

# GOVERNMENT OF TELANGANA



## COMMON SCHEDULE OF RATES AS PER T.S STANDARD DATA FOR THE YEAR 2021-22 (Effective from 1<sup>st</sup> June 2021)

BOARD OF CHIEF ENGINEERS



# MASTER INDEX

S.No	Description	Page No.	
		From	To
1	Part-I ( Irrigation & CAD Works)	01	23
2	Part-II ( Road & Bridge Works)	24	37
3	Part-III ( Building Works)	47	400
4	Part-IV ( Public Health Works)	401	477
5	Annexure-Latest GO's -Seigniorage Charges		





**Office of the Engineer-in-Chief (Admn)  
I&CAD Dept., Errum Manzil, Hyderabad**

**Proc.No. ENC/Admn/Dy.EnC/EE(Tech)/DEE-1/AEE-1/SoR 2021-22/Vol.I Dt:09.06.2021**

**Sub:** Schedule of Rates as per Telangana Revised Standard Data for the year 2021-22 -Irrigation & CAD works(Part-I), Road & Bridge Works (Part-II), Building Work Items(Part-III) and Public Health Items (Part-IV)-Approved-Printing & Communication of SoRs - Reg.

- Ref:**
- 1) G.O.Ms.No.49,I&CAD (PW:Reforms)Dept., dt:2.3.2009
  - 2) The Commissioner, Labour Dept.Lr. No H1/1713/2021 Dt.30.03.2021
  - 3) Minutes of Board of Chief Engineers (BOCEs) meeting on finalization of Schedule of Rates 2021-22 held on 18.05.2021.
  - 4) ENC (PH) Lr.No.146/ AEE-4/T2/Sor/2021-22 Dt.28.05.2021
  - 5) ENC (NH & Bldgs) R&B Dept Lr. No: DEE-II/AEE-10/Bldgs/SoR-2021-22 Dt.31-05-2021.
  - 6) ENC(SR,CRN&PPP)R&BDeptLr No.5040/EE(R)/DEE1/AEE1/2021Dt.01-06-2021.

**-:oOo:-**

The Government have approved Revised Standard Data vide ref 1<sup>st</sup> cited. The Schedule of Rates as per Telangana Revised Standard Data for the year 2021-22 is approved based on the following.

The Engineer-in-Chief (Admn), I&CAD Dept., has furnished the draft rates proposed for Labour Rates and Basic data for Irrigation Items Part-I of Common SoR for the year 2021-22.

The Engineer-in-Chief (SR,CRN&PP), R&B Dept has furnished the draft Schedule of rates for the Part-II of Common SoR for Roads & Bridge items for the year 2021-22.

The Engineer-in-Chief (NH & Bldgs), R&B Dept has furnished the draft Building Schedule of rates for the Part-III of Common SoR for Civil, Plumbing & Electrical items for the year 2021-22.

The Engineer-in-Chief (PH), PH&ME Dept has furnished Part-IV of Common SoR for Public Health works items and Public Health Materials for the year 2021-22.

The draft schedule of rates for the year 2021-22 as furnished by the Engineer-in-Chief (admn), I&CAD Dept., Engineer-in-Chief (NH&Bldgs), R&B Dept., Engineer-in-Chief (SR ,CRN & PPP), R&B Dept., Engineer-in-Chief (PH), PH&ME Dept were discussed in detail and finalized in the annual Board of Chief Engineers meeting held on 18.05.2021 at 11.30 AM in BOCE's Conference hall, Jalasoudha, I&CAD Dept., Hyderabad.

The procedure for the adoption of Irrigation work items, lead & lift charges (Common to all departments) is incorporated in the Annexure-A of schedule of rates (SoR).

The approved basic rates are applicable to the datas as per Revised Standard Data approved by the Government vide G.O.1<sup>st</sup> cited.

The Government vide G.O. MS.No.15 T.R&B(R-1) Department Dt: 24.12.2014 have issued orders for adoption of MoRTH data by all Engineering Departments of Telangana State in respect of Road and Bridge works, with prevailing Standard Schedule of Rates in preparation of estimates. The Government approval is necessary to adopt any other data.

The lead & lift charges are common to all Engineering Departments. The detailed calculations are incorporated in the Lead & lift chapter in the I&CAD Works (Part-I) of Telangana Revised Standard Data.

One hard copy & compact disc containing Schedule of Rates is here with communicated.

No other items other than the items communicated by this office shall be introduced in the SoR.

The Heads of Department and Officers mentioned below are authorized to print the Schedule of Rates for the year 2021-22. The unauthorized printing & selling of the SoR is strictly prohibited. The Schedule of Rates for 2021-22 will be in force until the new SoR comes in to force.

Any discrepancies found (or) corrections required in SoR 2021-22 may be brought to the notice of the undersigned for issuing necessary corrigendum/ addendum.

The revised rates will come into force from 1st June of 2021.

The receipt of the proceedings may be acknowledged.

**Encl: SoR 2021-22 containing Part-I (Irrigation & CAD works), Part-II (Road & Bridge works) Part-III (Buildings works) and Part-IV (Public Health works)**

Sd/- G.Anil Kumar; Dt:09.06.2021  
Engineer-in-Chief(Admn)  
Irrigation & CAD Department and  
Chairman, Board of Chief Engineers

- I. Copy submitted to the Special Chief Secretary to Govt., I&CAD Dept., 6<sup>th</sup> Floor, B.R.K. Bhavan, Hyderabad for favour of information.
- II. Copy Communicated to the following Heads of Departments along with Enclosures for information.
  1. Engineer-in-Chief (NH & Buildings), Roads & Buildings Department.
  2. Engineer-in-Chief (SR, CRN & PPP), Roads & Buildings Department
  3. Engineer-in-Chief (P.H.), PH & ME Department.

4. Engineer-in-Chief (P.R.), Panchayat Raj Department.
  5. Engineer-in-Chief (RWS) R W S & S, Department.
  6. Schedule of Rates 2021-22 & Standard data, Part-1 (Irrigation & CAD works) placing in Web site of Irrigation & CAD Department for favour of information and necessary action.
- III. Copy to the Superintending Engineer, Irrigation Circle, Irrigation & CAD Department, Red Hills, Hyderabad for necessary action
- IV. Copy communicated to the DEE (computers) with a request place the Proceedings in I& CAD department website for wide publicity.

**Sd/- G.Anil Kumar; Dt:09.06.2021**  
Engineer-in-Chief (Admn)  
Irrigation & CAD Department and  
Chairman, Board of Chief Engineers

**ANNEXURE- A**

1. The SPIU (Irrigation), Centre for Good Governance (CGG), Hyderabad has developed software package linking the basic input data of Irrigation with approved data of Irrigation work items.
2. The lead and lift charges are common to all Engineering Departments. The detailed calculations are incorporated in the Lead & Lift charges chapter in the I&CAD works (Part-1) of Telangana Revised standard data.
3. The estimate sanctioning authority shall physically verify each and every Irrigation work item data incorporated in the estimate with basic input data before sanction of the estimate. Any lapses or arithmetic errors arising in the sanction of data's /estimate due to adoption of the software package lies entirely on the concerned estimate sanctioning authority only.
4. Any discrepancies / corrections required for improper basic input data appearing in the approved data's of Irrigation work items in the software package and hard copy of SoR & Standard data's (part-1) may be brought to the notice of undersigned for issuing corrections.
5. Estimate Sanction Authority shall examine the Components/Materials/Items proposed for arriving finished rate in the Data. Any Items Components/Materials/Items not required for that work, can be deleted by the Estimate Sanctioning Authority while according the approval to Datas.

Sd/- G.Anil Kumar; Dt .09.06.2021  
Engineer-in-Chief (Admn)  
Irrigation & CAD Department and  
Chairman, Board of Chief Engineers

**Preamble**  
**(SoR 2021-22)**  
**Common to all Engineering**  
**Departments**



## PREAMBLE

### 1. AREA ALLOWANCES:

#### A) CORPORATIONS & MUNICIPALITIES:

1. a). 25% extra over the basic rates on labour component of works is allowed in all Municipal Corporation Limits of Telangana except Greater Hyderabad (up to a belt of 12 Kms. from Municipal Corporation limits) and other corporations as notified by the Government from time to time.
- b). 40% extra over the basic rates on labour component of works is allowed in Greater Hyderabad (up to a belt of 12 Km from Municipal Corporation limits).
2. 20% extra over basic rates on labour component of works is allowed in all District Headquarters and the remaining Municipal limits (up to a belt of 12 Kms from Municipal limits).

#### B) JAIL COMPOUNDS:

20% extra is allowed over labour rates for the works in the Jail compounds. Only equivalent number of Man Mazdoor shall be provided in the Jail premises and no women Mazdoor are allowed inside.

#### C) INDUSTRIAL AREA:

20% over basic rates on labour component of works is allowed for works situated within 10km belt of Industrial area of Jeedimetla, in Malkajgiri District, Lingampally, Tandur, Ibrahimpatnam and Kothuru in Ranga Reddy District, Patancheru, Ramachandrapur in Sangareddy District, Bibinagar in Yadadri-Bhongiri District, Wadepally in Nalgonda District, Nagapally (Centenary Colony, Begumpet "X" roads), Takkalapally, Ramagundam and Godavarikhani in Peddapally District, Manchiryal, Mandamarri, Bellampalli in Manchiryal District, Sarpaka, Kothagudem, Paloncha and Manguguru in Bhadradi-Kothagudem district, Singareni Collieries area limits in Khammam and Bhadradi-Kothagudem, Jayashankar-Bhoopalpally and Mulugu districts.

#### D) AGENCY / TRIBAL AREAS:

1. 25% extra is allowed for the works located within the interior Agency / Tribal limits, i.e. for the works located within & upto 16 KMs from any all-weather route inside Agency / Tribal.
2. 40% extra is allowed for the works located within the interior Agency / Tribal limits, i.e. for the works located beyond 16 KMs from any all-weather route inside Agency / Tribal.

#### NOTE:

- a) No extra percentage is permissible in respect of Forest produce such as Bamboo, Rellu grass and for all materials obtained from outside the Agency / Tribal.

- b) *The extra percentage under Agency / Tribal areas allowance may be allowed on the labour component and on the labour charges in the rates for conveyance of materials.*
- c) *The extra percentage on cost of materials in Agency / Tribal areas can be allowed on the labour component only, if they are manufactured in the Agency / Tribal areas itself except Forest produce.*

#### **E) GHAT ROADS:**

For Ghat Roads and other roads steeper than 1 in 20, the length of the road may be taken as 1.5 times the existing length of the road for the purpose of leads only for conveyance of materials based on the certificate for the Ghat Road given by the Superintending Engineer concerned.

**Foot Note:** *Under compelling circumstances, the concerned Chief Engineer can adopt the equivalent length of road as 2 ½ times of actual length.*

#### **Note:**

**Area allowances:** *If more than one area allowance (such as those) for (1) Municipalities (2) Agency / Tribal areas (3) Industrial areas are applicable for a particular situation, only the maximum out of the allowable percentages is to be allowed.*

### **3. EXCAVATION OF TRIAL TRENCHES, TRIAL PITS AND EXCAVATION IN RESTRICTED PLACES:**

#### **a). TRENCHES:**

- 1) Trenches of not more than 2 meters in width : 25% extra

#### **b). TRIAL PITS:**

- 1) Up to 2 Meters depth : 25% extra  
 2) 2 Meters to 4 Meters depth : 50% extra  
 3) 4 Meters to 6 Meters depth : 75% extra  
 4) 6 Meters to 8 Meters depth : 100% extra  
 5) 8 Meters to 9 Meters depth : 150% extra  
 6) More than 9 Meters depth : 200% extra

#### **c) EXCAVATION IN RESTRICTED PLACES: -**

- 1) Foundation of Buildings : 75% extra  
 2) For pipe lines where the depth is 1.5 times or Less than the width : 75% extra  
 3) For pipe lines where the depth is 1.5 times or more than the width : 120% extra  
 4) Silt removal in restricted areas such as U.T's., Culverts and Syphons. : 120% extra  
 5) Excavation of field channels : 75% extra



- 6) For narrow trenches not more than 2 meters in width and depth not less than twice the width and for excavation of road boundary drains, model sections of canals. : 75% extra
- 7) High berm cutting of not more than 150 mm average thickness and sectioning for roads : 50% extra

**Note:** 1) *The extra percentage is allowed over Common item for all earth works (COM-MWRK-Manual Works) for corresponding soil and Standard data items. It includes the charges for all lifts and initial lead but does not include dewatering charges if any in respect of all the items under (A) and (B) above.*

- 2) *The above extra percentages in respect of excavation in hard rock for restricted places are to be allowed for (2/3)<sup>rd</sup> of the cost and shall not to be allowed in respect of items involving blasting component which may be taken as (1/3)<sup>rd</sup> of the cost.*

### **3. MANUFACTURED SAND:**

As per GO Ms No 37 Industries and Commerce (Mines-I) Dept., dated 29.05.2018, the Government have directed all the Engineering Works Departments to use Manufactured Sand (Rock sand) and natural river sand in the ratio of 50:50 in all the mixes of Cement concrete and in the items of works where sand is used earlier, to reduce the burden on Natural Resources and to make the sustainable ecosystem. Accordingly, the Manufactured Sand/Rock Sand shall be substituted proportionately in respective data items.

### **4. FLY ASH BRICKS:**

As per recommendations of Board of Chief Engineers dated 11.11.2016, and MoEF & CC amended Notification No S.O 254(E), dated 25.01.2016 all Engineering Departments shall mandatorily adopt Fly ash bricks and other Fly ash based products in Buildings and other allied works proposed within 100 Km radius of fly ash generating Coal/Lignite based Thermal Power plants in Telangana.

### **5. CONVEYANCE OF BITUMEN (BULK AND PACKED)**

Packed Bitumen	---	Rs 2.25 per Km/MT
Bulk Bitumen	---	Rs 2.00 per Km/MT (Round the trip)

### **6. SEIGNIORAGE CHARGES**

**Note:** *The rates of the materials indicated in the SoR are exclusive of Seigniorage Charges.*

Appropriate Seigniorage Charges for relevant materials as fixed by the Government from time to time shall be kept in Part-II of Schedule-A i.e., under reimbursable items as recommended by the Board of Chief Engineers.

The concerned Technical sanctioning authority should ensure that the relevant Seigniorage charges of work items shall be reconciled separately duly excluding from the data, so that, the Seigniorage charges are not affected by quoted Tender percentage.

### **7. G S T (Goods & Service Tax):**

The GST (Goods & Service Tax) on **Works Contract** shall be implemented as per orders of the Government from time to time. At present, GST @ 5% on Works Contract where in earth work component is 75% or more and for all other works GST @ 12% will be applicable.

### **GUIDE LINES**

- 1) The Schedule of Rates (**SoR**) is formulated under four Parts, which are applicable to all the Engineering Departments and other Organizations under the control of Telangana State Government.

**PART -1:** Irrigation& CAD (Dam and Allied Works, Canals and Allied Works, Canal C.D. Works, Tunnels and Allied Works, Preliminary and Maintenance Works, Hydraulic Gates and allied works and Leads and Lifts applicable to all Departments.

**PART -2:** Roads and Bridges

**PART -3:** Buildings including Electrical Works

**PART -4:** Drinking Water Supply and Public Health (Only for works done by manual means)

### **2) Brief description of item of work:**

Brief description of the item of work to cover all important aspects of the work included in the Data. On reading the description of the item, the user should be in a position to assess the various cost components involved in the work.

### **3) Data for assessing quantities:**

The data reflects various assessments / assumptions made in arriving at the quantities of materials, machinery, labour and other in-puts. In case of plants and equipment the output of main plant is worked out and the requirement of all other inputs and assessed to match the output of the main plant. Cycle time of operations is the criteria for assessing the output of equipment. Generally, the equipment manufacturers furnish the output of machinery under ideal conditions of working. Suitable job and management efficiency factors are considered while working out the average output of machinery under field conditions. In case of combination of machinery and manpower, the assessment of manpower shall match the output of machinery.

Though cycle time of operations is the criteria for hourly / daily out-put of machinery work-force, the actual progress of work depends on several other factors such as power interruptions, minor break-downs, time for meals and other needs of work-force, stray rains

etc. Therefore, it is the general practice to consider 50 minutes as the actual working time per hour for working out the hourly / daily out-put of machinery / work-force. CWC / BIS guide-lines stipulate the actual working hours for the purpose of equipment planning and utilisation. The daily out-put is computed duly considering the actual available working time and feedback from the field.

- For gate and hoist works, it is the general practice to specify the quantity of work in terms of number of sets of embedded parts / gates. The requirement of machinery and work-force for cutting, bending, fabrication, erection, painting etc., is assessed to commensurate with the task involved.
- The data for gates and E.M. Parts is arrived per Metric Tonne (MT) quantity.
- The data for Hoists and Gantry Cranes is worked out on the basis of capacity in tonnage.

4. **The lead and lift charges** provided in SoR are generally applicable and common to all Engineering Departments. Any item which is not covered in this part, the rates as provided in the data of the relevant works may be adopted in preparation of estimates.

5. **Input Basic Materials** needed for all works are listed and incorporated in the data. The requirements are analyzed and the specifications adopted shall confirm to Standards published by the BIS.

- The labour and material rates will be communicated by the Board of Chief engineers.
- Unless otherwise specified, all material rates shall be exclusive of GST.
- For Sand, Gravel, Murrum, Stones, Coarse Aggregates etc, the rates are ex-quarry/Stock yard, adding loading charges by machinery / manual means and idle hire charges of machinery as per table under chapter “ conveyance or lead and lift charges”, as applicable.
- For AC sheets, GI sheets, Hume pipes, wood and stone slabs, the rates are to be taken prevailing at major commercial centre near project area. The lead charges, as applicable are to be added in preparing estimates
- For Steel and Cement, the rates are delivery at site excluding GST.
- The specifications of the aggregates for sizes and gradation and its adoption shall be as per IS 383.

6. **The Labour** component in the data is mentioned for unit work.

- No allowance towards labour importation and labour amenities added extra as they are included in the recommended overheads.
- On Labour Component: Certain additional allowances are added extra to the wages of labour (,i.e. only on labour component in the work item) in the form of percentage, as recommended by the Government/Board of chief engineers due to statutory and other provisions.

**7) Hire Charges Of Machinery:** The machinery and /or group of machinery For items of works and their output has been worked out based on the availability of machinery generally in the market and working in the field successfully, duly considering cycle time, idle time, operator efficiency, type of work etc.

- The hire charge of a machinery / equipment is worked out based on the guidelines published by CWC and BIS codes.
- For the other machinery not covered by the list, the R&B and other users may adopt hire charges as recommended by the MORTH.

### **8) Lead Charges**

- a. The high level committee has recommended to adopt, for conveyance by head load, a minimum lead of 50 meters and additional lead up to 150 meters in the intervals of 50 meters. Beyond 150 meters lead, only machinery rates are to be adopted.
- b. The basic work item rates provided in the Standard Data & Schedule of rates include 50 m or 1 km as initial lead and no lead charges shall be allowed where the source of material is within the initial lead specified in item rate. Additional lead charges shall be allowed for the lead exceeding initial lead specified in the item rate. The Guidelines may be followed regarding adding Lead charges as given against each chapter.
- c. For the materials where the basic rates are mentioned as “Quarry Rates” in the SoR, which includes initial lead of 1.00km lead charges are to be added for the lead distances from the approved quarries as applicable
- d. The lead charges per unit quantity for conveyance of the materials are worked out, and included in the schedule of rates in increment of 50 m for head load and in increment of 1 km for mechanical mode.
- e. The rates for lead charges by head load up to 150 meters and by machinery up to 5 km, shall be cumulative and inclusive of lead charges for preceding lead. For lead beyond 5 km, the lead charges shall be worked out on per km basis.

### **9. Loading and Unloading Charges for Materials**

The following features are considered:

- a. Loading and unloading charges are not payable for conveyance by head load.
- b. Loading and unloading charges are not payable for conveyance by mechanical means, for disposal of excavated material unless specified.
- c. The rates for unloading of materials except earth, sand, gravel, coarse aggregate, rubble, size stone and cut stone, are inclusive of stacking wherever applicable.

### **10. Lift Charges:**

- a. The data includes initial lift charges of 3.0 meters, for materials conveyance by head load, Additional leads in the interval of 1.0 meters are worked out, as additional labour input and incorporated in the chapter on” Lead and lifts”

- b. Where the conveyance / lifting of material is done by mechanical means, lift charges shall not be considered, as the cycle time of operation of the machine includes lifts involved.
- c. The data and rates for lift charges is cumulative and are inclusive of rates for preceding lifts also.

#### **11. Wastage of Materials**

- a) **Cement:** No wastage allowance is recommended towards the quantity of cement used in works, as the wastage is already included in the input and in major works bulk quantities are used.
- b) **Steel:** The wastage of steel @ 2.5% is allowed for gates and allied structures. For RCC works the wastage is @2.5% for the reinforcement rods above 36mm dia. and @ 5% for rods below 36mm dia. including overlaps, if they are not welded. If welding is adopted for the reinforcement rods even for below 36mm dia, 2.5% of wastage is only recommended.

**12. In Respect of RCC Works,** the rate for cement concrete for 1 cum is worked out separately for all grades based on Indian Standards. The rate of Reinforcement steel per MT is calculated separately and to be added in the estimates of RCC works as a separate item.

**13. Soil Classification:** The Committee recommended to allow uniform classification of soils for all Departments and data is worked out accordingly.

- 1. All soils
- 2. Marshy soil
- 3. Ordinary rock (Not Requiring Blasting),
- 4. Hard rock
  - a. Hard Rock (Requiring Blasting)
  - b. Hard Rock (Controlled Blasting)
  - c. Removable by Chiseling (Blasting Prohibited)

#### **14. Use of Super Plasticizers and Admixtures:**

Concrete admixtures such as Air-Entraining Agent (AEA) / Water reducing agent can be used advantageously for better quality concrete. The high level committee has recommended to adopt for super plasticizers and admixtures at 0.4% on cement for concrete work as per MORTH standards for batching plants.

#### **15. Contractors overheads, profit and other provisions:**

- a) The provisions allowed in G.O.Ms.No.94, I&CAD, dated 01.07.03, need not be added separately for the items covered in the contractor overhead charges.
- b) For all Road & Bridge works Overheads & Contractors profit shall be allowed as specified in the **MoRTH** Standard Data Book.

- c) Overheads and Contractor's profit @ 13.615% shall be allowed in the data which includes labour importation and amenities etc. as mentioned below.

**The overhead charges include the following elements:**

- i. Site accommodation, setting up plant, access road, water supply, electricity and general site arrangements.
- ii. Office furniture, equipment and communications
- iii. Expenditure on:
  - a. Corporate office of contractor
  - b. Site supervision
  - c. Documentation and "as built" drawings
- iv. Mobilisation/ De-Mobilisation of resources
- v. Labour camps with minimum amenities and transportation to work sites.
- vi. Light vehicles for site supervision including administrative and managerial requirements.
- vii. Laboratory equipment and quality control including field and laboratory testing.
- viii. Minor T & P and survey instruments and setting outworks, including verification of line, dimensions, trial pits and bore holes, where required.
- ix. Watch and ward
- x. Traffic management during construction
- xi. Expenditure on safeguarding environment
- xii. Sundries
- xiii. Financing Expenditure

**16. Role of Central Competent Agency For Schedule Of Rates (Board Of Chief Engineers)**

- a) The Board of Chief Engineers under the Chairman ship of Engineer-in- Chief, (Administration) I&CAD Department is the competent authority to finalize and recommend the Schedule of Rates applicable for all Engineering Departments. The Board has to assess and incorporate only the three basic inputs required to generate unit work item rates as below.

**1. Basic rates of labour:**

Wages of labour commonly required in execution of works has to be arrived and incorporated in the schedule of rates (**Basic input of Labour wages**), without adding extra towards area allowances (like municipality allowance, tribal area and ghat road allowances etc, which shall be added to the rates where applicable in the form of separate percentage as explained in the preceding paras. The rates shall be the prevailing daily rates in the State and shall not be less than the minimum wages fixed by the Government from time to time.

## 2. Materials Rates:

The basic input material rates common to all departmental works are listed out and incorporated (in the chapter “Basic inputs”) The material specifications adopted shall confirm to Standards published by the BIS.

The Prevailing market rates for all basic input materials shall be obtained from the major commercial centers near the project areas. Average of the rates, ignoring freak rates, shall be reckoned as the prevailing market rate excluding all taxes viz., GST.

For sand, gravel, murrum, stones, aggregates etc., the rates are ex-quarry/stock yard including loading charges and idle hire charges. For steel, Cement, AC sheets, GI sheets, Hume pipes, wood and stone slabs, the rates prevailing at major commercial centre near project area has to be adopted.

## 3. Use Rate of Machinery:

The third parameter for incorporation in the Basic Inputs, is the use rate of machinery. To arrive at the use rate of machinery, the inputs to be incorporated are

- i. The list and capital cost of machinery required to be used in the construction activity, The rate has to be obtained from major manufacturers and outlet sources and the rate shall be the current market price excluding all taxes and duties i.e G.S.T etc. and including freight charges.
  - ii. The prevailing fuel charges of petrol and diesel are ascertained and average rate adopted
  - iii. Borrow rate of interest as fixed by the Government/competent authority be indicated.
  - iv. For the other machinery not covered by the list, the R&B and other users may adopt hire charges as recommended by the MORTH
- b) The Chairman, Board of Chief Engineers(BOCEs) or competent authority appointed by the Government, based on the approved basic inputs, load the above three basic parameters in the software program. The unit rate of all works including hire charges of all machinery will be generated automatically for adoption.

**The Chairman, BOCEs shall communicate the uniform Schedule of rates arrived from Standard Data, to all users for uniform and direct adoption in all infrastructure Departments, as applicable.**

Sd/- G.Anil Kumar Dt 09.06.2021  
Engineer-in-Chief (Admn)  
I & CAD Department and  
Chairman, Board of Chief Engineers





**PART-I**  
**IRRIGATION & CAD**  
**WORKS**



**BASIC DATA  
FOR  
IRRIGATION WORK ITEMS**

# PART-1 INDEX

## IRRIGATION & CAD WORKS

Sl. No.	Description	Page No	
		From	To
1	Irrigation Work Items	01	14
2	Labour Rates	15	18
3	Hire Charges	19	20
4	Conveyance Charges of Materials	21	23

**SCHEDULE OF RATES  
BASIC DATA FOR  
IRRIGATION WORK ITEMS  
FOR THE YEAR 2021-22  
STATEMENT OF RATES FOR MATERIALS**

**General Guide Lines for Revising Rates of Materials**

1. Average of the prevailing market rates, ignoring freak rates, shall be the criteria for fixing market rates for materials.
2. The rates for materials is exclusive of seigniorage charges wherever applicable.
3. The rates for materials, except those for which lead charges are admissible as per the statement of lead charges, shall be for all leads.
4. The rates provided for useful rubble / stone chips from excavation shall be at dump yard

Sl. No.	Description of material	Unit	Scheduled Rates for the Year 2021-22
1	Acetylene gas	cum	368.00
2	Asphalt 80/100 Grade	Kg	48.00
3	Binding wire	Kg	66.00
4	Burnt stone slab 10 cm thick	sqm	284.00
5(a)	Ordinary Portland Cement (43/53 GRADE) *(Note: As per Monthly rate fixed by Sub Committee)	tonne	5600.00
5(b)	Portland Pozzolona cement *(Note as per monthly rate fixed by committee)	tonne	5400.00
5(c)	Portland Slag Cement *(Note as per monthly rate fixed by sub-committee)	tonne	5000.00
6	Chequered plate	Kg	63.00
7	Coarse aggregate 10-4.75 mm(excluding Seigniorage charges)	cum	760.00
8	Coarse aggregate 20-10 mm(excluding Seigniorage charges)	cum	990.00
9	Coarse aggregate 40-20 mm(excluding Seigniorage charges)	cum	890.00
10	Coarse aggregate 80-40 mm(excluding Seigniorage charges)	cum	551.00
	<i>The aggregate rates mentioned above (from Sl.No.7 to Sl.No.10) are <b>exclusive of Seigniorage charges but including blasting charges of Rs.70/cum and 25% machine crushing charges. However, if the metal is obtained from hand broken, the blasting and crushing charges shall be deducted. The aggregate shall be HB Stone of Granite, Dolomite, Dolerite and Trap. (Quartzite and Basalt with aggregate impact of less than 20)</b></i>		
11	Coir brush	Each	47.00
12	Copper sheet 16 SWG	kg	657.00
13	Coursed rubble stone 30 x 30 x 45 cm(excluding Seigniorage charges)	Each	25.00

Sl. No.	Description of material	Unit	Scheduled Rates for the Year 2021-22
14	Coursed rubble stone 30 x 30 x 60 cm(excluding Seigniorage charges)	Each	33.00
15	Curing Compound	Ltr	132.00
16	D - cord	Rm	9.00
17	Delay - noiseless trunk	Each	18.00
18	Detonating fuse coil	Rm	8.00
19	Detonating shock tube / Cord relays	Rm	34.00
20	Detonator delay type	Each	18.00
21	Detonator electric	Each	11.00
22	Detonator ordinary	Each	10.00
23	Empty cement bag	Each	6.00
24	Explosive ANFO	kg	65.00
25	Explosive ANFO high strength booster	kg	74.00
26	Explosive small dia ( Kelvex-220 or equivalent)	kg	81.00
27 (a)	Fine aggregate/ sand(un-screened) for Concrete & Filtering items) (excluding Seigniorage charges)	cum	600.00
27 (b)	Fine aggregate/Sand(unscreened)for filling and blind age (excluding Seigniorage charges)	cum	600.00
28	Fine aggregate /Sand (Screened) for Mortar ,Plastering items and Sand blasting items(excluding Seigniorage charges)	cum	800.00
29	Geo-textile ( filter fabric ) 160 gsm	sqm	41.00
30	Geo-textile ( filter fabric ) 200 gsm	sqm	48.00
31	Geo-textile ( filter fabric ) 250 gsm	sqm	56.00
32	G I Pipe 100 mm dia B Class	Rm	825.00
33	G I Pipe 15 mm dia A class	Rm	99.00
34	G I pipe 25 mm dia A class	Rm	154.00
35	G I pipe 40 mm dia B class	Rm	261.00
36	G I pipe 50 mm dia A class	Rm	297.00
37	G I Pipe 80 mm dia B Class	Rm	534.00
38	G.I Bolts / Nuts and Washers	kg	94.00

Sl. No.	Description of material	Unit	Scheduled Rates for the Year 2021-22
39 (a)	G.I sheet ( plain )	tonne	59,976.00
39 (b)	G.I sheet ( Corrugated )	tonne	63,893.00
40	Hariyala turfing sods	sqm	40.00
41	Hectometer stone one line dressed	Each	341.00
42	Hemp yarn	kg	81.00
43	Honne wood planks	cum	64,505.00
44	Hume pipe with collar 150 mm dia (NP2) PH Rate	Rm	341.00
45	Hume pipe with collar 300 mm dia (NP2) PH Rate	Rm	583.00
46	J- Bolts 30 cm long	Each	44.00
47	Jungle wood planks	cum	28,080.00
48	Khandki stone 15 to 20 cm height	Each	17.00
49	Khandki stone 20 to 25 cm height	Each	20.00
50	Khandki stone 25 to 30 cm height	Each	22.00
51	Kilometer stone one line dressed	Each	500.00
52	LDPE sheet ( Geo membrane ) 500 micron thick	sqm	100.00
53	LDPE sheet ( Geo membrane ) 750 micron thick	sqm	142.00
54	LDPE sheet ( Geo membrane ) 1000 micron thick	sqm	189.00
55	M S Bolts / Nuts / Washers	kg	83.00
56	Murum(including loading charges <b>but excluding</b> Seigniorage charges )	cum	248.00
57	Oxalic acid	Ltr	87.00
58	Oxygen gas	cum	52.00
59	PVC sealing strip	Rm	49.00
60	PVC water stopper 310 mm wide	Rm	424.00
61	PVC pipe of 100 mm dia	Rm	164.00
62	Reinforcement steel (HYSD/TMT ) from Primary steel producers like TATA, SAIL, VSP, JSW, SHYAM STEEL, GOEL TMT, V-XEGA, JINDAL PANTHER and BALAJI SHAKTI *(Note: As per Monthly rate fixed by Sub-Committee)	tonne	56,000.00
63	Resin bond Cement capsule	Each	55.00

Sl. No.	Description of material	Unit	Scheduled Rates for the Year 2021-22
64	Rough stone 20 x 20 x 75 cm ( Including Loading charges <b>but excluding</b> Seigniorage Charges)	Each	39.00
65(a)	Shahabad stone slab polished (including loading charges <b>but excluding</b> Seigniorage charges)	sqm	270.00
65(b)	Shahabad stone slab non polished (including loading charges <b>but excluding</b> Seigniorage charges)	sqm	230.00
66	Stone chips (at dump yard/Spoil)(including loading charges <b>but excluding</b> Seigniorage charges)	cum	220.00
67	Stone chips ( at quarry )(including loading charges <b>but excluding</b> Seigniorage charges)	cum	524.00
68	Structural steel angle / channel / beam / bars <b>*(Note: As per Monthly rate fixed by Sub-Committee)</b>	tonne	50,000.00
69	Structural steel plate / flats (including loading charges) <b>*(Note: As per Monthly rate fixed by Sub-Committee)</b>	tonne	52,000.00
70	Super Plasticizer (Conplast RP-264 or equivalent )	kg	61.00
71	Synthetic Enamel paint 1st quality	Ltr	221.00
72	Synthetic adhesive ( Resin + Hardener )	Kg	314.00
73	Tar felt joint filler board 12 mm thick	sqm	379.00
74	Tar felt joint filler board 20 mm thick	sqm	580.00
75	Through stones 20 x 20 x 30 to 45 cm (including loading charges <b>but excluding</b> Seigniorage charges)	Each	28.00
76	Through stones 25 x 25 x 45 to 60 cm long (including loading charges <b>but excluding</b> Seigniorage charges)	Each	50.00
77	Through stones 30 x 30 x 65 to 75 cm long (including loading charges <b>but excluding</b> Seigniorage charges)	Each	76.00
78	Un-coursed rubble stones ( at dump yard /Spoil) (including loading charges <b>but excluding</b> Seigniorage charges)	cum	208.00
79	Un-coursed rubble stones ( at quarry )( including loading charges <b>but excluding</b> Seigniorage charges)	cum	407.00
80	Water proofing compound	kg	103.00
81	Welding electrodes 4 mm dia	Each	12.00
82	Wire brush	Each	42.00
83	Wire mesh 20 gauge	sqm	231.00
84	Zinc chromate red oxide primer paint	Ltr	164.00
85	inorganic zinc silicate	Ltr	490.00
86	solvent less coal tar epoxy paint	Ltr	223.00
87	Zinc phosphate primer (as per BIS)	Ltr	179.00



Sl. No.	Description of material	Unit	Scheduled Rates for the Year 2021-22
88	Allkyd based iron oxide paint (as per BIS)	Ltr	155.00
89 (a)	a) Cost of HDPE (80mm dia)	Rm	184.00
89 (b)	b) Light black MS casing pipe 80mm dia (4mm thick)	Rm	620.00
90	welded steel wire fabric 100X100X5 mm size	Kg	172.00
91	Protective Mastic	Ltr	436.00
92	Solvent less coal tar epoxy (brown)	Ltr	223.00
93	Excavation of drain with Excavator	cum	46.00
94	Crushed stone sand/Rock sand 4.75mm to 2.36 mm as per IS 383 (1970) (excluding Seigniorage charges)	Cum	590.00
95	Fly ash conforming to IS: 3812 ( Part II & I)	Cum	74.00
96	Benching old embankment slopes 0.45 X 0.45 M	RM	8.00
97	Laying of Sand Bags in the stipulated places including cost of empty cement bag, sand, thread, stitching charges and labour charges etc., with 13.615% overhead charges and contractors profit.	per bag	37.00
98	Rough stone for revetment 225mm thick ( including Loading charges but excluding Seigniorage charges)	cum	221.00
99	Eradication of Weed growth from Drains, Canals by spraying Chemicals	sqm	3.00
100	Thinner	Ltr	84.00
101	Credit for excavated rock found suitable for use	Cum	220.00
102	Earth Cost or compensation for earth taken from private land (Excluding Seigniorage Charges)	Cum	71.00

**MATERIALS FOR GATES & HOISTS**  
**FOR THE YEAR 2021-22**

**GUIDE LINES**

1. For cast steel / Alloy steel / Forged steel / Bronze, aluminum alloy components the rates shall be inclusive of cost of basic metal for these components, casting / forging charges, machining charges and applicable excise duty on finished alloy component.
2. For other materials the rates shall be prevailing market rates.

Sl. No.	Description of material	Unit	Scheduled Rates for the Year 2021-22
1	Alloy steel ( IS : 1570-carbon steel ) shafts	Kg	240.00
2	Alloy steel ( IS : 1570-stainless steel ) pins	Kg	417.00
3	Bolt / Nut / Washer ( hot dipped galvanized )	Kg	119.00
4	Bolt / Nut / Washer ( stainless steel )	Kg	312.00
5(a)	Bronze (IS:305)bearings/bushes	Kg	940.00
5(b)	Aluminium alloy(IS:305)bearings/bushes	Kg	375.00
6	Cast iron blocks	Kg	86.00
7	Cast steel drums / gears	Kg	236.00
8	Cast steel pinions	Kg	221.00
9	Cast steel wheels / pulleys / hubs / rollers / retainers	Kg	179.00
10	Chemical for de-greasing/ de-rusting/phosphate coating	Ltr	150.00
11	Coal tar epoxy paint	Ltr	216.00
12	Forged steel hooks / shackles	Kg	247.00
13	MS pipe 200 / 300 mm dia	Kg	166.00
14	MS pipe 32 mm dia	Rm	188.00
15	MS pipe 25 mm dia	Rm	153.00
16(a)	Rubber bottom seal ( IS : 11855) 120 X 16 mm	Rm	803.00
16(b)	Rubber bottom seal ( IS : 11855) 120 X 20 mm	Rm	835.00
17(a)	Rubber side seal ( music note type Teflon claded ) ( IS : 11855 ) 36Ø 113 X 14 mm	Rm	1,540.00
17(b)	Rubber side seal ( music note type Teflon claded ) ( IS : 11855 ) 50Ø 125 X 16 mm	Rm	2,160.00
18(a)	Rubber side seal ( music note type uncladed ) ( IS : 11855 ) 36Ø 113 X 14 mm	Rm	1,396.00
18(b)	Rubber side seal ( music note type uncladed ) ( IS : 11855 ) 50Ø 125 X 16 mm	Rm	1,870.00

Sl. No.	Description of material	Unit	Scheduled Rates for the Year 2021-22
19	Rubber side seal Z-type ( IS : 11855 )	Rm	1,931.00
20(a)	Rubber corner seal (Teflon claded ) (IS : 11855) 36 Ø 113 X 14 mm	Each	2,940.00
20(b)	Rubber corner seal (Teflon claded ) (IS : 11855) 50Ø 125 X 16 mm	Each	3,780.00
21(a)	Rubber corner seal (un claded ) (IS : 11855) 36Ø 113 X 14 mm	Each	2,532.00
21(b)	Rubber corner seal (un claded ) (IS : 11855) 50Ø 125 X 16 mm	Each	3,376.00
22	Stainless steel plates / flats	Kg	284.00
23	Welding electrode 4 mm dia x 450 mm (radiographic low hydrogen)	Each	20.00
24	Welding electrode 4 mm dia x 450 mm (stainless steel)	Each	25.00
25	Wire rope 6x37 construction ( IS : 2266 )	Kg	223.00
26	Zinc	Kg	200.00
27	Zinc rich (zinc content : 90 %) epoxy primer	Ltr	643.00

**DETAILS OF CAPITAL COST OF MACHINERY / EQUIPMENT**  
**GUIDE LINES FOR FIXING CAPITAL COST OF MACHINERY / EQUIPMENT**  
**FOR THE YEAR 2021-22**

1. The Capital cost of machinery / equipment shall be for new machinery / equipment and shall be inclusive of all taxes, duties, other levies.
2. The cost of transport vehicles / equipment shall be exclusive of cost of tyres and tubes.
3. The cost of drill rods / drill bits / air hose / water hose / road tax / insurance charges and other consumable accessories shall not be included in the capital cost.
4. In cases, where the current capital cost of machinery / equipment could not be collected through enquiries, the capital cost considered for previous year may be updated on the basis of average percentage increase / decrease in the index for machinery published in the R.B.I Bulletin.

Sl. No.	Description of material	Unit	Scheduled Rates for the Year 2021-22
1	Agitator car / Transit mixer 2 cum (excluding tyres )	Each	23,51,304.00
	tyres and tubes 6 sets		1,01,982.00
2	Air compressor 5 cmm electric	Each	7,43,886.00
3	Air compressor 7 cmm diesel	Each	9,99,305.00
4	Air compressor 7 cmm electric	Each	9,86,580.00
5	Air compressor 8.5 cmm diesel	Each	11,32,476.00
6	Air compressor 8.5 cmm electric	Each	11,70,450.00
7	Air compressor 15 cmm electric	Each	14,73,161.00
8	Angle Dozer 90 HP	Each	56,61,000.00
9	Batching plant 0.5 cum with accessories	Each	13,33,395.00
10	Batching plant 2 x 1.00 cum with accessories	Each	43,75,800.00
11	Batching plant 2 x 1.50 cum with accessories	Each	57,63,000.00
12	Bending machine	Each	5,66,610.00
13	Clamp shell and hoisting ropes	Each	32,666.00
14	Concrete bucket 1.5 cum	Each	58,263.00
15	Concrete hand mixer 45/30 ltr	Each	17,919.00
16	Concrete mixer 300/200 ltr(diesel)	Each	1,62,750.00
17	Concrete mixer 300/200 ltr ( electric )	Each	1,64,273.00
18	Concrete mixer 600/400 ltr(diesel)	Each	2,70,810.00
19	Concrete mixer 600/400 ltr ( electric )	Each	2,65,200.00
20	Concrete paver 100 Sqm / hr	Each	24,48,000.00
21	Convey mucker ( excluding tyres )	Each	40,41,954.00
	Tyres and tubes 6 sets		96,900.00
22	Core drilling machine	Each	11,75,040.00
23	Diesel generating set 30 KVA	Each	5,35,000.00

Sl. No.	Description of material	Unit	Scheduled Rates for the Year 2021-22
24	Diesel generating set 50 KVA	Each	7,87,500.00
25	Diesel Loco 45 HP	Each	21,77,700.00
26	Dewatering pump 5 HP diesel	Each	37,455.00
27	Dewatering pump 5 HP electric	Each	27,216.00
28	Dewatering pump 10 HP diesel	Each	64,260.00
29	Dewatering pump 10 HP electric	Each	59,303.00
30	Dewatering pump 20 HP diesel	Each	2,05,000.00
31	Dewatering pump 20 HP electric	Each	1,15,763.00
32	Drifter	Each	11,27,100.00
33	Drilling jumbo ( excluding tyres )	Each	13,50,000.00
	Tyres and tubes 6 sets		98,532.00
34	Dumper 4.5 cum ( excluding tyres )	Each	16,12,620.00
	Tyres and tubes 6 sets		97,700.00
35	Geophysical Ele.resistivity meter	Each	5,15,100.00
36	Grouting pump	Each	1,55,040.00
37	Guniting / sand blasting equipment	Each	3,01,716.00
38	Ice plant with accessories 30 t / day	Each	26,46,000.00
39	Jack hammer	Each	73,000.00
40	Needle vibrator 40 mm petrol	Each	16,538.00
41	Needle vibrator 40 mm electric	Each	15,423.00
42	Needle vibrator 60 mm petrol	Each	17,427.00
43	Needle vibrator 60 mm electric	Each	17,075.00
44	Planing machine 4 m stroke	Each	8,00,700.00
45	Plate shearing machine up to 12 mm	Each	5,01,638.00
46	Pneumatic placer 0.5 cum	Each	6,35,103.00
47	Pneumatic tamper	Each	92,642.00
48	Pug cutting machine	Each	19,294.00
49	Pusher leg	Each	55,125.00
50	Road roller diesel 10 t	Each	9,76,500.00
51	Shovel 0.50 cum 75 HP	Each	38,00,000.00
52	Shovel 0.85 cum 110 HP	Each	65,28,000.00
53	Stationery derrick crane 5 t	Each	6,68,100.00
54	Tipper 5 cum ( excluding tyres )	Each	18,71,100.00
	Tyres and tubes 6 sets		96,600.00
55	Tipping tub 1.5 cum	Each	2,75,100.00

Sl. No.	Description of material	Unit	Scheduled Rates for the Year 2021-22
56	Tower crane 5 tonne	Each	80,63,100.00
57	Transformer 250 KVA	Each	4,81,950.00
58	Truck 10 t ( excluding tyres )	Each	16,53,750.00
	Tyres and tubes 6 sets		98,532.00
59	Truck mounted derrick crane 5 t ( excluding tyres )	Each	23,73,000.00
	Tyres and tubes 6 sets		97,700.00
60	Upright drilling machine	Each	62,118.00
61	Ventilation fan 20 HP	Each	2,83,815.00
62	Vibratory pad foot roller 8 t	Each	30,24,300.00
63	Wagon drill	Each	6,78,341.00
64	Water tanker 8000 Ltr. (excluding tyres)	Each	15,17,250.00
	Tyres and tubes 6 sets		97,700.00
65	Welding set	Each	49,940.00
66	Winch 35 HP electric	Each	3,87,600.00
67	Hydraulic Truck Crane 30T	Each	1,60,65,000.00
	tyres and tubes 6 sets		2,06,754.00
68	Hydraulic Truck Crane 16T	Each	1,04,04,000.00
	Tyres and tubes 6 sets		2,15,040.00
69	Heavy Duty Airless Spray Painting Equipment	Each	5,11,877.00

**ACCESSORIES TO MACHINERY / EQUIPMENT**  
**FOR THE YEAR 2021-22**

Sl. No.	Description of material	Unit	Scheduled Rates for the Year 2021-22
1	Casing shoe bit	Each	9,830.00
2	Diamond core bit BX size	Each	10,548.00
3	Diamond core bit NX size	Each	12,150.00
4	Double tube core barrel	Each	14,175.00
5	Extension drill rod with coupling sleeve	Rm	2,393.00
6	Jack hammer drill rod 1.5 m	Each	5,130.00
7	Jack hammer drill rod 2.5 m	Each	6,195.00
8	Nozzle for Guniting / sand blasting gun	Each	762.00
9	Paving Cylinder	Each	27,783.00
10	Rails 30R ( 30 kg / m )	tonne	52,647.00
11	Reamer shell	Each	5,355.00
12	T.C. Cross bit 50 mm dia	Each	5,025.00
13	T.C. Cross bit 75 mm dia	Each	10,868.00
14	T.C. Cross bit 100 mm dia	Each	12,774.00
15	Tyres and Tubes for truck	Set	16,956.00
16	Wire rope 16 mm dia	Rm	263.00

**OTHER COSTS ON MATERIAL / MACHINERY / EQUIPMENT**  
**FOR THE YEAR 2021-22**

1. The rate provided for ' SUNDRIES' (Lump sum provision for unquantified inputs in the data rates ) shall be updated on the basis of general percentage increase / decrease in the market rates or on the basis of R.B.I ' All Commodity' index.
2. The rate for structural steel fabrication shall include cost of all materials (except structural steel), machinery, labour and one coat of primer painting.
3. Demand charges and electric power charges shall be as per prevailing APCPDCL tariff.
4. Rate of interest on capital cost shall be as approved by Government or other competent authority.

Sl No.	DESCRIPTION OF MATERIAL	UNIT	RATE
1	Air hose 25 mm dia	Rm	172.00
2	Air hose 50 mm dia	Rm	262.00
3	Demand charges (HT-I : General-11 KVA category) on power supply	KVA / month	422.00
4	Diesel	Ltr	91.04
5	<b>Electric power (HT-VIII Category) including tax (1.5 times of the Tariff of HT-I(A): General-11 KVA category)</b>	Kwhr	10.00
6	Excise duty on Gates / Hoist supplies	%	0.00
7	Insurance charges on machinery	% / annum	0.00
8	Interest on capital cost	% / annum	9%
9	Lubricants	Ltr	240.00
10	Petrol	Ltr	96.50
11	Rivets	Kg	98.00
12	Road tax on transport vehicles	Rs./annum	R.T.A
13	Shalimastic sealing compound	Kg	102.00
14	Shutter oil	Ltr	37.00
15	Structural steel fabrication	Kg	32.00
16	Sundries ( Lump sum for un quantified inputs )	LS	24.00
17	Water hose ( pressure ) 20 mm dia	Rm	162.00
18	Steel wedges	LS	17.00
19	Elbows / Nipple / Plugs etc.,	LS	20.00
20	Soldering materials	LS	18.00
21	Steam circulation arrangement	LS	19.00
22	Fuel charges ( gas for heating )	LS	19.00
23	Vulcanizing materials	LS	20.00
24	Gas cutting set ( 2 No's 15 m hose and nozzle unit	Each	15402.00
25	Grease	Kg	262.00
26	Welding holder set ( cable / holder / gloves / mask etc )	Each	8670.00
27	Use rate of ropes	LS	162.00



**MATERIALS FOR GATES AND HOISTS**  
**FOR THE YEAR 2021-22**

Sl. No.	Description of material	Unit	Scheduled Rates for the Year 2021-22
1	Worm reducers	Each	2,27,448.00
2	Electric motor 20 HP(Double Shaft)	Each	1,08,000.00
3	Electric motor 17.5 HP(Double Shaft)	Each	76,500.00
4	Electric motor 12.5 HP(Double Shaft)	Each	65,790.00
5	Electric motor 5 HP(Double Shaft)	Each	31,110.00
6	Electric motor 3 HP (Double Shaft)	Each	20,580.00
7	Electric motor 2 HP (Double Shaft)	Each	12,118.00
8	Floating shaft 300 mm dia	Kg	200.00
9	Manual operating system	Each	29,453.00
10	Gate position indicator	Each	2,18,484.00
11	Ele-magnetic brake	Each	34,650.00
12	Electric cable / switch / control panel etc	LS	59,823.00
13	Wire rope sockets	Each	5,090.00



# LABOUR RATES



**LABOUR RATES  
FOR THE YEAR 2021-22**

Sl. No.	Category of Worker	Scheduled Rates for the Year 2021-22 (Rs)
<b>I.</b>	<b>SKILLED CATEGORY:</b>	
1	Bar bender	645
2	Black smith / Tin smith / Rivetor	540
3	Blaster ( Licensed )	645
4	Carpenter Cl- I	645
5	Electrician ( Licensed )	620
6	Fitter Cl- I	620
7	Floor Polisher / Tile Layer	540
8	Foreman	635
9	Gauge reader	535
10	Maistry / Work Inspector	645
11	Mason Cl- I / Brick layer Cl- I	545
12	Mechanic Cl- I	570
13	Operator Air compressor / DG set	570
14	Operator Batching plant	625
15	Operator Bus/Ambulance/ Lorry/ Tanker	625
16	Operator Concrete / Asphalt mixer	580
17	Operator Concrete / Asphalt paver	580
18	Operator Concrete pump / Placer/ ice plant	580
19	Operator Core drilling machine	625
20	Operator Crane/ Tower crane/ Cable way	625
21	Operator Drilling jumbo / Loco / Winch	570
22	Operator Grouting/ Guniting/ Shotcreting	570
23	Operator Jackhammer/Pneumatic tamper	570
24	Operator Pump / Ventilation fan	570
25	Operator Lathe/Drilling/Shearing machine	625
26	Operator Bending / Planing machine	570
27	Operator Road roller	630
28	Operator Shovel / Scraper / Dozer	630
29	Operator Spillway / Sluice gate	580
30	Operator Crusher / Conveyor / Mucker	580

Sl. No.	Category of Worker	Scheduled Rates for the Year 2021-22 (Rs)
31	Operator Tipper / Dumper / Transit mixer	625
32	Operator Concrete vibrator	580
33	Operator Vibratory plain / padfoot roller	575
34	Operator Wagon drill / Drifter	625
35	Painter Cl- I	625
36	Plumber ( Licensed ) / Pipe fitter	635
37	Sarang / Khalasi	570
38	Spun pipe moulder	575
39	Stone chiseller Cl- I / Stone cutter Cl- I	575
40	Struct. steel Fabricator / Marker / Erector	655
41	Welder / Gas Cutter	580
42	Welder (X-ray quality)	625
43	Caulker	625
44	Bore Mechanic	625
45	Plumber Class-I	635
<b>II.</b>	<b>SEMI SKILLED CATEGORY:</b>	
1	Asphalt Sprayer / Boiler attendant	515
2	Bhisti	515
3	Boatman with boat	515
4	Carpenter Cl- II / Erector shuttering	515
5	Cartman with double bullock cart	570
6	Cartman with single bullock cart	515
7	Chavali / Navagani	515
8	Crowbarman / Jumperman	515
9	Fitter Cl- II	515
10	Gangman / Head / Survey mazdoor	515
11	Gardener / Trained mali	515
12	Helper Air compressor / DG set	515
13	Helper Batching plant	515
14	Helper Blasting	515
15	Helper Bus/ Ambulance/ Lorry/ Tanker	515
16	Helper Bending/Shearing/Planing machine	515
17	Helper Carpenter	515

Sl. No.	Category of Worker	Scheduled Rates for the Year 2021-22 (Rs)
18	Helper Concrete / Asphalt mixer	515
19	Helper Concrete / Asphalt paver	515
20	Helper Core drilling machine	515
21	Helper Crane/ Tower crane/ Cable way	515
22	Helper Drilling jumbo / Loco / Winch	515
23	Helper Fitter / Fabrication	515
24	Helper Grouting/ Guniting/ Shotcreting	515
25	Helper Jack hammer / Pneumatic tamper	515
26	Helper Laboratory / Instrumentation	515
27	Helper Road roller	515
28	Helper Shovel / Scraper / Dozer	515
29	Helper Crusher / Conveyor / Mucker	515
30	Helper Tipper / Dumper/ Transit mixer	515
31	Helper Vibrator	515
32	Helper Vibratory plain/ padfoot roller	515
33	Helper Wagon drill/ Drifter	515
34	Lineman Electric / Telephone	515
35	Mason Cl- II / Brick layer Cl-II	515
36	Mechanic Cl- II	515
37	Painter Cl- II	515
38	Patkari / Neeraganti / Sowdy	515
39	Stone Chiseller Cl- II	515
40	Stone breaker / Hammerman	515
41	Valveman / Canal sluice operator	515
42	Plumber Class-II	515
43	Sewer Cleaner	515
<b>III.</b>	<b>UN-SKILLED CATEGORY:</b>	
1	Cement / Asphalt handling mazdoor	490
2	Civic worker	490
3	Heavy mazdoor	490
4	Light mazdoor	490
5	Watchman	490
<b>IV.</b>	<b>OTHER CATEGORY:</b>	

Sl. No.	Category of Worker	Scheduled Rates for the Year 2021-22 (Rs)
1	Care-taker / conductor / Lift attender	515
2	Cook / Messman	515
3	Dhobi	515
4	Diploma Engineer / Surveyor	925
5	Diver with headgear	625
6	Graduate / Laboratory Assistant	645
7	Graduate Engineer/ Geologist	1175
8	Horticulture Assistant / Photographer	570
9	ITI certificate holder / Tracer / Printer	655
10	Literate mazdoor	490
11	Stenographer / Computer Operator	680
12	Telephone / Wireless Operator	635
13	Typist/Job Typist	635
14	CAD operator with diploma in Engineering/General degree with CAD Certificate	925
15	Jeep Driver	605
16	Data Processing Operator	820
17	Laboratory Chemist with M.Sc/B.sc Chemistry having Computer Knowledge./ Laboratory Microbiologist with M.Sc / B.Sc Microbiology or B.Sc with BZC having Computer Knowledge.	925

**Note:-**

1. The wage should not be less than the minimum wages of schedule of employment, subject to out turn.
2. 25% extra over the corresponding Labour rates in respect of the work to be done during night time subject to issue of certificate accordingly by the concerned estimate sanctioning authority for providing in the data and by concerned Executive Engineer in charge of the work for payment. The night time allowance is applicable only to the works done under all Municipality limits only.



# HIRE CHARGES



**HIRE CHARGES OF MACHINERY**  
**FOR THE YEAR 2021-22**

Sl. No	Description of machinery	Unit	Hire charge in Rs	Fuel charge in Rs	Crew Charge in Rs.	Total in Rs
1	Agitator car / Transit mixer 2 cum	Hour	799.70	1377.00	355.70	2532.40
2	Air compressor 5 cmm ( electric )	Hour	105.80	302.10	211.60	619.50
3	Air compressor 7 cmm ( diesel )	Hour	240.30	1126.60	270.80	1637.70
4	Air compressor 7 cmm ( electric )	Hour	140.30	402.80	211.60	754.70
5	Air compressor 8.5 cmm ( diesel	Hour	272.40	1408.30	270.80	1951.50
6	Air compressor 8.5 cmm ( electric)	Hour	166.40	503.60	211.60	881.60
7	Air compressor 15 cmm ( electric)	Hour	133.80	1119.00	225.70	1478.50
8	Angle Dozer 90 hp	Hour	1695.90	963.30	297.70	2956.90
9	Batching plant 0.5 cum( 6 cum/hr)	Hour	114.70	134.30	426.70	675.70
10	Batching plant 2 x 1.00 cum(15 cum/hr)	Hour	376.30	402.80	426.70	1205.80
11	Batching plant 2 x 1.50 cum(50 cum/hr)	Hour	495.60	492.40	426.70	1414.70
12	Bending machine 3000 x 12 mm	Hour	41.00	134.30	169.30	344.60
13	Clamp shell and hoisting ropes	Hour	5.90	0.00	0.00	5.90
14	Concrete bucket 1.5 cum	Hour	15.80	0.00	0.00	15.80
15	Concrete hand mixer 45 / 30 ltr	Hour	6.10	0.00	0.00	6.10
16	Concrete mixer 300 / 200 ( diesel)	Hour	55.60	125.20	284.70	465.50
17	Concrete mixer 300 / 200 ltr ( electric)	Hour	56.10	44.80	284.70	385.60
18	Concrete mixer 600 / 400 ( diesel)	Hour	92.50	250.40	284.70	627.60
19	Concrete mixer 600 / 400 ltr ( electric	Hour	90.60	89.50	284.70	464.80
20	Concrete paver 100 sqm / hr	Hour	338.40	0.00	546.60	885.00
21	Convey mucker	Hour	825.50	311.50	227.80	1364.80
22	Core drilling machine	Hour	320.90	375.50	355.70	1052.10
23	Diesel generating set 30 KVA	Hour	66.70	1001.40	169.30	1237.40
24	Diesel generating set 50 KVA	Hour	98.20	1502.20	169.30	1769.70
25	Diesel Loco 45 hp	Hour	369.50	845.00	211.60	1426.10
26	Dewatering pump 5 hp ( diesel )	Hour	9.00	125.20	142.30	276.50
27	Dewatering pump 5 hp ( electric )	Hour	3.10	44.80	106.70	154.60
28	Dewatering pump 10 hp ( diesel )	Hour	15.50	250.40	142.30	408.20
29	Dewatering pump 10 hp ( electric	Hour	6.70	89.50	106.70	202.90
30	Dewatering pump 20 hp ( diesel )	Hour	49.30	500.70	142.30	692.30
31	Dewatering pump 20 hp ( electric	Hour	13.10	179.00	106.70	298.80
32	Drifter	Hour	320.50	0.00	444.60	765.10
33	Drilling jumbo	Hour	374.50	67.60	225.70	667.80
34	Dumper 4.5 cum	Hour	623.90	630.90	284.50	1539.30
35	Geophysical Electric resistivity meter	Hour	102.80	0.00	0.00	102.80
36	Grouting pump	Hour	35.30	44.80	338.50	418.60
37	Guniting / sand blast equipment	Hour	114.10	0.00	282.10	396.20
38	Ice plant & accessories 30 t / day	Hour	176.60	1275.70	170.80	1623.10
39	Jack hammer	Hour	20.80	0.00	423.20	444.00
40	Needle vibrator 40 mm ( petrol )	Hour	6.10	26.50	204.90	237.50
41	Needle vibrator 40 mm ( electric )	Hour	5.70	9.00	204.90	219.60
42	Needle vibrator 60 mm ( petrol )	Hour	6.40	39.80	204.90	251.10
43	Needle vibrator 60 mm ( electric )	Hour	6.30	13.40	204.90	224.60

Sl. No	Description of machinery	Unit	Hire charge in Rs	Fuel charge in Rs	Crew Charge in Rs.	Total in Rs
44	Planing machine 4 m stroke	Hour	110.70	134.30	270.80	515.80
45	Plate shearing machine upto 12 mm	Hour	45.50	179.00	177.80	402.30
46	Pneumatic placer 0.5 cum	Hour	180.20	0.00	113.10	293.30
47	Pneumatic tamper	Hour	21.10	0.00	338.50	359.60
48	Pug cutting machine	Hour	7.30	4.50	0.00	11.80
49	Pusher leg	Hour	12.50	0.00	0.00	12.50
50	Road roller diesel 10 t	Hour	213.40	1126.60	285.80	1625.80
51	Shovel 0.50 cum 75 hp	Hour	964.30	751.10	297.70	2013.10
52	Shovel 0.85 cum 110 hp	Hour	1656.50	1377.00	297.70	3331.20
53	Stationery derrick crane	Hour	81.20	0.00	0.00	81.20
54	Tipper 5 cum	Hour	490.10	473.20	222.30	1185.60
55	Tipping tub 1.5 cum	Hour	70.50	0.00	0.00	70.50
56	Tower crane 5 tonne	Hour	850.70	232.80	237.10	1320.60
57	Transformer 250 KVA	Hour	5073.90	0.00	0.00	5073.90
58	Truck 10 t	Hour	447.10	473.20	222.30	1142.60
59	Truck mounted derrick crane 5 t	Hour	595.40	473.20	222.30	1290.90
60	Upright drilling machine/Grinder	Hour	23.60	44.80	243.80	312.20
61	Ventilation fan 20 hp	Hour	11.60	179.00	36.80	227.40
62	Vibratory pad foot roller 8 t	Hour	1325.00	1627.30	340.10	3292.40
63	Wagon drill	Hour	185.30	0.00	355.70	541.00
64	Water tanker 8000 ltr	Hour	417.80	473.20	222.30	1113.30
65	Welding set	Hour	15.60	107.40	0.00	123.00
66	Winch 35 hp ( electric )	Hour	127.20	219.30	338.50	685.00
67	Tractor with 2T roller	Hour				380.00
68	Hydraulic Truck Crane 30T	Hour	3222.20	118.80	670.20	4011.20
69	Hydraulic Truck Crane 16T	Hour	2172.20	75.00	670.20	2917.40
70	Heavy Duty Airless Spray Painting Equip.	Hour	124.00			124.00

**CONVEYANCE  
CHARGES OF MATERIAL**



**LEAD/LIFT/LOADING & UNLOADING CHARGES**  
**FOR THE YEAR 2021-22**

**LEAD, LIFT, LOADING AND UNLOADING CHARGES FOR MATERIALS**

1. For total lead up to 150 m (including initial lead) lead charges by head load only shall be adopted irrespective of mode of conveyance.
2. For total lead exceeding 150 m conveyance by mechanical means only shall be adopted irrespective of mode of conveyance.
3. The rates for loading at quarry including idle hire charges of trucks and hire charges per for each kilometre and up to 5 km are cumulative and inclusive of total charges for preceding lead.
4. Unless otherwise specified lead charges for Earth / Sand / Gravel / Aggregates and Stones are for loose volume and not for compacted or in-situ volume.
5. The rates for lift charges, lead charges, hire charges are cumulative and inclusive of rates for preceding lift, lead and hire charges
6. Lift charges are not payable where conveyance of materials is by mechanical means to final placing point.
7. Loading and unloading charges are not payable for conveyance by head load.
8. Loading charges are not payable for conveyance by mechanical means for disposal of excavated materials beyond initial lead of 50 m wherever specified.
9. Loading and unloading charges are not payable for conveyance by mechanical means for disposal of excavated materials beyond initial lead of 1 km wherever specified.
10. The rates for unloading of materials except earth, sand, gravel, coarse aggregate, rubble, size stone and cut stone are inclusive of stacking.
11. Hire charges are per 1KM for tippers and trucks for transport of materials from work site to dump yard and other places are cumulative& includes previous km up to 5 kms.
12. The lead & lift charges are inclusive of contractor's profit and overhead charges of 13.615%
13. *During the BoCE meeting held on 26.05.2016, it is observed that the in some of the estimates, Lead charges are being added directly to the material basic rates for arriving the finished item rate. In view of that, the BoCE has instructed to see that while arriving the finished item rate the lead charges are to be added to the material basic rates only after deducting the provision of Contractor's Profit and Overhead charges.*

**COM-LDLFT-1**

**A. (Lead) Conveyance Charges for materials by head load**

Sl No.	Total distance ( Total lead includes initial lead )	Earth / Sand /Gravel / Murrum/ Lime/ Surki/ Size stone / Cut stone Rubble / Coarse aggregate Rs/ Cum	Cement / Reinforce-ment steel Str steel Rs / tonne	PCC slab/ Shahbad slab / CC block/ BS slab/ Late-rite / Wood Rs / cum
1	2	3	4	5
1	Total lead upto 50 m (covered by item rate)	Initial Lead	Initial Lead	Initial Lead
2	Total lead upto 100 m	79.50	46.40	101.20
3	Total lead upto 150 m	159.10	92.80	202.40

**Notes:**

1. No loading or unloading charges are admissible for conveyance by head load.
2. For total lead exceeding 150 m conveyance charges by mechanical means only shall be adopted irrespective of mode of conveyance.
3. The Lead Charges are inclusive of 13.615% Contractor Profit and Overhead charges

#### COM-LDLFT-2

**B. (Lead) Conveyance charges for machinery per kilometer for transporting materials by tippers and trucks excluding loading, unloading and idle hire charges of machinery.**

**( No loading and unloading charges allowed for machinery loading and unloading )**

SI No.	Distance	(Lead) charges for trucks and tippers for Earth / Sand /Gravel / Murrum/ Lime/ Surki/ per cu.meter	(Lead) charges for trucks and tippers for Rubble/Size stones/ Cut Stones/ Coarse aggregate per cu.meter	(Lead) charges for trucks and tippers for Cement/ Steel/ RCC poles/ AC & GI sheets/ Packed materials/ tonne	(Lead) charges for trucks and tippers per cu.meter for PCC slabs/ Shahabad slabs/ CC & Laterite blocks/ Wood/ cum	(Lead) charges for per cu.meter for water/ 1000 litres	(Lead) charges for trucks per 1000 Nos. of Bricks
1	2	3	4	5	6	7	8
1	Lead upto 1 km	40.40	38.90	24.30	57.30	23.70	64.90
2	Lead upto 2 km	56.60	54.50	34.10	80.20	33.20	90.90
3	Lead upto 3 km	75.40	75.40	47.10	110.90	44.30	121.20
4	Lead upto 4 km	91.60	91.60	57.20	134.70	53.80	147.10
5	Lead upto 5 km	107.80	107.80	67.40	158.50	63.20	173.10
6	for Every km beyond 5 km upto 30 km	16.20	16.20	10.10	23.80	9.50	26.00
7	for Every km beyond 30 km	13.50	13.50	8.40	19.80	7.90	21.60

**Note: The Lead Charges are inclusive of 13.615% Contractor Profit and Overhead charges**

#### COM-LDLFT-3

**C. LOADING AND UNLOADING CHARGES BY MANUAL MEANS (idle hire charges of trucks are not added)**

SI No.	Description of item	Earth / Sand /Gravel Murrum/ Surki/ Rs / cum	Rubble/ size stone/ cut stone/ Coarse aggregate,Lime in Rs/cum	Cement in Rs/tonne	Steel in Rs./tonne	Brick work Rs/1000 No
1	2	3	4	5	6	7
1	Loading	26.40	52.70	87.00	104.30	72.50
2	Unloading	13.20	26.35	87.00	104.30	72.50

**Note: The Lead Charges are inclusive of 13.615% Contractor Profit and Overhead charges**



**COM-LDLFT-4****D. LOADING AND UNLOADING CHARGES BY MANUAL MEANS (including idle hire charges of trucks)**

Sl No.	Description of item	Earth / Sand /Gravel /Murrum/ Surki/ Rs / cum	Rubble / size stone / cut stone / Coarse aggregate, Lime in Rs/cum	Cement in Rs/ tonne	Steel in Rs./ tonne	Brick work Rs/1000 No
1	2	3	4	5	6	7
1	Loading	144.40	170.80	216.80	234.10	286.70
2	Unloading	52.40	85.40	216.80	234.10	286.70

**COM-LDLFT-5****E. LOADING AND UNLOADING CHARGES BY MECHANICAL MEANS (including idle hire charges of trucks)**

Sl No.	Description of item	Earth / Sand /Gravel /Murrum/ / Surki/ Rs / cum	Rubble/ size stone/ cut stone/ Coarse aggregate, Lime in Rs/cum
1	2	3	4
1	Loading	67.00	126.20
2	Unloading	20.30	20.30

*Note: The Lead Charges are inclusive of 13.615% Contractor Profit and Overhead charges*

**COM-LDLFT-6****F. LIFT CHARGES FOR MATERIALS BY HEAD LOAD**

Sl No.	Total lift (Total lift includes initial lift)	Earth / Sand /Gravel /Murrum/ Lime/ Surki/ Size stone / Cut stone Rubble / Coarse aggregate Rs / cum	Cement / Reinforcement steel/ Str steel Rs / tonne	PCC slab/ Shahbad slab / CC block/ BS slab / Laterite / Wood Rs / cum
1	2	3	4	5
1	Total lift upto 3 m (covered by item rate)	Initial lift	Initial lift	Initial lift
2	For Every 1.00 Lift beyond initial lift of 3 meters	9.30	6.70	12.40



**PART-II**  
**ROADS & BRIDGES WORKS**

# PART-II INDEX

## Roads & Bridge Works

S.No.	Description	Page No	
		From	To
1	Labour Rates	24	26
2	Material & Work Items	27	34
3	Hire Charges	35	37

**LABOUR RATES**

Sl. No	S.S. Item No.	Description	Unit (Per)	Scheduled Rate for Year (2021-22)	Remarks
1	2	3	4	5	6
<b>(A) SKILLED WORKMEN</b>					
<b>First Class</b>					
1	a	stone cutter	Day	<b>575</b>	As per I&CAD (S.No.39)
2	b	Mason Cl-I/Brick Layer	Day	<b>545</b>	As per I&CAD (S.No.11)
3	c	Carpenter	Day	<b>645</b>	As per I&CAD (S.No.4)
4	d	Painter	Day	<b>625</b>	As per I&CAD (S.No.35)
5	e	Plumber	Day	<b>635</b>	As per I&CAD (S.No.36)
6	f	Welder	Day	<b>580</b>	As per I&CAD (S.No.41)
7	g	Fitter	Day	<b>620</b>	As per I&CAD (S.No.6)
8	h	Electrician	Day	<b>620</b>	As per I&CAD (S.No.5)
9	1	Cook	Day	<b>515</b>	As per I&CAD (S.No.2) Other Category
10	2	Mechanic	Day	<b>570</b>	As per I&CAD (S.No.12)
12	6	Blaster(licensed)	Day	<b>645</b>	As per I&CAD (S.No.3)
13	3	Barbender	Day	<b>645</b>	As per I&CAD (S.No.1)
14	7	Tipper and Heavy Vehicle Driver above 12 T	Day	<b>625</b>	As per I&CAD (S.No.15)
15		Road Roller Driver (7.5 T to 12 T)	Day	<b>630</b>	As per I&CAD (S.No.27)
<b><u>Operator</u></b>					
16		Concrete Mixer	Day	<b>580</b>	As per I&CAD (S.No.16)
17		Vibrator	Day	<b>580</b>	As per I&CAD (S.No.32)
18		Jack Hammer	Day	<b>570</b>	As per I&CAD (S.No.23)
19		Driller	Day	<b>625</b>	As per I&CAD (S.No.34)
20	11	Pump operator	Day	<b>570</b>	As per I&CAD (S.No.24)
21	13	Wireless Operator	Day	<b>635</b>	As per I&CAD (S.No.12) Other Category
22	15	Jeep Driver	Day	<b>605</b>	As per I&CAD (S.No.15) Other Category
23	16	Work Inspector with I.T.I qualification	Day	<b>655</b>	As per I&CAD (S.No.9)

Sl. No	S.S. Item No.	Description	Unit (Per)	Scheduled Rate for Year (2021-22)	Remarks
					Other Category
24	17	Work Inspector with LCE, LME, L.E.E qualification	Day	925	As per I&CAD (S.No.4) Other Category
25	18	Work Inspector with B.E (Civil Mechanical and Electrical qualification)	Day	1175	As per I&CAD (S.No.7) Other Category
26	19	Work Inspector with Non-technical qualification SSLC/SSC/HSC	Day	645	As per I&CAD (S.No.10)
27	27 a(i)	Typist/ Job Typist	Day	635	As per I&CAD (S.No.13) Other Category
28	a (ii)	Computer operator	Day	680	As per I&CAD (S.No.11) Other Category
29	b	"CAD Operator with Diploma in Engineering /General degree with CAD certificate"	Day	925	As per I&CAD (S.No.14) Other Category
<b>(B) SEMI -SKILLED WORKMEN</b>					
<b>SECOND CLASS</b>					
30	1	Mason	Day	515	As per I&CAD (S.No.35) Semi-Skilled
31	b	Brick Layer and Stone Cutter	Day	515	As per I&CAD (S.No.35) Semi-Skilled
32	c	Carpenter	Day	515	As per I&CAD (S.No.4) Semi-Skilled
33	d	Painter	Day	515	As per I&CAD (S.No.37) Semi-Skilled
34	10	Telephone Operator	Day	635	As per I&CAD (S.No.12) Other Category
35	13	Hammer Man	Day	515	As per I&CAD (S.No.40) Semi-skilled
36	1	Head Mazdoor (Mukaddar)	Day	515	As per I&CAD (S.No.10) Semi Skilled
<b>(C) UNSKILLED WORKMEN</b>					
37	2	Man Mazdoor	Day	490	As per I&CAD (S.No.3) Un-Skilled
38	3	Watch Man	Day	490	As per I&CAD (S.No.5) Un-Skilled
39	5	Woman Mazdoor	Day	490	As per I&CAD (S.No.4) Un-Skilled

Sl. No	S.S. Item No.	Description	Unit (Per)	Scheduled Rate for Year (2021-22)	Remarks
<b>Note :</b> <i>Whenever unskilled workmen are engaged for cleaning of Sewers &amp; Septic Tanks, they may be paid double of the above wages.</i>					
<b>(D) OTHER CONVEYANCE ITEMS</b>					
40	1	Single bullock with driver and cart	Day	<b>515</b>	As per I&CAD (S.No.6) Semi Skilled
41	3	Bullock pair with driver and cart	Day	<b>570</b>	As per I&CAD (S.No.5 ) Semi Skilled
42	6	Nava with crew	Day	<b>515</b>	As per I&CAD (S.No.3) Semi Skilled

**Note:**

- 1. The wage should not be less than the minimum wages of schedule of employment, subject to out turn.*
- 2. 25% extra over the corresponding labour rates in respect of the work to be done during night time subject to issue of certificate accordingly by the concerned estimate sanctioning authority for providing in the data and by concerned Executive Engineer in charge of the work for payment. The night time allowance is applicable only to the works done under Greater Hyderabad Muncipal Corporation and Greater Warangal Municipal Corporation limits only.*

**MATERIAL RATES**

Sl. No	S.S Item No.	Description	Unit	Scheduled Rate for Year (2021-22)	Remarks
1	2	3	4	5	6
		<b>(A) STONE AND ROAD MATERIALS</b>			
		<b>ROUGH STONE QUARRIED INCLUDING WEDGING, BREAKING, BURNING, SPLITTING</b>			
1	22.a	For R.R Masonary Work (other than Granite, Dolomite and Trap	1 cum	152	Retained as per SoR 2021-22
2	b.i	For SS Revetment work 225 mm	1 cum	152	do
3	b.ii	For SS Revetment work 300 mm	1 cum	156	do
4	b.ii i	For SS Revetment work 450 mm	1 cum	129	do
5	c	Jeddy Stone above 450 mm to 600 mm	1 cum	179	do
6	d I.	Laterite for revetment 225 mm	1 cum	112	do
7	d II.	Laterite for revetment 300 mm	1 cum	131	do
8	d.ii i	Granite for revetment 225 mm	1 cum	146	do
9	d.iv	Granite for revetment 300 mm	1 cum	148	do
		<b>Note:- Only when other than granite is not available</b>			
10	e	Laterite for masonry	1 cum	129	do
11	f	Cyclopean stones above 0.2 cum	1 cum	241	do
12	g	For R.R.Masonry works ( granite, dolomite and trap variety) including loading & unloading	1 cum	239	do
13		NOTE:- For items 22(a) to 22(c), 22d.iii, 22d.iv 22(f) and 22(g) add extra Rs /cum, wherever quarrying is done by blasting	1 cum	70	do
		<b>COURSED RUBBLE STONE QUARRYING WEDGING, BREAKING, BURNING AND SPLITTING FOR SS FIRST SORT WORKS</b>			
14	23.a	Granite, dolomite and trap	1 cum	249	do
15	b	For other varieties	1 cum	179	do
16	27	Granite stone slabs for culverts, lintels and copings (3 faces dressed coarse rubble masonry)	1 cum	1642	do
17		<b>NOTE: - For items 23(a), 23(b) and 27 add extra Rs. Per Cum, wherever quarrying is done by blasting</b>	1 cum	70	do
18	28	Bond stones ( 600 x 200 x 200 mm )	each	29	do
19	b	Chainage stones and Centre line stones (750x150x150mm)	each	35	do
	29 (a)	Kilometers stones ( 1100 x 370 x 250 mm)	each	Based on detailed	



Sl. No	S.S Item No.	Description	Unit	Scheduled Rate for Year (2021-22)	Remarks
	b	5th Kilometers stones ( 1520 x 520 x 250 mm)	each	analysis as per MoRTH Data	
	30 (a)	Hectometers stones ( 900 x 200 x 200 mm)	each		
20	31	Demarcation Stones ( 900 x 150 x 150 mm)	each	67	do
21	32. a	Guard Stones ( 1200 x 200 x 200 mm )	each	97	do
22	b	Guide Stones ( 800 x 150 x 150 mm )	each	67	do
23	c	Carving letters and figures in stone up to 100 mm size	each	8	do
24	d	Carving letters and figures in stone above 100 mm size	each	9	do
		<b>HARD BROKEN STONE OF GRANITE, TRAP AND DOLERITE FREE FROM DUST OBTAINED BY QUARRYING, WEDGING, BREAKING, BURNING AND SPLITTING .</b>			
25	33. a	- do - 6mm size (IS383,1970)	1 cum	505	do
26	b	- do - 10mm size (IS383,1970)	1 cum	657	do
27	c	- do - 12mm size (IS383,1970)	1 cum	781	do
28	d	- do - 20mm size (IS383,1970)	1 cum	870	do
29	e	- do - 25mm size (IS383,1970)	1 cum	830	do
30	f	- do - 40mm size (IS383,1970)	1 cum	505	do
31	g	- do - 50mm size (IS383,19705)	1 cum	433	do
32	h	- do - 60mm size (IS383,1970)	1 cum	398	do
33	i	- do - 65mm size (IS383,1970)	1 cum	360	do
34	j	- do - 75mm size (IS383,1970)	1 cum	289	do
35	k	- do - 75 to 100mm size (IS383,1970)	1 cum	236	do
36		NOTE:- (1) Add extra Rs. /- per cum for items 33 (a) to 33 (k) if the metal is obtained by blasting		70	do
37		(2) Add 25% extra per cum if the metal is obtained by machine crushing excluding cost of blasting.		25%	do
38		(3) Deduct Rs. /- per cum if the metal or rubble is obtained from surface stone and boulders.		9.9	do
39		(4) Add Rs. /- per cum for selection of stones and boulders from excavated spoil dumps for items 33 a to 33 k, when this addition of Rs. /- per Cum is allowed deduction of Rs. /- per Cum mentioned under Note (3) above should invariably be made.		17	do
		<b>SOFT BROKEN STONE SCREENED AND FREE FROM DUST</b>			
40	33.l	- do - 40 mm size ( IS383,1970 )	1 Cum	117	do
41	33. m	- do - 50 mm size ( IS383,1970 )	1 Cum	105	do
42	33.	- do - 60 mm size ( IS383,1970 )	1 Cum	83	do

Sl. No	S.S Item No.	Description	Unit	Scheduled Rate for Year (2021-22)	Remarks
	n				
43	33.o	- do - 65 mm size ( IS383,1970 )	1 Cum	74	do
44	33.p	- do - 75 mm size ( IS383,1970 )	1 Cum	69	do
		<b>HARD BROKEN STONE OF GRANITE TRAP DOLERITE AND DOLAMITE FREE FROM DUST OBTAINED BY QUARRYING WEDGING, BREAKING, BURNING AND SPLITTING (QUARTZITE AND BASALT WITH AGGREGATE IMPACT OF LESS THAN 20)</b>			
45	33a	-do- 2.36 mm to 5 mm size ( IRC, MORTH &MORD)	1 cum	485	do
	b	-do- 5 mm to 7 mm size ( IRC, MORTH & MORD)	1 cum	485	do
46	c	-do- 9.5 mm to 11.2 mm size ( IRC, MORTH & MORD)	1 cum	620	do
47	d	-do- 12mm to 14 mm size ( IRC, MORTH & MORD)	1 cum	700	do
48	e	-do- 19 mm to 22 mm size ( IRC,MORTH & MORD )	1 cum	821	do
49	f	-do- 25 mm to 27 mm size ( IRC,MORTH &MORD )	1 cum	790	do
50	g	-do- 40 mm to 45 mm size ( IRC , MORTH &MORD)	1 cum	520	do
51	h	-do- 50 mm to 55 mm size ( IRC,MORTH & MORD )	1 cum	440	do
52	i	-do- 60 mm to 63 mm size ( IRC, MORTH &MORD)	1 cum	400	do
53	j	-do- 65 mm size ( IRC ,MORTH &MORD )	1 cum	360	do
54	k	-do- 75 mm size ( IRC,MORTH &MORD)	1 cum	290	do
55	1	<b>NOTE:- Add extra Rs. /- per cum for items 33 (a) to 33 (j) if the metal is obtained by blasting</b>	1 cum	70	do
56	2	Add <b>25%</b> extra per cum if the metal is obtained by machine crushing excluding cost of blasting.	1 cum	25%	do
57	3	Deduct Rs. /- per cum if the metal or rubble is obtained from surface stones and boulders	1 cum	9.9	do
58	4	Add Rs. /- per cum for selection of stones and boulders from excavated soil dumps for items 33 (a) to 33 (k), when this addition of Rs. /- per cum allowed deduction of Rs. /- per cum mentioned under note (3) above should invariably be made	1 cum	17	do
		<b>HARD BROKEN STONE OTHER THAN GRANITE SUCH AS QUARTZ, QUARTZ-</b>			

Sl. No	S.S Item No.	Description	Unit	Scheduled Rate for Year (2021-22)	Remarks
		<b>NAPA AND BASALT SCREENED AND FREE FROM DUST</b>			
59	33. q	- do - 10 mm size (IS383,1970)	1 Cum	367	do
60		-do- 9.5 mm to 11.2 mm size ( IRC,MORTH & MORD )	1 Cum	367	do
61	r	- do - 12 mm size (IS383,1970)	1 Cum	344	do
62		-do- 12mm to 14 mm size ( IRC , MORTH & MORD )	1 Cum	344	do
63	s	- do - 20 mm size (IS383,1970)	1 Cum	278	do
64		-do- 19 mm to 22 mm size ( IRC,MORTH & MORD )	1 Cum	278	do
65	t	- do - 25 mm size (IS383,1970)	1 Cum	273	do
66	u	- do - 40 mm size (IS383,1970)	1 Cum	162	do
67		-do- 40 mm to 45 mm size ( IRC , MORTH & MORD)	1 Cum	162	do
68	v	- do - 50 mm size (IS383,1970)	1 Cum	143	do
69		-do- 50 mm to 55 mm size ( IRC,MORTH &MORD)	1 Cum	143	do
70	33. w	- do - 65 mm size (IS383,1970)	1 Cum	135	do
71		-do- 60 mm to 65 mm size ( IRC, MORTH &MORD)	1 Cum	135	do
72	x	- do - 75 mm size (IS383,1970)	1 Cum	111	do
73		- do - 75 mm size ( IRC ,MORTH & MORD)	1 Cum	111	do
74	y	- do - 75 to 100 mm size (IS383,1970)	1 Cum	87	do
75		- do - 75 to 100 mm ( IRC, MORTH & MORD)	1 Cum	87	do
		<b>OTHER ITEMS</b>			
76	33. z1	Laterite 40 to 75 mm ( ring)	1 Cum	96	do
77	z2	kankar, hard broken kankar 40 to 75 mm ( ring )	1 Cum	71	do
78	z3	Soling stone of 150 mm size of granite, trap and Dolomite varieties.	1 Cum	90	do
79		<b>NOTE:-</b> (1) Add extra for items to 33(z3) Rs /- Per cum, wherever quarrying is done by blasting. (2) Wherever controlled blasting is resorted to the Chief Engineer concerned shall approve the observed data in support of SS item No. 22 a to 22 c , 22g, 23	1 Cum	70	do
80	z4	Soling stone of 150 mm size other than granite variety	1 Cum	63	do
81	z5	Soling Stone laterite, Kankar 150mm, surface stone	1 Cum	39	do
82	z6	Field picked metal unbroken 20 mm size	1 Cum	52	do
83	z7	- do - 25 mm size	1 Cum	40	do

Sl. No	S.S Item No.	Description	Unit	Scheduled Rate for Year (2021-22)	Remarks
84	z8	- do - 40 mm size	1 Cum	46	do
85	z9	- do - 50 mm size	1 Cum	40	do
86	z10	- do - 60 mm size	1 Cum	34	do
87	z11	- do - 80 mm size	1 Cum	30	do
88		<b>NOTE:-</b> Add Rs. /- Per Cum for selection of stone and boulders from excavated spoil dumps for items 33 (Q) TO 33 Z , when this addition of Rs. /- Per cum is allowed deduction of Rs. /- per cum should invariably be made towards the metal or rubble if it is obtained from surface stone and boulders.			do
89	34	<b>Gravel</b>	1 Cum	98	do
90	35 a	Quarry rubbish	1 Cum	77	do
91	b	HBG Stone Chips 2.36mm and below	1 Cum	524	As per I&CAD S.No 67 of Materials
		<b>NOTE: Add 25% extra per cum for item 91(b) if the metal is obtained by machine crushing excluding cost of blasting</b>			
92	36. a	Sand for mortar, ceiling coat including washing screening etc.,	1 Cum		As per I&CAD S.No 28 of Materials
93	36. b	Sand for Concrete	1 Cum		As per I&CAD S.No 27 of Materials
94	36. c	Sand for filling and blindage	1 Cum		As per I&CAD S.No 27 of Materials
95	37	Clay for puddle and masonry Items 38 (a) to 39 (h) As per local prevailing rates based on competitive quotations.	1 Cum	33	do
		<b>(C) LIME AND CEMENT</b>			
96	40 to 41(c)				
97	42	Cement	Metric Tonne		
		<b>NOTE: (1) The rate is material at site ( No conveyance charges to be allowed) 2)As per the rates applicable to the District. 3) Least of the (1) and (2 ) above may allowed 4) The price of cement will be reviewed and fixed on monthly basis as per G.O.Ms.No.94 T,R&amp;B Dept Dt16-4-2008 and rates will be communicated separately.</b>			
98	42. a	Labour for mixing cement mortar	1 Cum	<b>Based on detailed analysis as per MoRTH</b>	
99	b	Mixing of cement mortar by machine	1 Cum		

Sl. No	S.S Item No.	Description	Unit	Scheduled Rate for Year (2021-22)	Remarks
				<b>Data</b>	
100	c	Grinding lime mortar or Surkhi mortar	1 Cum	<b>89</b>	do
101	d	Shell lime slaked and screened	1 Cum	<b>893</b>	do
102	e	White cement	1 Kg.	<b>Building SSR</b>	
		<b>(D) MORTARS</b>			
103	43 to 45	Items 43 to 45			
		<b>(E) METAL AND IRON WORKS</b>			
104		Mild steel rods 6mm dia.	One Metric Tonne	Monthly Rates will be communicated by Govt.	
105		Mild steel flats	One Metric Tonne		
106		Mild Steel, Structural Steel, I.e., Angles, Channels and I sections.	One Metric Tonne		
107		High Yield Strength Deformed Bars	One Metric Tonne		
108		Mild Steel Plates	One Metric Tonne		
		<b>NOTE:</b> (1) The rate are inclusive of sales tax. 2) As per the rates applicable to the District. 3) Least of the (1) and (2 ) above may allowed 4) The prices of steel will be reviewed and fixed on monthly basis as per G.O.Ms.No.94 T,R&B Dept, Dt 16-4-2008 and rates will be communicated separately.			
		<b>III RATES OF WORKS</b>			
		<b>(A) CLEARING SITE</b>			
109	1.a	Clearing heavy Jungle	1 Sqm	<b>Based on detailed analysis as per MoRTH Data</b>	
110	b	Clearing light Jungle	1 Sqm		
111	c	Clearing Scrub Jungle	1 Sqm		
112	d	Clearing Juliflora (Prosafis) jungle including up-rooting and removing of Juliflora stumps.	1 Sqm	3.5	do
113	2.a .i	Cutting and removing Palmyrah trees including stacking of girth 30 to 100 cm.	Each	18	do
114	ii	- do - 100 to 200 cm.	Each	42	do
115	2.b .i	Uprooting and removing Palmyrah stumps including stacking of girth 30 to 100 cm.	Each	44	do
116	ii	- do - 100 to 200 cm.	Each	46	do
117	2.c .i	Cutting and removing date trees including stacking of girth 30 to 100 cm	Each	23	do
118	ii	- do - 100 to 200 cm	Each	33	do

Sl. No	S.S Item No.	Description	Unit	Scheduled Rate for Year (2021-22)	Remarks
119	d.i	Uprooting and removing stumps of date trees including stacking of girth 30 to 100 cm.	Each	23	do
120	ii	- do - 100 to 200 cm	Each	29	do
121	e.l	Cutting and removing other kind of trees including stacking of girth 30 to 100 cm	Each	29	do
122	ii	- do - 100 to 200 cm	Each	44	do
123	iii	- do - above 200 cm	Each	71	do
124	f.l	Uprooting and removing stumps of other kind of trees including stacking of girth 30 to 100 cm.	Each	23	do
125	ii	- do - 100 to 200 cm	Each	31	do
126	iii	- do - above 200 cm	Each	39	do
127	3.a	Uprooting and clearing prickly pear jungle	1 Sq.m	2	do
128	b	- do - under 2.5 meters height including burning and burying as directed.	1 Sq.m	2.9	do
129	c	- do - over 2.5 meters height including burning and burying with an initial lead of conveyance	1 Sq.m	3.3	do
130	4.a	Removing of natchu, goobi, thooti etc., from drains, channels including clearance if not more than 1 metre depth of water with an initial lead of 10 metres and lift of 2 metres.	1 Sq.m	1.8	do
131	b.l	Clearing alchi, tilla	1 Sq.m	3.6	do
132	b.ii	Removal of Jammu	1 Sq.m	3.1	do
133	c.l	Removal of imponea, cornea	1 Sq.m	3.4	do
134	c.ii	Removal of water hyacinth up to 30 cm thick.	1 Sq.m	3.5	do
135	c.iii	- do - more than 30 cm thick	1 Sq.m	4.8	do
136	d	Removal of natchu, goobi, thooti etc., for every extra lead or lift over the initial lead or lift.	1 Sq.m	1.3	do
		<b>(B) DISMANTLING</b>			
	5	<b>DISMANTLING, CLEARING AWAY MATERIALS USEFUL FOR REUSE.</b>			
137	n.(i)	Dry rough stone revetment for aprons and stacking within 40 metres	1 cum	59	do
		<b>(C) QUARRYING AND BLASTING</b>			
138	6	Blasting and removing hard granite measured in solid	1 cum	Based on detailed analysis as per MoRTH Data	
	7	<b>Drilling holes in hard granite or sheet rock</b>			
	a)	<b>Manually ( Hand)</b>			
139	i)	20 mm dia meter	1 RM	118	do
140	ii)	25 mm dia meter	1 RM	124	do
141	iii)	36 mm dia meter	1 RM	143	do

Sl. No	S.S · Ite m No.	Description	Unit	Scheduled Rate for Year (2021-22)	Remarks
	b)	<b>Pneumatic Compressor</b>			
142	i)	20 mm dia meter	1 RM	133	do
143	ii)	25 mm dia meter	1 RM	144	do
144	iii)	36 mm dia meter	1 RM	157	do
	8	<b>Grouting the holes with neat cement slurry excluding cost of steel</b>			
145	i)	20 mm dia meter	1 RM	84	do
146	ii)	25 mm dia meter	1 RM	105	do
147	iii)	36 mm dia meter	1 RM	131	do
271		Jute Rope	Mtr	8.3	do
272		De bonding Strips	Mtr	10	do
273		Selent	Ltr	66	do
274		Ply sheet 125 micron	1 Sqm	17	do
275		Rural water	1 kl	73	do
276		Urban water	1 kl	98	do

**HIRE CHARGES FOR MACHINERY**

Sl. No.	Description		Unit	Hire Charges for (2021-22) ( Rupees)	Remarks
	Machine	Activity			
1	2	3	4	5	6
1	Dozer( D 80 )	Spreading	Per Hour		As per I&CAD S.No 8
		Cutting			
		Cleaning			
2	Dozer( D 50 )	Spreading Cutting Cleaning	Per Hour	1758	
3	Mortor Grader	Clearing	Per Hour	3602	
		Spreading			
		GSB			
		WMM			
4	Hydraulic Excavator	Soil Ordinary	Per Hour		As per I&CAD S.No.52
		Soil Marshy			
		Soil unsuitable			
5	Front end loader	Soil loading	Per Hour	1844	
		Aggregate loading	Per Hour		
6	Tipper- 5.5 Cum	Transportation of soil, GSB,WMM, Hot mix etc	Per Hour	8	As per I&CAD S.No.54
			Per tonne Km		
7	Vibratory roller 8 tonne	Earth/Soil, GSB,	Per Hour		As per I&CAD S.No.62
		WMM			
8	Smooth wheeled roller 8 tonne	Soil compaction ,BM compaction	Per Hour		As per I&CAD S.No.50
9	Water tanker 8 Kilolitre	Water transport	Per Hour		As per I&CAD S.No.64
10	Water tanker 6 Kilolitre	Water transport	Per Hour	699	
11	Tractor	Pulling	Per Hour	465	
12	Tractor with rotavator	Scarifying	Per Hour	473	
13	Tractor with ripper attachment	Scarifying	Per Hour	568	
14	Air Compressor	General purpose	Per Hour		As per I&CAD S.No.2
15	Wet mix plant 60 TPH	Wet mix	Per Hour	1844	
16	Mechanical broom Hydraulic	Surface cleaning	Per Hour	400	
17	Bitumen Pressure Distributor	Applying bitumen tack coat	Per Hour	1678	
18	Emulsion Pressure Distributor	Applying emulsion tack coat	Per Hour	963	
19	Hot mix Plant - 120 TPH capacity	DBM/BM/SDC	Per Hour	31556	
		/Premix			
20	Hot mix Plant - 100 TPH capacity	DBM/BM/SDC	Per Hour	27072	
		/Premix			
21	Hot mix Plant - 60 TPH capacity	DBM/BM/SDC	Per Hour	24268	
		/Premix			
22	Hot mix Plant - 40 to 60 TPH capacity	DBM/BM/SDC	Per Hour	21414	
		/Premix			



Sl. No.	Description		Unit	Hire Charges for (2021-22) ( Rupees)	Remarks
	Machine	Activity			
23	Paver Finisher Hydrostatic with sensor control 100 TPH	DBM/BM/SDC	Per Hour	3427	
		/Premix			
24	Paver finisher Mechanical 100	Paving of WMM, paving of DLC	Per Hour	2519	
25	Hydraulic Chip Spreader	Surface dressing	Per Hour	2875	
26	Tandem Road roller	Rolling of Asphaltic surface	Per Hour	1844	
27	Pneumatic Road roller	Rolling of Asphaltic surface	Per Hour	1437	
28	Pot-Hole repair machine	Repair of pot-holes	Per Hour	946	
29	Bitumen boiler oil fired	Bitumen Spraying	Per Hour	234	
30	GSB Plant 50 Cum	Producing GSB	Per Hour	1280	
31	Mastic Cooker	Mastic wearing coat	Per Hour	73	
32	Batching and Mixing Plant (a) 30 Cum capacity	Concrete mixing	Per Hour	1380	As per I&CAD S.No.10
	(b) 15 - 20 Cum capacity	Concrete mixing	Per Hour		
33	Transit mixer	Transportation of concrete mix	Per Hour		As per I&CAD S.No.1
34	Concrete pump of 45 and 30 cum	Pumping of Concrete	Per Hour	899	
35	Cranes				
	(a) 80 tonnes	Lifting purpose	Per Hour	1312	As per I&CAD S.No.14
	(b) 35 tonnes			886	
	(c) 3 tonnes			394	
	(d)Crane with grab bucket 0.75 cum	Well foundation	Per Hour	2419	
	(e)Crane with grab bucket 1 cum	Well foundation	Per Hour	3956	
36	Concrete bucket	For pouring concrete	Per Hour		
37	Kerb casting machine	Kerb making	Per Hour	348	
38	Concrete mixer	Concrete mixing	Per Hour		As per I&CAD S.No.18
	(a)0.28 cum				
	(b) 1.0 cum	Concrete mixing	Per Hour	727	
39	Piling rig with bantonite pump	0.75 m dia to 1.20 m dia boring attachment	Per Hour	6132	
40	Concrete paver finisher with 40 HP motor	Paving of concrete surface	Per Hour	3248	
41	Integrated stone crusher	Crushing of spalls 100 TPH	Per Hour	9757	
		Crushing of spalls 200 TPH	Per Hour	20573	
42	Pre stressing jack	Stressing of steel	Per Hour	158	

Sl. No.	Description		Unit	Hire Charges for (2021-22)	Remarks
	Machine	Activity		( Rupees)	
	with pump and access	wires/ stands			
43	Generator				
	250 KVA	Generation of electric energy	per hour	2072	
	125 KVA		per hour	1478	
	100 KVA		per hour	1261	
	30 KVA		per hour		As per I&CAD S.No.23
44	Pneumatic sinking of Plants	Pneumatic sinking of wells	Per K.m.	63	
45	Truck 5.5 cum per 10 tonnes	Material transport	Per Km.		As per I&CAD S.No.58
46	Road marking machine	Road marking	Per Hour	124	
47	Mobile slurry seal equipment	Mixing and laying slurry seal	Per Hour	1261	
48	Plate compacter	For compacting in medians	Per Hour	54	
49	Drilling equipment	For drilling	Per Hour		As per I&CAD S.No.22

**Note:**

*The above hire charges of machinery & plant includes crew, oils, conveyance of machinery to site and all other incidental charges.*

**PART-III**  
**BUILDING WORKS**



**Procs. No. ENC(B)/ DEE-III/AEE-10/Bldgs/SoR-2021-22**

**Dt: 31-05-2021.**

Sub:- Printing of Buildings-SoR for all the Engineering Departments specific to the functioning of Building works - Telangana Buildings-SoR:2021-22 - Communication of Buildings-SoR - Reg.,

Ref:- 1. G.O.Rt.No.471, T,R&B (R.1) Dept., Dt:20-04-2007.

2. Minutes of Committee of Chief Engineers meetings for finalizing the Building-SoRs held on Dt: 25-05-2021.

\* \* \* \* \*

The Government have constituted a Committee of Chief Engineers of Engineering departments dealing with Building works for finalizing and communicating Buildings-SoR (Civil & Electrical) vide G.O. 1<sup>st</sup> cited. In accordance therewith the Committee of Chief Engineers has finalized and approved the Telangana Buildings-SoR: 2021-22 in the Minutes of Meeting held on 25-05-2021.

The rates for the Building items (Civil, Water Supply & Sanitary and Electrical items) are to be followed henceforth by all the concerned departments for building works. The rates of Labour Rates, Common Material & Work items, Public Health items, Conveyance Rates of Materials & Hire charges of Telangana Common SoR-2021-22 remain unchanged. No other items other than the items communicated in this Buildings-SoR shall be introduced.

The Heads of Departments mentioned below are authorized to print the Telangana Buildings-SoR: 2021-22. The unauthorized printing & selling of the Buildings-SoR is strictly prohibited. The revised rates will come into force with immediate effect. The receipt of the proceedings may please be acknowledged.

Enclosed: Buildings SoR: 2021-22-CD as above

**Sri. I. Ganapathi Reddy  
Engineer-in-Chief (R&B)  
NH, CRF, LWE & Buildings  
Convener-Member,  
Committee of Chief Engineers-Buildings-SoR**

To

1. Engineer-in-Chief (IW) I&CAD, Irrigation Department, Errum manzil, Hyderabad-82.
2. Engineer-in-Chief (R&B) (State Roads, CRN), Roads & Buildings Department, Errum manzil, Hyderabad-82.
3. Chief Engineer (R&B) (QC, D&P, LWE, RSW and Rural Roads), Roads & Buildings Department, Errum manzil, Hyderabad-82.
4. Chief Engineer (R&B) (PPP, EAP and Member COT), Roads & Buildings Department, Errum manzil, Hyderabad-82.

5. Chief Engineer (R&B) (Chief Technical Examiner), Roads & Buildings Department, Errum manzil, Hyderabad-82.
6. Engineer-in-Chief, (PHE) Public Health Engineering. Department, A,C, Guards, Hyderabad-4.
7. Engineer-in-Chief (Admn) Panchayat Raj Department, Errum manzil, Hyderabad-82.
8. Engineer-in-Chief, Tribal Welfare & Social Welfare Department, DSS Bhavan, Masab tank, Hyderabad.
9. Engineer-in-Chief, Greater Hyderabad Municipal Corporation (GHMC), CC Complex, Tank bund Road Hyderabad
10. Chief Engineer (Telangana State Housing Board) Gruhakalpa, Nampally, Hyderabad
11. Chief Engineer (Telangana State Housing Corporation) Urdugally, Himayatnagar, Hyderabad
12. Chief Engineer (TSSRTC), RTC 'X' Roads, Musheerabad, Hyderabad.
13. Chief Engineer (TSMCID), IIIrd Floor, DM&HS Campus, Sultanbazar, Koti, Hyderabad.
14. Chief Engineer (Telangana State Police Housing & Welfare Corporation), Lakdi-ka-pool, Hyderabad.
15. Superintending Engineer (R&B), Head Quarters Circle, Khairatabad, Hyderabad
16. Superintending Engineer (R&B), Electrical Circle, Errum manzil, Hyderabad-82.

# PREAMBLE

## 1.0 INTRODUCTION

The Committee of Chief Engineers has met in the chambers of Engineer-in-Chief (R&B) Buildings & NH discussed the Draft SoR 2021:22 and the agenda items and approved the Buildings SoR:2021-22 for Civil, Water Supply & Sanitary and Electrical items. The discussions and the details of the decisions taken are as follows.

In compliance with the regular practice, indices from WPI (Wholesale Price Index) and CIDC (Construction Industry Development Council) for the year 2021-22 were collected. Similarly, Labour Rates for the year 2021-22 were also obtained. The indices were examined with respect to the market trends, trend of tenders and quotations that were received. Meetings were conducted with the stakeholders to receive the feedback on need for updating the rates and certain data.

## 2.0 PRICE INDEX AND LABOUR RATES

- i. The Cost Indices for building construction are obtained from the publications of the CIDC (Construction Industry Development Council) for the period 2019 and 2018. <http://www.cidc.in/publications6.html>.

Wholesale Price Index (WPI) Data for all materials for the year 2021-22 is obtained from <https://eaindustry.nic.in/>.

- ii. The wages for labour and other skilled, semi-skilled workforce approved and published by the Government of Telangana for the 2021-22 is obtained and compared with that of the previous year.

4.96% increase is considered for labour-oriented components of the items in Buildings SoR: 2021-22 than the items of Buildings SoR: 2021-22 as per the Manpower wages approved by the Government of Telangana and Board of Chief Engineers. The Builders Association of India have represented that especially, the construction industry got effected largely considering the extra care being taken in handling the labour welfare and adhering to the COVID - 19 guidelines. They further represented in their letter dated 25-05-2021, that this aspect alone has caused 100% additional burden on the labour component of the construction industry. And have cited the following reasons for the abnormal increase:

- a) The large Infrastructure expansion in the National and International market is creating pressure on the domestic market.
- b) The restrictions imposed by GOI on imports from Chinese products including major building materials, is another jolt causing concerns among the builders' community.
- c) Abnormal increase of Crude oil rate in the International market, the HSD Diesel rate increased considerably, which cascades every transported item.
- d) Enormous Infrastructure growth in the States i.,e Uttar Pradesh, Bihar, West Bengal, Odissa, Jharkhand etc., the labours were engaged their own State, resulting huge shortage of migrated labours from those States to Telangana.
- e) MS reinforcement, MS Steel, increased by 46%.
- f) Copper rate increased by 100%.
- g) Bronze rate increased by 30%.

- h) Stainless Steel rate increased by 30%.
- i) Aluminum rate increased by 50%.
- j) PVC rate increased by 100%.
- k) Diesel and Petrol/lubricants rates have increased by 50%.
- l) Cement rate increased by 40%.
- m) Glass rate increased by 30%.
- n) Building materials viz., MS hardware, Window grills, SS railing, Plumbing, Aluminum hardware, painting items, Electrical items, Switch gears, Sanitary, cemented products have increased by 30% to 40%.

In view of their representation and as per the discussions during the meeting held on 25-05-2021, the Committee of Chief Engineers approves 5% increase for civil items and 10% increase for water supply items for building works in the Buildings SoR's input rates.

### **3.0 QUOTATION ITEMS**

Requests for inclusion of new items have been examined with respect to the market trends, technological changes, need for use and general practices. Certain modifications were necessitated to the existing items as per the suppliers/ manufacturer's recommendations. For those items where specific quotations from the manufacturers, suppliers or vendors are received, lowest quoted rates are considered.

### **4.0 APPLICABILITY OF COMMON SoR - 2021-22**

The rates of labour, common materials & work items, Public Health items, conveyance rates of materials & Hire charges approved and published in Common SoR-2021-22 remain applicable. The specifications, stipulations & all other conditions of Common-SoR other than those specified in this context remain applicable.

### **5.0 OTHER GUIDELINES AND AMENDMENTS TO DATA ITEMS**

- i. During the execution of original works where non-SoR items are proposed as supplemental items, estimate preparing/ approving authorities are recommended to adopt pricelists/catalogue rates/ MRP rates of approved brands of Buildings SoR and allow the rates in the works duly removing the GST component.
- ii. For maintenance, retrofitting and repair works where non-SoR items are proposed, MRP rates/ catalogue prices can be operated however, GST component shall be removed from the MRP rates/ catalogue prices before operating the rate as supplemental.
- iii. It is reiterated to continue to allow Contractor's Profit & Over Heads - CPOH (13.615% or as applicable) and Tender Premium as applicable on the items procured through quotations/ pricelists/ catalogue prices. Instructions were already issued by the Committee of Chief Engineers on finalization of Buildings SoR on Civil and Electrical items to allow Contractor's Profit & Over Heads provision on all building works vide Proceedings CEB/TA8/AEE3/SSR: 2010-11 Dt:03-12-2010.
- iv. As was reiterated in earlier SoRs, the provision of '**Over Heads and Contractor's Profit**' is applicable to building works since the advent of the AP. Revised standard data-2009, which is approved by the Government in G.O.Ms.No.49 I&CAD (PW-Reforms) Dept., dated: 02-03-2009 and this component shall be operative on all the data items of the estimates and rates of the



finished items published in Buildings SoR for original works subjected to the fulfillment of the conditions given below:

- i. Site accommodation, setting up plant, access road, water supply, electricity, and general site arrangements.
  - ii. Office furniture, equipment, and communications.
  - iii. Expenditure on:
    - a) Corporate office of contractor.
    - b) Technical agents for site supervision. (Reimbursement to the technical agent's provision is dispensed with where 'over heads and contractor's profit' provision is included in the data rates)
    - c) Documentation and "as built" drawings.
    - d) Mobilization/ de-mobilization of resources. (Payment of mobilization advances shall be dispensed with where 'over heads and contractor's profit' provision is included in the data rates)
    - e) Labour camps with minimum amenities and transportation to work sites.
    - f) Light vehicles for site supervision including administrative and managerial requirements.
    - g) Laboratory equipment and quality control including field and laboratory testing. (For all the works costing more than Rs. 2.00 Crores contractors must establish Quality Control laboratory)
    - h) Minor T & P and survey instruments and setting outworks, including verification of line, dimensions, etc.
    - i) Watch and ward.
    - j) Traffic management/ Safety management during construction.
    - k) Expenditure on safeguarding environment.
  - iv. Sundries.
  - v. Financing Expenditure.
- v. It is recommended to adopt Contractor's Profit & Over Heads - **CPOH provision** in the rate analysis of estimates pertaining to **structural repairing, retrofitting works and all maintenance works**, duly deducting the mentioned provisions at IV.i, IV.iii.c), & IV.iii.g) above, towards which 3% may be deducted. An allowance of 13.615% (or as applicable) - 3% = 10.615% may be allowed in the estimates of structural repairing, retrofitting works and all maintenance works.
- vi. It is recommended to allow 15% allowance known as '**VVIP area allowance**' on the labour charges for the works which are taken up in VVIP areas such as Hon'ble Governor's residence, Hon'ble Chief Minister's residence, Hon'ble Chief Justice residence, Hon'ble High-court, and places like Secretariat or areas where VVIP presence/ movement imposes restrictions on labour mobilization, labour movement, and causes hindrance in regular work.
- vii. A separate recommendation for building works on 10% allowance known as '**risk allowance**' on the labour charges, is made to Board of Chief Engineers. This is recommended in view of the difficulties expressed by the Builders Association of India in mobilizing material and labour under pandemic situations for urgent and emergency works including original and repair works. Separate instructions will be issued by the Engineer-in-Chief (R&B) on this.
- viii. The VVIP area allowance and risk allowances are over and above the usual/ regular allowances, such as LA&LI, MAA, building foundations allowance, etc., allowed in Common

- SoR. The above allowances may be added in the rate-analysis of sanctioned estimates to arrive at the budget requirements/ contract values/ agreement rates.
- ix. Rate analysis for scaffolding with cup-lock system using heavy duty cup-lock pipes, Jack pipes, and bracing pipes is worked out and introduced in Buildings SoR: 2021-22. Rates for shuttering with Plywood/ aluminium sheets/ MS plates is also worked out in three segments and appended in the section “scaffolding charges” of Telangana Buildings: SoR 2021-22. The rate analysis is appended for 15 floors for all regular items of building works.
  - x. Rate analysis for access scaffold and stage scaffold is also worked out for brick masonry and plastering/ putty/ texture/ painting items using heavy duty cup-lock pipes, Jack pipes, and bracing pipes. The rate analysis is appended for 15 floors in the section “scaffolding charges” of Telangana Buildings: SoR 2021-22.
  - xi. Clarifications were sought from the Committee of Chief Engineers on operation of STAGE & ACCESS scaffolding for Brick Masonry and Plastering items. It is presumed that the rates published in Buildings SoR are for works in sequence, such as Brick Masonry will precede Plastering etc., hence the rates are derived accordingly by taking into consideration that the ACCESS scaffold provided for Brick Masonry will be continuously used. In case, where ACCESS/ STAGE scaffolds are used in repairs/ maintenance works, the procedure advised hereunder may be followed.
  - xii. All the estimating authorities are requested to invariably adopt the steel scaffolding/ cup-lock scaffolding in the works owing to safety concerns. It is recommended not to adopt centering and scaffolding rates of Casuarinas Ballies, Bamboos, Wooden Reapers, Runners, Wood Posts, Wall Plates for 3<sup>rd</sup> and above floors and works where ECV is Rs. 1.0 Crore and above. This stipulation is applicable for STAGE scaffold, ACCESS scaffold and regular centering and shuttering items due to safety concerns.
  - xiii. For structural repairing and retrofitting works, estimating authorities are recommended to adopt rates of ACCESS scaffold and STAGE scaffold with heavy duty cup-lock pipes, Jack pipes, and bracing pipes by multiplying the respective rates with a factor 2. This multiplication factor is intended to compensate for procurement/ mobilization of access scaffold and stage scaffold exclusively for structural repairing and retrofitting works only.
  - xiv. Similarly, for structural repairing and retrofitting works it is recommended to adopt rates of ACCESS scaffold and STAGE scaffold with heavy duty cup-lock pipes, Jack pipes, and bracing pipes cumulatively to reach external and unsupported areas/ surfaces only. Rates for this purpose needs to be calculated by cumulating the rates of lower floors for arriving at rates for upper floors. For ex: rate for 3<sup>rd</sup> floor = rate for 1<sup>st</sup> floor + rate for 2<sup>nd</sup> floor + rate for 3<sup>rd</sup> floor. This provision is in addition to the provision specified in above para (xiii).
  - xv. The estimate preparing and sanctioning authorities are requested to invariably enclose (i) quarry maps showing the shortest distance from the work site to the quarry from where materials are proposed to be carted and (ii) certificates of quality, quantity, and availability of materials in the identified quarries, for all those lead items of estimate at the time of technical sanctions.
  - xvi. Following amendments are suggested due to difficulties expressed by the estimating authorities owing to technological update, changes in the methodology, and certain omissions.

## AMENDMENTS/ MODIFICATIONS - 2021-22

ITEM CODE		DESCRIPTION/ SPECIFICATION	UNIT	COEFF
BLD-CSTN - 3-22	(New Item)	Supply and placing of the Nominal Mix Concrete produced in Batching Plant using 20 mm hard granite down-graded metal (SS5 -coarse aggregate) from approved quarry including cost and conveyance of all materials like cement, fine aggregate (sand) coarse aggregate, water etc., to site including hire charges for the batching plant, concrete pump, and all other labour charges for pumping, laying concrete, compacting, curing etc. complete as per standard practices but excluding cost of steel, its fabrication charges, centring, and shuttering for finished item of work.		
		(USING BATCHING PLANT)		
	A	BELOW FOUNDATIONS, BELOW PLINTH (Below Plinth works for any Building work)		
		Unit: 1cum		
		A. MATERIALS:		
		Cement as indicated below:	cum	-
		Coarse aggregate 20mm granite downgraded	cum	0.800
		Fine aggregate (Sand)	cum	0.400
		Water (including for curing)	kl	1.200
		B. MACHINERY		
		Batching plant at 20 cum per hour	hour	0.222
		Transit mixer 4cum capacity for lead up to 1km	hour	0.222
		Concrete Pump	day	0.222
		C. LABOUR:		
		Mason 1 <sup>st</sup> class	day	0.056
		Mason 2 <sup>nd</sup> class	day	0.056
		Mazdoor (unskilled)	day	0.917
	Note:	Cement in cum for the grades/ mixes indicated:		
		Nominal Mix (1:5:10)	cum	0.080
		Nominal Mix (1:4:8)	cum	0.100
		Nominal Mix (1:3:6)	cum	0.133
		Nominal Mix (1:2:4)	cum	0.200
BLD-CSTN - 3-23	(New Item)	Supply and placing of the Nominal Mix Concrete produced in Weigh-Batcher using 20 mm hard granite downgraded metal (coarse aggregate) from approved quarry including cost and conveyance of all materials like cement, fine aggregate (sand) coarse aggregate, water etc., to site including hire charges for the weigh-batcher and all other labour charges for placing, laying concrete, compacting, curing etc. complete as per standard practices but excluding cost of steel, its fabrication charges, centring, and shuttering for finished item of work.		

ITEM CODE		DESCRIPTION/ SPECIFICATION (USING WEIGH-BATCHER)	UNIT	COEFF
	A	BELOW FOUNDATIONS, BELOW PLINTH (Below Plinth works for any Building work) Unit: 1cum A. MATERIALS: Cement as indicated below:		
		Coarse aggregate 20mm hard granite downgraded	cum	-
		Fine aggregate (Sand)	cum	0.800
		Water (including for curing)	kl	0.400
		B. MACHINERY Weigh Batcher Hire charges (Machine mixing) charges	hour	1.200
		C. LABOUR: Mason 1 <sup>st</sup> class	day	1.333
		Mason 2 <sup>nd</sup> class	day	0.133
		Mazdoor (unskilled)	day	0.267
	Note:	Cement in cum for the grades/ mixes indicated:		
		Nominal Mix (1:5:10)	cum	4.600
		Nominal Mix (1:4:8)	cum	0.080
		Nominal Mix (1:3:6)	cum	0.100
		Nominal Mix (1:2:4)	cum	0.133
			cum	0.200
		<b>Filling with useful available excavated earth (excluding rock) in trenches, sides of foundations and basement with initial lead in layers not exceeding 15 cm thick, consolidating each deposited layer by watering and ramming including cost and conveyance of water to work site and all operational, incidental, labour charges, hire charges of T &amp; P etc., complete for finished item of work. (APSS NO. 309 &amp; 310)</b>		
BLD-CSTN- 2-8	(Modification)	Sand filling Unit 10 cum A. MATERIALS: Sand (filling grade)		
		B. LABOUR: Mazdoor (unskilled)	cum	10.000
			day	2.500
BLD-CSTN- 2-9	(Modification)	Ordinary Soils (either excavated or carted) - MANUAL MEANS Unit 10 cum A. MATERIALS: Ordinary soils		
		B. LABOUR: Mate (Crowbar man / Jumper man)	cum	10.000
		Mazdoor (unskilled)	day	0.200
		Bhisti	day	2.500
			day	0.200
		Water charges		1%

ITEM CODE		DESCRIPTION/ SPECIFICATION	UNIT	COEFF
BLD-CSTN- 2-10	(New Item)	Ordinary Soils (either excavated or carted) - MECHANICAL MEANS		
		Unit 10 cum		
		A. MATERIALS:		
		Ordinary soils	cum	10.000
		B. MACHINERY		
		Mini Roller Compactor 1.5 - 2.0 Ton Capacity (Hire charges similar to Tractor with 2T roller at Sl. No: 67 of I&CAD)	Hour	0.330
		Hydraulic Excavator 1 cum bucket capacity	Hour	0.330
		C. LABOUR:		
		Mazdoor (unskilled)	day	1.500
		Water charges		1%
	Note:	<b>Backfilling with useful available excavated earth:</b>		
		Labour charges for carrying available excavated earth with a lead of 50 m to the foundation pits is considered in the rate for backfilling with available excavated earth. Cost of transportation of good quality earth is to be considered as per requirement.		
	Note:	<b>Filling with carted earth/ sand:</b>		
		The cost of carted earth/ sand may be worked out separately if the same is not available from the adjoining area.		
	Note:	This data item is applicable with effective from the date of publication of the Buildings SoR 2021-22. The old data item <b>Backfilling with useful available excavated earth / Filling with carted earth/ sand</b> as reiterated in the Buildings SoR 2013-14 will be continued to be applicable for price adjustment purposes.		
		<b>Earth work excavation for foundations and depositing on bank for all lifts and with an initial lead of 10m including all operational, incidental, labour charges such as shoring, sheeting, planking, strutting, etc. complete for finished item of work excluding seigniorage excluding dewatering charges etc as per SS - 20 B (APSS 308).</b>		
BLD-CSTN2-11	(New Item)	Hard rock (blasting prohibited)-Up to 3 m depth Using Hydraulic Breaker		
		Unit 10 cum		
		A. LABOUR:		
		Mate (Crowbar man / Jumper man)	day	0.750
		Mazdoor (unskilled)	day	1.800
		B. MACHINERY		
		Hydraulic Excavator with Breaker Attachment (Small, medium, or large) in place of the bucket (Hire charges similar to Shovel 0.85 cum 110 HP at Sl. No: 52 of I&CAD)	Hour	2.000
	Note:	For every additional depth of 1.0 M of excavation over initial depth of 3.0 M, 10% allowance may be allowed on all rate analysis items like Manpower, Machinery etc.,		



# PART-III INDEX

## Building Works

S.No.	Description	Page No	
		From	To
1	Civil Items	47	207
2	Plumbing Items	208	252
3	Electrical Items	267	400





**INDEX FOR CIVIL ITEMS OF THE TELANGANA BUILDING SOR 2021-22**

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
<b>A</b>	<b>SECTION</b>	<b>BRICKS &amp; BUILDING BLOCKS</b>		
		(Excluding taxes, cost of conveyance, unloading & stacking)		
<b>I</b>	<b>SUB-SECTION</b>	<b>ORDINARY CLAY BRICKS</b>		
1	TBSC-A.I-01	Common burnt clay bricks of class as per Table-1 of IS:1077-1992 Non-Modular or traditional size 23 x 11 x 7 cm	Each	7.00
2	TBSC-A.I-02	Common burnt clay bricks of class as per Table-1 of IS:1077-1992 Modular or traditional size 19 x 9 x 9 cm	Each	8.00
<b>II</b>	<b>SUB-SECTION</b>	<b>FLY-ASH CEMENT/LIME SOLID BLOCKS</b>		
3	TBSC-A.II-01	Fly ash cement/lime solid blocks with compressive strength of 75 kg/sq.cm - IS:12894-1990 - CLASS - 7.5 290 x 225 x 140 mm	Each	27.00
4	TBSC-A.II-02	Fly ash cement/lime solid blocks with compressive strength of 75 kg/sq.cm - IS:12894-1990 - CLASS - 7.5 290 x 200 x 140 mm	Each	25.00
5	TBSC-A.II-03	Fly ash cement/lime solid blocks with compressive strength of 75 kg/sq.cm - IS:12894-1990 - CLASS - 7.5 290 x 150 x 140 mm	Each	21.00
6	TBSC-A.II-04	Fly ash cement/lime solid blocks with compressive strength of 75 kg/sq.cm - IS:12894-1990 - CLASS - 7.5 290 x 112/100 x 140 mm	Each	15.00
7	TBSC-A.II-05	Fly ash cement/lime solid blocks with compressive strength of 75 kg/sq.cm - IS:12894-1990 - CLASS - 7.5 225 x 100 x 60 mm	Each	9.00
8	TBSC-A.II-06	Fly ash cement/lime solid blocks with compressive strength of 75 kg/sq.cm - IS:12894-1990 - CLASS - 7.5 145 x 225 x 140 mm	Each	16.00
9	TBSC-A.II-07	Fly ash cement/lime solid blocks with compressive strength of 75 kg/sq.cm - IS:12894-1990 - CLASS - 7.5 145 x 200 x 140 mm	Each	13.00
10	TBSC-A.II-08	Fly ash cement/ lime solid blocks with compressive strength of 50 kg/sq.cm - IS:12894-1990 - CLASS - 5 290 x 225 x 140 mm	Each	26.00
11	TBSC-A.II-09	Fly ash cement/ lime solid blocks with compressive strength of 50 kg/sq.cm - IS:12894-1990 - CLASS - 5 290 x 200 x 140 mm	Each	20.00
12	TBSC-A.II-10	Fly ash cement/ lime solid blocks with compressive strength of 50 kg/sq.cm - IS:12894-1990 - CLASS - 5 290 x 150 x 140 mm	Each	21.00
13	TBSC-A.II-11	Fly ash cement/ lime solid blocks with compressive strength of 50 kg/sq.cm - IS:12894-1990 - CLASS - 5 290 x 112/100 x 140 mm	Each	12.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
14	TBSC-A.II-12	Fly ash cement/ lime solid blocks with compressive strength of 50 kg/sq.cm - IS:12894-1990 - CLASS - 5 225 x 100 x 60 mm	Each	7.00
15	TBSC-A.II-13	Fly ash cement/ lime solid blocks with compressive strength of 50 kg/sq.cm - IS:12894-1990 - CLASS - 5 145 x 225 x 140 mm	Each	13.00
16	TBSC-A.II-14	Fly ash cement/ lime solid blocks with compressive strength of 50 kg/sq.cm - IS:12894-1990 - CLASS - 5 145 x 200 x 140 mm	Each	12.00
<b>III</b>	<b>SUB-SECTION</b>	<b>AUTOCLAVED CONCRETE BLOCKS</b>		
17	TBSC-A.III-01	Supply of Aerated (Cellular) Autoclaved Concrete Blocks conforming to IS:2185 (Part-3) - 1984 and IS:6441-1972 of Compressive strength 3 N/mm <sup>2</sup> (landing cost - including cost of conveyance, loading & unloading) 600 x 200 x 100 mm	Each	50.00
18	TBSC-A.III-02	Supply of Aerated (Cellular) Autoclaved Concrete Blocks conforming to IS:2185 (Part-3) - 1984 and IS:6441-1972 of Compressive strength 3 N/mm <sup>2</sup> (landing cost - including cost of conveyance, loading & unloading) 600 x 200 x 150 mm	Each	73.00
19	TBSC-A.III-03	Supply of Aerated (Cellular) Autoclaved Concrete Blocks conforming to IS:2185 (Part-3) - 1984 and IS:6441-1972 of Compressive strength 3 N/mm <sup>2</sup> (landing cost - including cost of conveyance, loading & unloading) 600 x 200 x 200 mm	Each	98.00
20	TBSC-A.III-04	Supply of Aerated (Cellular) Autoclaved Concrete Blocks conforming to IS:2185 (Part-3) - 1984 and IS:6441-1972 of Compressive strength 3 N/mm <sup>2</sup> (landing cost - including cost of conveyance, loading & unloading) 600 x 200 x 230 mm	Each	112.00
<b>B</b>	<b>SECTION</b>	<b>NATURAL FLOORING STONES</b> (Excluding taxes, cost of conveyance, unloading & stacking)		
<b>I</b>	<b>SUB-SECTION</b>	<b>LOCALLY AVAILABLE FLOORING STONES</b>		
21	TBSC-B.I-01	Shahabad /Tandur Rough Stone slabs of all sizes up to 25 mm in thickness	1 Sqm	100.00
22	TBSC-B.I-02	Shahabad / Tandur Rough Stone slabs of all sizes between 25 mm - 40 mm thickness	1 Sqm	130.00
23	TBSC-B.I-03	Polished Shahabad/ Tandur stone slabs of all sizes between 15 - 18 mm thickness	1 Sqm	173.00
24	TBSC-B.I-04	Kadapa slabs of 40 mm thick of all sizes	1 Sqm	100.00
25	TBSC-B.I-05	Kadapa slabs of 50 mm thick of all sizes	1 Sqm	116.00
26	TBSC-B.I-06	Polished black Kadapa slabs of all sizes between 15 - 18 mm thickness	1 Sqm	144.00
27	TBSC-B.I-07	Polished black Kadapa slabs of all sizes between 25 - 30 mm thickness	1 Sqm	173.00
28	TBSC-B.I-08	Polished White Bethamcherla (marble type) stone of all sizes and between 22-25 mm	1 Sqm	402.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		thickness		
29	TBSC-B.I-09	Polished Coloured Bethamcherla (marble type) stone of all sizes and between 22-25 mm thickness	1 Sqm	287.00
II	SUB-SECTION	<b>NATURAL FLOORING STONES - MARBLE</b>		
30	TBSC-B.II-01	Polished Marble slabs of Dongari/ Adanga/ Marodh/ Rajgangpur etc., variety of thickness between 16 mm to 20 mm of sizes from 600 mm to 900 mm	1 Sqm	695.00
31	TBSC-B.II-02	Polished Marble slabs of Dongari/ Adanga/ Marodh/ Rajgangpur etc., variety of thickness between 16 mm to 20 mm of sizes up to 600 mm	1 Sqm	561.00
32	TBSC-B.II-03	Polished Marble slabs of any variety and gang saw cut (Such as Dongari/ Adanga/ Marodh/ Rajgangpur etc) 16 mm to 20 mm (average) thick ( 0.610 M width of any length)	1 Sqm	953.00
33	TBSC-B.II-04	Polished Marble Tiles of 8 - 10 mm thickness of all sizes and varieties	1 Sqm	454.00
III	SUB-SECTION	<b>NATURAL FLOORING STONES - GRANITE</b>		
34	TBSC-B.III-01	High Polished Granite 16 to 18 mm thick up to 8'-00 (2.43 M) other than black/ premium colours	1 Sqm	3,274.00
35	TBSC-B.III-02	High Polished Granite 16 to 18 mm thick up to 8'-00 (2.43 M) other than black and regular colours	1 Sqm	2,845.00
36	TBSC-B.III-03	High Polished Granite 16 to 18 mm thick up to 8'-00 (2.43 M) black	1 Sqm	2,419.00
37	TBSC-B.III-04	Granite stone tiles 8 mm thick (mirror polished of all shades)	1 Sqm	1,110.00
C	SECTION	<b>WALL &amp; FLOOR TILES</b>		
		(Excluding taxes but including cost of loading, cost of conveyance, unloading & stacking)		
I	SUB-SECTION	<b>NON-PORCELAIN CERAMIC FLOOR TILES</b>		
38	TBSC-C.I-01	Supply of Non-skid red or white full body Ceramic floor tiles of size 300 x 300 mm and thickness between 7-8 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	315.00
39	TBSC-C.I-02	Supply of Non-skid red or white full body Ceramic floor tiles of size 400 x 400 mm and thickness between 7-8 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	326.00
40	TBSC-C.I-03	Supply of Non-skid red or white full body Ceramic floor tiles of size 600 x 600 mm and thickness between 8-10 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	510.00
41	TBSC-C.I-04	Supply of Non-skid red or white full body	1 Sqm	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		Ceramic floor tiles of scratch free-stain free and scratch free-Nano finish of size 600 x 600 mm and thickness between 8-10 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs		510.00
42	TBSC-C.I-05	Supply of red or white body pressed/ rectified Ceramic floor tiles High Glossy of size 600 x 600 mm and thickness between 8-10 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	475.00
<b>II</b>	<b>SUB-SECTION</b>	<b>PORCELAIN VITRIFIED FLOOR TILES</b>		
43	TBSC-C.II-01	Supply of ordinary soluble salt porcelain vitrified tiles screen printed and polished of size 400 x 400 mm and thickness between 8-9 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	
44	TBSC-C.II-02	Supply of soluble salt/ stain free porcelain vitrified tiles screen printed and polished of size 600 x 600 mm and thickness between 8-10 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	443.00
45	TBSC-C.II-03	Supply of Nano polished /stain free soluble salt/ stain free porcelain vitrified tiles screen printed of size 600 x 600 mm and thickness between 8-10 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	443.00
46	TBSC-C.II-04	Supply of Nano polished soluble salt/ stain free porcelain vitrified tiles screen printed of size 800 x 800 mm and thickness between 9-11 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	525.00
47	TBSC-C.II-05	Supply of Double charged / multi charged stain free full body porcelain vitrified tiles with double layer pigment of size 600 x 600 mm and thickness between 8-10 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	578.00
48	TBSC-C.II-06	Supply of Double charged / multi charged stain free full body porcelain vitrified tiles with double layer pigment of size 800 x 800 mm and thickness between 9-11 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	630.00
49	TBSC-C.II-07	Supply of Double charged / multi charged stain free full body porcelain vitrified tiles with double layer pigment of size 1000 x	1 Sqm	735.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		1000 mm and thickness between 12-15 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs		
50	TBSC-C.II-08	Supply of digital / polished glazed full body porcelain vitrified tiles with any type of design texture such as marble finish, wooden, bamboo, stone finishes etc., scratch less, stain free and of size 800 x 800 mm and thickness between 9-11 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	683.00
51	TBSC-C.II-09	Supply of digital / polished glazed full body porcelain vitrified tiles with any type of design texture such as marble finish, wooden, bamboo, stone finishes etc., scratch less, stain free and of size 900 x 900 mm and thickness between 9-11 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	840.00
52	TBSC-C.II-10	Supply of digital / polished glazed full body porcelain vitrified tiles with any type of design texture such as marble finish, wooden, bamboo, stone finishes etc., scratch less, stain free and of size 1000 x 1000 mm and thickness between 12-15 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	1,050.00
53	TBSC-C.II-11	Supply of digital / polished glazed full body porcelain vitrified tiles with any type of design texture such as marble finish, wooden, bamboo, stone finishes etc., scratch less, stain free and of size 1200 x 600 mm and thickness between 12-15 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	788.00
54	TBSC-C.II-12	Supply of full body heavy duty industrial variety porcelain vitrified tile of size 300 x 300 / 200 x 100 mm and thickness between 10-12 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	500.00
55	TBSC-C.II-13	Supply of full body heavy duty industrial variety / tact porcelain vitrified tile of size 300 x 300 / 200 x 100 mm and thickness between 12-15 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	700.00
56	TBSC-C.II-14	Supply of full body heavy duty industrial variety porcelain vitrified tile of size 300 x 300 / 200 x 100 mm and thickness between	1 Sqm	1,300.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		18-20 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs		
57	TBSC-C.II-15	Supply of full body heavy duty industrial variety porcelain vitrified tile of size 400 x 400 mm and thickness between 10 -12 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	600.00
58	TBSC-C.II-16	Supply of full body heavy duty industrial variety porcelain vitrified tile of size 600 x 600 mm and thickness between 10 - 12 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	800.00
59	TBSC-C.II-17	Supply of Nano polished /stain free Twin white vitrified tiles of size 600 x 600 mm and thickness between 8-10 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	550.00
60	TBSC-C.II-18	Supply of polished /stain free Full Body vitrified tiles of size 600 x 600 mm and thickness between 8-10 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of Specific colour and finish in all shades and designs	1 Sqm	800.00
61	TBSC-C.II-19	Supply of Double charged / multi charged stain free vitrified tiles with double layer pigment of size 600 x 1200 mm and thickness between 8-10 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	750.00
62	TBSC-C.II-20	Supply of double charged Matt Full Body vitrified tiles of size 600 x 1200 mm and thickness between 8-10 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of Specific colour and finish in all shades and designs	1 Sqm	1,025.00
63	TBSC-C.II-21	Supply of digital / polished glazed vitrified tiles Glossy/Matt with any type of design texture such as marble finish, wooden, bamboo, stone finishes etc., scratch less, stain free and of size 600 X 600 mm and thickness between 8-10 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	600.00
64	TBSC-C.II-22	Supply of digital / polished glazed vitrified tiles with any type of design texture such as marble finish, wooden, bamboo, stone finishes etc., scratch less, stain free and of size 1200 x 1200 mm and thickness between 9-11 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour	1 Sqm	1,450.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		and finish in all shades and designs		
65	TBSC-C.II-23	Supply of digital / polished glazed vitrified tiles with any type of design texture such as marble finish, wooden, bamboo, stone finishes etc., scratch less, stain free and of size 800 x 1600 mm and thickness between 9-11 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	1,450.00
66	TBSC-C.II-24	Supply of digital / polished glazed vitrified tiles with any type of design texture such as marble finish, wooden, bamboo, stone finishes etc., scratch less, stain free and of size 1200 x 1800 mm and thickness between 9-10 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	1,700.00
<b>III</b>	<b>SUB-SECTION</b>	<b>CERAMIC WALL TILES</b>		
67	TBSC-C.III-01	Supply of glazed red or white full body ceramic wall tiles of size 200 x 300 mm / 245 mm x 325 mm / 250 mm x 375 mm and thickness 6 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	315.00
68	TBSC-C.III-02	Supply of glazed red or white full body ceramic wall tiles of size 300 x 450 mm / 320 mm x 400 mm and thickness 6 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	420.00
69	TBSC-C.III-03	Supply of glazed red or white full body ceramic wall tiles of size 300 x 600 mm and thickness between 6-8 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	578.00
<b>IV</b>	<b>SUB-SECTION</b>	<b>PORCELAIN WALL TILES</b>		
70	TBSC-C.IV-01	Supply of glazed full body porcelain wall tiles of size 300 x 600 mm with any type of design texture such as marble finish, wooden, bamboo, stone finishes etc., scratch less, stain free and thickness between 6-8 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	750.00
71	TBSC-C.IV-02	Supply of digital / polished glazed full body porcelain wall tiles of size 300 x 600 mm with any type of design texture such as marble finish, wooden, bamboo, stone finishes etc., scratch less, stain free and thickness between 6-8 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	750.00
72	TBSC-C.IV-03	Supply of digital / polished glazed full body	1 Sqm	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		porcelain highlighter wall tiles of size 300 x 600 mm with any type of design texture such as marble finish, wooden, bamboo, stone finishes etc., scratch less, stain free and thickness between 6-8 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs		750.00
73	TBSC-C.IV-04	Supply of screen printed glazed full body porcelain wall tiles of size 300 x 600 mm with any type of design texture such as marble finish, wooden, bamboo, stone finishes etc., scratch less, stain free and thickness between 6-8 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	750.00
74	TBSC-C.IV-05	Supply of glazed full body porcelain wall tiles of size 400 x 600 mm with any type of design texture such as marble finish, wooden, bamboo, stone finishes etc., scratch less, stain free and thickness between 6-8 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	Deleted
75	TBSC-C.IV-06	Supply of glazed full body porcelain wall tiles of size 600 x 800 mm with any type of design texture such as marble finish, wooden, bamboo, stone finishes etc., scratch less, stain free and thickness between 7-9 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	Deleted
76	TBSC-C.IV-07	Supply of glazed full body porcelain premium plain design highlighter combination floor and wall tiles set with floor tiles of thickness 14-16 mm and wall tiles of thickness 8-10 mm but excluding highlighters 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	Deleted
77	TBSC-C.IV-08	Supply of glazed full body porcelain premium plain design highlighter combination floor and wall tiles set with floor tiles of thickness 14-16 mm and wall tiles of thickness 8-10 mm but including highlighters 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	Deleted
78	TBSC-C.IV-09	Providing and fixing wall dado with epoxy emulsion grout/ synthetic/ resin based adhesive in specified thick and pointing with specified colour epoxy grout excluding cost of tiles	1 Sqm	340.00
79	TBSC-C.IV-10	Providing and fixing wall dado with cement	1 Sqm	



Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		based adhesive in specified thick and pointing with specified colour epoxy grout excluding cost of tiles		175.00
80	TBSC-C.IV-11	Providing and fixing flooring with full depth jointing and pointing to the Vitrified/ Ceramic Tile flooring in specified thick for tiles of any sizes with epoxy emulsion grout/ synthetic / resin adhesive in width of 3-5 mm with Nylon spacers excluding cost of tiles.	1 Sqm	340.00
81	TBSC-C.IV-12	Providing and fixing flooring with full depth jointing and pointing to the Vitrified/ Ceramic Tile flooring in specified thick for tiles of any sizes with cement based adhesive in width of 3-5 mm with Nylon spacers excluding cost of tiles .	1 Sqm	172.00
82	TBSC-C.IV-13	Providing and fixing flooring with full depth jointing and pointing to the Marble/ Granite flooring for any sizes with epoxy emulsion grout/ synthetic / resin based adhesive in width of 3-5 mm excluding cost of tiles.	1 Sqm	677.00
83	TBSC-C.IV-14	Providing and fixing flooring with full depth jointing and pointing to the Marble/ Granite flooring for any sizes with cement based adhesive in width of 3-5 mm excluding cost of tiles.	1 Sqm	343.00
<b>V</b>	<b>SUB-SECTION</b>	<b>GLASS MOSAIC TILES</b>		
84	TBSC-C.V-01	Supply of glazed full body glass mosaic tiles of 20 x 20 x 4 mm thick in specified pattern 1st Quality of any colour and design	1 Sqm	1,188.00
85	TBSC-C.V-02	Providing Glass Mosaic tiles using specified pattern fixing in specified thick epoxy emulsion grout of epoxy resins and filler powder of approved colour grout including all taxes excluding cost of tiles	1 Sqm	267.00
86	TBSC-C.V-03	Providing Glass Mosaic tiles using specified pattern fixing in specified thick cementitious powder mix cement grout and approved colour grout including all taxes excluding cost of tiles	1 Sqm	103.00
<b>VI</b>	<b>SUB-SECTION</b>	<b>WALL CLADDING TILES</b>		
87	TBSC-C.VI-01	Supply of glazed full body porcelain tiles for external cladding purposes of any size and thickness between 6-10 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	578.00
88	TBSC-C.VI-02	Supply of glazed red or white full body ceramic tiles for external cladding purposes of any size and thickness between 5-7 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	504.00
89	TBSC-C.VI-03	Supply of glazed red or white full body ceramic tiles for external cladding purposes	1 Sqm	546.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		of any size and thickness between 10-12 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs		
90	TBSC-C.VI-04	Supply of glazed red or white full body ceramic tiles for external cladding purposes of any size and thickness between 18-20 mm 1st quality conforming to IS:15622 - 2017, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	Deleted
<b>VII</b>	<b>SUB-SECTION</b>	<b>TERRAZZO FLOOR TILES (PLAIN &amp; CHEQUERED)</b>		
91	TBSC-C.VII-01	Supplying precast terrazzo tiles conforming to IS: 13801 using marble aggregates of size 10 mm , sand, marble powder, white cement pigments etc., with terrazzo topping not less than 6 mm of tiles overall size not less than 20 mm thick white shades.	1 Sqm	275.00
92	TBSC-C.VII-02	Supplying precast terrazzo plain tiles conforming to IS: 13801 using marble aggregates of size 10 mm , sand, marble powder, white cement pigments etc., with terrazzo topping not less than 6 mm of tiles overall size not less than 20 mm thick any coloured shades.	1 Sqm	292.00
93	TBSC-C.VII-03	Supplying precast terrazzo chequered tiles conforming to IS: 13801 using marble aggregates of size 10 mm , sand, marble powder, white cement pigments etc., with terrazzo topping not less than 6 mm of tiles overall size not less than 20 mm thick of any coloured shades.	1 Sqm	300.00
<b>VIII</b>	<b>SUB-SECTION</b>	<b>CEMENT CONCRETE FLOOR TILES (PLAIN &amp; CHEQUERED)</b>		
94	TBSC-C.VIII-01	Supplying plain Cement Concrete general purpose tiles conforming to IS: 13801 using aggregates, cement, pigments of size 300 x 300 mm and thickness 20 mm of any shades.	1 Sqm	258.00
95	TBSC-C.VIII-02	Supplying Chequered Cement Concrete heavy duty tiles conforming to IS: 13801 using aggregates, cement, pigments of size 300 x 300 mm and thickness 20 mm of any shades.	1 Sqm	271.00
96	TBSC-C.VIII-03	Supplying plain Cement Concrete general purpose tiles conforming to IS: 13801 using aggregates, cement, pigments of size 300 x 300 mm and thickness 25 mm of any shades.	1 Sqm	275.00
97	TBSC-C.VIII-04	Supplying Chequered Cement Concrete heavy duty tiles conforming to IS: 13801 using aggregates, cement, pigments of size 300 x 300 mm and thickness 25 mm of any shades.	1 Sqm	288.00
98	TBSC-C.VIII-05	Supplying plain Cement Concrete general purpose tiles conforming to IS: 13801 using aggregates, cement, pigments of size 400 x 400 mm and thickness 25 mm of any shades.	1 Sqm	300.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
99	TBSC-C.VIII-06	Supplying Chequered Cement Concrete heavy duty tiles conforming to IS: 13801 using aggregates, cement, pigments of size 400 x 400 mm and thickness 25 mm of any shades.	1 Sqm	315.00
100	TBSC-C.VIII-07	Supply of high strength Cement Concrete plain Step tiles with edge half rounded and grooved conforming to IS: 13801 using aggregates, cement, pigments of regular colour, design and of 25 mm thickness	1 Sqm	449.00
101	TBSC-C.VIII-08	Supply of high strength Cement Concrete terrazzo/pre-polished/ chequered Step tiles with edge rounded and grooved conforming to IS: 13801 using aggregates, cement, pigments of any premium colour, design and of 25 mm thickness	1 Sqm	472.00
102	TBSC-C.VIII-09	Supply of COOL ROOF SRI TILES 300x300 mm and thickness 8mm 1st quality conforming to IS:4457:2007, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	525.00
103	TBSC-C.VIII-10	Supply of COOL ROOF SRI TILES 300x300 mm and thickness 10mm 1st quality conforming to IS:4457:2007, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	600.00
104	TBSC-C.VIII-11	Supply of COOL ROOF SRI TILES 400x400 mm and thickness 10mm 1st quality conforming to IS:4457:2007, IS:13630 (Parts 1 to 15) of any colour and finish in all shades and designs	1 Sqm	700.00
<b>IX</b>	<b>SUB-SECTION</b>	<b>PRE-CAST CONCRETE BLOCKS FOR PAVING</b>		
105	TBSC-C.IX-01	Supply of precast concrete blocks for paving of M-30 grade and thickness not less than 50 mm for Non-traffic areas conforming to IS 15658:2006 in all shapes and designs as per the manufacturer's specification	1 Sqm	320.00
106	TBSC-C.IX-02	Supply of precast concrete blocks for paving of M-35 grade and thickness not less than 60 mm for Light traffic areas conforming to IS 15658:2006 in all shapes and designs as per the manufacturer's specification	1 Sqm	345.00
107	TBSC-C.IX-03	Supply of precast concrete blocks for paving of M-40 grade and thickness not less than 80 mm for Medium traffic areas conforming to IS 15658:2006 in all shapes and designs as per the manufacturer's specification	1 Sqm	494.00
108	TBSC-C.IX-04	Supply of precast concrete blocks for paving of M-50 grade and thickness not less than 100 mm for Heavy traffic areas conforming to IS 15658:2006 in all shapes and designs as per the manufacturer's specification	1 Sqm	544.00
109	TBSC-C.IX-05	Supply of precast concrete blocks for paving of M-55 grade and thickness not less than 120 mm for very heavy traffic areas conforming to IS 15658:2006 in all shapes and designs as per the manufacturer's specification	1 Sqm	619.00
110	TBSC-C.IX-06	Labour charges for laying & fixing of precast	1 Sqm	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		concrete blocks for paving of all grades, any thickness, all sizes & shapes including all labour charges for loading & unloading, laying to desired lines and levels complete excluding cost of cement, sand, water, electricity etc		207.00
<b>X</b>	<b>SUB-SECTION</b>	<b>VINYL FLOORING</b>		
111	TBSC-C.X-01	Vinyl Flooring Sheets/ tiles having a nominal total thickness of 2 mm with a wearing surface impregnated polyurethane homogeneous mixture of PVC, Plasticizers, Urethane, color pigments with wearing resistance and Fire Resistance as per standards	1 Sqm	810.00
112	TBSC-C.X-02	Vinyl Composition Floor Tiles of size 305 mm x 305 mm having an overall thickness of 2.0mm with a wearing surface impregnated polyurethane homogeneous mixture of PVC, Plasticizers, Urethane, color pigments with wearing resistance and Fire Resistance as per standards	1 Sqm	555.00
113	TBSC-C.X-03	Vinyl Flooring Sheets or tiles having a nominal total thickness of 1.5 mm with a wearing surface impregnated polyurethane homogeneous mixture of PVC, Plasticizers, Urethane, color pigments with wearing resistance and Fire Resistance as per standards	1 Sqm	403.00
<b>D</b>	<b>SECTION</b>	<b>TIMBER &amp; ROOFING MATERIALS</b>		
		(Excluding taxes but including cost of loading, cost of conveyance, unloading & stacking)		
		Note: Before proposing the Teak Wood Items, the estimating authorities shall obtain prior approval from the competent authority		
<b>I</b>	<b>SUB-SECTION</b>	<b>MEDIUM TEAK WOOD</b>		
114	TBSC-D.I-01	Medium Teak Wood scantlings: up to 2.0 M	1 cum	76,251.00
115	TBSC-D.I-02	Medium Teak Wood scantlings: 2.0 to 3.0 M	1 cum	84,724.00
116	TBSC-D.I-03	Medium Teak Wood scantlings: above 3.0 M	1 cum	93,197.00
117	TBSC-D.I-04	Medium Teak Wood Planks: any thickness	1 cum	1,52,502.00
<b>II</b>	<b>SUB-SECTION</b>	<b>BEST TEAK WOOD</b>		
118	TBSC-D.II-01	Best Teak Wood scantlings: up to 2.0 M	1 cum	1,31,322.00
119	TBSC-D.II-02	Best Teak Wood scantlings: 2.0 to 3.0 M	1 cum	1,39,794.00
120	TBSC-D.II-03	Best Teak Wood scantlings: above 3.0 M	1 cum	1,48,267.00
121	TBSC-D.II-04	Best Teak Wood Planks: any thickness	1 cum	1,65,212.00
<b>III</b>	<b>SUB-SECTION</b>	<b>BURMA TEAK WOOD</b>		

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
122	TBSC-D.III-01	Burma Teak Wood scantlings: up to 2.0 M	1 cum	1,80,450.00
123	TBSC-D.III-02	Burma Teak Wood scantlings: 2.0 to 3.0 M	1 cum	1,85,604.00
124	TBSC-D.III-03	Burma Teak Wood scantlings: above 3.0 M	1 cum	1,95,216.00
125	TBSC-D.III-04	Burma Teak Wood Planks: any thickness	1 cum	2,11,385.00
<b>IV</b>	<b>SUB-SECTION</b>	<b>ASSAM TEAK WOOD</b>		
126	TBSC-D.IV-01	Assam Teak Wood scantlings: any length	1 cum	48,375.00
127	TBSC-D.IV-02	Assam Teak Wood Planks: any thickness	1 cum	70,144.00
<b>V</b>	<b>SUB-SECTION</b>	<b>SAL/ COUNTRY WOOD</b>		
128	TBSC-D.V-01	Sal Wood scantlings: any length	1 cum	47,025.00
129	TBSC-D.V-02	Sal Wood Planks: any thickness	1 cum	62,701.00
<b>VI</b>	<b>SUB-SECTION</b>	<b>ROOFING MATERIAL</b>		
130	TBSC-D.VI-01	A.C sheet Corrugated 6 mm thick	1 Sqm	231.00
131	TBSC-D.VI-02	A.C sheet plain 4 m thick	1 Sqm	166.00
132	TBSC-D.VI-03	A.C sheet plain 6 m thick	1 Sqm	173.00
133	TBSC-D.VI-04	Plain or Corrugated Galvanized iron sheets as per IS 277 (0.1 mm to 0.8 mm thickness)	1 kg	63.00
134	TBSC-D.VI-05	Supply of Pre-painted Galvalume Trapezoidal Profile Roofing sheets with 0.50mm thickness, Coating: Alu-Zinc coating AZ150 GSM. Tensile Strength: 550 MPA. Paint coating: Regular Modified Polyester painting. Painting Thickness (Top): 18 to 20 Microns, (Bottom): 5 to 7 Microns. Sheet Width: 1.020, Length: Maximum 12 Meters with Regular Range Colours	1 Sqm	407.00
135	TBSC-D.VI-06	Supply of Pre-painted Galvalume Trapezoidal Profile Roofing sheets with 0.47mm thickness, Coating: Alu-Zinc coating AZ150 GSM. Tensile Strength: 550 MPA. Paint coating: Regular Modified Polyester painting. Painting Thickness (Top): 18 to 20 Microns, (Bottom): 5 to 7 Microns. Sheet Width: 1.020, Length: Maximum 12 Meters with Regular Range Colours	1 Sqm	396.00
136	TBSC-D.VI-07	Supply of Pre-painted Galvanized Trapezoidal Profile Roofing sheets with 0.50mm thickness, Coating: Zinc coating Z120 GSM. Tensile Strength: 300 MPA. Paint coating: Regular Modified Polyester painting. Painting Thickness (Top): 18 to 20 Microns, (Bottom): 5 to 7 Microns. Sheet Width: 1.020, Length: Maximum 12 Meters with Regular Range Colours	1 Sqm	356.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
137	TBSC-D.VI-08	Supply of Pre-painted Galvanized Trapezoidal Profile Roofing sheets with 0.47mm thickness, Coating: Zinc coating Z120 GSM. Tensile Strength: 300 MPA. Paint coating: Regular Modified Polyester painting. Painting Thickness (Top): 18 to 20 Microns, (Bottom): 5 to 7 Microns. Sheet Width: 1.020, Length: Maximum 12 Meters with Regular Range Colours	1 Sqm	335.00
138	TBSC-D.VI-09	Supply of Roof Accessories medium size: Ridge, Barge Cap, Corner Trim, L-Flashing, Down Pipes, Gutter etc., with 0.50mm thick, Width: 0.585, Length: Maximum 2½ Meters	1 RM	273.00
139	TBSC-D.VI-10	Supply of Roof Accessories medium size: Ridge, Barge Cap, Corner Trim, L-Flashing, Down Pipes, Gutter etc., with 0.47mm thick, Width: 0.585, Length: Maximum 2½ Meters	1 RM	244.00
140	TBSC-D.VI-11	Supply of fibre reinforced corrugated sheets 6 mm thick(Non asbestos) in compliance with Type-A Category -C class-7 of IS 14871 for roofing	1 Sqm	336.00
141	TBSC-D.VI-12	Supply of pre painted fibre reinforced corrugated sheets 6mm thick(Non asbestos) in compliance with Type-A Category -C class-7 of IS 14871 for roofing	1 RM	399.00
142	TBSC-D.VI-13	75 mm long screws -	1 Each	6.00
143	TBSC-D.VI-14	G.I scam bolts & nuts	1 Each	7.00
144	TBSC-D.VI-15	G.I bolts & nuts	1 Each	7.00
145	TBSC-D.VI-16	G.I 'J' bolts 8 mm Diameter	1 Each	11.00
146	TBSC-D.VI-17	G.I Washers	1 Each	3.00
147	TBSC-D.VI-18	Limpet washers (for scam & 'J' bolts)	1 Each	3.00
148	TBSC-D.VI-19	Bitumen washers	1 Each	3.00
149	TBSC-D.VI-20	Supply of UV resistant multi-wall polycarbonate sheets for roofing of any colour - 6 mm thick	1 Sqm	1,340.00
150	TBSC-D.VI-21	Aluminium universal glazing set 40 mm wide for jointing and fixing polycarbonate sheets	1 RM	134.00
151	TBSC-D.VI-22	Providing 10mm thick UV resistant multiwall polycarbonate sheets fixed to the purlins with aluminum universal glazing set 40mm wide for jointing and fixing sheets and 14 size self-drilling screws with neoprene washer. Side laps are stitched with self-tapping / drilling screws. End laps are to be sealed with 25x3 mm Butyl tape including cost and conveyance of all materials and labour charges, overheads and contractor's profits , etc. complete for	1 Sqm	2,175.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		finished item of work		
152	TBSC-D.VI-23	Supply of Galvanized Roofing Deck sheets with 0.80mm -2mm thickness, Coating: Zinc coating Z125 / Z275/ Z 500 GSM. Yield Strength: E250. crest to crest width 130 mm length 12 meters : profile width 982mm and profile depth 44mm CR steel as per IS-513 HR steel as per IS 1079 and Galvanised Steel as per IS 277	1 kg	112.00
<b>E</b>	<b>SECTION</b>	<b>STEEL MATERIALS</b>		
		<b>(Excluding taxes but including cost of loading, cost of conveyance, unloading &amp; stacking)</b>		
<b>I</b>	<b>SUB-SECTION</b>	<b>MILD STEEL MATERIALS</b>		
153	TBSC-E.I-01	Supply & fixing of Rolling shutter made of 80 x 1.25 mm machine rolled CRCA laths, interlocked together through their entire length and jointed together at the ends by end-locks, mounted on specially designed pipe shaft of 50mm Diameter nominal bore MS B class pipe with brackets, plates, guide channels, stoppers, bottom locking plates and arrangements for inside & outside locking with push-pull operations including cost of hood cover and springs complete, painted with one coat of approved steel primer, locks, ball bearings, all accessories etc complete for finished item of work as per special Spec: 1108	1 Sqm	4,161.00
154	TBSC-E.I-02	Supplying & fixing collapsible steel shutters with vertical, double channel of 20 x10x2 mm of 100 mm centre ,Bracers with flat iron 40x40x6 mm with 38 mm Diameter steel pulleys, the top, bottom and side vertical frames of the collapsible gate with 65x65mmx8mm MS Angle and middle guide rail at site height with 65mmx8mm MS flat for the pulleys to guide and fixed with necessary hold fasts, bolts, nuts, rivets, locking arrangements, stoppers, handles, all accessories all fixtures and painted with one coat of approved steel primer etc., complete for finished item of work as per special Spec 1105	1 Sqm	3,640.00
155	TBSC-E.I-03	Expanded metal sheets as per IS-412-1962-Light Weight-25 mm(SWM)x75 mm (LWM)3.25 mm Wide and 1.25 mm thick	1 Sqm	168.00
156	TBSC-E.I-04	Expanded metal sheets as per IS-412-1962-Light Weight-20 mm(SWM)x60 mm(LWM) 2.50 mm Wide and 1.25 mm thick	1 Sqm	168.00
157	TBSC-E.I-05	Expanded metal sheets as per IS-412-1962-Light Weight-20 mm(SWM)x50 mm(LWM) 2.50 mm Wide and 1.25 mm thick	1 Sqm	168.00
158	TBSC-E.I-06	Expanded metal sheets as per IS-412-1962-Medium Weight-25 mm(SWM)x75 mm(LWM)	1 Sqm	229.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		3.25 mm Wide and 1.60 mm thick		
159	TBSC-E.I-07	Expanded metal sheets as per IS-412-1962-Medium Weight-20 mm(SWM)x60 mm(LWM) 2.50 mm Wide and 1.60 mm thick	1 Sqm	229.00
160	TBSC-E.I-08	Expanded metal sheets as per IS-412-1962-Medium Weight-20 mm(SWM)x50 mm(LWM) 2.50 mm Wide and 1.60 mm thick	1 Sqm	229.00
161	TBSC-E.I-09	Expanded metal sheets as per IS-412-1962-Heavy Weight-25 mm(SWM)x75 mm(LWM) 3.25 mm Wide and 2.24 mm thick	1 Sqm	262.00
162	TBSC-E.I-10	Expanded metal sheets as per IS-412-1962-Heavy Weight-20 mm(SWM)x60 mm(LWM) 2.50 mm Wide and 2.24 mm thick	1 Sqm	262.00
163	TBSC-E.I-11	Expanded metal sheets as per IS-412-1962-Heavy Weight-20 mm(SWM)x50 mm(LWM) 2.50 mm Wide and 2.24 mm thick	1 Sqm	262.00
164	TBSC-E.I-12	Rabbit wire mesh (chicken mesh) of not less than 30 gauge	1 Sqm	20.00
165	TBSC-E.I-13	Country Nails	1 Kg	65.00
166	TBSC-E.I-14	Wire Nails	1 Kg	65.00
167	TBSC-E.I-15	Mild Steel Tubes & pipes of all Diameters as per IS-1161	1 Kg	65.00
<b>II</b>	<b>SUB-SECTION</b>	<b>GALVANIZED STEEL MATERIALS</b>		
168	TBSC-E.II-01	Supplying Galvanized Steel Barbed wire conforming to IS 278 - 1978 : Type A - IOWA Type Designation as per standard specification	1 Kg	95.00
169	TBSC-E.II-02	Supplying Galvanized Steel Barbed wire conforming to IS 278 - 1978 : Type B - Glidden Type Designation as per standard specification	1 Kg	95.00
170	TBSC-E.II-03	Galvanized Iron fly proof wire mesh of not less than 20 gauge	1 Sqm	248.00
171	TBSC-E.II-04	Hot dipped Galvanized Iron Chain link mesh 8 gauge - (4.0 mm) as per IS: 2721-1979: 2"x2" (50 mm x 50 mm) - 8 Gauge	1 Sqm	545.00
172	TBSC-E.II-05	Hot dipped Galvanized Iron Chain link mesh 8 gauge - (4.0 mm) as per IS: 2721-1979: 2½"x2½" (63 mm x 63 mm) - 8 Gauge	1 Sqm	432.00
173	TBSC-E.II-06	Hot dipped Galvanized Iron Chain link mesh 8 gauge - (4.0 mm) as per IS: 2721-1979: 3"x3" (76 mm x 76 mm) - 8 Gauge	1 Sqm	369.00
174	TBSC-E.II-07	Hot dipped Galvanized Iron Chain link mesh 8 gauge - (4.0 mm) as per IS: 2721-1979: 4"x4" (102 mm x 102 mm) - 8 Gauge	1 Sqm	275.00
175	TBSC-E.II-08	Hot dipped Galvanized Iron Chain link mesh 8 gauge - (4.0 mm) as per IS: 2721-1979 - PVC Coated - 2"x2" (50 mm x 50 mm) - 8 Gauge	1 Sqm	658.00
176	TBSC-E.II-09	Hot dipped Galvanized Iron Chain link mesh 8 gauge - (4.0 mm) as per IS: 2721-1979 - PVC Coated - 2½"x2½" (63 mm x 63 mm) - 8 Gauge	1 Sqm	545.00
177	TBSC-E.II-10	Hot dipped Galvanized Iron Chain link mesh 8	1 Sqm	



Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		gauge - (4.0 mm) as per IS: 2721-1979 - PVC Coated - 3"x3" (76 mm x 76 mm) - 8 Gauge		450.00
178	TBSC-E.II-11	Hot dipped Galvanized Iron Chain link mesh 8 gauge - (4.0 mm) as per IS: 2721-1979 - PVC Coated - 4"x4" (102 mm x 102 mm) - 8 Gauge	1 Sqm	351.00
<b>III</b>	<b>SUB-SECTION</b>	<b>STAINLESS STEEL MATERIALS</b>		
179	TBSC-E.III-01	Stainless Steel Tubes, sections, plates, sheets & pipes of all sizes & Diameters for - 304 Grade	1 Kg	407.00
180	TBSC-E.III-02	Stainless steel fly proof wire mesh of not less than 20 gauge	1 Sqm	549.00
<b>F</b>	<b>SECTION</b>	<b>GLASS MATERIALS</b>		
		(Excluding taxes but including cost of loading, cost of conveyance, unloading & stacking)		
<b>I</b>	<b>SUB-SECTION</b>	<b>PLAIN GLASS PANES</b>		
181	TBSC-F.I-01	Plain Float Glass 4 mm thick	1 Sqm	420.00
182	TBSC-F.I-02	Plain Float Glass 5 mm thick	1 Sqm	533.00
183	TBSC-F.I-03	Plain Float Glass 6 mm thick	1 Sqm	661.00
184	TBSC-F.I-04	Plain Float Glass 8 mm thick	1 Sqm	888.00
185	TBSC-F.I-05	Plain Float Glass 10 mm thick	1 Sqm	935.00
186	TBSC-F.I-06	Plain Float Glass 12 mm thick	1 Sqm	1,121.00
<b>II</b>	<b>SUB-SECTION</b>	<b>PIN HEADED GLASS PANES</b>		
187	TBSC-F.II-01	Pin headed Glass 4 mm thick	1 Sqm	315.00
188	TBSC-F.II-02	Pin headed Glass 5 mm thick	1 Sqm	410.00
<b>III</b>	<b>SUB-SECTION</b>	<b>TINTED GLASS PANES</b>		
189	TBSC-F.III-01	Tinted - Bronze/ Green Glass 4 mm thick	1 Sqm	491.00
190	TBSC-F.III-02	Tinted - Bronze/ Green Glass 5 mm thick	1 Sqm	614.00
191	TBSC-F.III-03	Tinted - Bronze/ Green Glass 6 mm thick	1 Sqm	735.00
192	TBSC-F.III-04	Tinted - Bronze/ Green Glass 8 mm thick	1 Sqm	1,053.00
193	TBSC-F.III-05	Tinted - Bronze/ Green Glass 10 mm thick	1 Sqm	1,227.00
194	TBSC-F.III-06	Tinted - Bronze/ Green Glass 12 mm thick	1 Sqm	1,473.00
<b>IV</b>	<b>SUB-SECTION</b>	<b>FROSTED/ GROUND GLASS PANES</b>		
195	TBSC-F.IV-01	Frosted / Ground Glass 4 mm thick	1 Sqm	566.00
196	TBSC-F.IV-02	Frosted / Ground Glass 5 mm thick	1 Sqm	712.00
<b>V</b>	<b>SUB-SECTION</b>	<b>TOUGHENED GLASS PANES</b>		
197	TBSC-F.V-01	Toughened Plain Glass 5 mm (including Glass)	1 Sqm	853.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
198	TBSC-F.V-02	Toughened Plain Glass 6 mm (including Glass)	1 Sqm	985.00
199	TBSC-F.V-03	Toughened Plain Glass 8 mm (including Glass)	1 Sqm	1,314.00
200	TBSC-F.V-04	Toughened Plain Glass 10 mm (including Glass)	1 Sqm	1,575.00
201	TBSC-F.V-05	Toughened Plain Glass 12 mm (including Glass)	1 Sqm	1,837.00
<b>VI</b>	<b>SUB-SECTION</b>	<b>HERMETICALLY SEALED PANES - (Rates for following items are with 5 mm thick toughened clear float glass, rates for other glasses can be derived from adding/deducting the difference of cost of selected glass)</b>		
202	TBSC-F.VI-01	Supplying and fixing of hermetically Sealed Insulated (IGU) Double Glazed Glass Unit (DGU) with 5 mm thick toughened Clear Glass both sides and hollow aluminium spacer bar frames where frame is bent at 90 degree angle and assembled with only one joint, called a bent frame filled with desiccant of appropriate grade molecular sieve desiccant of adsorption capacity by weight, 20-30% by weight, capacity to dry air down to an extremely low PPMv level, <100 ppm (%RH) fixed to the glasses of specified thickness and quality with primary and secondary sealants of Poly ISO Butylene, or Butyl, primary sealant and Silicone and Polysulfide secondary sealants, to help fixing the IGU at the time of assembly and protect the gas filled spaces from moisture vapor penetration, chemical attack from cleaning fluids and glazing products, and liquid water penetration due to rain or condensation complete for Type I - Dry Air Insulated - Regular IGU	1 Sqm	2,918.00
203	TBSC-F.VI-02	Supplying and fixing of hermetically Sealed Insulated (IGU) Double Glazed Glass Unit (DGU) with 5 mm thick toughened Clear Glass both sides and hollow aluminium spacer bar frames where frame is bent at 90 degree angle and assembled with only one joint, called a bent frame filled with desiccant of appropriate grade molecular sieve desiccant of adsorption capacity by weight, 20-30% by weight, capacity to dry air down to an extremely low PPMv level, <100 ppm (%RH) fixed to the glasses of specified thickness and quality with primary and secondary sealants of Poly ISO Butylene, or Butyl, primary sealant and Silicone and Polysulfide secondary sealants, to help fixing the IGU at the time of assembly and protect the gas filled spaces from moisture vapor	1 Sqm	2,933.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		penetration, chemical attack from cleaning fluids and glazing products, and liquid water penetration due to rain or condensation complete for Type II - Inert gases such as argon, krypton, and xenon - IGU		
204	TBSC-F.VI-03	Supplying and fixing of hermetically Sealed Insulated (IGU) Double Glazed Glass Unit (DGU) using 5 mm thick toughened Clear Glass both sides and hollow aluminium spacer bar frames where frame is bent at 90 degree angle and assembled with only one joint, called a bent frame filled with desiccant of appropriate grade molecular sieve desiccant of adsorption capacity by weight, 20-30% by weight, capacity to dry air down to an extremely low PPMv level, <100 ppm (%RH) fixed to the glasses of specified thickness and quality with primary and secondary sealants of Poly ISO Butylene, or Butyl, primary sealant and Silicone and Polysulfide secondary sealants, to help fixing the IGU at the time of assembly and protect the gas filled spaces from moisture vapor penetration, chemical attack from cleaning fluids and glazing products, and liquid water penetration due to rain or condensation complete for Type III - Vacuum sealed IGU	1 Sqm	3,148.00
<b>G</b>	<b>SECTION</b>	<b>PAINTS &amp; POLISHES</b>		
		(Excluding taxes but including cost of loading, cost of conveyance, unloading & stacking)		
<b>I</b>	<b>SUB-SECTION</b>	<b>PRIMERS, FILLERS &amp; BASES</b>		
204	TBSC-G.I-01	Supply of water based Cement Primer of Interior Grade- 1	1 Kg	158.00
205	TBSC-G.I-02	Supply of water based Cement Primer of Exterior Grade- 2	1 Kg	201.00
206	TBSC-G.I-03	Supply of wall putty of White Cement or Polymer or Cement based	1 Kg	37.00
207	TBSC-G.I-04	Acrylic spray plaster in paste form made with specially selected inert mineral fillers, antifungal agents to protect the material the acrylic binding medium used gives good surface adhesion any grade	1 Kg	30.00
208	TBSC-G.I-05	Supply of Red Oxide Primer Paint for iron works of Grade -1	1 Lit	136.00
209	TBSC-G.I-06	Supply of Zinc Chromate Yellow Oxide Primer paint for iron works	1 Lit	215.00
210	TBSC-G.I-07	Supply of Wood Primer	1 Lit	152.00
211	TBSC-G.I-08	Supply of Metal paste (Putty) for steel works	1 Kg	152.00
212	TBSC-G.I-09	Supply of Putty for wood work (Powder chalk)	1 Kg	152.00
213	TBSC-G.I-10	Supply of White Lead	1 Kg	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
				109.00
214	TBSC-G.I-11	Supply of Synthetic clear Varnish	1 Lit	152.00
215	TBSC-G.I-12	Supply of Spirit	1 Lit	107.00
216	TBSC-G.I-13	Supply of Linseed Oil	1 Lit	61.00
217	TBSC-G.I-14	Supply of thinner for melamine polish/ French polish	1 Lit	140.00
218	TBSC-G.I-15	Supply of thinner for Poly-urethane polish	1 Lit	286.00
219	TBSC-G.I-16	Supply of French Polish	1 Lit	198.00
220	TBSC-G.I-17	Supply of readymade Wax Polish	1 Kg	601.00
221	TBSC-G.I-18	Supply of wood adhesive compound	1 Kg	236.00
222	TBSC-G.I-19	Supply of anti-corrosive grade - 1 bitumen paint of black colour	1 Lit	542.00
223	TBSC-G.I-20	Acrylic coarse spray plaster to cover undulations in paste form made with specially selected inert mineral fillers, antifungal agents to protect the material the acrylic binding medium used gives good surface adhesion interior grade	1 Kg	16.00
224	TBSC-G.I-21	Supply of coarse wall putty of grey cement or polymer or cement based to cover exterior undulations	1 Kg	45.00
225	TBSC-G.I-22	Supply of base coat as primer for natural textures and natural stone based paints - Exterior grade	1 Kg	61.00
II	SUB-SECTION	<b>LIME, DISTEMPERS &amp; CEMENT PAINTS</b>		
226	TBSC-G.II-01	Supply of paint grade lime for white / colour wash	1 Kg	24.00
227	TBSC-G.II-02	Supply of Dry Powder Distemper	1 Kg	46.00
228	TBSC-G.II-03	Supply of acrylic based Oil Bound washable Distemper	1 Kg	57.00
229	TBSC-G.II-04	Supply of Water proof Cement paint	1 Kg	54.00
III	SUB-SECTION	<b>EMULSION BASED PAINTS</b>		
230	TBSC-G.III-01	Supply of acrylic emulsion paint interior grade having VOC (Volatile Organic Compound) content less than 30 grams/ Lit.	1 Lit	205.00
231	TBSC-G.III-02	Supply of acrylic emulsion paint exterior grade with silicon additives having VOC (Volatile Organic Compound) content less than 30 grams/ Lit.	1 Lit	215.00
232	TBSC-G.III-03	Supply of acrylic emulsion paint weather proof water-based, modified acrylic with silicon additives exterior grade having VOC (Volatile Organic Compound) content less than 30 grams/ Lit.	1 Lit	237.00
233	TBSC-G.III-04	Supply of acrylic emulsion paint interior premium grade having VOC content less than 50gm/lit	1 Lit	240.00
234	TBSC-G.III-05	Supply of semi glossy acrylic emulsion paint exterior premium grade with silicon additives having VOC content less than 50gm/lit	1 Lit	340.00
235	TBSC-G.III-06	Supply of natural stone based high UV	1 Kg	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		resistant topcoat exterior emulsion paint		74.00
<b>IV</b>	<b>SUB-SECTION</b>	<b>SOLVENT BASED PAINTS</b>		
236	TBSC-G.IV-01	Supply of solvent based latex paint having VOC (Volatile Organic Compound) content less than 30 grams/ Lit.	1 Lit	258.00
237	TBSC-G.IV-02	Supply of synthetic polymer luxury plastic emulsion / solvent based luster paint of superior grade having VOC (Volatile Organic Compound) content less than 30 grams/ Lit.	1 Lit	452.00
<b>V</b>	<b>SUB-SECTION</b>	<b>OIL BASED ENAMEL PAINTS</b>		
238	TBSC-G.V-01	Supply of ready mixed Synthetic Enamel in all shades Grade - I / Polyurethane full gloss Enamel (IS - 13213) paints having VOC (Volatile Organic Compound) content less than 30 grams/ Lit.	1 Lit	264.00
239	TBSC-G.V-02	Supply of ready mixed Synthetic Enamel / Epoxy enamel (IS - 14209) paints in all shades Grade - II having VOC (Volatile Organic Compound) content less than 30 grams/ Lit.	1 Lit	201.00
<b>VI</b>	<b>SUB-SECTION</b>	<b>TEXTURE PAINTS</b>		
240	TBSC-G.VI-01	Exterior grade Texture ready mixed paint with sand texture added sand particles Acrylic copolymers and mineral compounds, bactericides and various additives having VOC (Volatile Organic Compound) content less than 30 grams/ Lit.	1 Kg	39.00
241	TBSC-G.VI-02	Exterior grade Texture ready mixed plaster made with natural minerals - granite flakes/ marble flakes/ powder, sand and other carefully selected and sieved minerals in an acrylic binding medium having VOC (Volatile Organic Compound) content less than 30 grams/ Lit.	1 Kg	50.00
242	TBSC-G.VI-03	Exterior grade natural textures ready mixed plaster made with natural mineral - granite flakes/marble flakes/powder, sand and other carefully selected and sieved minerals in an acrylic binding medium	1 Kg	73.00
243	TBSC-G.VI-04	Exterior grade natural textures in roller finish ready mixed plaster made with natural mineral - marble powder sand and other carefully selected and sieved minerals in an acrylic binding medium	1 Kg	75.00
<b>VII</b>	<b>SUB-SECTION</b>	<b>SPECIAL PAINTS</b>		
244	TBSC-G.VII-01	Supply of Melamine Polish	1 Lit	333.00
245	TBSC-G.VII-02	Supply of Interior Grade Poly-Urethane Polish	1 Lit	678.00
246	TBSC-G.VII-03	Supply of Exterior Grade Poly-Urethane Polish	1 Lit	828.00
247	TBSC-G.VII-04	Supply of grade-1 aluminium paint	1 Lit	271.00
<b>H</b>	<b>SECTION</b>	<b>PARTICLE BOARDS</b>		
		(Excluding taxes but including cost of		

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		<b>loading, cost of conveyance, unloading &amp; stacking)</b>		
<b>I</b>	<b>SUB-SECTION</b>	<b>MELAMINE FACED PLAIN PARTICLE BOARD</b>		
248	TBSC-H.I-01	Melamine faced Single Deco Plain Particle Board- 8 mm thick conforming to IS 3129	1 Sqm	644.00
249	TBSC-H.I-02	Melamine faced Single Deco Plain Particle Board- 12 mm thick conforming to IS 3129	1 Sqm	731.00
250	TBSC-H.I-03	Melamine faced Single Deco Plain Particle Board- 18 mm thick conforming to IS 3129	1 Sqm	847.00
251	TBSC-H.I-04	Melamine faced Single Deco Plain Particle Board- 25 mm thick conforming to IS 3129	1 Sqm	960.00
252	TBSC-H.I-05	Melamine faced Single Deco Plain Particle Board- 35 mm thick conforming to IS 3129	1 Sqm	1,595.00
253	TBSC-H.I-06	Melamine faced Twin Deco Plain Particle Board- 8 mm thick conforming to IS 3129	1 Sqm	742.00
254	TBSC-H.I-07	Melamine faced Twin Deco Plain Particle Board- 12 mm thick conforming to IS 3129	1 Sqm	847.00
255	TBSC-H.I-08	Melamine faced Twin Deco Plain Particle Board-18 mm thick conforming to IS 3129	1 Sqm	980.00
256	TBSC-H.I-09	Melamine faced Twin Deco Plain Particle Board-25 mm thick conforming to IS 3129	1 Sqm	1,085.00
257	TBSC-H.I-10	Melamine faced Twin Deco Plain Particle Board-35 mm thick conforming to IS 3129	1 Sqm	2,039.00
<b>II</b>	<b>SUB-SECTION</b>	<b>INSULATING PARTICLE BOARDS</b>		
258	TBSC-H.II-01	Natural Colour-Insulating Board - 12 mm thick conforming to IS 3348	1 Sqm	241.00
259	TBSC-H.II-02	Natural Colour-Insulating Board - 18 mm thick conforming to IS 3348	1 Sqm	355.00
260	TBSC-H.II-03	Natural Colour-Insulating Board - 25 mm thick conforming to IS 3348	1 Sqm	453.00
261	TBSC-H.II-04	White Insulating Board - 12 mm thick conforming to IS 3348	1 Sqm	293.00
262	TBSC-H.II-05	White Insulating Board - 18 mm thick conforming to IS 3348	1 Sqm	418.00
263	TBSC-H.II-06	White Insulating Board - 25 mm thick conforming to IS 3348	1 Sqm	372.00
<b>III</b>	<b>SUB-SECTION</b>	<b>MEDIUM DENSITY FIBRE BOARDS</b>		
264	TBSC-H.III-01	Medium Fibre Board: Interior Grade - 6 mm thick conforming to IS 15932	1 Sqm	392.00
265	TBSC-H.III-02	Medium Fibre Board: Interior Grade - 8 mm thick conforming to IS 15932	1 Sqm	445.00
266	TBSC-H.III-03	Medium Fibre Board: Interior Grade - 12 mm thick conforming to IS 15932	1 Sqm	595.00
267	TBSC-H.III-04	Medium Fibre Board: Interior Grade - 15 mm thick conforming to IS 15932	1 Sqm	756.00
268	TBSC-H.III-05	Medium Fibre Board: Interior Grade - 18 mm thick conforming to IS 15932	1 Sqm	844.00
269	TBSC-H.III-06	Medium Fibre Board: Interior Grade - 25 mm thick conforming to IS 15932	1 Sqm	1,197.00
270	TBSC-H.III-07	Medium Fibre Board: Interior Grade - 30 mm thick conforming to IS 15932	1 Sqm	1,446.00
271	TBSC-H.III-08	Medium Fibre Board: Interior Grade - 35 mm thick conforming to IS 15932	1 Sqm	1,579.00
272	TBSC-H.III-09	Medium Fibre Board: Exterior Grade - 6 mm	1 Sqm	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		thick conforming to IS 15932		533.00
273	TBSC-H.III-10	Medium Fibre Board: Exterior Grade - 8 mm thick conforming to IS 15932	1 Sqm	620.00
274	TBSC-H.III-11	Medium Fibre Board: Exterior Grade - 12 mm thick conforming to IS 15932	1 Sqm	822.00
275	TBSC-H.III-12	Medium Fibre Board: Exterior Grade - 15 mm thick conforming to IS 15932	1 Sqm	1,033.00
276	TBSC-H.III-13	Medium Fibre Board: Exterior Grade - 18 mm thick conforming to IS 15932	1 Sqm	1,155.00
277	TBSC-H.III-14	Medium Fibre Board: Exterior Grade - 25 mm thick conforming to IS 15932	1 Sqm	1,540.00
278	TBSC-H.III-15	Medium Fibre Board: Exterior Grade - 30 mm thick conforming to IS 15932	1 Sqm	1,917.00
279	TBSC-H.III-16	Medium Fibre Board: Exterior Grade - 35 mm thick conforming to IS 15932	1 Sqm	2,264.00
280	TBSC-H.III-17	MDF Board: Plain-Interior - 9 mm thick conforming to IS 15932	1 Sqm	360.00
281	TBSC-H.III-18	MDF Board: Plain-Interior - 12 mm thick conforming to IS 15932	1 Sqm	409.00
282	TBSC-H.III-19	MDF Board: Plain-Interior - 18 mm thick conforming to IS 15932	1 Sqm	506.00
283	TBSC-H.III-20	MDF Board: Plain-Interior - 25 mm thick conforming to IS 15932	1 Sqm	607.00
284	TBSC-H.III-21	MDF Board: Plain-Interior - 30 mm thick conforming to IS 15932	1 Sqm	924.00
285	TBSC-H.III-22	MDF Board: Plain-Interior - 35 mm thick conforming to IS 15932	1 Sqm	1,092.00
286	TBSC-H.III-23	MDF Board: Plain-Exterior - 9 mm thick conforming to IS 15932	1 Sqm	470.00
287	TBSC-H.III-24	MDF Board: Plain-Exterior - 12 mm thick conforming to IS 15932	1 Sqm	506.00
288	TBSC-H.III-25	MDF Board: Plain-Exterior - 18 mm thick conforming to IS 15932	1 Sqm	663.00
289	TBSC-H.III-26	MDF Board: Plain-Exterior - 25 mm thick conforming to IS 15932	1 Sqm	832.00
290	TBSC-H.III-27	MDF Board: Plain-Exterior - 30 mm thick conforming to IS 15932	1 Sqm	1,092.00
291	TBSC-H.III-28	MDF Board: Plain-Exterior - 35 mm thick conforming to IS 15932	1 Sqm	1,260.00
292	TBSC-H.III-29	MDF Board: Interior-One Side Laminated -9 mm thick conforming to IS 15932	1 Sqm	563.00
293	TBSC-H.III-30	MDF Board: Interior-One Side Laminated -12 mm thick conforming to IS 15932	1 Sqm	637.00
294	TBSC-H.III-31	MDF Board: Interior-One Side Laminated -18 mm thick conforming to IS 15932	1 Sqm	741.00
295	TBSC-H.III-32	MDF Board: Interior-One Side Laminated -25 mm thick conforming to IS 15932	1 Sqm	832.00
296	TBSC-H.III-33	MDF Board: Interior-One Side Laminated -30 mm thick conforming to IS 15932	1 Sqm	1,203.00
297	TBSC-H.III-34	MDF Board: Interior-One Side Laminated -35 mm thick conforming to IS 15932	1 Sqm	1,283.00
298	TBSC-H.III-35	MDF Board: Exterior-One Side Laminated -9 mm thick conforming to IS 15932	1 Sqm	647.00
299	TBSC-H.III-36	MDF Board: Exterior-One Side Laminated -12	1 Sqm	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		mm thick conforming to IS 15932		727.00
300	TBSC-H.III-37	MDF Board: Exterior-One Side Laminated -18 mm thick conforming to IS 15932	1 Sqm	823.00
301	TBSC-H.III-38	MDF Board: Exterior-One Side Laminated -25 mm thick conforming to IS 15932	1 Sqm	962.00
302	TBSC-H.III-39	MDF Board: Exterior-One Side Laminated -30 mm thick conforming to IS 15932	1 Sqm	1,283.00
303	TBSC-H.III-40	MDF Board: Exterior-One Side Laminated -35 mm thick conforming to IS 15932	1 Sqm	1,362.00
304	TBSC-H.III-41	MDF Board: Interior-Both Side Laminated -9 mm thick conforming to IS 15932	1 Sqm	643.00
305	TBSC-H.III-42	MDF Board: Interior-Both Side Laminated -12 mm thick conforming to IS 15932	1 Sqm	727.00
306	TBSC-H.III-43	MDF Board: Interior-Both Side Laminated -18 mm thick conforming to IS 15932	1 Sqm	832.00
307	TBSC-H.III-44	MDF Board: Interior-Both Side Laminated -25 mm thick conforming to IS 15932	1 Sqm	1,045.00
308	TBSC-H.III-45	MDF Board: Interior-Both Side Laminated -30 mm thick conforming to IS 15932	1 Sqm	1,283.00
309	TBSC-H.III-46	MDF Board: Interior-Both Side Laminated -35 mm thick conforming to IS 15932	1 Sqm	1,362.00
310	TBSC-H.III-47	MDF Board: exterior-Both Side Laminated -9 mm thick conforming to IS 15932	1 Sqm	727.00
311	TBSC-H.III-48	MDF Board: exterior-Both Side Laminated -12 mm thick conforming to IS 15932	1 Sqm	823.00
312	TBSC-H.III-49	MDF Board: exterior-Both Side Laminated -18 mm thick conforming to IS 15932	1 Sqm	973.00
313	TBSC-H.III-50	MDF Board: exterior-Both Side Laminated -25 mm thick conforming to IS 15932	1 Sqm	1,063.00
314	TBSC-H.III-51	MDF Board: exterior-Both Side Laminated -30 mm thick conforming to IS 15932	1 Sqm	1,346.00
315	TBSC-H.III-52	MDF Board: exterior-Both Side Laminated -35 mm thick conforming to IS 15932	1 Sqm	1,443.00
<b>IV</b>	<b>SUB-SECTION</b>	<b>CEMENT BONDED PLAIN &amp; PARTICLE BOARDS</b>		
316	TBSC-H.IV-01	Cement Bonded Board conforming to IS:14862-2000 - 4mm Thick	1 Sqm	153.00
317	TBSC-H.IV-02	Cement Bonded Board conforming to IS:14862-2000 - 6mm Thick	1 Sqm	218.00
318	TBSC-H.IV-03	Cement Bonded Board conforming to IS:14862-2000 - 8mm Thick	1 Sqm	280.00
319	TBSC-H.IV-04	Cement Bonded Board conforming to IS:14862-2000 - 10mm Thick	1 Sqm	322.00
320	TBSC-H.IV-05	Cement Bonded Board conforming to IS:14862-2000 - 12mm Thick	1 Sqm	402.00
321	TBSC-H.IV-06	Cement Bonded Board conforming to IS:14862-2000 - 14mm Thick	1 Sqm	448.00
322	TBSC-H.IV-07	Cement Bonded Board conforming to IS:14862-2000 - 16mm Thick	1 Sqm	510.00
323	TBSC-H.IV-08	Cement Bonded Board conforming to IS:14862-2000 - 18mm Thick	1 Sqm	578.00
324	TBSC-H.IV-09	Cement Bonded Board conforming to IS:14862-2000 - 20mm Thick	1 Sqm	613.00
325	TBSC-H.IV-10	Cement bonded particle board conforming to	1 Sqm	



Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		IS 14276-6 mm thick		233.00
326	TBSC-H.IV-11	Cement bonded particle board conforming to IS 14276- 8 mm thick	1 Sqm	319.00
327	TBSC-H.IV-12	Cement bonded particle board conforming to IS 14276- 10 mm thick	1 Sqm	395.00
328	TBSC-H.IV-13	Cement bonded particle board conforming to IS 14276- 12 mm thick	1 Sqm	475.00
329	TBSC-H.IV-14	Cement bonded particle board conforming to IS 14276- 16 mm thick	1 Sqm	626.00
330	TBSC-H.IV-15	Cement bonded particle board conforming to IS 14276- 20 mm thick	1 Sqm	777.00
331	TBSC-H.IV-16	Cement bonded particle board conforming to IS 14276- 25 mm thick	1 Sqm	990.00
332	TBSC-H.IV-17	Cement bonded particle board conforming to IS 14276- 30 mm thick	1 Sqm	1,181.00
333	TBSC-H.IV-18	Cement bonded particle board conforming to IS 14276- 40 mm thick	1 Sqm	1,554.00
334	TBSC-H.IV-19	Pre-laminated cement bonded particle board- 6 mm thick	1 Sqm	553.00
335	TBSC-H.IV-20	Pre-laminated cement bonded particle board- 8 mm thick	1 Sqm	597.00
336	TBSC-H.IV-21	Pre-laminated cement bonded particle board- 10 mm thick	1 Sqm	641.00
337	TBSC-H.IV-22	Pre-laminated cement bonded particle board- 12 mm thick	1 Sqm	701.00
338	TBSC-H.IV-23	Pre-laminated cement bonded particle board- 16 mm thick	1 Sqm	779.00
339	TBSC-H.IV-24	50 mm thick SOLID WALL PANEL Sandwich panels made of light weight FRACC non-asbestos fibre reinforced cement concrete	1 Sqm	1,020.00
340	TBSC-H.IV-25	75 mm thick SOLID WALL PANEL Sandwich panels made of light weight FRACC non-asbestos fibre reinforced cement concrete	1 Sqm	1,225.00
<b>J</b>	<b>SECTION</b>	<b>PLYWOODS, LAMINATES &amp; VENEERS</b>		
		(Excluding taxes but including cost of loading, cost of conveyance, unloading & stacking)		
<b>I</b>	<b>SUB-SECTION</b>	<b>MOISTURE RESISTANT (MR) GRADE</b>		
341	TBSC-J.I-01	3 Ply - 4 mm thick Plywood conforming to IS:303 MR Grade	1 Sqm	388.00
342	TBSC-J.I-02	5 Ply - 6 mm thick Plywood conforming to IS:303 MR Grade	1 Sqm	429.00
343	TBSC-J.I-03	5 Ply - 8 mm thick Plywood conforming to IS:303 MR Grade	1 Sqm	503.00
344	TBSC-J.I-04	5 Ply - 9 mm thick Plywood conforming to IS:303 MR Grade	1 Sqm	503.00
345	TBSC-J.I-05	9 Ply - 12 mm thick Plywood conforming to IS:303 MR Grade	1 Sqm	632.00
346	TBSC-J.I-06	9 Ply - 15 mm thick Plywood conforming to IS:303 MR Grade	1 Sqm	930.00
347	TBSC-J.I-07	9 Ply - 18 mm thick Plywood conforming to IS:303 MR Grade	1 Sqm	911.00
<b>II</b>	<b>SUB-SECTION</b>	<b>BOILING WATER RESISTANT (BWR) GRADE</b>		
348	TBSC-J.II-01	3 Ply - 4 mm thick Plywood conforming to	1 Sqm	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		IS:303 BWR Grade		444.00
349	TBSC-J.II-02	5 Ply - 6 mm thick Plywood conforming to IS:303 BWR Grade	1 Sqm	520.00
350	TBSC-J.II-03	5 Ply - 8 mm thick Plywood conforming to IS:303 BWR Grade	1 Sqm	648.00
351	TBSC-J.II-04	5 Ply - 9 mm thick Plywood conforming to IS:303 BWR Grade	1 Sqm	613.00
352	TBSC-J.II-05	9 Ply - 12 mm thick Plywood conforming to IS:303 BWR Grade	1 Sqm	801.00
353	TBSC-J.II-06	9 Ply - 15 mm thick Plywood conforming to IS:303 BWR Grade	1 Sqm	1,148.00
354	TBSC-J.II-07	9 Ply - 19 mm thick Plywood conforming to IS:303 BWR Grade	1 Sqm	1,152.00
<b>III</b>	<b>SUB-SECTION</b>	<b>VENEERED DECORATIVE PLYWOOD</b>		
355	TBSC-J.III-01	3 Ply-4 mm thick One side Teak Veneered Decorative Plywood conforming to IS:1328	1 Sqm	574.00
356	TBSC-J.III-02	5 Ply - 6 mm thick One side Teak Veneered Decorative Plywood conforming to IS:1328	1 Sqm	747.00
357	TBSC-J.III-03	5 Ply - 9 mm thick One side Teak Veneered Decorative Plywood conforming to IS:1328	1 Sqm	958.00
358	TBSC-J.III-04	9 Ply - 12 mm thick One side Teak Veneered Decorative Plywood conforming to IS:1328	1 Sqm	1,220.00
359	TBSC-J.III-05	5 Ply - 9 mm thick Both sides Teak Veneered Decorative Plywood conforming to IS:1328	1 Sqm	1,250.00
360	TBSC-J.III-06	9 Ply - 12 mm thick Both sides Teak Veneered Decorative Plywood conforming to IS:1328	1 Sqm	1,457.00
<b>IV</b>	<b>SUB-SECTION</b>	<b>LAMINATES</b>		
361	TBSC-J.IV-01	Melamine Laminate Sheets - Glossy Finish: 1.00 mm thick	1 Sqm	385.00
362	TBSC-J.IV-02	Melamine Laminate Sheets - Glossy Finish: 1.50 mm thick	1 Sqm	551.00
363	TBSC-J.IV-03	Melamine Laminate Sheets - Glossy Finish: 1.80 mm thick	1 Sqm	604.00
364	TBSC-J.IV-04	Melamine Laminate Sheets - Mat Finish: 1.00 mm thick	1 Sqm	409.00
365	TBSC-J.IV-05	Melamine Laminate Sheets - Mat Finish: 1.50 mm thick	1 Sqm	569.00
366	TBSC-J.IV-06	Melamine Laminate Sheets - Mat Finish: 1.80 mm thick	1 Sqm	613.00
<b>V</b>	<b>SUB-SECTION</b>	<b>COMMERCIAL VENEERS</b>		
367	TBSC-J.V-01	Teak Veneer Lamination of 4 mm thick with Pencil Grains conforming to IS 14315	1 Sqm	430.00
368	TBSC-J.V-02	Teak Veneer Lamination of 4 mm thick with Natural Grains conforming to IS 14315	1 Sqm	790.00
<b>K</b>	<b>SECTION</b>	<b>CEILINGS, WALL PARTITIONS &amp; WALL LININGS</b>		
		(Excluding taxes but including cost of loading, cost of conveyance, unloading & stacking)		
<b>I</b>	<b>SUB-SECTION</b>	<b>FALSE CEILINGs - TILES/ SHEETS</b>		
369	TBSC-K.I-01	Gypsum Board tiles of size not less than 0.595 M x 0.595 M of 12.5 mm thick as per IS 2095 - 1992	1 Sqm	268.00
370	TBSC-K.I-02	Gypsum Board tiles of size not less than 0.595	1 Sqm	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		M x 0.595 M of 9 mm thick as per IS 2095 - 1992		262.00
371	TBSC-K.I-03	Gypsum Board Plain sheet 12.5 mm thick as per IS 2095 -1993	1 Sqm	237.00
372	TBSC-K.I-04	<b>DELETED</b>		
373	TBSC-K.I-05	14 mm - Mineral Fibre sheet 600 x 600 of Board / Tegular Edge tiles with a Humidity Resistance of 90% RH, Average NRC 0.50, Light Reflectance >80%, Thermal Conductivity $\lambda = 0.052$ to $0.057$ w/mk, Fire Performance Class 0/Class 1	1 Sqm	562.00
374	TBSC-K.I-06	15 mm - Mineral Fibre sheet 600 x 600 of Board / Tegular Edge tiles with a Humidity Resistance of 95% RH, Average NRC 0.50, Light Reflectance >85%, Thermal Conductivity $\lambda = 0.052$ to $0.057$ w/mk, Fire Performance Class 0/Class 1	1 Sqm	658.00
375	TBSC-K.I-07	16 mm - Tegular Edge 600 x 600 of Board / Tegular/ Micro look Edge tiles with a Humidity Resistance of 99% RH, Average NRC 0.60, Light Reflectance >85%, Thermal Conductivity $\lambda = 0.052$ to $0.057$ w/mk, Fire Performance Class 0/Class 1	1 Sqm	708.00
376	TBSC-K.I-08	Designer ceiling Cement Boards -thickness 3.2 mm	1 Sqm	247.00
377	TBSC-K.I-09	High pressure steam cured Cement Boards 4 mm thick	1 Sqm	133.00
378	TBSC-K.I-10	High pressure steam cured Cement Boards 6 mm thick	1 Sqm	199.00
379	TBSC-K.I-11	High pressure steam cured Cement Boards 8 mm thick	1 Sqm	264.00
380	TBSC-K.I-12	High pressure steam cured Cement Boards 10 mm thick	1 Sqm	330.00
381	TBSC-K.I-13	High pressure steam cured Cement Boards 12 mm thick	1 Sqm	395.00
382	TBSC-K.I-14	High pressure steam cured Cement Boards 14 mm thick	1 Sqm	461.00
383	TBSC-K.I-15	High pressure steam cured Cement Boards 16 mm thick	1 Sqm	529.00
384	TBSC-K.I-16	High pressure steam cured Cement Boards 18 mm thick	1 Sqm	593.00
385	TBSC-K.I-17	High pressure steam cured Cement Boards 20 mm thick	1 Sqm	660.00
386	TBSC-K.I-18	High pressure steam cured designer Cement Boards 4 mm thick	1 Sqm	195.00
387	TBSC-K.I-19	High pressure steam cured designer Cement Boards 6 mm thick	1 Sqm	286.00
388	TBSC-K.I-20	Calcium Silicate Boards - 6mm thick	1 Sqm	220.00
389	TBSC-K.I-21	Calcium Silicate Boards - 8mm thick	1 Sqm	293.00
390	TBSC-K.I-22	Calcium Silicate Boards - 10mm thick	1 Sqm	367.00
391	TBSC-K.I-23	Calcium Silicate Boards - 12mm thick	1 Sqm	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
				439.00
392	TBSC-K.I-24	Supply of Thermocol 12 mm thick sheets	1 Sqm	26.00
393	TBSC-K.I-25	Supply of Thermocol 19 mm thick sheets	1 Sqm	45.00
394	TBSC-K.I-26	Supplying and fixing of false ceiling using Plaster of Paris Boards 12 mm thick with standard GI ceiling angles, sections perimeter channels including cost and conveyance of all materials and labour charges etc complete	1 Sqm	428.00
395	TBSC-K.I-27	Supplying and fixing of false ceiling using Plaster of Paris Boards 10 mm thick with standard GI ceiling angles, sections perimeter channels including cost and conveyance of all materials and labour charges etc complete	1 Sqm	357.00
396	TBSC-K.I-28	Supply and fixing false ceiling using 8 mm thick Cement Bonded particle boards conforming to IS 14276 with galvanized and pre painted steel T section of size 24mm x 38mm x 0.3 mm for main T duty pre punched to accept cross T section of size 24mm x 30mm x 0.3 mm duly punched at both ends for insertion into main T. The grid size will be 610mm x 610mm. The frame work (grid) is suspended to the roof by using G.I flat of 0.60mm or 14-gauge G.I wire with necessary fixers to the roof and frame work the cost is inclusive of necessary hardware, labour, one coat of primer (Both side) and two coats of smooth finish on visible side.	1 Sqm	1,220.00
397	TBSC-K.I-29	Providing and fixing false ceiling consisting of 600 mm x 600 mm, Solid PVC insulation panels having wall thickness of 1mm thick plain PVC rigid foam sheet and EPS as defined in of desired thickness depending on insulation required shall be insert in a frame work made using anodized aluminium Tee section of sizes 1"X1" (25X25mm, 19 gauge or 1mm thick) in square pattern of grid sizes of 2'X2' (600X600mm). The aluminium framework is supported from the ceiling with the help of G.I. hook and G.I. wire/6mm.M.S. rods of required sizes to maintain proper level etc. the aluminium framework is supported on side wall with the use of aluminium 1"X1" (25X25mm) angles, complete as per direction of Engineer-in-Charge & drawing	1 Sqm	1,310.00
398	TBSC-K.I-30	Supply and fixing of PVC false ceiling on MS/GI made skeleton framework. The frame shall be 24 X 48mm MS tube section fixed along with the wall. The entire frame work shall be concealed with PVC section having overall dimensions of 6 X 250 mm with a wall thickness of 1mm ± 0.3mm with tongue and	1 Sqm	1,454.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		groove system, provided with necessary arrangements for electrical connections, complete, for finished item of work.		
399	TBSC-K.I-31	15 mm - Micro Look Edge 600 x 600 of Board / Tegular/ Micro look Edge tiles with a Humidity Resistance of 95% RH, Average NRC 0.90, Light Reflectance >88%, Thermal Conductivity $\lambda = 0.032$ w/mk, Fire Performance Class 0/Class 1 suitable for Green Building application, with Recycled content of 88% (FG)	1 Sqm	1,501.00
400	TBSC-K.I-32	16 mm - Tegular Edge 600 x 600 of Board / Tegular/ Micro look Edge tiles with a Humidity Resistance of 99% RH, Average NRC 0.55, Light Reflectance >84%, Thermal Conductivity $\lambda = 0.052$ to $0.057$ w/mk, Fire Performance Class 0/Class 1	1 Sqm	665.00
401	TBSC-K.I-33	Providing & Fixing of Lay-in-metal plain ceiling System consisting of 600 x 600mm Lay in GI tiles of pre coated galvanized steel in 0.5 mm thickness in white colour to be laid on grid systems with 15mm wide T - section flanges but excluding cost of Grid systems complete for finished item of work	1 Sqm	724.00
402	TBSC-K.I-34	Providing & Fixing of GI Lay in Standard Perforated(2.5mm diameter-16% open area) metal ceiling consisting of 600 x 600 mm Lay in tiles of pre coated galvanized steel in 0.5 mm thickness in Global white color acoustical fleece hot pressed to the back of the perforated tile to be laid on grid systems with 0.5 mm thickness in white colour with 15mm wide T - section flanges but excluding cost of Grid systems and having rotary stitching on the Main Runner, 1200 mm & 600 mm Cross Tees and the tiles with NRC of 0.70, Fire Performance of Class A2-s1.d0 as per EN13501 standard in module size of 600 X 600 mm suitable for Green Building application, with Recycled content of 25% complete for finished item of work	1 Sqm	1,037.00
		Providing and fixing false ceiling at all heights with GRG (Glass Fibre Reinforced Gypsum) false ceiling tiles of size 595 x 595 mm of approved texture, design and patterns having moisture content less than 2% humidity resistance of 99%, NRC 0.50 to 0.75 as per IS 8225:1987, Noncombustible as per BS 476 part 4 1970 and light reflectance of 85% minimum to be laid in true horizontal level suspended on inter locking metal T grid of hot dipped galvanized iron section of 0.33 mm thick galvanized @ 120 gms per sqm including both sides, comprising of main T runners of size 15x32mm of length 3000mm, cross T of size		

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		15x32mm of length 1200 mm and secondary intermediate cross T of size 15x32mm of length 600mm to form grid module of size 600 x 600mm suspended from ceiling using galvanized mild steel items galvanizing @ 80 grams per sqm i.e. 50mm long, 8mm outer diameter, M-6 dash fasteners, 6mm dia fully threaded hanger rod up to 1000mm length and L shape level adjuster of size 85x25x2 mm. Galvanized iron permitter wall angle of size 24x24x0.40mm of length 3000mm to fixed on periphery wall/partition with help of plastic rawl plugs at 450mm center to centre and 40mm long dry wall SS screws. The work shall be carried out as per specifications, drawing and as per directions of Engineer-in-Charge		
403	TBSC-K.I-35	GRG (Glass Fibre Reinforced Gypsum) false ceiling with fully perforated 10mm thick square edged GRG false ceiling tiles	1 Sqm	1,640.00
404	TBSC-K.I-36	GRG (Glass Fibre Reinforced Gypsum) false ceiling with semi perforated 12mm thick micro tegular edged GRG false ceiling tiles	1 Sqm	1,573.00
405	TBSC-K.I-37	Providing and fixing false ceiling at all heights with GRG (Glass Fibre Reinforced Gypsum) false ceiling tiles of size 595 x 595 mm of approved texture, design and patterns having moisture content less than 2% humidity resistance of 99%, NRC 0.60 to 0.75 as per IS 8225:1987, Noncombustible as per BS 476 part 4 1970 and light reflectance of 85% minimum to be laid in true horizontal level suspended on inter locking metal T grid of hot dipped galvanized iron section of 0.33 mm thick galvanized @ 120 gms per sqm including both sides, comprising of main T runners of size 15x32mm of length 3600mm, cross T of size 15x32mm of length 1200 mm and secondary intermediate cross T of size 15x32mm of length 600mm to form grid module of size 600 x 600mm suspended from ceiling using galvanized mild steel items galvanizing @ 80 grams per sqm i.e. 50mm long, 8mm outer diameter, M-6 dash fasteners, 6mm dia fully threaded hanger rod up to 1000mm length and L shape level adjuster of size 85x25x2 mm. Galvanized iron permitter wall angle of size 24x24x0.40mm of length 3000mm to fixed on periphery wall/partition with help of plastic rawl plugs at 450mm center to centre and 40mm long dry wall SS screws. The work shall be carried out as per specifications, drawing and as per directions of Engineer-in-Charge with semi perforated 12mm thick micro tegular edged GRG false ceiling tiles	1 Sqm	1,733.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
406	TBSC-K.I-38	Providing and fixing false ceiling at all heights with 15mm thick ecofriendly integral densified Board/tegular edged light weight calcium silicate false ceiling tiles having non cementitious calcium silicate reinforced with fibers and natural fillers with recycled content of more than 50%. False ceiling tile of size 595x595 mm of approved texture, design and patterns having NRC i.e. Noise reduction coefficient of 0.1 to 0.12 for plain and designer range of tiles HEXA/QUADRA and 0.5 to 0.75 for semi perforated and fully perforated tiles SPINTONE/COSMOS/GLOBE, Light reflectance of 85% minimum Nom combustible as per BS 476 part 4, Fire performance as per BS 476 Part 6 & 7, Relative humidity Resistance of 100%, thermal conductivity of 0.048 W/m.K to 0.050 W/m.K as per IS 3346/1980. The tile shall have average body density of 350 kg/m <sup>3</sup> as per ECBC code 2007 and average edge density of 450kg/m <sup>3</sup> the tile shall be primer coated on both sides and the fair surface shall be having a factory finish in two coats of white dispersion type solvent free paint in true horizontal level suspended on inter locking metal T grid of hot dipped galvanized iron section of 0.33mm thick galvanized @ 120 grams per sqm including both sides comprising of main T runners of size 24x38mm of length 3600mm cross T of size 24x32mm of length 1200mm and cross T of size 24x32mm of length 600mm to form grid module of size 600x600mm suspended from ceiling GI slotted cleats of size 25x35x1.6mm fixed to ceiling with 12.5mm dia and 50mm long dash fasteners, 4mm GI adjustable rods with galvanized steel level clips of size 85x30x0.8mm spaced 1200mm centre to centre along main T bottom exposed with 24mm of all T sections wall angle of size 24x24x0.40mm of length 3000mm to be fixed on periphery wall/partition with the help of plastic rawl plugs at 450 with 15mm thick integral densified tegular edged light weight calcium silicate false ceiling tiles	1 Sqm	1,664.00
407	TBSC-K.I-39	Providing and fixing false ceiling at all heights with 15mm thick ecofriendly integral densified Board/tegular edged light weight calcium silicate false ceiling tiles having non cementitious calcium silicate reinforced with fibers and natural fillers with recycled content of more than 50%. False ceiling tile of size 595x595 mm of approved texture, design and patterns having NRC i.e. Noise reduction	1 Sqm	1,882.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		<p>coefficient of 0.1 to 0.15 for plain and designer range of tiles HEXA/QUADRA and 0.5 to 0.75 for semi perforated and fully perforated tiles SPINTONE/COSMOS/GLOBE, Light reflectance of 85% minimum Nom combustible as per BS 476 part 4, Fire performance as per BS 476 Part 6 &amp; 7, Relative humidity Resistance of 100%, thermal conductivity of 0.048 W/m.K to 0.050 W/m.K as per IS 3346/1980. The tile shall have average body density of 350 kg/m<sup>3</sup> as per ECBC code 2007 and average edge density of 450kg/m<sup>3</sup> the tile shall be primer coated on both sides and the fair surface shall be having a factory finish in two coats of white dispersion type solvent free paint in true horizontal level suspended on inter locking metal T grid of hot dipped galvanized mild steel powder coated section of 0.40 mm thick silhouetted white/black profile compiling main T runners of size 42x15mm of length 3600mm cross T of size 42x15mm of length 1200mm and cross T of size 42x15mm of length 600mm to form grid module of size 600x600mm suspended from ceiling GI slotted cleats of size 25x35x1.6mm fixed to ceiling with 12.5mm dia and 50mm long dash fasteners, 4mm GI adjustable rods with galvanized steel level clips of size 85x30x0.8mm spaced 1200mm centre to centre along main T bottom exposed with 24mm of all T sections wall angle of size 22x19x0.40mm of length 3000mm to be fixed on periphery wall/partition with the help of plastic rawl plugs at 450 with 15mm thick integral densified tegular edged light weight calcium silicate false ceiling tiles</p>		
408	TBSC-K.I-40	<p>Providing and fixing of false ceiling with powder coated exposed GI grid suspension system E Grid T 2430 or equivalent load carrying capacity with mid span deflection not exceeding 1/360 span with hanger spacing of 1200mm c/c consisting of main runner 3600mm long, Cross Tee 1200mm/60mm long and wall angle. The wall angle shall be fixed on PVC dash fasteners on the perimeter of the wall by steel screws with distance 300mm c/c, The main runners to be placed @ 1200mm, Cross tee 1200mm will be inserted in the pre-cut slots of main runner at a regular interval of 600mm to form a modular grid of 1200mm x 600mm. Additional cross tees of 600mm shall be placed perpendicular to the cross tee 1200mm long to finally form a grid of 600mm x 600mm. Grid of module</p>	1 Sqm	1,114.00



Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		size 600mmx600mm shall be supported by 3mm dia GI wire from purlins/soffit. 4mm thick High pressure steam cured non-asbestos fibre cement standard ceiling board density>1299 kg/m <sup>3</sup> , Modulus of rupture - 15.85 Mpa, Thermal conductivity - 0.0872 W/mK of size 595mm x 595mm confirming to IS 14862 and Type B category III of ISO 8336:1993, reaction to fire A2s1d0 tested as per EN13501 Part I and BS 476 part 4,5,6&7 should be placed in the Grid module to form a false ceiling. All complete as per drawing and directions of Engineer-in-Charge		
409	TBSC-K.I-41	Providing and fixing of false ceiling with powder coated exposed GI grid suspension system E Grid T 2430 or equivalent load carrying capacity with mid span deflection not exceeding 1/360 span with hanger spacing of 1200mm c/c consisting of main runner 3600mm long, Cross Tee 1200mm/60mm long and wall angle. The wall angle shall be fixed on PVC dash fasteners on the perimeter of the wall by steel screws with distance 300mm c/c, The main runners to be placed @ 1200mm, Cross tee 1200mm will be inserted in the pre-cut slots of main runner at a regular interval of 600mm to form a modular grid of 1200mm x 600mm. Additional cross tees of 600mm shall be placed perpendicular to the cross tee 1200mm long to finally form a grid of 600mm x 600mm. Grid of module size 600mmx600mm shall be supported by 3mm dia GI wire from purlins/soffit. 6mm thick High pressure steam cured non-asbestos fibre cement standard ceiling board density>1299 kg/m <sup>3</sup> , Modulus of rupture - 15.85 Mpa, Thermal conductivity - 0.0872 W/mK of size 595mm x 595mm confirming to IS 14862 and Type B category III of ISO 8336:1993, reaction to fire A2s1d0 tested as per EN13501 Part I and BS 476 part 4,5,6&7 should be placed in the Grid module to form a false ceiling. All complete as per drawing and directions of Engineer-in-Charge	1 Sqm	1,279.00
410	TBSC-K.I-42	Providing and fixing of false ceiling with powder coated exposed GI grid suspension system E Grid T 2430 or equivalent load carrying capacity with mid span deflection not exceeding 1/360 span with hanger spacing of 1200mm c/c consisting of main runner 3600mm long, Cross Tee 1200mm/60mm long and wall angle. The wall angle shall be fixed on PVC dash fasteners on the perimeter of the wall by steel screws with distance 300mm c/c, The main runners to be placed @	1 Sqm	1,469.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		1200mm, Cross tee 1200mm will be inserted in the pre-cut slots of main runner at a regular interval of 600mm to form a modular grid of 1200mm x 600mm. Additional cross tees of 600mm shall be placed perpendicular to the cross tee 1200mm long to finally form a grid of 600mm x 600mm. Grid of module size 600mmx600mm shall be supported by 3mm dia GI wire from purlins/soffit. 6mm thick High pressure steam cured non-asbestos fibre cement designer ceiling board density>1299 kg/m <sup>3</sup> , Modulus of rupture - 15.85 Mpa, Thermal conductivity - 0.0872 W/mK of size 595mm x 595mm confirming to IS 14862 and Type B category III of ISO 8336:1993, reaction to fire A2s1d0 tested as per EN13501 Part I and BS 476 part 4,5,6&7 should be placed in the Grid module to form a false ceiling. All complete as per drawing and directions of Engineer-in-Charge		
411	TBSC-K.I-43	<p>Providing &amp; Fixing of Armstrong Mineral Fibre Acoustical Suspended Ceiling System with 16mm thick Bio guard plain Beveled Tegular Edge Tiles with Armstrong Suprafine 15mm face exposed grid. The tiles shall have smooth bright visual with Humidity Resistance (RH) of 99%, NRC 0.15 (Average value of Absorption Co-efficient readings taken at 250 Hz, 500 Hz, 1000 Hz and 2000 Hz) as per ASTM C423 standard, CAC of 35db as per ASTM E1414, Light Reflectance ≥89% as per ASTM E-1477, Thermal Conductivity k = 0.052 - 0.057 W/mK, Colour Global White, Fire Performance of Class 0/1 as per BS 476 Part6/7 and Class A as per ASTM E 84 with 16mm beveled tegular edge and 8mm drop in module size of 600 x 600mm. The scrim on the face of the tile shall be cleanable, washable up to 150 cycle as per ASTM D-4828 and resistant to disinfectants. The tile shall be treated with Anti-Microbial coating on the face and wax coating on the back to resist permeability. Tiles to be tested for antimicrobial activity having “total inhibition” as per TNO Seed Layer test &amp; “inhibition” as per Kirby Bauer agar diffusion test (excluding Pseudomonas Aeruginosa) and efficacy greater than 2 as per JIS-Z 2801-2010.It shall be suitable for Green Building application, with Recycled content of 37%. The tile shall have certifications from GRIHA and GreenPro thereby confirming that it is an environment friendly product.</p> <p>SUSPENSION: The tile shall be laid on</p>	1 Sqm	1,213.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		<p>Armstrong Suprafine 32 with 15 mm wide T - section flanges colour global white (matching to tile color) having roll formed double stroke rotary stitching on all T sections i.e. the Main Runner, 1200 mm &amp; 600 mm Cross Tees with a web height of 32mm (all sections). The deflection loading of the system shall be 10.5 kg/m<sup>2</sup> (as per standard installation layout mentioned below) and main beam tested as per ASTM C635 (Deflection limit less than L/360) with a deflection loading of 8.8 kg/m. The end details of the cross tee shall be made of pre hardened steel and fixed to the ends of the cross tee to provide double locking between “cross tee to cross tee” and “cross tee to main beam”. All main beam to main beam and cross tee to cross tee connection shall have a pull out strength of more than 100kg. The T Sections shall be made of hot dipped galvanized steel of 90 gsm as per IS 277 (2003) and pre-painted steel with baked polyester paint with OT bending capability. All border cross tee/main beam shall be levelled using perimeter fill. The Tile &amp; Grid system used together shall carry a 30 year warranty against manufacturing defect and manufacturer shall provide a warranty certificate. The Tile &amp; Grid shall have the manufacturers name embossed/printed on it. The supply shall be backed by a Manufacturing Test Certificate.</p> <p>INSTALLATION: To comprise main runner spaced at 1200mm securely fixed to the structural soffit using Armstrong suspension system (specifications above) at 1200mm maximum. The First/Last Armstrong suspension system at the end of each main runner shall not be greater than 450mm from the adjacent wall along with the first and the last main beam shall be at less than 600mm from the wall. Flush fitting 1200mm long cross tees to be interlocked between main runners at 600mm to form 1200 x 600 mm module. Cut cross tees longer than 600mm require independent support. 600 x 600mm module to be formed by fitting 600mm long flush fitting cross tees centrally between the 1200 mm cross tees. Perimeter trim to be Armstrong wall angles of size 3000x19x19mm, secured to walls using screws at 450mm centre to centre maximum. Installation shall be carried out as per Armstrong recommended procedure.</p> <p>SUSPENSION SYSTEM accessories consisting of</p>		

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		M6 Anchor Fasteners with hanger hole, pre-straightened hanger wire of dia - 2.5 mm of 1.80 m length having a tensile strength of 344-413 MPa and a minimum loading strength of 110 kgs.		
412	TBSC-K.I-44	Providing & Fixing horizontal level suspended ceiling comprising of Armstrong GI Bioguard Clip-in Plain Tile 600x600mm (Nominal Size) tiles of 120 gsm galvanized steel as per IS 277 (2003) suitable for architectural finishes in 0.5mm thickness as per in IS:513 (1994) in Global white color with concealed suspension system having a beveled edge of 3x3mm and height of 33mm on one side and 18mm on the other side. Tiles shall be flattened by precision leveler to minimize sag to less than 1/400mm. The tiles shall have double round pip of $\phi$ 2mm and $\phi$ 6mm for secure engagement and levelling respectively, along with swing down feature and special tabs to allow removal of tile to enable plenum access. The coated surface of the tile shall exhibit anti-microbial properties (eradication and inhibition of growth) and shall achieve up to 99.99% reduction in bacterial activity as per ISO22196:2011 when tested for organisms: Escherichia Coli, Bacillus Subtilis, Pseudomonas Aeruginosa, Clostridium Perfringens, Enterococcus Faecalis, Staphylococcus Aureus, Salmonella Enterica, Streptococcus Faecalis and MRSA. The coated surface of the tile shall also exhibit fungal resistance properties and shall achieve a "Rating 0" (No fungal growth observed) as per ASTM G-21 when tested for Aspergillus Brasilliensis, Penicillium Pinophilum and Candida Albicans. The tile shall be electrostatically polyester powder coated using RoHS compliant powder having coating thickness ranging from 60-80 microns. The powder coating shall pass Salt Spray Test for 750 Hours as per ASTM B117, QUV -A Test for 1000hours as per ASTM G-154 - (Cycle - 1) and Humidity test for 1000hours as per DIN 50017. The powder coating shall have an adhesion of GT0 as per EN ISO 2409. The shade variation across batches shall be delta E<1 using Excite/BYK Gardner instrument and gloss level of 25±5% at 60° as per ASTM D523. The tile shall have scratch, mar & abrasive resistance properties. The tile shall have a Light Reflectance of ≥ 63% in accordance to ASTM 1477-98 and Fire Performance of class 0/1 as per BS 476 Part 6 & 7 in module size of 600x600mm.	1 Sqm	1,810.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		<p>SUSPENSION &amp; INSTALLATION: Shall comprise of 3000mm long 'C' channels of 38H x 12W mm and 1mm thick spaced at 1200mm centre to centre securely fixed to the structural soffit using threaded rod (Approved make/Third Party Supply) connecting to C-channel hanger of 109x18.5x16.5mm at 1200mm C/C and anchor fastener (Approved make/Third Party Supply). The last hanger at the end of each C-channel shall not be greater than 600mm from the adjacent wall. Use a C-channel connector of 99.5x35x 9mm for splicing together two pieces of C-channels. 4000mm DP-12 main carriers (Clip-in bar) of 16W x 40H mm and 0.6mm thick made of galvanized steel of 140gsm as IS 277 (2003) and shall be spaced at 600mm centre to centre in a direction perpendicular to the C-channels and secured at every intersection with C-channel using a DP-12 hanger (Clip-in bar hanger) of 54x18x20mm. Use DP-12 connector (Clip-in bar connector) to splice two pieces of DP-12 main carriers (Clip-in bar). Tiles shall be clipped in between two DP-12 carriers (Clip-in bars) from below. Optionally - Security clip to be installed to ensure the panels are positively engaged with DP12 channel (Clip-in bar channel). Installation shall be carried out as per Armstrong recommended procedure. Perimeter to be finished using Armstrong wall angles of size 3000x19x32mm in white color secured to walls using screws at 450mm centre to centre. Cut tiles to be secured to the wall angles using a spring clamp. The Tile &amp; Grid system used together shall carry a 10 year warranty against manufacturing defect and manufacturer shall provide a warranty certificate. The Tile &amp; Grid shall have the manufacturers name embossed/printed on it. The supply shall be backed by a Manufacturing Test Certificate.</p>		
413	TBSC-K.I-45	<p>Providing and fixing false-ceiling, 1 layer magnesite bonded wood wool acoustic panel, 1mm thick fibre, exquisite surface structure, building biology recommended, size 600 x 600 x 25mm, having edge detail SK-06, weight 11.30Kg/Sqm, fire protection class B-s1,d0 as per EN 13501-1 &amp; Humidity Resistance of 95%. Thickness Tolerance T2 (<math>\pm 1</math> mm) according to EN 13168. Wood wool panels to be PEFC certified &amp; should bear the Forest Stewardship Council Seal confirming that the wood used originates from responsibly</p>	1 Sqm	3,110.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		<p>managed forests. The wood wool panels to be laid in true horizontal level suspended on inter locking metal grid of hot dipped galvanised steel sections (galvanized @ 90 gsm/sqm) consisting of Main "Tee", size 24W x 38H x 3600L mm made from 0.30 mm thick sheet spaced at 600mm centre to centre and Cross "Tee", size 24W x 28H x 600L mm made of 0.30 mm thick sheet to be interlocked between the main T runners at the distance of 600mm centre to centre to create 600x600mm module to lay ceiling tiles of approved surface pattern in the grid including, wherever required, cutting / making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. The perimeter trims to be of 22W x 19H x 3000L mm and 0.50 mm thick. Main "Tees" to be suspended from ceiling using 6mm dia and 50mm long anchor fasteners, Knauf SoH suspension hangers consisting of 4mm GI adjustable rods with galvanized level clips spaced at 900mm centre to centre along the Main Tee. The 4.00mm GI rods should be in accordance to IS 280:2006 and should have a zinc coating of not less than 90 gsm in accordance with IS 4826:1986 and a tensile strength of 300-550 MPa in accordance to IS 1608:2005. The first suspension from the perimeter trim should not exceed 300mm. The bottom exposed width of 24mm of all T-sections shall be pre-painted with polyester paint. The wood wool board should be backed by 40mm thick rock wool slabs packed in 600 x 600 polythene bags having a gross density of 50kg/m<sup>3</sup>. The finished face of wood wool panels have to be installed at a distance of 300mm from the soffit to achieve an NRC of 0.90 as per ASTM C423. Panels can be spray painted on site under supervision of manufacturer.</p> <p>SUSPENSION: The tile shall be laid on Armstrong Prelude 38 with 24 mm wide T - section flanges colour global white (matching to tile colour) having roll formed double stroke rotary stitching on all T sections i.e. the Main Runner, 1200 mm &amp; 600 mm Cross Tees with a web height of 38mm (all sections). The deflection loading of the system shall be 15 kg/m<sup>2</sup> (as per standard installation layout mentioned below) and main beam tested as per ASTM C635 (Deflection limit less than L/360) with a deflection loading of 18kg/m. The end details of the cross tee shall be made of pre</p>		

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		<p>hardened steel and fixed to the ends of the cross tee to provide double locking between “cross tee to cross tee” and “cross tee to main beam”. All main beam to main beam and cross tee to cross tee connection shall have a pull out strength of more than 100kg. The T Sections shall be made of hot dipped galvanized steel of 90 gsm as per IS 277 (2003) and pre-painted steel with baked polyester paint with OT bending capability. INSTALLATION: To comprise main runner spaced at 1200mm securely fixed to the structural soffit using Armstrong suspension system (specifications above) at 1200mm maximum. The First/Last Armstrong suspension system at the end of each main runner shall not be greater than 450mm from the adjacent wall along with the first and the last main beam shall be at less than 600mm from the wall. Flush fitting 1200mm long cross tees to be interlocked between main runners at 600mm to form 1200 x 600 mm module. Cut cross tees longer than 600mm require independent support. 600 x 600mm module to be formed by fitting 600mm long flush fitting cross tees centrally between the 1200 mm cross tees. Perimeter trim to be Armstrong wall angles of size 3000x19x19mm, secured to walls using screws at 450mm centre to centre maximum. Installation shall be carried out as per Armstrong recommended procedure. ARMSTRONG SUSPENSION SYSTEM accessories supplied by Armstrong consisting of M6 Anchor Fasteners with hanger hole, pre-straightened hanger wire of dia - 2.5 mm of 1.80 m length having a tensile strength of 344-413 MPa and a minimum loading strength of 110 kgs.</p>		
414	TBSC-K.I-46	<p>Providing and fixing false-ceiling, 1 layer magnesite bonded wood wool acoustic panel, 1mm thick fibre, exquisite surface structure, building biology recommended, size 600 x 600 x 15mm, having edge detail SK-04, weight 11.3 Kg/Sqm, fire protection class B-s1,d0 as per EN 13501-1 &amp; Humidity Resistance of 95%. Thickness Tolerance T2 (<math>\pm 1</math> mm) according to EN 13168. Wood wool panels to be PEFC certified &amp; should bear the Forest Stewardship Council Seal confirming that the wood used originates from responsibly managed forests. The wood wool panels to be laid in true horizontal level suspended on inter locking metal grid of hot dipped galvanised steel sections (galvanized @ 90</p>	1 Sqm	3,270.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		<p>gsm/sqm) consisting of Main "Tee", size 24W x 38H x 3600L mm made from 0.30 mm thick sheet spaced at 600mm centre to centre and Cross "Tee", size 24W x 28H x 600L mm made of 0.30 mm thick sheet to be interlocked between the main T runners at the distance of 1200mm centre to centre to create 1200x600mm module to lay ceiling tiles of approved surface pattern in the grid including, wherever required, cutting / making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. The perimeter trims to be of 22W x 19H x 3000L mm and 0.50 mm thick. Main "Tees" to be suspended from ceiling using 6mm dia and 50mm long anchor fasteners, Knauf SoH suspension hangers consisting of 4mm GI adjustable rods with galvanized level clips spaced at 900mm centre to centre along the Main Tee. The 4.00mm GI rods should be in accordance to IS 280:2006 and should have a zinc coating of not less than 90 gsm in accordance with IS 4826:1986 and a tensile strength of 300-550 MPa in accordance to IS 1608:2005. The first suspension from the perimeter trim should not exceed 300mm. The bottom exposed width of 24mm of all T-sections shall be pre-painted with polyester paint. The wood wool board should be backed by 40mm thick rock wool slabs packed in 600 x 600 polythene bags having a gross density of 50kg/m<sup>3</sup>. The finished face of wood wool panels have to be installed at a distance of 300mm from the soffit to achieve an NRC of 0.90 as per ASTM C423. Panels can be spray painted on site under supervision of manufacturer.</p> <p>SUSPENSION: The tile shall be laid on Armstrong Prelude 38 with 24 mm wide T - section flanges colour global white (matching to tile colour) having roll formed double stroke rotary stitching on all T sections i.e. the Main Runner, 1200 mm &amp; 600 mm Cross Tees with a web height of 38mm (all sections). The deflection loading of the system shall be 15 kg/m<sup>2</sup> (as per standard installation layout mentioned below) and main beam tested as per ASTM C635 (Deflection limit less than L/360) with a deflection loading of 18kg/m. The end details of the cross tee shall be made of pre hardened steel and fixed to the ends of the cross tee to provide double locking between "cross tee to cross tee" and "cross tee to main beam". All main beam to main beam</p>		



Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		and cross tee to cross tee connection shall have a pull out strength of more than 100kg. The T Sections shall be made of hot dipped galvanized steel of 90 gsm as per IS 277 (2003) and pre-painted steel with baked polyester paint with OT bending capability. INSTALLATION: To comprise main runner spaced at 1200mm securely fixed to the structural soffit using Armstrong suspension system (specifications above) at 1200mm maximum. The First/Last Armstrong suspension system at the end of each main runner shall not be greater than 450mm from the adjacent wall along with the first and the last main beam shall be at less than 600mm from the wall. Flush fitting 1200mm long cross tees to be interlocked between main runners at 600mm to form 1200 x 600 mm module. Cut cross tees longer than 600mm require independent support. 600 x 600mm module to be formed by fitting 600mm long flush fitting cross tees centrally between the 1200 mm cross tees. Perimeter trim to be Armstrong wall angles of size 3000x19x19mm, secured to walls using screws at 450mm centre to centre maximum. Installation shall be carried out as per Armstrong recommended procedure. ARMSTRONG SUSPENSION SYSTEM accessories supplied by Armstrong consisting of M6 Anchor Fasteners with hanger hole, pre-straightened hanger wire of dia - 2.5 mm of 1.80 m length having a tensile strength of 344-413 MPa and a minimum loading strength of 110 kgs.		
II	SUB-SECTION	<b>FALSE CEILINGs - SECTIONS &amp; ACCESSORIES</b>		
415	TBSC-K.II-01	G.I. Ceiling Angle - 25 mm x 10 mm x 0.55 mm	1 RM	71.00
416	TBSC-K.II-02	G.I. Ceiling Section 51.5 mm x 26 mm x 10.5 mm x 0.55 mm thick	1 RM	82.00
417	TBSC-K.II-03	G.I. intermediate Section 45 mm x 15 mm x 15 mm x 0.9 mm	1 RM	81.00
418	TBSC-K.II-04	G.I. Perimeter Channel - 20 mm x 27 mm x 30 mm (web) of 0.55 mm thick	1 RM	71.00
419	TBSC-K.II-05	G.I.-Precoated Fine line Grid 25 mm x 25 mm x 0.7 mm	1 RM	40.00
420	TBSC-K.II-06	G.I.-Precoated Fine line Grid 15 mm x 25 mm x 0.7 mm	1 RM	36.00
421	TBSC-K.II-07	GI - Precoated - T-Sec- 24 mm x 38 mm x 0.7 mm thick	1 RM	53.00
422	TBSC-K.II-08	Hot dipped GI Angle - Precoated - Grid: 19 mm x 19 mm	1 RM	39.00
423	TBSC-K.II-09	Polyester painted GI - T Section - 24 x 32 mm	1 RM	48.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
424	TBSC-K.II-10	Polyester painted GI - T Section - 24 x 25 mm	1 RM	44.00
425	TBSC-K.II-11	Polyester painted GI - T Section - 24 mm x 27 mm	1 RM	45.00
426	TBSC-K.II-12	Aluminium Angle : 24 mm x 24 mm	1 RM	26.00
427	TBSC-K.II-13	Anodized Aluminium T Section : 24 x 24.5 x 2.4 mm	1 RM	33.00
428	TBSC-K.II-14	Connecting Clips	1 Each	4.00
429	TBSC-K.II-15	Rawl Plug	1 Each	4.00
430	TBSC-K.II-16	6 mm Nylon Rawl Plug	1 Each	4.00
431	TBSC-K.II-17	Soffit Cleats	1 Each	4.00
432	TBSC-K.II-18	Drywall Screws - 25 mm	1 Each	4.00
433	TBSC-K.II-19	Jointing Compound	1 Kgs	29.00
434	TBSC-K.II-20	Jointing Paper Tape	1 RM	6.00
435	TBSC-K.II-21	Drywall Top Coat	1 Lit	136.00
436	TBSC-K.II-22	Universal Holding Clips	1 Each	4.00
437	TBSC-K.II-23	4 mm Diameter GI Connecting Rod	1 RM	12.00
438	TBSC-K.II-24	2 mm Diameter GI Connecting Rod	1 RM	11.00
<b>III</b>	<b>SUB-SECTION</b>	<b>WALL LINING &amp; PANELLING</b>		
439	TBSC-K.III-01	Providing wooden paneling 12 mm thick prelaminated particle board fixed on wooden frame of BT wood size 50.8 mm x 25.4 mm (2"x1") at distance of 609.6mm (2'-0") intervals of both ways providing 3/4" x 1/2" (19.05 mm x 12.7 mm) size BT wood ornamental cover beading and necessary screws, synthetic glue complete for finished item of work.	1 Sqm	1,756.00
440	TBSC-K.III-02	Providing and fixing perforated wall panels channeled wood works panels/ sheets of width 192 mm, thickness of 15 mm and length 2400 mm made of a moisture resistant fibre board substrate with a laminated facing as per the approved shade/ species & finish and a melamine balancing layer on the reverse side, with a special perforation pattern of helm holtz fluted perforation with consecutive 3 mm wide grooves followed by 21 mm of visible surface with edges of panel shall be tongue and groove fitting to fix special clips for installation and seamless finish, the back of the panel shall have hot	1 Sqm	3,390.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		pressed acoustic fleece to absorb noise/sound absorbing to achieve NRC of 0.5 as per ASTM C423 and humidity resistance with minimum sag resistance of RH70, and a fire rating class of 2 as per Part 7 of BS 476		
441	TBSC-K.III-03	Supply and fixing of wall lining fixing to GI channels of perimeter channel 30mm x 27mm x 0.55 thick and ceiling channels of 51.1mm x 26mm x 10.5mm x 0.55mm thick and fixing and finishing using joint compound and glass fibre tape complete finish as per specification without painting for finished item of work: using 8mmthick Calcium silicate boards	1 Sqm	742.00
442	TBSC-K.III-04	Supply and fixing of wall lining fixing to GI channels of perimeter channel 30mm x 27mm x 0.55 thick and ceiling channels of 51.1mm x 26mm x 10.5mm x 0.55mm thick and fixing and finishing using joint compound and glass fibre tape complete finish as per specification without painting for finished item of work: Using 10mm thick Calcium silicate boards	1 Sqm	818.00
443	TBSC-K.III-05	Supply and fixing of wall lining fixing to GI channels of perimeter channel 30mm x 27mm x 0.55 thick and ceiling channels of 51.1mm x 26mm x 10.5mm x 0.55mm thick and fixing and finishing using joint compound and glass fibre tape complete finish as per specification without painting for finished item of work: Using 12mm thick Calcium silicate boards	1 Sqm	892.00
444	TBSC-K.III-06	Supply and fixing of cement board (conforming to IS:14862:2000) wall paneling with frame work made of GI stud profile of size 48 x 40 x 10 x 0.55 mm thick placed at every 610 mm C/C intervals fixed vertically in between floor and roof `U` track of size 50 x 30 x 0.6 mm thick duly fixed with self-expansion screws and fixing with self-tapping self-embedding screws fixed at every 300 mm (centers) leaving a 3 mm gap between two panels of width 2'-0". The Gap will be covered with a decorative beading. Surface will be given a smooth finish over a coat of primer. - With 8 mm Cement Bonded Board	1 Sqm	894.00
445	TBSC-K.III-07	Supply and fixing of cement board (conforming to IS:14862:2000) wall paneling with frame work made of GI stud profile of size 48 x 40 x 10 x 0.55 mm thick placed at every 610 mm C/C intervals fixed vertically in between floor and roof `U` track of size 50 x 30 x 0.6 mm thick duly fixed with self-expansion screws and fixing with self-tapping self-embedding screws fixed at every 300 mm (centers) leaving a 3 mm gap between two panels of width 2'-0". The Gap will be covered with a decorative beading. Surface	1 Sqm	1,029.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		will be given a smooth finish over a coat of primer. - With 10 mm Cement Bonded Board		
446	TBSC-K.III-08	Supply and fixing Cement Bonded Particle Board conforming to IS 14276 wall paneling using 10 mm Cement Bonded Particle Board conforming to IS 14276 with frame work made of GI stud section of size 48mm x 35mm x 0.55mm thick placed at every 610 mm C/C intervals vertically and at 1200mm internals horizontally fixed to the wall by means of self-expansion screws and caps and Cement Bonded Particle Board conforming to IS 14276 is to be fixed to frame by means of self-taping screws placed at every 300 mm intervals leaving 3mm gap between two panels. The cost inclusive of one coat of synthetic plastered primer and two coats of synthetic smooth finished putty and cost & conveyance of all materials, labour charges etc. complete as per the direction of Engineer in charge.	1 Sqm	1,537.00
447	TBSC-K.III-09	Supply and fixing of Cement Bonded Pre-laminated Particle Board wall paneling using 12 mm Cement Bonded Pre-laminated Particle with frame work made of G.I stud section of size 48mm x 35mm x 0.55mm thick placed at every 610mm intervals vertically and at 1200mm internals horizontally fixed to the wall by means of self-expansion screws and caps. Cement Bonded Pre-laminated Particle is to be fixed to frame by means of self-taping screws placed at every 300mm intervals leaving 3mm gap between two panels. The cost inclusive of Conveyance of materials, Labour charges etc., complete as per the direction of Engineer in charge	1 Sqm	2,265.00
448	TBSC-K.III-10	Providing and fixing plain PVC rigid foam sheet wall paneling of thickness 5mm consisting of panels having size 1220mm X2440mm stuck on inner frame work of 25mm wide strips of 5mm thick PVC rigid foam sheet. The strips should have in their centre a groove of 6mm width and 2mm depth for sinking the head of the screw used to fix the strips to the wall and should be placed vertically at equal intervals of 405/407mm centre to centre. The PVC strips shall be fixed to the wall using 65mm long M.S. screws through the groove in the strip by using PVC fasteners. The distance between two screws shall not be more than 300mm. a groove of 2mm may be left at the joint of two panels for aesthetic looks. This framework is done for making existing wall surface in ensured level and for sticking the wall paneling sheet	1 Sqm	2,014.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		(panel) on it. The exact size of the panel and correspondingly of the grid May be varied depending on the size of the wall. However it must ensure that a strips of 5mm thick PVC sheet of width 75mm feathered at the edges shall be stuck at the places where two panels are joined, using solvent cement. , complete as per direction of Engineer-in-Charge, manufacture's specification & drawing		
449	TBSC-K.III-11	Providing and fixing INSULATED PVC WALL paneling shall consist of PVC insulated panels having wall thickness of 1mm /1.5mm/2mm PVC sheet and the desired thickness of EPS (dependent on the insulation required) screwed into the wall using screws of adequate length. The screws shall be placed at a distance of 150mm and shall be 25mm from the edge of the insulated panel on all from sides of the panel. The PVC strips of 5mm thick PVC sheet of width 75mm feathered at the edges shall be stuck using solvent cement adhesive at the places where two panels are joined, so as to cover the screw of both the panels, using solvent cement. 90 heat bent strips of 5mm thick PVC sheets of width 75mm X75mm feathered at the edges shall be stuck at wall joints / pillars etc. , complete as per direction of Engineer-in-Charge, manufacture's specification & drawing	1 Sqm	2,120.00
450	TBSC-K.III-12	Supply and fixing of wall paneling on the framework of wooded rippers of 24 X 24mm of required size. The entire framework shall be paneled with PVC section having overall dimensions of 6 X 250mm with a wall thickness of 1mm ± 0.3mm. The panels are joined with tongue and groove system. Necessary cut-outs for electrical connections to be provided at required places complete, for finished item of work.	1 Sqm	1,376.00
451	TBSC-K.III-13	Providing and fixing wall paneling with 8mm thick high pressure steam cured non asbestos fibre cement siding planks Density >1200 kg/m <sup>3</sup> , Modulus of rupture 15.85 Mpa, Thermal conductivity .0872 W/mK confirming to IS 14862:2000 and Type B category III of ISO 8336:1993, reaction to fire A2S1d0 tested as per EN13501 Part I and BS 476 Part 4,5,6,7 fixed on the supporting W profile/Aluminium tube or iron tube with the helo of full threaded flat head screw 0.70 mm thick having a knurled web of 51.55mm and two flanges of 26mm each with lips of 10.55mm placed at 407/1220mm c/c vertically and a perimeter channel having one flange of 20mm	1 Sqm	2,329.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		and another flange of 30mm with thickness of 0.70mm and web of length 27mm is fixed on the floor and the ceiling with the nylon sleeves @ 300mm c/c with expandable fasteners. Board is fixed to the W profile with 35mm long self-embedding type screws @ 300mm c/c all complete as per the drawing and directions of Engineer-in-Charge. The boards maybe finished so as to have a uniform gap/groove or overlapping system. The groove shall be filled up with clear PU sealant. Finally exterior surface of the boards to be painted with PU paint of approved shade/make		
452	TBSC-K.III-14	Providing and fixing wall paneling with 8mm thick high pressure steam cured non asbestos fibre cement artwood Fibre cement pre colored siding planks Density >1200 kg/m <sup>3</sup> , Modulus of rupture 15.85 Mpa, Thermal conductivity .0872 W/mK confirming to IS 14862:2000 and Type B category III of ISO 8336:1993, reaction to fire A2S1d0 tested as per EN13501 Part I and BS 476 Part 4,5,6,7 fixed on the supporting W profile/Aluminium tube or iron tube with the help of full threaded flat head screw 0.70 mm thick having a knurled web of 51.55mm and two flanges of 26mm each with lips of 10.55mm placed at 407/1220mm c/c vertically and a perimeter channel having one flange of 20mm and another flange of 30mm with thickness of 0.70mm and web of length 27mm is fixed on the floor and the ceiling with the nylon sleeves @ 300mm c/c with expandable fasteners. Board is fixed to the W profile with 35mm long self-embedding type screws @ 300mm c/c all complete as per the drawing and directions of Engineer-in-Charge. The boards maybe finished so as to have a uniform gap/groove or overlapping system. The groove shall be filled up with clear PU sealant. Finally exterior surface of the boards to be painted with PU paint of approved shade/make	1 Sqm	2,020.00
453	TBSC-K.III-15	Providing and fixing wall paneling with 9mm thick high pressure steam cured non asbestos fibre cement stone board Density >1200 kg/m <sup>3</sup> , Modulus of rupture 15.85 Mpa, Thermal conductivity .0872 W/mK confirming to IS 14862:2000 and Type B category III of ISO 8336:1993, reaction to fire A2S1d0 tested as per EN13501 Part I and BS 476 Part 4,5,6,7 fixed on the supporting W profile/Aluminium tube or iron tube with the help of full threaded flat head screw 0.70 mm thick	1 Sqm	2,476.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		having a knurled web of 51.55mm and two flanges of 26mm each with lips of 10.55mm placed at 620/1220mm c/c vertically and a perimeter channel having one flange of 20mm and another flange of 30mm with thickness of 0.70mm and web of length 27mm is fixed on the floor and the ceiling with the nylon sleeves @ 300mm c/c with expandable fasteners. Board is fixed to the W profile with 35mm long self-embedding type screws @ 300mm c/c all complete as per the drawing and directions of Engineer-in-Charge. The boards maybe finished so as to have a uniform gap/groove or overlapping system. The groove shall be filled up with clear PU sealant. Finally exterior surface of the boards to be painted with PU paint of approved shade/make		
454	TBSC-K.III-16	Providing and fixing wall paneling with 9mm thick high pressure steam cured non asbestos fibre cement heavy duty board Density >1200 kg/m <sup>3</sup> , Modulus of rupture 15.85 Mpa, Thermal conductivity .0872 W/mK confirming to IS 14862:2000 and Type B category III of ISO 8336:1993, reaction to fire A2S1d0 tested as per EN13501 Part I and BS 476 Part 4,5,6,7 fixed on the supporting W profile/Aluminium tube or iron tube with the help of full threaded flat head screw 0.70 mm thick having a knurled web of 51.55mm and two flanges of 26mm each with lips of 10.55mm placed at 407/1220mm c/c vertically and a perimeter channel having one flange of 20mm and another flange of 30mm with thickness of 0.70mm and web of length 27mm is fixed on the floor and the ceiling with the nylon sleeves @ 300mm c/c with expandable fasteners. Board is fixed to the W profile with 35mm long self-embedding type screws @ 300mm c/c all complete as per the drawing and directions of Engineer-in-Charge. The boards maybe finished so as to have a uniform gap/groove or overlapping system. The groove shall be filled up with clear PU sealant. Finally exterior surface of the boards to be painted with PU paint of approved shade/make	1 Sqm	1,979.00
455	TBSC-K.III-17	Providing and Fixing of Armstrong Optra Acoustical Wall Panel with square edges made of fibre glass substrate 25mm thick, wrapped on the front side with an acoustically transparent fabric as per the approved shade (Husk, Copper, Sangria, Sesame, Coffee, Charcoal, Titanium, Flame, Peanut and Shell). The panel shall be classified for Fire	1 Sqm	4,638.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		<p>Class A, as per ASTM E-84. The Acoustical Wall Panel shall be of sizes 600x600mm (Nominal) or 600x1200mm (Nominal) and shall achieve an NRC of 0.85 (Average value of Absorption Co-efficient readings taken at 250 Hz, 500 Hz, 1000 Hz and 2000 Hz) with 50mm airgap as per ASTM C423 to be fixed to wall on a framework of wooden battens and using Wall panel Impalers (supplied by the manufacturer) or by using construction adhesives (as per the instructions laid down by the manufacturer). The fibre glass substrate shall have a recycle content of 85%.</p> <p><b>INSTALLATION:</b> An appropriate vapour barrier (by others) shall be applied/installed on the vertical surface before the installation to properly seal against entry of any moisture. Vapour barrier (by others) shall be installed as per Manufacturer's recommendation. Install wooden batten grid (provided by others) of section 50x50mm or as approved by the Architect on the solid wall/partition to provide level and plumb surface. The Impalers shall be fixed to the battens using self-tapping screws, 3 nos. in case of 600x600mm and 4 nos. in case of 600x1200mm. Silica based construction adhesive (by others) to be dabbed on to the projecting elements (spikes) of the Impalers. Armstrong Optra Wall Panels shall be pierced through the spikes of the Impalers ensuring the line and level of the panels are maintained.</p>		
<b>IV</b>	<b>SUB-SECTION</b>	<b>PARTITIONS</b>		
455	TBSC-K.IV-01	Supply & fixing 75mm thick metal stud partition using 12.5 mm thick Gypboard conforming to IS 2095-1982 screw fixed to either side to 48 mm studs of 0.55 mm thick with the 50 mm floor and ceiling channel 0.55 mm and the joints duly finished with joint compound, paper tape and two coats Dry wall top coat as per specification.	1 Sqm	1,186.00
456	TBSC-K.IV-02	Supply and Fixing 66mm thick metal stud partition screw fixed to either side of 48mm studs of 0.55mm thick with 50mm floor and ceiling channel 0.55mm and the joints duly finished with joining compound, glass fibre tape and two coats dry wall top coat as per specification finished Item of work- using 8mm thick Calcium silicate boards	1 Sqm	1,252.00
457	TBSC-K.IV-03	Supply and Fixing 66mm thick metal stud partition screw fixed to either side of 48mm studs of 0.55mm thick with 50mm floor and	1 Sqm	1,402.00



Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		ceiling channel 0.55mm and the joints duly finished with joining compound, glass fibre tape and two coats dry wall top coat as per specification finished Item of work - Using 10mm thick Calcium silicate boards		
458	TBSC-K.IV-04	Supply and Fixing 66mm thick metal stud partition screw fixed to either side of 48mm studs of 0.55mm thick with 50mm floor and ceiling channel 0.55mm and the joints duly finished with joining compound, glass fibre tape and two coats dry wall top coat as per specification finished Item of work - Using 12mm thick Calcium silicate boards	1 Sqm	1,550.00
459	TBSC-K.IV-05	Supply and Fixing 66mm thick metal stud partition using 2 layers of 12mm thick Calcium silicate boards screw fixed to either side to 48mm studs of 0.55mm thick with 50mm floor and ceiling channel 0.55mm. The boards joints are to be staggered to avoid through passage. Ceramic wool of 50mm thick, 64kg/m <sup>3</sup> density is to be placed in cavity of the partition. The joints duly finished with joining compound, glass fibre tape and two coats dry wall top coat as per specification without painting for finished item of work	1 Sqm	4,158.00
460	TBSC-K.IV-06	Supply and fixing double skin cement board (conforming to IS:14862:2000) partition with Frame work made of GI stud profile of size 48 x 40 x 10 x 0.55 mm thick placed at every 610 mm C/C intervals and 1220 mm horizontal intervals duly fixed with self-expansion screws, the cement board of 8 mm thick cladded around with self-tapping self-embedding screws fixed at every 300 mm (centers) leaving 3 mm gap between two panels and the gap will be covered with decorative moulding surface will be given a smooth finish over cement primer. The rate is inclusive of cost and conveyance of all materials and labour charges etc. complete.	1 Sqm	1,561.00
461	TBSC-K.IV-07	Providing and fixing of 50 mm thick SOLID WALL PANEL Sandwich panels made of light Weight FRACC two 5 mm thick non-asbestos fibre reinforced cement sheets (conforming to IS:14862:2000) on either side of the lightweight concrete core composed of Portland cement binders with tongue and groove arrangement. The bottom of the panel shall be fixed to the floor channel made up of 1 mm thick GI channels of size 28x52x31 mm fixed to the existing floor with 6x60mm nylon self-expansion screws at 600 mm C/C and top of the panel fixed with ceiling channel made out of 0.8 mm thick GI Channel of size	1 Sqm	1,611.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		31x52x31 mm duly fixed to the existing ceiling with 6x60mm nylon self-expansion screws at 600 mm C/C. All the tongue and groove joints of the panels have to be thoroughly cleaned and both the panels have to be fixed by applying the mixture of fly ash and sodium silicate in between and Everest jointing compound all the exposed joints. The rate includes cost of 50mm SOLID WALL PANELS, G.I. Floor and ceiling channel. The panels can be flushed by using paper tape and Everest jointing compound all complete		
462	TBSC-K.IV-08	Providing and fixing of 75mm thick SOLID WALL PANEL Sandwich panels made of light Weight FRACC two 5 mm thick non-asbestos fibre reinforced cement sheets (conforming to IS:14862:2000) on either side of the lightweight concrete core composed of Portland cement binders with tongue and groove arrangement. The bottom of the panel shall be fixed to the floor channel made up of 1 mm thick GI channels of size 28x77x31 mm fixed to the existing floor with 6x60mm nylon self-expansion screws at 600 mm C/C and top of the panel fixed with ceiling channel made out of 0.80 mm thick GI Channel of size 31x77x31 mm duly fixed to the existing ceiling with 6x60mm nylon self-expansion screws at 600 mm C/C. All the tongue and groove joints of the panels have to be properly cleaned and both the panels have to be fixed by applying the mixture of fly ash and sodium silicate in between and Everest jointing compound all the exposed joints. The rate includes cost of 75mm SOLID WALL PANEL panels, G.I. Floor and ceiling channel. The panels can be flushed by using paper tape and Everest jointing compound all complete.	1 Sqm	1,922.00
463	TBSC-K.IV-09	Supply & fixing of 50 mm thick partition with composite panel comprise of two 5mm thick Boards (asbestos-free fibre reinforced cement sheets conforming to IS 14862) strongly bonded with core material which is light weight concrete mix of Portland cement, expanded polystyrene bead aggregates and admixture. s with unique semi-circular Tongue & Groove Joining System provides better stability, rapid installation and better workability. The bottom of the panel shall be fixed to the floor channel made up of 1 mm thick GI channels of size 28x52x31 mm fixed to the existing floor with 6x60mm nylon self-expansion screws at 600 mm C/C and top of the panel fixed with ceiling channel made out of 0.8 mm thick GI Channel of size 31 x 52 x	1 Sqm	1,611.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		31 mm duly fixed to the existing ceiling with 6x60mm nylon self-expansion screws at 600 mm C/C. All the tongue and groove joints of the panels have to be properly cleaned and both the panels have to be fixed by applying the jointing compound in all the exposed joints. The rate includes cost of 50mm S, G.I. Floor and ceiling Channel.		
464	TBSC-K.IV-10	Supply & fixing of 75 mm thick partition with composite panel comprise of two 5mm thick Boards (asbestos-free fibre reinforced cement sheets conforming to IS 14862) strongly bonded with core material which is light weight concrete mix of Portland cement, expanded polystyrene bead aggregates and admixture. s with unique semi-circular Tongue & Groove Joining System provides better stability, rapid installation and better workability. The bottom of the panel shall be fixed to the floor channel made up of 1 mm thick GI channels of size 28x77x31 mm fixed to the existing floor with 6x60mm nylon self-expansion screws at 600 mm C/C and top of the panel fixed with ceiling channel made out of 0.8 mm thick GI Channel of size 31x77x31 mm duly fixed to the existing ceiling with 6x60mm nylon self-expansion screws at 600 mm C/C. All the tongue and groove joints of the panels have to be properly cleaned and both the panels have to be fixed by applying the jointing compound in all the exposed joints. The rate includes cost of 75mm S, G.I. Floor and ceiling Channel.	1 Sqm	1,922.00
465	TBSC-K.IV-11	Supply and fixing double skin partition using with 10 mm Cement Bonded Particle Board conforming to IS 14276 made out of G.I. track section of size 50mmx 35mm x 0.55 mm for fixing to the roof and floor and stud section of size 48mm x 35mm x 0.55mm placed in track section vertically at 610mm intervals and at 1200mm intervals horizontally fixed to the wall by means of self-expansion screws and caps to the wall and roof the panel is to be fixed both sides of frame work by using self-taping screws fixed at every 300mm intervals to the frame work leaving 3 mm gap between two panels. The cost inclusive with one coat of synthetic primer and two coats of synthetic plaster smooth finish and cost and conveyance of all materials to site, labour charges etc., complete as per the direction of Engineer in charge.	1 Sqm	2,350.00
466	TBSC-K.IV-12	Supply and fixing of Cement Bonded Prelaminated Particle Board double skin partition using with 10 mm Cement Bonded	1 Sqm	3,238.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		Prelaminated Particle Board made out of G.I track section of size 50 mm x 35mm x 0.55mm for fixing to the roof and floor and stud section of size 48mm x 35mm x 0.55mm placed in track section vertically at 610mm intervals and at 1200mm internals horizontally. The frame is fixed by means of self-expansion screws and caps to the wall / roof. Cement Bonded Prelaminated Particle Board is to be fixed both sides of the frame work by using 2mm thick electro plated CR flat section leaving 3mm gap between two panels. The cost inclusive of cost and conveyance of all materials to sites, other materials incidentals and labour charges as per the direction of Engineer in charges.		
467	TBSC-K.IV-13	Supply and fixing of Cement Bonded Prelaminated Particle Board aluminium glazed partitions using 10MM Cement Bonded Prelaminated Particle Board and 5.00 mm thick plain glass to full height. Using with Cement Bonded Prelaminated Particle Board to a height of 0.91 meter at bottom panel and remaining height with glass and aluminium sections anodized to 12 to 15 microns and of sections of size 37mm x 62mm and 1.5mm thickness with one meter centre to centre duly fixed with clip beading on both sides including fixing the frame to pillars by M.S. flats, bolts and nuts including cost and conveyance of all materials etc., complete as directed during execution.	1 Sqm	3,732.00
468	TBSC-K.IV-14	Providing and fixing 50mm thick SEMI HEIGHT SOLID PVC PARTITION consisting of 49mm sandwich PVC panel made out of 36mm high density expanded polystyrene sheet(E.P.S.-Thermocol) stuck on both side with 2mm thick plain/printed /prelam PVC rigid foam sheets reinforced with frame work made from 35mmX5mm M.S. Angle. In between two M.S. Angles 5mm thick plain/printed/prelam heat moulded "" PVC 'C' channel of size 50X100mm with feathered edges shall be fixed on the floor & 50X75mm with feathered edges plain/printed /prelam PVC 'C' channel. In between adjoining EPS sandwiched PVC partitions panel 5mm thickX75mm width plain/printed/prelam PVC sheet feathered at edges shall be stuck on front & back face using solvent cement etc. in places where two partitions meet to form an 'L' shape the panels are joined 5mm thick plain/printed/prelam heat moulded "" PVC 'L' section of size 75mmX75mm with feathered edges shall be fixed on front &	1 Sqm	2,861.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		back side. This is done to maintain the symmetry of design. An additional 5mm thick PVC strip of 40mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent adhesive, complete as per direction of Engineer-in-Charge, manufacture's specification & drawing		
469	TBSC-K.IV-15	Supply and fixing of PVC Double Skin Partition. The entire framework shall be carried out by mild steel section having overall dimensions of 24 X 48mm with a wall thickness of 1.2mm. The entire framework shall be concealed with PVC section having overall dimensions of 6 X 250mm with a wall thickness of 1mm ± 0.3mm both sides. Glass provision/Door provision can be provided along the partition wherever required. Partitions can be made full or half as per requirement complete, for finished item of work.	1 Sqm	2,415.00
470	TBSC-K.IV-16	Supply and fixing double skin cement based Board partition with Frame work made of GI stud profile of size 48x40x 10x 0.6 mm thick placed at every 610 mm C/C intervals and 915 mm horizontal intervals duly fixed with self-expansion screws, the Cement Bonded Board of 8 mm thick cladded around with self-tapping self-embedding screws fixed at every 300 mm (centers) leaving a 3 mm gap between two panels of width 2'-0"(610 mm). The Gap will be covered with a decorative moulding surface will be given a smooth finish over cement primer. The rate Inclusive of cost and conveyance of all materials and labour charges etc., Complete. DOUBLE SKIN PARTITION	1 Sqm	1,351.00
471	TBSC-K.IV-17	Supply and fixing of partitions made of seccolor pre-painted steel (base steel as per IS 513 of 0.58 mm thick 'D' quality, galvanized as per IS 277 with Zinc of 120 GSM). Primer coated with epoxy primer of 5-7 microns thick, finish painted with a polyester paint of 12-16 microns thick alkyd backer. Section for outer frame should be 46x52mm, section for shutter should be 46x46mm, section for mullion should be 46x70mm, section for beading should be 18x25mm and section for middle and bottom rail (Lock Rail and Kick Rail) of size should be 23x130mm. The partition should be paneled with 9mm pre-laminated particle board to a height of 0.91m from the bottom, and remaining height with 5mm thick plain glass With Ethyl Propylene Diametermine Monomer (EPDM) Gaskets. The sections are to be cut	1 Sqm	4,777.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		to length; mitre joined with corner bracket Centre mullions are to be fixed using mullion cap. Gaskets made of Ethyl Propylene Diametermine Monomer (EPDM). Corner brackets made of CRCA with zinc phosphate. Mullion caps made of Glass filled nylon. The above frames should be fixed to the concrete/masonry wall by means of self-expanding screws, and complete for finished item of work Fixed Partition: Outer frame section size of 46x52mm, mullion section should be of 46x70mm, fixed beading should be of 18x25mm.		
472	TBSC-K.IV-18	Supply and fixing of partitions made of seccolor pre-painted steel (base steel as per IS 513 of 0.58 mm thick 'D' quality, galvanized as per IS 277 with Zinc of 120 GSM). Primer coated with epoxy primer of 5-7 microns thick, finish painted with a polyester paint of 12-16 microns thick alkyd backer. Section for outer frame should be 46x52mm, section for shutter should be 46x46mm, section for mullion should be 46x70mm, section for beading should be 18x25mm and section for middle and bottom rail (Lock Rail and Kick Rail) of size should be 23x130mm. The partition should be paneled with 9mm pre-laminated particle board to a height of 0.91m from the bottom, and remaining height with 5mm thick plain glass With Ethyl Propylene Diametermine Monomer (EPDM) Gaskets. The sections are to be cut to length; mitre joined with corner bracket Centre mullions are to be fixed using mullion cap. Gaskets made of Ethyl Propylene Diametermine Monomer (EPDM). Corner brackets made of CRCA with zinc phosphate. Mullion caps made of Glass filled nylon. The above frames should be fixed to the concrete/masonry wall by means of self-expanding screws, and complete for finished item of work Fixed Partition with Door: Outer frame section size of 46x52mm, mullion section should be of 46x70mm, fixed beading should be of 18x25mm, section for shutter should be of 46x46mm and section for middle & bottom should be of size 23x130mm	1 Sqm	5,447.00
473	TBSC-K.IV-19	Providing and fixing in position wall paneling to all heights with ecofriendly light weight calcium silicate panels/tiles globe design of size 595x595mm having square/butt edge having NRC i.e. Noise reduction coefficient of 0.5 to 0.75 as per IS 8225:1987, Light reflectance of 85% minimum, Noncombustible as per BS 476 part 4, fire performance as per	1 Sqm	2,155.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		<p>BS 476 part 6&amp;7, humidity resistance of 100% and thermal conductivity &lt; 0.043 W/m K as per ASTM 518: 1991 comprising of a frame made from especially fabricated galvanized mild steel sheet 0.50mm thick pressed section galvanizing @ 120 grams per sqm including both sides i.e. vertical studs of size 48x34x36mma re placed at 600mm center to center in a floor and ceiling channel section of size 50x32mm fixed to the floor and soffit at 600mm centers using 12mm dia, 50mm long wedge type expanded zinc alloy dash fastener with 10mm bolt. Glass wool of 50mm thickness is then to be inserted in the slots and finally calcium silicate noncombustible panels/tiles are to be screw fixed with self-tapping pan head nickel coated mild steel screws of size 13x3.2mm on to this grid leaving an even groove of 1mm between the panels. The joints between the panels are to be duly jointed and finished using recommended jointing calcium silicate based compound and fiber joint tape roll 50mm wide and two coats of primer suitable for paneling as per manufacturers specification as per direction of Engineer-in-Charge with 15mm thick integral densified fully perforated light weight calcium silicate panels/tiles</p>		
474	TBSC-K.IV-20	<p>Providing and fixing in position 67mm thick partition using Galvalume wall frame system AZ 150, 300Mpa yield strength sections minimum 0.55mm thickness with 150gms/sqm coating of aluminium zinc as per IS 277/1992 max height 3m using 8mm thick High pressure steam cured Everest non asbestos fibre cement wall board density&gt;1200 kg/m<sup>3</sup>, Modulus of rupture 15.85 Mpa, Thermal conductivity 0.0872 W/mK confirming IS 14862:2000 and Type B category III of ISO 8336:1993, Reaction to fire A2-s1-d0 tested as per EN13501 part I and BS 476 Part 4,5,6,7 on either side fixed on the framework with 25mm fully threaded self-tapping screws @ 300mm center to center on either side of 51mm studs 0.55mm thick having one flange of 42mm and another flange of 44mm made of Galvalume wall frame placed at 610mm c/c in 51mm floor and ceiling channel 0.55mm thick having equal flanges of 32mm Galvalume steel. Boards are to be fixed horizontally in a staggered manner to avoid through joints on both sides. The boards maybe finished so as to have uniform gap/groove. Alternatively, uniform</p>	1 Sqm	2,590.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		gap/grooves maybe covered with manufactured recommended jointing compound or expansion filler for jointless/seamless finish. All complete as per drawing and directions of Engineer-in-Charge		
475	TBSC-K.IV-21	Providing and fixing in position 69mm thick partition using Galvalume wall frame system AZ 150, 300Mpa yield strength sections minimum 0.55mm thickness with 150gms/sqm coating of aluminium zinc as per IS 277/1992 max height 3m using 9mm thick High pressure steam cured Everest non asbestos fibre cement wall board density>1200 kg/m <sup>3</sup> , Modulus of rupture 15.85 Mpa, Thermal conductivity 0.0872 W/mK confirming IS 14862:2000 and Type B category III of ISO 8336:1993, Reaction to fire A2-s1-d0 tested as per EN13501 part I and BS 476 Part 4,5,6,7 on either side fixed on the framework with 25mm fully threaded self-tapping screws @ 300mm center to center on either side of 51mm studs 0.55mm thick having one flange of 42mm and another flange of 44mm made of Galvalume wall frame placed at 610mm c/c in 51mm floor and ceiling channel 0.55mm thick having equal flanges of 32mm Galvalume steel. Boards are to be fixed horizontally in a staggered manner to avoid through joints on both sides. The boards maybe finished so as to have uniform gap/groove. Alternatively, uniform gap/grooves maybe covered with manufactured recommended jointing compound or expansion filler for jointless/seamless finish. All complete as per drawing and directions of Engineer-in-Charge	1 Sqm	3,556.00
476	TBSC-K.IV-22	Providing and fixing in position 70 thick partition using Galvalume wall frame system AZ 150, 300Mpa yield strength sections minimum 0.55mm thickness with 150gms/sqm coating of aluminium zinc as per IS 277/1992 max height 3m using 9mm thick High pressure steam cured Everest non asbestos fibre cement heavy duty wall board density>1200 kg/m <sup>3</sup> , Modulus of rupture 24 Mpa, Thermal conductivity 0.0872 W/mK confirming IS 14862:2000 and Type B category III of ISO 8336:1993, Reaction to fire A2-s1-d0 tested as per EN13501 part I and BS 476 Part 4,5,6,7 on wet side and 10mm thick Fibre cement wall board density>1200 kg/m <sup>3</sup> , Modulus of rupture 15.85 Mpa, Thermal conductivity 0.0872 W/mK confirming IS 14862:2000 and Type B category III of ISO 8336:1993, Reaction to fire A2-s1-d0 tested as per EN13501 part I	1 Sqm	3,269.00



Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		and BS 476 Part 4,5,6,7 on other side fixed on the framework with 25mm fully threaded self-tapping screws @ 300mm center to center on either side of 51mm studs 0.55mm thick having one flange of 42mm and another flange of 44mm made of Galvalume wall frame placed at 610mm c/c in 51mm floor and ceiling channel 0.55mm thick having equal flanges of 32mm Galvalume steel. Boards are to be fixed horizontally in a staggered manner to avoid through joints on both sides. The boards maybe finished so as to have uniform gap/groove. Alternatively, uniform gap/grooves maybe covered with manufactured recommended jointing compound or expansion filler for jointless/seamless finish. All complete as per drawing and directions of Engineer-in-Charge		
477	TBSC-K.IV-23	Providing and fixing in position 71mm thick partition using GI Sections minimum 0.55mm thickness with 180gms/sqm coating of aluminium zinc as per IS 277/1992 max height 3m using 10mm thick High pressure steam cured Everest non asbestos fibre cement wall board density>1200 kg/m <sup>3</sup> , Modulus of rupture 15.85 Mpa, Thermal conductivity 0.0872 W/mK confirming IS 14862:2000 and Type B category III of ISO 8336:1993, Reaction to fire A2-s1-d0 tested as per EN13501 part I and BS 476 Part 4,5,6,7 on either side fixed on the framework with 25mm fully threaded self-tapping screws @ 300mm center to center on either side of 51mm studs 0.55mm thick having one flange of 42mm and another flange of 44mm made of Galvalume wall frame placed at 610mm c/c in 51mm floor and ceiling channel 0.55mm thick having equal flanges of 32mm Galvalume steel. Boards are to be fixed horizontally in a staggered manner to avoid through joints on both sides. The boards maybe finished so as to have uniform gap/groove. Alternatively, uniform gap/grooves maybe covered with manufactured recommended jointing compound or expansion filler for jointless/seamless finish. All complete as per drawing and directions of Engineer-in-Charge	1 Sqm	2,905.00
478	TBSC-K.IV-24	Providing and fixing in position 100mm thick drywall partition system which includes Galvalume wall frame system AZ 150, 300Mpa yield strength comprising of 51mm floor and ceiling track profile 0.5mm thick having two equal flanges of 32mm fixed to the floor and ceiling in plumb with each other with 6mm anchor fasteners at 620mm c/c, vertical studs	1 Sqm	3,970.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		of size 51mm, 0.5mm thick having one flange of 42mm and another flange of 44mm and two equal lips of 6mm insert fixed into the track profiles at 620mm centers, 12mm thick Everest board conforming to IS 14862 Type B and 12.5 thick Gypsum plaster board are screw fixed to the either side of the framework as inner and outer layer with 25mm fibre cement screws and 35mm drywall screws, respectively at 300mm centers. The cavity of frame should be filled with mineral wool of 48kg/m <sup>3</sup> density and 50mm thickness. Finally the joints of the Gypsum plaster board are to be jointed and finished with joint tape and gypsum jointing compound. All the periphery of the partition should be sealed with acoustic cum fire rated sealant.		
<b>L</b>	<b>SECTION</b>	<b>DOORS, SHUTTERS &amp; FRAMES</b>		
		<b>(Excluding taxes but including cost of loading, cost of conveyance, unloading &amp; stacking)</b>		
<b>I</b>	<b>SUB-SECTION</b>	<b>DOOR FRAMES</b>		
479	TBSC-L.I-01	Mild Steel Hallow single rebate general purpose door frames manufactured using cold roll formed process steel sheet of 1.25 mm thick bright (Cold Rolled Close Annealed (CRCA) and profile-B of size 105 x 60 mm conforming to IS 4351 - 2003 including pre-treatment, phosphating with Hinges, Base Ties, Holdfast Lugs, Mortar Guards, shock absorbers and provision for Tower Bolts, Aldrops, Lock & Strike plates etc. for both single and double shutter doors	1 Rm	361.00
480	TBSC-L.I-02	Powder Coated Mild Steel Hallow single rebate door frames manufactured using cold roll formed process steel sheet of 1.25 mm thick bright (Cold Rolled Close Annealed (CRCA) and profile size of 105 x 60 mm conforming to IS 4351 - 2003 including pre-treatment, Galvanized as per IS:277, zinc phosphating finished with Thermosetting Polyurethane paint of Aliphatic Grade providing high levels of scratch resistance and durability/Epoxy polyester powder for powder coating paint thickness 60 - 65 microns(Dry film thickness)Stainless Steel Ball Bearing Butt Hinges 3 mm thick fixed flush to the frame with Hinges, Base Ties, Holdfast Lugs, Mortar Guards, shock absorbers and provision for Tower Bolts, Aldrops, Lock & Strike plates etc. for both single and double shutter doors	1 RM	663.00
481	TBSC-L.I-03	Providing and fixing factory made polyvinyl chloride (PVC) Door Frame of the size 50 x 47mm with a wall thickness of 5mm, made out of extruded 10 mm rigid PVC foam sheet,	1 Rm	315.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		mitre cut at two corners and joined with 2nos. of 150mm long brackets of 15x15mm M.S. square tube. The two vertical door profiles are to be reinforced with 19x19mm M.S. Square tube of 19 gauge. The door frame shall be fixed to the wall using 65/100mm long M.S. Screws through the frame by using PVC fasteners. A minimum of 4nos. of screws to be provided for each vertical member & minimum 2nos. for horizontal member etc. complete as per manufacturers specification and direction of Engineer-in-Charge for finished item of work		
482	TBSC-L.I-04	SUPPLY & FIXING SINGLE SIDE PRELAM SOLID PANEL PVC DOOR FRAME (CHOUKHAT) Providing and fixing factory made Pac single side Prelam door frame of the size 50X47 mm with a wall thickness of 5mm, made out of extruded 5mm rigid Pac single side prelam sheet, meter cut at two corners and joined with 2nos. of 150mm long brackets of 1515mm MS. Square tube. The two vertical door profiles are to be reinforced with 19X19mm MS. square tube of 19guage. The door frame shall be fixed to the wall using 65/100mm long MS. Screws through the frame by using Pac fasteners. a minimum of 4nos. of screws to be provided for each vertical member and minimum 2nos. for horizontal member etc. complete as per manufacture specification and direction of Engineer-in-charge.	1 Rm	330.00
483	TBSC-L.I-05	Supply and fixing of door frame made of hollow extruded PVC section having dimensions of 40 X 57mm with the wall thickness of 2mm +/- 0.2mm duly reinforced with seasoned wood plank at the hinges side. The door frame top 2 corners shall be metre-cut/ welded. PVC DOOR FRAME	1 RM	256.00
484	TBSC-L.I-06	Supply and fixing of door frame made of hollow extruded PVC section having dimensions of 40 X 47 mm with the wall thickness of 2mm +/- 0.2mm duly reinforced with seasoned wood plank at the hinges side. The door frame top 2 corners shall be mitre cut/welded	1 RM	202.00
485	TBSC-L.I-07	Supply & fixing of Door frames made of all formed sections of 1.25mm thick CRCA section, size should be 50x60mm with 32mm rebate. The corner of the frame should be welded. The frame should be painted with one coat of primer and finished painted with pure polyester paint. The frame should be provided with approved quality butt hinges of 3 Nos. complete for finished item.: Single	1RM	214.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		shutter 3'-0" x 7'-0" (914.4x2133.6mm) outer frame section size of 50 x 60 mm		
486	TBSC-L.I-08	Supply & fixing of Door frames made of all formed sections of 1.25mm thick CRCA section, size should be 50x60mm with 32mm rebate. The corner of the frame should be welded. The frame should be painted with one coat of primer and finished painted with pure polyester paint. The frame should be provided with approved quality butt hinges of 3 Nos. complete for finished item.: Double shutter 5'-0" x 7'-0" (1524 x 2133.6mm) outer frame section size of 50 x 60 mm	1 RM	214.00
487	TBSC-L.I-09	Supplying & fixing of Door frame made of roll formed section of 1.25 mm thick CRCA section, size should be 50 x 75 mm with 32 mm rebate. The corner of the frame should be welded. The frame should be painted with one coat of primer and finished painted with pure polyester paint. The frame should be provided with approved quality butt hinges of 3 Nos. Complete for finished item of work.: Single shutter 3'-0" x 7'-0" (914.4x2133.6mm) outer frame section size of 50 x 75 mm	1 RM	241.00
488	TBSC-L.I-10	Supplying & fixing of Door frame made of roll formed section of 1.25 mm thick CRCA section, size should be 50 x 75 mm with 32 mm rebate. The corner of the frame should be welded. The frame should be painted with one coat of primer and finished painted with pure polyester paint. The frame should be provided with approved quality butt hinges of 3 Nos. Complete for finished item of work.: Single shutter 5'-0" x 7'-0" (1524x2133.6mm) outer frame section size of 50 x 75 mm	1 RM	241.00
489	TBSC-L.I-11	Providing and fixing door frames fabricated from sections made of galvanized steel powder coated (base steel as per IS 513, galvanized as per IS 277 with zinc of 120 grams / square metre), the factory made section are powder coated with pure polyester powder of 50-60 microns thick with total coated thickness of 1.25 mm, size of door frame section is of 105 x 60 mm with a rebate of 38 mm to accommodate 35 mm thick door shutter, with groove to insert gasket in the frame section, frame section filled with polyurethane foam, cut to length, and joined by way of welding, each frame provided with: a) 2mm thick MS powder coated butt hinges of 100 mm long - 3 Nos. for single shutter, 6 Nos. for double shutter. b) CRCA electroplates stiffeners of 6 Nos. - 3 in each vertical. c) 40 mm x 200 mm x 1.2 mm hold fasts screwed to stiffeners - 6 Nos.	1 RM	735.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		with split end tail. d) Nylon Aldrops Receiver - 1 No. for single shutter frame. e)Tie Rod - 1 No		
490	TBSC-L.I-12	Providing and fixing of door frames factory made, internal door frames without threshold, fabricated from pre painted cold roll formed section 100 mm x 60 mm made of galvanized (base steel as per IS-513 'D' quality galvanized as per IS-277 with Zinc of 120 Gms/sqm) steel colour coated sections with total coated thickness of 1 mm primer coated with epoxy primer of 5-7 microns thick finish painted with polyester paint of 12-16 microns and back coated with alkyd backer of 5-7 microns, the frame section filled with polyurethane (PU Foam) of 40 kg/Cum and the sections cut to length and mitre joined by means of 1.25 mm thick CRCA electroplated corner brackets of size 75 x 75 mm and 1.25 mm thick electroplated stiffeners of size 150 mm for fixing hold fasts and hinges with MS Powder coated fittings a) 6 Nos M.S. Z Type hold fasts made of 30 mm x 3 mm MS flat of 230 mm long, 3 Nos each size expandable PVC covered screw type fasteners b) 2.5 mm x 300 mm long 'T' hinges /2.5 mm x 50 mm x 50 mm x 100 mm two way but hinges (3 Nos for single leaf or 2 Nos for Double leaf/leaf) c) 12 mm Diameter MS tie rod at bottom with necessary size of nuts on either side.	1 RM	461.00
491	TBSC-L.I-13	Supply and fixing of factory made Bathroom door frames without threshold, fabricated from pre-painted cold roll formed section 50mm x 50 mm made of galvanized steel as per IS - 513 'D' quality, galvanized as per IS-277 steel colour coated sections primer coated with epoxy primer finish painted with polyester paint the frame section filled with polyurethane (P.U. Foam) of 40 Kg/Cum; and the sections joined by means of 1.25mm thick CRCA electroplated corner brackets of size 75 x 75 mm and 1.25mm thick electroplated stiffeners of size 150mm for fixing hold fasts and hinges together with the following MS Power coated fitting (Supply and fixing) of approved make. a) 6 Nos M.S. Z. Type hold fasts made of 30mm x 3 mm MS flat of 230mm long, 3 Nos each side expandable PVC covered screw type fasteners b) 2.5 mm x 300 mm long 'T' hinges / 2.5mm x 50 mm x 100mm two way but hinges (3 Nos for single leaf or 2 Nos for Double leaf /leaf )c) 12 mm Diameter MS tie rod at bottom with necessary size of nuts on either side.	1 RM	416.00
492	TBSC-L.I-14	Supply of factory made Precast Reinforced	1 RM	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		Cement concrete door frame of with overall dimension of 60 x 100 mm for single shutter door (+/-2mm) three nos, of 6mm dia steel bars are used for longitudinal reinforcement for each vertical and horizontal member and are held firmly by 3mm dia ties spaced at not more than 300mm c/c Polymer wonder blocks are provided in the frames for tower bolt and hinges provisions made in the frame for Aldrops provisions are made in the vertical member for fixing of 3 nos. hold-fasts with 8 mm dia bolts and the frame surface shall be smooth without any voids and shall confirm to <b>IS 6523</b> complete finished item including all taxes as per specifications & the directions of the Engineer-in-Charge.		315.00
493	TBSC-L.I-15	Supply of factory made Precast Reinforced Cement concrete double door frame of the door frame shall have overall dimension of 60 x 125 for single shutter door(+/-2mm) four nos, of 6mm dia steel bars are used for longitudinal reinforcement for each vertical and horizontal member and are held firmly by 3mm dia ties spaced at not more than 300mm c/c Polymer wonder blocks for fixing of tower bolt and hinges with provision for Aldrops and 3 nos. hold-fasts with 8mm dia bolts and the frame surface shall be smooth without any voids and shall confirm to <b>IS 6523</b> complete finished item including all taxes as per specifications & the directions of the Engineer-in-Charge.	1 RM	410.00
494	TBSC-L.I-16	Fixing of precast RCC frames (Precast RCC framed members to be supplied at site) including assembling the members for door frames fixing to MS masonry or RCC wall face including providing and fixing Six no. hold-fasts of MS Flat 40x5mm and length 40cm per frame embedding in cement concrete blocks of size 30x10x15 cm of mix (1 cement:3 Coarse sand: 6 graded stone aggregate 20 mm nominal size) complete as per specification & the directions of the Engineer-in-Charge	1 RM	250.00
495	TBSC-L.I-17	Providing and fixing factory made solid Wood Polymer Composite (WPC) single extruded Door Frame section of 100*65 MM with encapsulation of 6 MM rigid layer on all external surfaces. The door frame will have a rebate of 32MM/ 37 MM. The two Vertical members are to be joined together with the horizontal member using 8x75 MM long MS Star full thread screws to be used with reverse forward speed control hand drilling machine. The ready/assembled door frame is fixed to wall using Z Hand fast 300 MM long	1 RM	703.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		hold fast.		
496	TBSC-L.I-18	Supplying and fixing of 30mm thick Wood Plastic Composite (WPC) Door shutter, comprising of 70% virgin polymer, 15% wood powder (fiber), and the remaining 15% additives, the door shutter shall be water resistant, fire resistant and termite resistant, with Tensile Strength not less than 170 Kgf/cm <sup>2</sup> and the door shutters surface finished deco paint etc., complete excluding cost of hinges, latches, aldrops etc.,	1 Sqm	1,937.00
<b>II</b>	<b>SUB-SECTION</b>	<b>DOOR SHUTTERS WITHOUT FRAMES</b>		
497	TBSC-L.II-01	Flush door shutters, solid bond wood block board type with teak ply on both faces.: 25 mm thick conforming to IS:2202	1 Sqm	1,818.00
498	TBSC-L.II-02	Flush door shutters, solid bond wood block board type with teak ply on both faces.: 30 mm thick conforming to IS:2202	1 Sqm	1,908.00
499	TBSC-L.II-03	Flush door shutters, solid bond wood block board type with teak ply on both faces.: 35 mm thick conforming to IS:2202	1 Sqm	2,084.00
500	TBSC-L.II-04	Flush door shutters, solid bond wood block board type with commercial ply on both faces.: 25 mm thick conforming to IS:2202	1 Sqm	1,037.00
501	TBSC-L.II-05	Flush door shutters, solid bond wood block board type with commercial ply on both faces.: 30 mm thick conforming to IS:2202	1 Sqm	1,252.00
502	TBSC-L.II-06	Flush door shutters, solid bond wood block board type with commercial ply on both faces.: 35 mm thick conforming to IS:2202	1 Sqm	1,417.00
503	TBSC-L.II-07	Flush door shutters, solid bond wood block board type with commercial ply on both faces.: 40 mm thick conforming to IS:2202	1 Sqm	1,605.00
504	TBSC-L.II-08	Flush door shutters, solid bond wood block board type with teak veneer on one face and commercial ply on another face (lipping): 20 mm thick conforming to IS:2202	1 Sqm	1,997.00
505	TBSC-L.II-09	Flush door shutters, solid bond wood block board type with teak veneer on one face and commercial ply on another face (lipping): 25 mm thick conforming to IS:2202	1 Sqm	1,941.00
506	TBSC-L.II-10	Flush door shutters, solid bond wood block board type with teak veneer on one face and commercial ply on another face (lipping): 30 mm thick conforming to IS:2202	1 Sqm	2,149.00
507	TBSC-L.II-11	Flush door shutters, solid bond wood block board type with teak veneer on one face and commercial ply on another face (lipping): 35 mm thick conforming to IS:2202	1 Sqm	2,343.00
508	TBSC-L.II-12	Flush door shutters, solid bond wood block board type with teak veneer on one face and commercial ply on another face (lipping): 40 mm thick conforming to IS:2202	1 Sqm	2,678.00
509	TBSC-L.II-13	Supply and fixing of Cement Bonded	1 Sqm	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		Prelaminated Particle Board single door shutter using 16MM Cement Bonded Prelaminated Particle Board with all round section "U" size of mm thick galvanized pre-painted cold rolled steel profiles Cement Bonded Prelaminated Particle Board with necessary screws fixed at every 1'0" (304.8mm) intervals. The cost inclusive of MS Nickel coated 250mm long Aldrops 2 no's , MS powder coated 250mm long tower bolt 1 no's, 2no's MS powder coated 125mm long grip handle, 1 no's M.S.P.C. Door stopper. Including cost and conveyance of all materials at site labour charges etc., complete finished item of work.		2,377.00
510	TBSC-L.II-14	Supply and fixing of Cement Bonded Prelaminated Particle Board double door shutter using 16MM Cement Bonded Prelaminated Particle Board with all round "U" section size of 20mm x 18mm x 20mm made from 0.6mm thick galvanized pre-painted cold rolled steel profiles with Cement Bonded Prelaminated Particle Board separating two shutter with 30mm x 20mm x 30mm stepped lipping with necessary screws fixed at every 1'0" (304.8mm) intervals. The cost inclusive of MS Nickel coated 250mm long Aldrops 2no's, MS powder coated 125mm long grip handle, 2 no's M.S.P.C. Door stopper. Including cost and conveyance of all materials at site labour charges etc., complete finished item of work.	1 Sqm	3,018.00
511	TBSC-L.II-15	Supply and fixing of Cement Bonded Prelaminated Particle Board door shutter made out of U sections of size 12x14x12 made from 0.6mm thick pps sections with 12MM Cement Bonded Prelaminated Particle Board with necessary screws fixed at every 1'.0"interwells. The hardware consists of 250mm long Aldrops - 2 Nos.150mm Handle- 1 No , 150 mm long ms powder coated tower bolt 1 no. nickel coated. The cost is inclusive of all incidentals, labour transportation charges.	1 Sqm	2,325.00
512	TBSC-L.II-16	Supply and fixing of Cement bonded Particle BOARD (conforming to IS 14862) door shutter with all-round style "U" lipping size 15 x 18 x 15 mm made from 0.8 mm thick powder coated cold rolled steel profiles with 16 mm thick Cement bonded Particle BOARD with necessary screws fixed at 1'-0" interval 250 mm long Aldrops 2 nos. M.S. nickel coated 250 mm long 1 no. M.S. Tower Bolts Including cost and conveyance of all materials at site and applying 1 coat of primer, 2 coats of	1 Sqm	1,600.00



Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		luppam and 2 coats of synthetic enamel paint as per approved design for finished item of work.		
513	TBSC-L.II-17	Supply and fixing of Cement bonded Particle BOARD (conforming to IS 14862) 12 mm thick door shutter of size 6'0" x 2'6" with all-round style "U" lipping size 15 x 14 x 15 mm made from 0.8 mm thick powder coated cold rolled steel profiles with necessary screws fixed at 1'-0" interval 250 mm long Aldrops 2 nos. M.S. nickel coated 250 mm long 1 no. M.S. Tower Bolts Including cost and conveyance of all materials at site and applying 1 coat of primer, 2 coats of luppam and 2 coats of synthetic enamel paint as per approved design for finished item of work.	1 Sqm	1,370.00
514	TBSC-L.II-18	Supply and fixing door shutter with frame made out of PVC section and panels conforming to IS:10151-1982 having panel sizes of 100 mm x 30 mm with self-extruded grooves at 40 mm x 50 mm grooves on front face and the infill panel dimension is 610 mm x 20 mm seamless hallow multi chambered PVC single panel for finished item of work.	1 Sqm	2,532.00
515	TBSC-L.II-19	Moulded panel solid core flush doors using water-resistant hardwood fibre HDF / MDF fibre boards skins of 2.5 mm thick of Masonite or equivalent doors - 30 mm thick	1 Sqm	1,566.00
516	TBSC-L.II-20	Moulded panel solid core flush doors using water-resistant hardwood fibre HDF / MDF fibre boards skins of 2.5 mm thick Masonite or equivalent doors - 35 mm thick	1 Sqm	1,712.00
517	TBSC-L.II-21	Solid core membrane flush doors using rigid PVC membrane of 0.3 mm thick of different elegant shades doors - 30 mm thick	1 Sqm	1,272.00
518	TBSC-L.II-22	Solid core membrane flush doors using rigid PVC membrane of 0.3 mm thick of different elegant shades doors - 35 mm thick	1 Sqm	1,409.00
519	TBSC-L.II-23	Providing and fixing 35mm thick FACTORY MADE MOULDED DOOR SHUTTER consisting of solid core single leaf flush door of 30mm thickness, lipped with 15mm (5mmX3) thick X 30mm width on one stiles and top rails and 10mm (5mmX2) thick X 30mm width on the other stiles and bottom rails. The inner panel laminated with 2mm thick termite proof, water proof and fire resistant moulded Pac sheet with 2,4,6 raised panel design in different panel and / or prelam colours on one side after routing the moulded design on flush door and 2mm prelam Pac sheet on other side using rubber adhesive on flush door and solvent cement adhesive on Pac lipping etc. complete as per direction of Engineer-in-Charge, manufacture specification and	1 Sqm	2,813.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		drawing		
520	TBSC-L.II-24	Supply & Fixing SOLID STEEL DOOR shutter made out of G I Precoated Sheet with an average wall thickness of 0.35 mm on both sides. MS Tube having dimensions of 19 x 19 mm is inserted along the hinge side of the door, core of the door shutter filled with High Density Polyurethane foam injected with the help of hydraulic injection method, four sides of the door covered with G I Precoated Sheet and the hardware locations reinforced with suitable wooden blocks as per drawing and stickers indicating location of the hardware pasted at appropriate places, etc complete	1 Sqm	1,436.00
521	TBSC-L.II-25	Providing of 35mm thick Factory made Prelaminated ABS (Acrylonitrile Butadiene Styrene) Door shutter moulded in different designs, consisting of all round Frame made out of water proof solid foam PVC bar of size 20x32mm, reinforced by 32x 32mm - 2 nos. for vertical made out of LVL (Laminated Veneer Lumber), core material of 32 mm thick high density craft paper honey comb board, sandwiched on both sides with prelaminated ABS sheet thickness of 1.5mm . PVC edge banding of size 0.45mm on the vertical sides for each shutter and ISI make S.S round lock complete for finished item of work	1 Sqm	6,615.00
522	TBSC-L.II-26	Supply and fixing of Cement Bonded Prelaminated Particle Board door shutter conforming to IS-14276 made out of U sections of size 12 x 18 x 12 made from 0.6mm thick PPS sections with 16 mm Cement Bonded Prelaminated Particle Board with necessary screws fixed at every 1'.0"interwells. The hardware consists of 12 mm dia x 200mm long Aluminium Aldrops - 2 Nos. 125 mm long Handle- 2 Nos. 3 mm x 12 mm x 180 mm long 304 SS hinges- 3 Nos with pole receiver of 10mm dia pole X40mm long welded on 2mm X40mm(ss304) plates works as receiver for RT patte hinges. The cost is inclusive of all incidentals, labour transportation charges.	1 Sqm	2,548.00
<b>III</b>	<b>SUB-SECTION</b>	<b>DOORS WITH SHUTTERS &amp; FRAMES</b>		
523	TBSC-L.III-01	Providing and fixing 30mm thick Solid panel PVC door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19mm x 19mm for stiles, & 15mm x 15mm for top & bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture. M.S. frame shall be covered with 5mm thick heat moulded PVC 'C' channel of size 30 x 50mm forming stiles,	1 Sqm	2,292.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		and 5mm thick, 75mm wide PVC sheets for top rail, lock rail & bottom rail on either side, and 10mm (5mm x 2) thick, 20mm wide cross PVC sheet as gap insert for top rail & bottom rail. Paneling of 5mm thick PVC sheet to be fitted in the M.S. frame welded / sealed to the stiles & rails with 30mm wide x 5mm thick PVC sheet beading on either side, and joined together with solvent cement adhesive etc. An additional 5mm thick PVC strip of 20mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent adhesive. Complete as per direction of Engineer-in-charge, manufacturer's specification & drawing for finished item of work .		
524	TBSC-L.III-02	Providing and fixing 30mm thick FACTORY MADE BOTHSIDE PRELAM SOLID PANEL PVC DOOR SHUTTER consisting of frame made out of MS. Tubes of 19gauge thickness and size of 19mmX19mm for stiles, top and bottom rails. MS. Frame shall have a coat of steel primers of approved make and manufacture. MS. Frame covered with 5mm thick heat moulded Prelam Pac 'C' channel of size 30mm thickness, 70mm width out of which 50mm shall be flat and 20mm shall be tapered in 450 angle on either side forming stiles; and 5mm thick, 95mm wide Prelam Pac sheet out of which 75mm shall be flat and 20mm shall be tapered in 450 on the inner side to form top and bottom rail 115mm wide Prelam Pac sheet out of which 75mm shall be flat and 20mm shall be tapered on both sides to form lock rail. Top, bottom and lock rail shall be provided either side of the panel. 10mm (5mmX2) thick, 20mmwide cross Pac sheet shall be provided as gap insert for top and bottom rail. Paneling of 5mm thick both side Prelam Pac sheet to be fitted in the MS. Frame welded/ sealed to the stiles & rails with 7mm(5mm+2mm) thick X 15mm wide Pac sheet beading on inner side and joined together with solvent cement adhesive etc. an additional 5mm thick Pac strip of 20mm width is to be stuck on the interior side of the 'C' channel using Pac solvent cement adhesive etc. complete as per direction of Engineer - in-charge, manufacture specification and drawing.	1 Sqm	2,618.00
525	TBSC-L.III-03	Providing and fixing 30mm thick FACTORY MADE SOLID SINGLE SIDE PRELAM PANEL PVC DOOR SHUTTER consisting of frame made out of MS. Tubes of 19gauge thickness and size of 19mmX19mm for stiles, and 15mmX15mm for	1 Sqm	2,377.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		<p>top and bottom rails. The MS. Frame shall have a coat of steel primers of approved make and manufacture. MS. Frame covered with 5mm thick heat moulded single side Prelam Pac 'C' channel of size 30mmX50mm to form stiles. 5mm thick &amp; 75mm wide single side Prelam Pac sheets shall be for the top, bottom and lock rails. Paneling of 5mm thick one side Pac sheet to be fitted in the MS. Frame and sealed to the front (prelam side) stiles and rails (which should have a 5mm 45 bent portion as beading) and attached to the back (white/ivory) stiles and rails which should have a 10mm 90 bent portion as beading ) using 2nos. 15mm wide X 5mm thick Pac sheet beading inside the 90 bent beading. All stiles, rails and beadings are to be joined to the panel using solvent cement etc. an additional 5mm thick Pac strip of 20mm width to be stuck on the interior side of the 'C' channel using Pac solvent cement adhesive and 10mm(5mmX2) thick, 20mm wide cross Pac sheet to be fitted as gap insert for top and bottom rail etc. complete as per direction of Engineer -in-Charge, manufacture specification and drawing.</p>		
526	TBSC-L.III-04	<p>MOULDED PVC DOOR - WOOD FREE Providing and fixing 30mm thick Brand factory made Moulded door shutter- wood free consisting of frame made out of MS. tubes 19gauge thickness and size of 25mmX25mm for stiles, top and bottom rails. MS. Frame shall have a coat of steel primers. The inner panel shall consist of 25mm thick High density EPS conforming to IS 4671-1984 bounded with 2mm thick termite proof, water proof and fire resistant moulded Pac sheet with 2,4,6 raised panel design in different plain and / or prelam colours after routing to the moulded design on one side and 2mm plain and / or prelam Pac sheet on other side of the EPS. The edge of panel to be sealed with lipping of 10mm wide PVC sheet bottom (made by sticking 2 rigid foam sheet of 5mm thickness using Pac solvent cement) and stiles sides 25mm(5mmX5) thick and 30mm width Pac sheet fitted along Ms. Tube for lock provision for lock height 5mm thick Pac sheet of size 150mmX100mm fixed with upper and lower face of inner side of EPS Panel etc. Complete as per direction of Engineer - in-Charge, manufacture specification and drawing</p>	1 Sqm	2,401.00
527	TBSC-L.III-05	<p>Providing and fixing 30mm thick FACTORY MADE WIRE MESH SOLID PVC DOOR SHUTTER consisting of frame made out of M.S. tubes of</p>	1 Sqm	2,134.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		19 gauge thickness and size of 19mmX19mm for stiles and 15mm for top, lock & bottom rails. MS. Frame shall have a coat of steel primers of approved make and manufacture. 19mmX19mm M.S. square tubes shall be covered with 5mm thick heat moulded "" PVC 'C' channel of size 30mm thickness, 90mm width out of which 75mm shall be flat and 15mm shall be bent in 900 on the inner side to from top and bottom rail land 130mm wide PVC sheet out of which 100mm shall be flat and 154mm shall be bent in 900 on both side to from lock rail, 10mm(5mmX2) thick, 20mm wide cross PVC sheet as gap insert for top rail & bottom rail. Panel will be of G.I. wire mesh of 24gauge to be fitted in by 'C' channel of size 35mm X10mm on the either side in the stiles. The inner side 'C' channel is fixed by 19mmX19mm MS. Tube on both sides with screws. The wire mesh in top bottom & lock rail is sealed with 15mm X 15mm tube with G.I. wire 10mm(5mmX2) thick PVC strip of 25mm width is to be stuck& nails on both side of G.I. wire mesh interior at the top, bottom & lock rail. An additional 5mm thick PVC strip of 20mm width is to be stuck on the interior side of the 'C' channel using PVC solvent cement adhesive etc. complete as per direction of Engineer-in-charge, manufacturer's specification & drawings		
528	TBSC-L.III-06	Providing and fixing door & shutter of which frame made from 1.2 mm powder coated cold rolled steel profiles of overall section size of 60 mm x 45 mm with 21 mm rebate for shutter with necessary stiffeners hinges and screws with Cement bonded Particle BOARD (IS 14862) shutter with all-round style "U" lipping of size 15 x 18 x 15 mm made from 0.8 mm thick CRCA powder coated steel profile with 16 mm thick Cement bonded Particle board with necessary screws fixed at every 1'-0" interval 250 mm long Aldrops 2 nos. M.S. nickel coated 250 mm long 1 no. M.S. Tower Bolts including cost and conveyance, one coat of primer, 2 coats of luppam and 2 coats of synthetic enamel paint as per approved colour, labour charges etc.	1 Sqm	1,885.00
529	TBSC-L.III-07	Doors Frames (Colour Coated Steel Sections) & Shutter using Cement Bonded Particle Board as per IS 14276 (Cement Bonded Particle Board conforming to IS 14276 or equivalent ) : Providing and fixing of door frame made from cold roll formed sections made of galvanized (Base steel as per IS277	1 Sqm	3,728.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		with zinc of 120 Gms/sqm) colour coated steel sections with total coated thickness of 1mm, primer coated with epoxy primer coat of 5-7 microns thick, finish paint with polyester paint of 12-16 microns. The Section for door frame is to be filled with polyurethane (P.U) form of 40kg/m3. Overall size of frame section should be of 50mm x 50mm. With necessary corner brackets, stiffeners, hinges, and screws. Cement Bonded particle board shutter (Cement Bonded Particle Board conforming to IS 14276 or equivalent ) "Single Leaf" with all round styles "U" section of size 12m x 18m x 12mm made from 0.6 mm thick galvanized, colour coated cold rolled steel profiles with 16mm thick Cement Bonded particle Board (Cement Bonded Particle Board conforming to IS 14276 or equivalent ) with necessary screws fixed at every 1'-0" (304.8mm) intervals. The cost inclusive of MS nickel coated Aldrops of size 250mm long 2nos. 200mm long tower bolt 1no., 125mm handles 2nos., cost and conveyance of all materials at site and applying one coat primer , one coat of luppam and two coats of synthetic enamel paint as per approved design for finished item of work		
530	TBSC-L.III-08	Supplying and fixing of Unplasticized Poly Vinyl Chloride (UPVC) <b>2 Track-2 Panel Sliding Doors</b> duly manufactured using UPVC reinforced profiles(Composition of profile shall consists a minimum of 5.5 PHR of TiO2 and not more than 12 PHR of CaCo3 for every 100 parts of PVC resin) of 60 mm x 45 mm x 2.20 mm with reinforcement of 1.2 mm thickness, super sash with overall size of 39 mm x 75 mm x 2.20 mm with for sliding door shutter frames capable of mounting single glazing system, structurally reinforced with hot dip galvanized up to 50 microns of minimum thickness of 1.5 mm prefabricated & welded through fusion welding the door sash shall be fitted with 6 mm thick clear float glass of reputed make duly fixed with Grey colour TPV Gasket for sash & Glazing bead shall be co-extruded with Grey colour soft PVC. Door shall be provided with standard hardware & multi point locking system of bent handle espagulate .the system is to be installed at the site using anchor fasteners, silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at	1 Sqm	6,063.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		site complete for finished item of work.		
531	TBSC-L.III-09	Supplying and fixing of Unplasticized Poly Vinyl Chloride (UPVC) 3 track sliding doors with mesh shutter provision - (2-glass shutters)- 95 -Series duly manufactured using UPVC reinforced profiles(Composition of profile shall consists a minimum of 5.5 PHR of TiO2 and not more than 12 PHR of CaCo3 for every 100 parts of PVC resin) of (108 mm x 45 mm)/(95.50 mm x 60 mm) x 2.20 mm for outer frames, (75 mm x 39 mm)/(66 mm x 42 mm) x 2.20 mm for sliding door shutter frames capable of mounting single glazing system, structurally reinforced with hot dip galvanized up to 50 microns of minimum thickness of 1.2 mm prefabricated & welded through fusion welding the door sash shall be fitted with 6 mm thick clear float glass of reputed make duly fixed with Grey colour TPV Gasket for sash & Glazing bead shall be co-extruded with Grey colour soft PVC. Door shall be provided with standard hardware & multi point locking system of Patio/Bent espagulate .the system is to be installed at the site using anchor fasteners, silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site complete for finished item of work.	1 Sqm	6,821.00
532	TBSC-L.III-10	Supplying and fixing of Unplasticized Poly Vinyl Chloride (UPVC) 3 track sliding doors with mesh shutter - (2-glass shutters and 1-mesh shutter)- 95 - Series duly manufactured using UPVC reinforced profiles (Composition of profile shall consists a minimum of 5.5 PHR of TiO2 and not more than 12 PHR of CaCo3 for every 100 parts of PVC resin) of (108 mm x 45 mm)/(95.50 mm x 60 mm) x 2.20 mm for outer frames, (75 mm x 39 mm)/(66 mm x 42 mm) x 2.20 mm for sliding door shutter frames capable of mounting single glazing system, structurally reinforced with hot dip galvanized up to 50 microns of minimum thickness of 1.2 mm prefabricated & welded through fusion welding the door sash shall be fitted with 6 mm thick clear float glass of reputed make duly fixed with Grey colour TPV Gasket for sash & Glazing bead shall be co-extruded with Grey colour soft PVC. Mesh shutter shall be made of (48 mm x 30 mm)/(50 mm x 26.5 mm) x 2.0 mm uPVC profile section and fitted with Vinyl Coated Fibre mesh and rollers/pulley duly fixed with TPV Gaskets weathering seal resistant Door	1 Sqm	7,538.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		shall be provided with standard hardware & multi point locking system of Patio/Roto espagulate and the system is to be installed at the site using anchor fasteners, silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site complete for finished item of work.		
533	TBSC-L.III-11	Supplying and fixing of Unplasticized Poly Vinyl Chloride (UPVC) sliding doors three track - three glass shutters sliding - 112 - Series duly manufactured using UPVC reinforced profiles of 112.0 mm x 60 mm x 2.25 mm for outer frames, 66 mm x 42 mm x 2.25 mm for sliding door shutter frames capable of mounting single glazing system, structurally reinforced with hot dip galvanized up to 50 microns of minimum thickness of 1.2 mm prefabricated & welded through fusion welding the window sash shall be fitted with 5 mm thick clear float glass of reputed make and fixed with EPDM weathering seal resistant accessories like clipping locking system made of aluminium 1 No., per set of sashes and the system is to be installed at the site using anchor fasteners, silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site with templates for casement sizing complete for finished item of work	1 Sqm	6,528.00
534	TBSC-L.III-12	Supplying and fixing of Unplasticized Poly Vinyl Chloride (UPVC) openable doors with openable shutters duly manufactured using UPVC reinforced profiles (Composition of profile shall consists a minimum of 5.5 PHR of TiO2 and not more than 12 PHR of CaCo3 for every 100 parts of PVC resin) of 60 mm x 55 mm x 2.40 mm for outer frames, 74 mm x 60 mm x 2.40 mm for mullion sections as per the need and 102 mm x 60 mm x 2.40 mm for openable shutter frame capable of mounting single glazing system structurally reinforced with hot dip galvanized up to 50 microns of minimum thickness of 1.2 mm prefabricated & welded through fusion welding the door sash shall be fitted with 6 mm thick clear float glass of reputed make duly fixed with Grey colour TPV Gaskets for sash & Glazing bead shall be co-extruded with Grey colour soft PVC System shall be provided with 4 no's of 3D Hinges for each shutter and multipoint locking with keys with raiser wedges for	1 Sqm	8,544.00



Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		smooth operation and the system is to be installed at the site using anchor fasteners, silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site complete for finished item of work.		
535	TBSC-L.III-13	Supplying and fixing door shutter, with shutter frame and infill panel made from PVC material conforming to IS: 10151-1982, the shutter frame made out of PVC extruded sections having overall dimension of 47 mm x 33 mm with wall thickness of 1.2mm + 0.3mm with usual process variation, the shutter frame with tapered shape to provide better grip to the infill panel end to drain out the water The Infill panel is made out of PVC Sections having Overall Dimensions of 200 mm x 20 mm with wall thickness of 1mm + 0.2mm, the shutter frames mitre cut and joined at the corner, by providing Polymeric “L” type corners to take hardware & fixtures fixed with 10-20mm counter sunk fully threaded parallel shank steel screws, all the hardware locations reinforced with special polymeric bars as per drawings, stickers showing locations of different hardware pasted on the shutter, the infill panels joined by tongue and groove method.	1 Sqm	1,007.00
536	TBSC-L.III-14	Supply and fixing of door shutters made of rigid PVC extruded hollow section(Nandi or equivalent ) of 20mm X 200 mm with the wall thickness of 1.0mm +/- 0.1mm equally divided into 4 no's with tongue and groove locking arrangements. The shutter frame is made of 30mm X 79mm with the wall thickness of 1.5mm +/-0.15mm section mitre-cut and joined at 4 corners with 125mm X 225mm plastic brackets. The shutter shall be horizontally reinforced with 2 no's of 8mm PVC rods. Teak wood batons shall be reinforced inside the door shutter during the fabrication of the door shutter at those points wherever the hardware is fixed onto the door shutter.	1 Sqm	1,866.00
537	TBSC-L.III-15	Providing & fixing 30 mm thick solid panel PVC door shutter consisting of frame made out of 19 gauge M.S tube of 19 x 19 mm for stiles, top & bottom rail, with a coat of primer of approved make. M.S. Frame covered with 5 mm thick heat moulded PVC “C” channel of size of 30 x 50 mm forming stiles, 5 mm thick 75 mm wide PVC sheet for top, lock & bottom rail on either side 20 mm wide cross PVC sheet as gap insert for top &	1 Sqm	2,939.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		bottom rail, paneling of 10mm(+/-)(5mm+5mm)" thick PVC sheet fitted in the M.S. frame welded /sealed to the stiles, on either side joined together with solvent cement adhesive etc., additional 5 mm thick PVC strip of 20 mm width stuck on the interior side of the C channel using solvent cement, complete as per direction of Engineer-in-charge, manufacturers specification.		
538	TBSC-L.III-16	Supplying & fixing SINGLE PANEL 30 mm thick PVC DOOR, door shutters with shutter frame and Infill panel made from PVC material, the shutter frame made out of PVC extruded sections having overall dimensions of 60 mm x 30 mm with wall thickness of 1.3 mm ± 0.3 mm, with the Infill panel made out of multi chambered seamless hollow PVC extruded panel having overall dimensions of 610 mm x 20 mm having wall thickness 1 mm ± 0.2 mm with the shutter frame meter cut and joined at corners and all the hardware locations reinforced with special polymeric bars as per drawing including providing special PVC bracket on hinge side, etc complete	1 Sqm	2,527.00
539	TBSC-L.III-17	Providing & fixing internal prelaminate PVC door frame of size 100 x 45 mm with a wall thickness of 5mm, made of extruded 5 mm Prelam PVC foam sheet, mitred cut at two corners and joined with two nos. of 150mm long brackets of 15 x 15 mm MS square tube, two vertical door profiles reinforced with 40 x 20 MS Tube of 19 gauge throughout the frame and the door frame fixed to the wall using 65/100mm long MS screws through the frame by using PVC fasteners with a minimum of 3 nos of screws provided for each vertical member and two nos. for horizontal, etc complete as per drawing and direction of Engineer in Charge	1 RM	583.00
540	TBSC-L.III-18	Supply & Fixing of Powder Coated Mild Steel doors, frames & shutters made of Skin pass galvanized Iron sheet conforming to Base Steel as per IS 513 "D" Quality, Galvanized as per IS 277 with Hot Zinc Coating of 120 grams / Sq.Mtr with powder coating of thickness 60-65 Microns, frame with 1.2mm thick Skin pass Galvanized Iron sheet formed to single rebate profile of size 100 mm X 58 mm and filled with in-fill Polyurethane foam, the Door Shutters are with 0.80 mm thick Skin pass Galvanized Iron Sheet formed to provide a 46 mm thick fully flush, double skin door shell with Lock Seam joints at stile edges, fitted with in-fill of Honeycomb Kraft Paper and	1 Sqm	11,883.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		coated with polyester powders of Pure polyester/ epoxy polyester or polyurethane powder for powder coating of thickness 60 - 65 microns and are coated with Zinc Phosphate Primer to receive any paint on site or finished with Thermosetting Polyurethane paint of Aliphatic Grade providing high levels of scratch resistance and durability, the Shutter provided with 6 MM clear float vision glass in Circular, Square or Rectangular shapes, Stainless Steel Ball Bearing Butt Hinges 3 mm thick fixed flush to the frame and shutter (Profile 102x76x3mm thick).Mortise Sash Lock with Lever Handles, Mortise Dead Bolt, etc for industrial, commercial, residential, clean room applications		
541	TBSC-L.III-19	Providing & Fixing of Scientific Doors with metal door frames and door shutters made of galvanize steel (base steel as per IS 513 of 0.58 mm thick D quality, galvanized as per IS 277 with Zinc of 120 GSM)coated with Zinc Phosphate Primer to receive any paint on site or finished with Thermosetting Polyurethane paint of Aliphatic Grade providing high levels of scratch resistance and durability/Epoxy polyester powder for powder coating paint thickness 50-60 microns (Dry film thickness) outer frame section of 100 x 58 mm x 1.2 mm thick, shutter section of 0.80 mm thick galvanized steel sheet pressed (roll formed) for 46mm thick fully flush, double skin door shell seam joints at stile edges, in-fill of honeycomb Kraft paper used to give the required rigidity and effective acoustic insulation with 6" Tower bolt - 1 No., 6" D handles - 2 Nos., 10" Aldrops - 1 No., Butt Hinges - 3 Nos, Mortise Lock of approved quality - 1 No, frames fixed to the concrete/masonry wall by means of self-expanding screws complete for finished item of work for Single leaf Door	1 Sqm	10,969.00
542	TBSC-L.III-20	Providing & Fixing of Scientific Doors with metal door frames and door shutters made of galvanize steel (base steel as per IS 513 of 0.58 mm thick D quality, galvanized as per IS 277 with Zinc of 120 GSM). coated with Zinc Phosphate Primer to receive any paint on site or finished with Thermosetting Polyurethane paint of Aliphatic Grade providing high levels of scratch resistance and durability/Epoxy polyester powder for powder coating paint thickness 50-60 microns (Dry film thickness) outer frame section of 100 x 58 mm x 1.2 mm thick, shutter section of	1 Sqm	11,701.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		0.80 mm thick galvanized steel sheet pressed (roll formed) for 46mm thick fully flush, double skin door shell seam joints at stile edges, in-fill of honeycomb Kraft paper used to give the required rigidity and effective acoustic insulation with 6" Tower bolt - 2 Nos., 6" D handles - 2 Nos., 10" Aldrops - 1 No., Butt Hinges - 6 Nos, Mortise Lock of approved quality - 1 No, frames fixed to the concrete/masonry wall by means of self-expanding screws complete for finished item of work for Double leaf Door		
543	TBSC-L.III-21	Supply & Fixing of Stainless steel doors, frames & shutters made of stainless steel grade 304 of hairline finish, frame with 1.2mm thick formed to single rebate profile of size 100 mm X 58 mm and filled with in-fill Polyurethane foam, the Door Shutters are with 0.80 mm thick Stainless steel Sheet formed to provide a 46 mm thick fully flush, double skin door shell with Lock Seam joints at stile edges, fitted with in-fill of Honeycomb Kraft Paper, the Shutter provided with 6 MM clear float vision glass in Circular, Square or Rectangular shapes, Stainless Steel Ball Bearing Butt Hinges 3 mm thick fixed flush to the frame and shutter (Profile 102x76x3mm thick).Mortise Sash Lock with Lever Handles, Mortise Dead Bolt, etc for industrial, commercial, residential, clean room applications	1 Sqm	22,278.00
544	TBSC-L.III-22	Supply & Fixing of Powder Coated Fire Rated doors, frames & shutters made of Skin pass galvanized Iron sheet conforming to Base Steel as per IS 513 "D" Quality, Galvanized as per IS 277 with Hot Zinc Coating of 120 grams / Sq.Mtr with powder coating of thickness 60-65 Microns, frame with 1.2mm thick Skin pass Galvanized Iron sheet formed to double rebate profile of size 143 mm X 58 mm with maximum bending radius of 1.4 mm and filled with in-fill Polyurethane foam, the Door Shutters are with 0.80 mm thick Skin pass Galvanized Iron Sheet formed to provide a 46 mm thick fully flush, double skin door shell with Lock Seam joints at stile edges, fitted with in-fill of Honeycomb Kraft Paper and coated with polyester powders of Pure polyester/ epoxy polyester or polyurethane powder for powder coating of thickness 60 - 65 microns and are coated with Zinc Phosphate Primer to receive any paint on site or finished with Thermosetting Polyurethane paint of Aliphatic Grade providing high levels of scratch resistance and durability, the	1 Sqm	14,110.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		Shutter provided with 6 MM clear float vision glass in Circular, Square or Rectangular shapes, Stainless Steel Ball Bearing Butt Hinges 3 mm thick fixed flush to the frame and shutter (Profile 102x76x3mm thick).Mortise Sash Lock with Lever Handles, Mortise Dead Bolt, etc for 120 minutes Fire Rated door conforming to IS:3614 (Part2) 1992		
545	TBSC-L.III-23	Supply & Fixing of Powder Coated Fire Rated doors, frames & shutters made of Skin pass galvanized Iron sheet conforming to Base Steel as per IS 513 "D" Quality, Galvanized as per IS 277 with Hot Zinc Coating of 120 grams / Sq.Mtr with powder coating of thickness 60-65 Microns, frame with 1.2mm thick Skin pass Galvanized Iron sheet formed to double rebate profile of size 143 mm X 58 mm with maximum bending radius of 1.4 mm and filled with in-fill Polyurethane foam, the Door Shutters are with 0.80 mm thick Skin pass Galvanized Iron Sheet formed to provide a 46 mm thick fully flush, double skin door shell with Lock Seam joints at stile edges, fitted with in-fill of Honeycomb Kraft Paper and coated with polyester powders of Pure polyester/ epoxy polyester or polyurethane powder for powder coating of thickness 60 - 65 microns and are coated with Zinc Phosphate Primer to receive any paint on site or finished with Thermosetting Polyurethane paint of Aliphatic Grade providing high levels of scratch resistance and durability, the Shutter provided with 6 MM clear float vision glass in Circular, Square or Rectangular shapes, Stainless Steel Ball Bearing Butt Hinges 3 mm thick fixed flush to the frame and shutter (Profile 102x76x3mm thick).Mortise Sash Lock with Lever Handles, Mortise Dead Bolt, etc for 60 minutes Fire Rated door conforming to IS:3614 (Part2) 1992	1 Sqm	13,368.00
546	TBSC-L.III-24	Supply & Fixing of Stainless steel Fire Rated doors, frames & shutters made of Stainless steel of 304 grade hairline finish, frame with 1.2mm thick Stainless steel of 304 grade hairline finish sheet formed to double rebate profile of size 143 mm X 58 mm with maximum bending radius of 1.4 mm and filled with in-fill Polyurethane foam, the Door Shutters are with 0.80 mm thick Stainless steel of 304 grade hairline finish Sheet formed to provide a 46 mm thick fully flush, double skin door shell with Lock Seam joints at stile edges, fitted with in-fill of	1 Sqm	22,278.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		Honeycomb Kraft Paper and coated with polyester powders of Pure polyester/ epoxy polyester or polyurethane powder for powder coating of thickness 60 - 65 microns and are coated with Zinc Phosphate Primer to receive any paint on site or finished with Thermosetting Polyurethane paint of Aliphatic Grade providing high levels of scratch resistance and durability, the Shutter provided with 6 MM clear float vision glass in Circular, Square or Rectangular shapes, Stainless Steel Ball Bearing Butt Hinges 3 mm thick fixed flush to the frame and shutter (Profile 102x76x3mm thick).Mortise Sash Lock with Lever Handles, Mortise Dead Bolt, etc for 120 minutes Fire Rated door conforming to IS:3614 (Part2) 1992		
547	TBSC-L.III-25	Supply & Fixing of Stainless steel Fire Rated doors, frames & shutters made of Stainless steel of 304 grade hairline finish, frame with 1.2mm thick Stainless steel of 304 grade hairline finish sheet formed to double rebate profile of size 143 mm X 58 mm with maximum bending radius of 1.4 mm and filled with in-fill Polyurethane foam, the Door Shutters are with 0.80 mm thick Stainless steel of 304 grade hairline finish Sheet formed to provide a 46 mm thick fully flush, double skin door shell with Lock Seam joints at stile edges, fitted with in-fill of Honeycomb Kraft Paper and coated with polyester powders of Pure polyester/ epoxy polyester or polyurethane powder for powder coating of thickness 60 - 65 microns and are coated with Zinc Phosphate Primer to receive any paint on site or finished with Thermosetting Polyurethane paint of Aliphatic Grade providing high levels of scratch resistance and durability, the Shutter provided with 6 MM clear float vision glass in Circular, Square or Rectangular shapes, Stainless Steel Ball Bearing Butt Hinges 3 mm thick fixed flush to the frame and shutter (Profile 102x76x3mm thick).Mortise Sash Lock with Lever Handles, Mortise Dead Bolt, etc for 60 minutes Fire Rated door conforming to IS:3614 (Part2) 1992	1 Sqm	19,423.00
548	TBSC-L.III-26	Supply & Fixing of Lead Lined Clean room doors frames and shutters made of Skin pass galvanized Iron sheet (Conform to Base Steel as per IS 513 "D" Quality, Galvanized as per IS 277 with Hot Zinc Coating of 120 grams / Sq.Mtr).with powder coating of thickness 60-65 Microns, frame of 1.60mm thick galvanized steel sheet (Conform to IS 277)	1 Sqm	15,996.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		formed to Single/double rebate profile of size 100mm X 58mm/ 143x58mm, door frames with a single / multi-Layer of Lead sheet varying thickness from 3mm /1mm to 2mm depends on radiation level, the shutter with 1.2 mm thick Galvanized Steel Sheet (Conform to IS 277) formed to provide a 46mm thick fully flush, double skin door shell with Lock Seam joints at stile edges with a single / multi-Layer of Lead sheet varying thickness from 3mm /1mm to 2mm depends on radiation level, the lead sheets extend the full width and height of the door, Lead thickness is equal to the shielding in the adjacent wall, the door frames and door shutters are coated with polyester powders of Pure polyester/ epoxy polyester or polyurethane powder for powder coating of thickness 60 - 65 microns, coated with Zinc Phosphate Primer to receive any paint on site or finished with Thermosetting Polyurethane paint of Aliphatic Grade providing high levels of scratch resistance and durability, hardware with Stainless Steel Ball Bearing Butt Hinges 3 mm thick fixed flush to the frame and shutter etc complete for finished item		
549	TBSC-L.III-27	Supply & Fixing of Lead Lined Stainless steel Clean room door frames and shutters made of Stainless steel grade of 304 hairline finish, frame with 1.60mm (16SWG) thick hairline finish Stainless steel grade of 304 formed to Single/double rebate profile of size 100 mm x 58mm/ 143 x 58 mm, door frames with a single / multi-Layer of Lead sheet varying thickness from 3mm /1mm to 2mm depends on radiation level, the shutter with 1.2 mm thick hairline finish Stainless steel grade of 304 formed to provide a 46mm thick fully flush, double skin door shell with Lock Seam joints at stile edges with a single / multi-Layer of Lead sheet varying thickness from 3mm /1mm to 2mm depends on radiation level. The lead sheets extend the full width and height of the door. Lead thickness is to be equal to the shielding in the adjacent wall. Hardware can be provided with Stainless Steel Ball Bearing Butt Hinges 3 mm thick fixed flush to the frame and shutter etc complete for finished item of work	1 Sqm	25,249.00
550	TBSC-L.III-28	Providing of Factory made prelaminate FPVC (Foamed Polyvinyl Chloride) Door frame of the size 105x40mm with a wall thickness of 10mm made out of extruded rigid FPVC profile mitre joined with 6 Nos. of 50mm long screw. The door frame shall be fixed to the	1 Sqm	8,134.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		wall by using 80mm long screws through the frame with the help of PVC fasteners of 3 no's to be provided for each vertical member, GI stiffeners of ("U" channel of size 29x9x1mm, 150mm long) -3 no's at hinge point, Frame reinforcement of("U" GI channel of size 46x22x.06mm),Bottom tie rod of ("U" GI channel size of 15x15x1mm) etc. complete as per manufacturers specification for finished item of work. Maximum door frame size : 980 x 2070 including providing of 35mm thick Factory made Prelaminated ABS (Acrylonitrile Butadiene Styrene) Door shutter moulded in different designs, consisting of all round Frame made out of water proof solid foam PVC bar of size 20x32mm, reinforced by 32x 32mm - 2 nos. for vertical made out of LVL (Laminated Veneer Lumber), core material of 32 mm thick high density craft paper honey comb board, sandwiched on both sides with prelaminate ABS sheet thickness of 1.5mm . PVC edge banding of size 0.45mm on the vertical sides. Hardware made out of steel coated butterfly hinges - 3 Nos. for each shutter and ISI make S.S round lock completes for finished item of work. Maximum shutter size of : 910 x 2030 mm		
551	TBSC-L.III-29	Supply and fixing of toilet door shutter with frame made of M.S. door frame of 5 mm x 48 mm x 48 mm (L angel) as all-round frame the frame is coated with one coat of red oxide and two coats of enamel of approved color. For shutter and the shutter is made with 16mm Bison lam shutter with all-round 'U' Lipping of PPS section of 12 mm x 18 mm x 12 mm x 0.60mm, along hardware of 200m long and 12mm dia aluminium Aldrops 2 Nos, 2Nos of 125m m handle, 3 Nos of RT patte hinges IS 304gr SS 2mmX12mmX180mm long with a pole receiver of 10mmDia x 40mm by welded on 3mm x 40mm SS 304, plate it works as receiver for RT Patte hinges it is welded to M.S. angle . M.S. angle will be fixed to wall of self-expandable screws and caps	1 Sqm	3,647.00
552	TBSC-L.III-30	Supplying and fixing of Unplasticized Poly Vinyl Chloride (UPVC) sliding doors three track - three glass shutters sliding duly manufactured using UPVC reinforced profiles of 108.0 mm x 49 mm x 2.25 mm for outer frames, 85 mm x 41 mm x 2.25 mm for sliding door shutter frames capable of mounting single glazing system, structurally reinforced with reinforced with 35mm x 10mm x 1.5mm thick with hot dip galvanized up to 50 microns	1 Sqm	8,885.00



Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		of minimum thickness of 1.2 mm prefabricated & welded through fusion welding the window sash shall be fitted with 5 mm thick clear float glass of reputed make and fixed with uPVC glazing bead of 22.5mm x 18mm with "C" or "R" type inner and outer EPDM weathering seal resistant accessories like clipping locking system made of aluminium 1 No., per set of sashes and the system is to be installed at the site using anchor fasteners, silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site with templates for casement sizing complete for finished item of work		
553	TBSC-L.III-31	Providing and fixing of factory made pre hung door. Frame: Shutter is hung on Factory made door frame of 40mm or 48 mm thickness made of Cement Bonded Particle Board (Bison Panel) and Composite board for water resistant property. Depending on thickness of the wall, width of the frame covers the entire wall from 100 to 300 mm based on actual measurements. The frame is laminated with 0.2mm thick water proof and scratch resistant PVC Foil using hot press and high grade PUR adhesive and is fitted with casing wick (rubber beading) for energy, dust and sound efficiency. The frame is affixed to the wall using high strength expandable PU Foam using tension rods for precision and optional anchor bolts, side and top of frame attached together using dowel screws and quick acting adhesives. Shutter: Factory made 42 mm thick shutter sandwiched with laminated Cement Bonded Particle Board (Bison Panel) 6 mm thick skins on both sides. Skeleton is made with Composite Board & Cement Bonded Particle Board (Bison Panel) of 30mm thickness (sides). Core of high density/ uniform load distribution featured Honey Comb and Laminated Veneer Lumber (LVL) for holding the lock body and hardware, laminated with 0.2mm thick water proof and scratch resistant PVC Foil and edge-banded with 1mm thick PVC edge-band using hot press and high grade PUR adhesives. Max opening dimensions in mm are 1100 (width) x 42 (thickness) x 2300 (height).		11,812.00
IV	SUB-SECTION	<b>CUP-BOARD DOORS</b>		
554	TBSC-L.IV-01	Supply and fixing of cupboard frames and shutters and using 16mm Cement Bonded Particle Board conforming to IS 14276 duly painted both sides with one coat of primer	1 Sqm	2,280.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		and two coats of synthetic / enamel paint of approved shade and brand including fixing of hardware like M.S. powder coated Piano hinges of size 18mm x 18mm, brass ball catches, Aluminium tower bolts and handles, Godrej locks, synthetic glue, screws and nails including cost and conveyance of all materials, labour charges, all incidental and operational charges etc., complete for finished item of work at site as per the directions of Engineer in Charge.		
555	TBSC-L.IV-02	Supply and fixing of box type cup board using Cement Bonded Particle Board conforming to IS 14276 for making frame of size 100mm x 35mm using two sandwiched 16MM boards, one Cement Bonded Particle Board conforming to IS 14276 and one Cement Bonded Prelaminated Particle Board with plain 35mm wood lipping. The Shutters are made of 16MM thick Cement Bonded Prelaminated Particle Board (Pre-Laminated Cement Bonded Particle Board) of approved shade inclusive of hardware like M.S. powder coated Piano hinges of size ¾" x ¾", Aluminium powder coated handles of size 4" (101.6mm), Aluminium tower bolt 4" (101.6mm) Godrej locks, screws, wood lipping and synthetic glue etc., complete finish item of work.	1 Sqm	3,747.00
556	TBSC-L.IV-03	Supply and fixing of PVC cupboards for kitchen and bedrooms shall be made out of multi chambered PVC sections having overall dimensions of 20 X 762mm with a wall thickness of 1.2mm ± 0.3mm. The cabinets shall be made as per the requirements of the room with groove system. The PVC section surface shall be plain and laminated finish to have good look, completed, for finished item of work for SINTEX OR equivalent PVC CABINETS	1 Sqm	4,208.00
557	TBSC-L.IV-04	Supply and fixing of cupboard shutter using teakwood scantling of size 50 mm x 50 mm teakwood as outer frame and 50 mm x 30 mm of size teakwood for shutter frames, 8mm thick Bison Lam as panel to each shutter consist of 2 Nos 75mm long tower bolt - 2 nos 75 mm big handle and other shutter will have 1 no of cupboard lack, 1 No of 75 mm long handle and 75 mm x 10mm x 1mm thick SS hinges- 2 Nos for each shutter. The above frame will be fixed to the wall with screws, the rate inclusive of screws, handle, etc., complete at site of work	1 Sqm	4,202.00
<b>M</b>	<b>SECTION</b>	<b>WINDOWS</b>		
		<b>(Excluding taxes but including cost of</b>		

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		loading, cost of conveyance, unloading & stacking)		
<b>I</b>	<b>SUB-SECTION</b>	<b>OPENABLE WINDOWS</b>		
558	TBSC-M.I-01	Supply and fixing of pre-painted steel casement/ open able windows base steel as per IS 513 of - 0.58 mm thick 'D quality, galvanized as per IS 277, finish painted with a polyester paint, section for outer frame of 46 x 52 mm section for shutter of 46 x 46 mm section for mullion 46 x 70 mm, and section for beading 18 x 25 mm paneled with 5 mm thick plain float glass fitted with EPDM gaskets, handle made of high grade aluminium powder coated frames fixed to the concrete /masonry wall by means of self-expanding screws including 10 mm square guard bars @ 150 mm pitch for Windows: Double shutter for sizes 2'0 x 4'0 (609.6 x 1219.2 mm ) 3'-0 x 4'-0 (914.4mm x 1219.2 mm) without mullion section	1 Sqm	6,738.00
559	TBSC-M.I-02	Supply and fixing of pre-painted steel casement/ open able windows base steel as per IS 513 of - 0.58 mm thick 'D quality, galvanized as per IS 277, finish painted with a polyester paint, section for outer frame of 46 x 52 mm section for shutter of 46 x 46 mm section for mullion 46 x 70 mm, and section for beading 18 x 25 mm paneled with 5 mm thick plain float glass fitted with EPDM gaskets, handle made of high grade aluminium powder coated frames fixed to the concrete /masonry wall by means of self-expanding screws including 10 mm square guard bars @ 150 mm pitch for Windows: Double shutter with mullion section for sizes 3'-0 x 4'-0 (914.4mm x 1219.2 mm) and 4'-0 x 4'-0 (1219.2x1219.2mm)	1 Sqm	7,127.00
560	TBSC-M.I-03	Supply and fixing of pre-painted steel casement/ open able windows base steel as per IS 513 of - 0.58 mm thick 'D quality, galvanized as per IS 277, finish painted with a polyester paint, section for outer frame of 46 x 52 mm section for shutter of 46 x 46 mm section for mullion 46 x 70 mm, and section for beading 18 x 25 mm paneled with 5 mm thick plain float glass fitted with EPDM gaskets, handle made of high grade aluminium powder coated frames fixed to the concrete /masonry wall by means of self-expanding screws including 10 mm square guard bars @ 150 mm pitch for Windows: Double shutter 4'-0 x 4'-0 (1219.2x12.19.2mm) without Mullion section	1 Sqm	6,932.00
561	TBSC-M.I-04	Supply and fixing of pre-painted steel casement/ open able windows base steel as	1 Sqm	6,351.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		per IS 513 of - 0.58 mm thick 'D quality, galvanized as per IS 277, finish painted with a polyester paint, section for outer frame of 46 x 52 mm section for shutter of 46 x 46 mm section for mullion 46 x 70 mm, and section for beading 18 x 25 mm paneled with 5 mm thick plain float glass fitted with EPDM gaskets, handle made of high grade aluminium powder coated frames fixed to the concrete /masonry wall by means of self-expanding screws including 10 mm square guard bars @ 150 mm pitch for Windows: Double shutter with Mullion section for sizes 4'-6 x 4'-6 (1371.6x1371.6mm) 5'-0 x 4'-0 (1524x1219.2mm) and 6'-0 x 4'-0 (1828.8x1219.2mm) and 6'-0 x 4'-6 (1828.8x1371.6mm)		
562	TBSC-M.I-05	Providing and fixing of Casement/ Open able Windows made of pre-painted steel as per IS 513 of 0.58 mm thick galvanized as per IS 277, finish painted with a polyester paint and section for outer frame of 48 x 50 mm, centre mullion of 48 x 50 mm, section for shutter of 48 x 25 mm and the fixed glass beading section should be 12 x 12 mm and the outer frame and mullions to have rebate for glazed shutter with a 20 mm provision for guard bars/grills, handle, stay, 2 nos. of stainless steel heavy duty pivot hinges provided per shutter and windows fitted with 5 mm thick plain float glass with rubber gaskets including fixing the frames in concrete/masonry wall by means of self-expanding screws, Including 10mm Square guard bars with 6" (152.4mm) pitch etc., complete Single shutter Window without vertical mullion for size 2'0"x4'0" (609.6mm x 1219.2mm)	1 Sqm	6,156.00
563	TBSC-M.I-06	Providing and fixing of Casement/ Open able Windows made of pre-painted steel as per IS 513 of 0.58 mm thick galvanized as per IS 277, finish painted with a polyester paint and section for outer frame of 48 x 50 mm, centre mullion of 48 x 50 mm, section for shutter of 48 x 25 mm and the fixed glass beading section should be 12 x 12 mm and the outer frame and mullions to have rebate for glazed shutter with a 20 mm provision for guard bars/grills, handle, stay, 2 nos. of stainless steel heavy duty pivot hinges provided per shutter and windows fitted with 5 mm thick plain float glass with rubber gaskets including fixing the frames in concrete/masonry wall by means of self-expanding screws, Including 10mm Square guard bars with 6" (152.4mm) pitch etc., complete Double shutter Window	1 Sqm	6,544.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		with vertical mullion for sizes 3'0" x 4'0" (914.4mm x 1219.2mm) and 4'0" x 4'0" (1219.2mm x 1219.2mm)		
564	TBSC-M.I-07	Providing and fixing of Casement/ Open able Windows made of pre-painted steel as per IS 513 of 0.58 mm thick galvanized as per IS 277, finish painted with a polyester paint and section for outer frame of 48 x 50 mm, centre mullion of 48 x 50 mm, section for shutter of 48 x 25 mm and the fixed glass beading section should be 12 x 12 mm and the outer frame and mullions to have rebate for glazed shutter with a 20 mm provision for guard bars/grills, handle, stay, 2 nos. of stainless steel heavy duty pivot hinges provided per shutter and windows fitted with 5 mm thick plain float glass with rubber gaskets including fixing the frames in concrete/masonry wall by means of self-expanding screws, Including 10mm Square guard bars with 6" (152.4mm) pitch etc., complete Centre fixed both side open able shutter window for sizes 5'0"x4'0" (1524mm x1219.2mm) and 6'0"x4'0" (1828.8mm x1219.2mm)	1 Sqm	5,766.00
565	TBSC-M.I-08	Providing & Fixing of Open able Windows with Fly-mesh made of pre-painted steel as per IS 513 of 0.58 mm thick galvanized as per IS 277 finish painted with a polyester paint and the section for outer frame of 72 x 55mm, centre mullion of 72 x 50mm, section for fixed glass beading section of 12 x 12 mm and section for shutters of 48 x 25 mm and outer frame & mullion sections with rebate for glazed shutters, fly mesh and a 20 mm provision for guard bars/grills and fly mesh shutter section of 20 x 40 mm, stay, handles, latch 2 Nos of heavy duty stainless steel pivot hinges per shutter and paneled with 5mm thick plain float glass and S.S. Mesh for fly mesh shutter (304 grade), fitted using rubber gaskets including fixing the windows in the concrete/masonry wall by means of self-expanding screws, including 10mm Square guard bars with 6" (152.4mm) pitch , complete for Single shutter Window 2'0"x4'0" (609.6mm x 1219.2mm)	1 Sqm	8,163.00
566	TBSC-M.I-09	Providing & Fixing of Open able Windows with Fly-mesh made of pre-painted steel as per IS 513 of 0.58 mm thick galvanized as per IS 277 finish painted with a polyester paint and the section for outer frame of 72 x 55mm, centre mullion of 72 x 50mm, section for fixed glass beading section of 12 x 12 mm and section for shutters of 48 x 25 mm and outer frame & mullion sections with rebate for glazed	1 Sqm	8,552.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		shutters, fly mesh and a 20 mm provision for guard bars/grills and fly mesh shutter section of 20 x 40 mm, stay, handles, latch 2 Nos of heavy duty stainless steel pivot hinges per shutter and paneled with 5mm thick plain float glass and S.S. Mesh for fly mesh shutter (304 grade), fitted using rubber gaskets including fixing the windows in the concrete/masonry wall by means of self-expanding screws, including 10mm Square guard bars with 6" (152.4mm) pitch , complete for Double shutter Window with vertical mullion of sizes 3'0" x 4'0" ( 914.4mm x 1219.2mm) and 4'0" x 4'0" (1219.2mm x 1219.2mm)		
567	TBSC-M.I-10	Providing & Fixing of Open able Windows with Fly-mesh made of pre-painted steel as per IS 513 of 0.58 mm thick galvanized as per IS 277 finish painted with a polyester paint and the section for outer frame of 72 x 55mm, centre mullion of 72 x 50mm, section for fixed glass beading section of 12 x 12 mm and section for shutters of 48 x 25 mm and outer frame & mullion sections with rebate for glazed shutters, fly mesh and a 20 mm provision for guard bars/grills and fly mesh shutter section of 20 x 40 mm, stay, handles, latch 2 Nos of heavy duty stainless steel pivot hinges per shutter and paneled with 5mm thick plain float glass and S.S. Mesh for fly mesh shutter (304 grade), fitted using rubber gaskets including fixing the windows in the concrete/masonry wall by means of self-expanding screws, including 10mm Square guard bars with 6" (152.4mm) pitch , complete for Centre fixed both side open able shutter window for a size 5'0"x4'0" (1524mm x1219.2mm).	1 Sqm	7,776.00
568	TBSC-M.I-11	Providing & Fixing of Open able Windows with Fly-mesh made of pre-painted steel as per IS 513 of 0.58 mm thick galvanized as per IS 277 finish painted with a polyester paint and the section for outer frame of 72 x 55mm, centre mullion of 72 x 50mm, section for fixed glass beading section of 12 x 12 mm and section for shutters of 48 x 25 mm and outer frame & mullion sections with rebate for glazed shutters, fly mesh and a 20 mm provision for guard bars/grills and fly mesh shutter section of 20 x 40 mm, stay, handles, latch 2 Nos of heavy duty stainless steel pivot hinges per shutter and paneled with 5mm thick plain float glass and S.S. Mesh for fly mesh shutter (304 grade), fitted using rubber gaskets including fixing the windows in the	1 Sqm	6,803.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		concrete/masonry wall by means of self-expanding screws, including 10mm Square guard bars with 6" (152.4mm) pitch , complete for a size 6'0"x4'0" (1828.8mm x1219.2mm)		
569	TBSC-M.I-12	Providing & Fixing of Mesh windows made of pre-painted steel (Base Steel as per IS 513 of 0.58mm thick galvanized as per IS 277 primer coated with epoxy primer finish painted with a polyester paint, section for outer frame of 47 x 36 mm, centre mullion of 60 x 36 mm, section mesh beading 18 x 6 mm and Fly mesh shutter section of 20 x 40 mm, the sections cut to length meter joined with corner bracket and centre mullions fixed with mullion cap, handles, latch, 2 Nos of heavy duty stainless steel pivot hinges per S.S. Mesh for fly mesh shutter (304 grade) including fixing the frames in the concrete/masonry wall by means of self-expanding screws complete for finished item of work.	1 Sqm	5,084.00
570	TBSC-M.I-13	Providing and fixing of Open able / Casement Windows made of pre-painted steel as per IS 513 of 0.80 mm thick galvanized as per IS 277 finish painted with a polyester paint and section for outer frame of 80 x 45 mm, centre mullion of 80 x 60 mm, section for shutter of 52 x 25 mm x 0.6 mm thick, outer frame and mullions to have rebate for glazed shutter with a provision for guard bars/grills, centre mullion fixed with mullion cap, 1 No. of High grade nylon latch handle, window stopper, 2 nos. of with MS Powder coated /SS ball bearing butt Hinges provided per shutter and windows fitted with 4 mm thick plain float glass with rubber gaskets including fixing the frames in concrete/masonry wall by means of self-expanding screws, Including 10 mm Square guard bars with 6" (152.4mm) pitch etc., complete for Single open able shutter window size of 2' 0" x 4' 0" (609.6 x 1219.2mm)	1 Sqm	5,428.00
571	TBSC-M.I-14	Providing and fixing of Open able / Casement Windows made of pre-painted steel as per IS 513 of 0.80 mm thick galvanized as per IS 277 finish painted with a polyester paint and section for outer frame of 80 x 45 mm, centre mullion of 80 x 60 mm, section for shutter of 52 x 25 mm x 0.6 mm thick, outer frame and mullions to have rebate for glazed shutter with a provision for guard bars/grills, centre mullion fixed with mullion cap, 1 No. of High grade nylon latch handle, window stopper, 2 nos. of with MS Powder coated /SS ball bearing butt Hinges provided per shutter and	1 Sqm	5,770.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		windows fitted with 4 mm thick plain float glass with rubber gaskets including fixing the frames in concrete/masonry wall by means of self-expanding screws, Including 10 mm Square guard bars with 6" (152.4mm) pitch etc., complete for Double open able shutter window Size of 3' 0" x 4' 0" (914.4mm x 1219.2mm) and 4'0" x 4'0" (1219.2mm x 1219.2mm)		
572	TBSC-M.I-15	Providing and fixing of Open able / Casement Windows made of pre-painted steel as per IS 513 of 0.80 mm thick galvanized as per IS 277 finish painted with a polyester paint and section for outer frame of 80 x 45 mm, centre mullion of 80 x 60 mm, section for shutter of 52 x 25 mm x 0.6 mm thick, outer frame and mullions to have rebate for glazed shutter with a provision for guard bars/grills, centre mullion fixed with mullion cap, 1 No. of High grade nylon latch handle, window stopper, 2 nos. of with MS Powder coated /SS ball bearing butt Hinges provided per shutter and windows fitted with 4 mm thick plain float glass with rubber gaskets including fixing the frames in concrete/masonry wall by means of self-expanding screws, Including 10 mm Square guard bars with 6" (152.4mm) pitch etc., complete for 5'0 x 4'0 ( 1524 x 1219.2mm) and 6'0 x4'0 ( 1829.6 x 1219.2mm)	1 Sqm	5,084.00
573	TBSC-M.I-16	Providing and fixing of Open able / Casement Windows <b>with fly mesh</b> made of pre-painted steel as per IS 513 of 0.80 mm thick galvanized as per IS 277, finish painted with a polyester paint and section for outer frame of 100 x 45 mm, centre mullion of 100 x 60 mm, section for shutter of 52 x 25 mm x 0.6 mm thick, section for fly-shutter of 52 x 25 mm x 0.6 mm thick and fitted with stainless steel 32 gauge fly mesh of 304 grade and mullions to have double rebate for glazed shutter and fly-shutter with a provision for guard bars/grills and the sections, 1 No. of High grade nylon latch handle, window stopper, 2 nos. of with MS Powder coated /SS ball bearing butt Hinges provided per shutter and windows fitted with 4 mm thick plain float glass with rubber gaskets including fixing the frames in concrete/masonry wall by means of self-expanding screws, Including 10 mm Square guard bars with 6" (152.4mm) pitch etc., complete for 2' 0" x 4' 0" (609.6 x 1219.2mm)	1 Sqm	7,199.00
574	TBSC-M.I-17	Providing and fixing of Open able / Casement Windows with fly mesh made of pre-painted	1 Sqm	7,542.00



Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		steel as per IS 513 of 0.80 mm thick galvanized as per IS 277, finish painted with a polyester paint and section for outer frame of 100 x 45 mm, centre mullion of 100 x 60 mm, section for shutter of 52 x 25 mm x 0.6 mm thick, section for fly-shutter of 52 x 25 mm x 0.6 mm thick and fitted with stainless steel 32 gauge fly mesh of 304 grade and mullions to have double rebate for glazed shutter and fly-shutter with a provision for guard bars/grills and the sections, 1 No. of High grade nylon latch handle, window stopper, 2 nos. of with MS Powder coated /SS ball bearing butt Hinges provided per shutter and windows fitted with 4 mm thick plain float glass with rubber gaskets including fixing the frames in concrete/masonry wall by means of self-expanding screws, Including 10 mm Square guard bars with 6" (152.4mm) pitch etc., complete for 3' 0" x 4' 0" (914.4mm x 1219.2mm) and 4'0" x 4'0" (1219.2mm x 1219.2mm)		
575	TBSC-M.I-18	Providing and fixing of Open able / Casement Windows with fly mesh made of pre-painted steel as per IS 513 of 0.80 mm thick galvanized as per IS 277, finish painted with a polyester paint and section for outer frame of 100 x 45 mm, centre mullion of 100 x 60 mm, section for shutter of 52 x 25 mm x 0.6 mm thick, section for fly-shutter of 52 x 25 mm x 0.6 mm thick and fitted with stainless steel 32 gauge fly mesh of 304 grade and mullions to have double rebate for glazed shutter and fly-shutter with a provision for guard bars/grills and the sections, 1 No. of High grade nylon latch handle, window stopper, 2 nos. of with MS Powder coated /SS ball bearing butt Hinges provided per shutter and windows fitted with 4 mm thick plain float glass with rubber gaskets including fixing the frames in concrete/masonry wall by means of self-expanding screws, Including 10 mm Square guard bars with 6" (152.4mm) pitch etc., complete for 5'0 x 4'0 ( 1524 x 1219.2mm) and 6'0 x4'0 ( 1829.6 x 1219.2mm)	1 Sqm	6,857.00
576	TBSC-M.I-19	Galvanized powder coated Casement Windows with open able shutters duly manufactured using pressed steel sections in mild steel conforming to IS 513 of having 1.0 mm thick and galvanized as per IS 277 of 120 GSM surface treatment with pure polyester powder coating of 30-40 microns thick and section for outer frame of 60x50mm, centre for mullion of 62x50mm, section for shutter	1 Sqm	6,064.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		of 52 x 22 mm, outer frame and mullions to have one side rebate for glazed shutter of size 24 mm and 10x10 mm square guard bars provided at 125 mm c/c the sections assembled with bolt & nut assembly with zinc-electroplated M-5 bolts, GI Handle of size 80 mm x 15 mm -1 No per shutter, 2 nos of stainless steel heavy duty pivot hinges of size 3 of SS 304 Grade per shutter, window panes with 5 mm thick plain float glass and fixed with glass beading section of 10x12 mm size with 0.8 mm thick powder coated aluminium 'U' channel and window frames fixing to the concrete/masonry wall arrangement with self-expanding screws, complete for finished item of work including of all taxes - 1220 x 1372 or below size		
577	TBSC-M.I-20	Galvanized powder coated Casement Windows with open able shutters duly manufactured using pressed steel sections in mild steel conforming to IS 513 of having 1.0 mm thick and galvanized as per IS 277 of 120 GSM surface treatment with pure polyester powder coating of 30-40 microns thick and section for outer frame of 60x50mm, centre for mullion of 62x50mm, section for shutter of 52 x 22 mm, outer frame and mullions to have one side rebate for glazed shutter of size 24 mm and 10x10 mm square guard bars provided at 125 mm c/c the sections assembled with bolt & nut assembly with zinc-electroplated M-5 bolts, GI Handle of size 80 mm x 15 mm -1 No per shutter, 2 nos of stainless steel heavy duty pivot hinges of size 3 of SS 304 Grade per shutter, window panes with 5 mm thick plain float glass and fixed with glass beading section of 10x12 mm size with 0.8 mm thick powder coated aluminium 'U' channel and window frames fixing to the concrete/masonry wall arrangement with self-expanding screws, complete for finished item of work including of all taxes - 1530 x 1372 or above size	1 Sqm	5,433.00
578	TBSC-M.I-21	Galvanized powder coated Casement Windows with open able shutters duly manufactured using pressed steel sections in mild steel conforming to IS 513 of having 1.0 mm thick and galvanized as per IS 277 of 120 GSM surface treatment with pure polyester powder coating of 30-40 microns thick and section for outer frame of 88x50mm, centre for mullion of 62x88 mm, section for glass and fly-proof mesh shutter of 52 x 22 mm, outer frame and mullions to have two sides rebate for glazed shutter of size 24 mm and	1 Sqm	7,620.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		10x10 mm square guard bars provided at 125 mm c/c the sections assembled with bolt & nut assembly with zinc-electroplated M-5 bolts, GI Handle of size 80 mm x 15 mm -1 No per shutter, 2 Nos of stainless steel heavy duty pivot hinges of size 3 of SS 304 Grade per shutter, window panes with 5 mm thick plain float glass and fixed with glass beading section of 10x12 mm size with 0.8 mm thick powder coated aluminium 'U' channel and fly-proof mesh of SS 304 grade fixed with 18 mm x 12 mm BT wood beading and window frames fixing arrangement to the concrete/masonry wall with self-expanding screws, complete for finished item of work including of all taxes - 1220 x 1372 or below size		
579	TBSC-M.I-22	Galvanized powder coated Casement Windows with open able shutters duly manufactured using pressed steel sections in mild steel conforming to IS 513 of having 1.0 mm thick and galvanized as per IS 277 of 120 GSM surface treatment with pure polyester powder coating of 30-40 microns thick and section for outer frame of 88x50mm, centre for mullion of 62x88 mm, section for glass and fly-proof mesh shutter of 52 x 22 mm, outer frame and mullions to have two sides rebate for glazed shutter of size 24 mm and 10x10 mm square guard bars provided at 125 mm c/c the sections assembled with bolt & nut assembly with zinc-electroplated M-5 bolts, GI Handle of size 80 mm x 15 mm -1 No per shutter, 2 Nos of stainless steel heavy duty pivot hinges of size 3 of SS 304 Grade per shutter, window panes with 5 mm thick plain float glass and fixed with glass beading section of 10x12 mm size with 0.8 mm thick powder coated aluminium 'U' channel and fly-proof mesh of SS 304 grade fixed with 18 mm x 12 mm BT wood beading and window frames fixing arrangement to the concrete/masonry wall with self-expanding screws, complete for finished item of work including of all taxes - 1530 x 1372 or above size	1 Sqm	7,005.00
580	TBSC-M.I-23	Supplying and fixing of Unplasticized Poly Vinyl Chloride (UPVC) casement windows open able shutters duly manufactured using UPVC reinforced profiles of (48 mm x 60 mm)/ (58 mm x 60 mm) x 2.0 mm for outer frames, (64 mm x 60 mm)/(72 mm x 60mm) x 2.0 mm for mullion sections for two or more open able shutters and (78 mm x 60 mm)/(72 mm x 42 mm) x 2.0 mm for outward open able shutter frame or (70 mm x 60 mm)/ (72 mm x 42 mm) x 2.0 mm for inward open able	1 Sqm	6,275.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		shutter frame capable of mounting single glazing system structurally reinforced with hot dip galvanized up to 50 microns of minimum thickness of 1.2 mm prefabricated & welded through fusion welding the window sash shall be fitted with 5 mm thick clear float glass of reputed make duly fixed with TPV Gaskets/ EPDM weathering seal resistant accessories for casement window - friction stay hinges of stainless steel grade 304- 2 Nos., per sash, handle with mazak alloy casting 1 No. per sash, locking system suitably concealed 1 No., per sash provided with raiser wedges for smooth operation and the system is to be installed at the site using anchor fasteners, silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site with templates for casement sizing complete for finished item of work		
581	TBSC-M.I-24	Supplying and fixing of Unplasticized Poly Vinyl Chloride (UPVC) casement windows openable shutters duly manufactured using UPVC reinforced profiles (Composition of profile shall consists a minimum of 5.5 PHR of TiO2 and not more than 12 PHR of CaCo3 for every 100 parts of PVC resin) of 60 mm x 55 mm x 2.40 mm for outer frames, 74 mm x 60 mm x 2.40 mm for mullion sections for two or more openable shutters 75 mm x 60 mm x 2.40 mm for openable shutter frame capable of mounting single glazing system structurally reinforced with hot dip galvanized up to 50 microns of minimum thickness of 1.0/1.2 mm prefabricated & welded through fusion welding. The window sash shall be fitted with 5 mm thick clear float glass of reputed make duly fixed with Grey colour TPV Gasket for sash & Glazing bead shall be co-extruded with Grey colour soft PVC and accessories for casement window - friction hinges of stainless steel grade 304/430- 2 Nos., per sash, handle with mazak alloy casting 1 No. per sash, multipoint locking system suitably concealed 1 No., per sash provided with raiser wedges for smooth operation and the system is to be installed at the site using anchor fasteners, silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site complete for finished item of work.	1 Sqm	7,521.00
582	TBSC-M.I-25	Supplying and fixing of Unplasticized Poly Vinyl Chloride (UPVC) casement windows	1 Sqm	7,739.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		<p>openable shutters duly manufactured using UPVC reinforced profiles of 60 mm x 60 mm x 2.60 mm for outer frames, 82 mm x 60 mm x 2.60 mm for Fix mullion ("T" or "Z" )made of 60mm x 82mm uPVC profile section with steel reinforcement of size 35mm x 28mm x 1.5mm shall be provided in windows having fixed panel as per the requirement. The shutter of outward open able window shall be made of size 60mm x 77mm or for inward open able window shall be made of size 60mm x 78mm; "T" shaped for outward open or "Z" shaped for Inward open extruded 3 box multi-chamber uPVC window profile section of white colour having outer wall thickness of 2.6mm (<math>\pm</math> 0.2mm) provided with reinforcement of minimum 1.5mm thick G/J/U/S/O type GI section prefabricated &amp; welded through fusion welding. The window sash shall be fitted with 5 mm thick clear float glass of reputed make duly fixed with Gasket for sash &amp; Glazing bead shall be co-extruded with Grey colour soft PVC and accessories for casement window - friction hinges of stainless steel grade 304- 2 Nos., per sash, handle 1 No. per sash, multipoint locking system suitably concealed 1 No., per sash provided with raiser wedges for smooth operation and the system is to be installed at the site using anchor fasteners, silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site complete for finished item of work.</p>		
		<p>Supply and fixing of Pre Laminated Cement Bonded Particle Board (as per IS-14276) WINDOWS with Pre-Painted Steel Sections fabricated from pre-painted Cold rolled formed sections made of galvanized steel color coated sections {Base steel as per IS-512 quality, galvanized as per IS-277 with Zinc of 120 gram/sqm) with total coated thickness of 0.58mm primer coated with epoxy primer of 5-7 microns thick, finish painted with polyester paint of 12-16 microns and back coated with alkyd backer of 5-7 microns), the sections for outer frame and centre mullion (duly filled with PU foam of 40 kg/Cum) should be of 60mm x 50mm, with provision for fixing glazed shutter. The section for glazed/paneled shutter should be of size 48mm x 25 mm and another section of size 60mm x 23mm should be provided for separating glazed and paneled portion 5 mm</p>		

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		thick colour pin headed glass is to be provided for glazing and providing guard bars of 10mm square rods duly welded at 150mm pitch to MS flat section of size 18mm and 3mm thick. Windows are to be fixed to wall by means of self-expansion nylon Cap (75) and electroplated wooden screws of size 100mm, including aluminum powder coated fittings, A) 75mm long grip handles 1 no per shutter, B) 75 mm long tower bolts 2 nos. per shutter, C) Heavy duty 55 Pivot hinges 2 nos per shutter, D) MS Powder coated telescopic stay 1no per shutter.		
583	TBSC-M.I-26	Pre Laminated Cement Bonded Particle Board (as per IS-14276) WINDOWS WITH PPS SECTIONS – Single shutter 2'0"x4'0" outer frame section size of 50mm x 60mm shutter frame section size of 48mm x 25mm	1 Sqm	7,272.00
584	TBSC-M.I-27	Pre Laminated Cement Bonded Particle Board (as per IS-14276) WINDOWS WITH PPS SECTIONS –Double shutter 3'0" x 4'0" outer frame section size of 50mm x 60mm shutter frame section size of 48mm x 25mm mullion section size of 50mm x 60mm for outer frame	1 Sqm	7,272.00
585	TBSC-M.I-28	Pre Laminated Cement Bonded Particle Board (as per IS-14276) WINDOWS WITH PPS SECTIONS – Double shutter 3'0" x 3'0" outer frame section size of 50mm x 60mm shutter frame section size of 48mm x 25mm Mullion section size of 50mm x 60mm for outer frame.	1 Sqm	7,272.00
586	TBSC-M.I-29	Pre Laminated Cement Bonded Particle Board (as per IS-14276) WINDOWS WITH PPS SECTIONS – Double shutter 4'0"x4'0" outer frame section size of 50mm x 60mm shutter frame section size of 48mm x 25mm Mullion section size of 50mm x 60mm for outer frame.	1 Sqm	7,272.00
<b>II</b>	<b>SUB-SECTION</b>	<b>SLIDING WINDOWS</b>		
587	TBSC-M.II-01	Providing and fixing 2 Track 2 glass shutter sliding Windows fabricated from roll formed sections made of Galvanized Steel Colour Coated/ Powder Coated (Base Steel as per IS 513 "D" quality, Galvanized as per IS 277 with Zinc of 120 GM/Sq.mtr) with total coated thickness of 0.58 mm. Primer coat with epoxy primer of 5-7 micron thick, finish painted with polyester paint of 12-16 microns thick and back coated with alkyd backer of 5-7 microns or Powder Coated with pure Polyester Powder up to 50-60 microns thick. Section for external frame should be of 44 x 59mm, Section for glass shutter should be of 35 x 49 mm Section for euro groove should be 25 x 24mm( Aluminium/Plastic)and Lap Strip	1 Sqm	7,236.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		should be of 30 x 41mm(Aluminium/Plastic).shutter should be provided with a glass of 5mm Plain Float Glass. Corner bracket for External frame made of Steel/Polypropylene, Corner Bracket for Internal frame made of Steel/Polypropylene, Touch Lock, Rollers, wool pile for lap strip & euro groove, Bump Stop Base & Rubber for shutter stopper. Ethyl Propylene Diamine Monomer (EPDM) Gasket should be used all around glass in shutter. The Frame Section should be cut to length and mitre joined with Corner brackets & Shutter Sections should be cut to length and mitre joined with Corner Bracket. Window Frame should be fixed to brick/ concrete masonry by using Nylon self-expanding caps and driving MS electroplated 80mm long screws into the caps through frames.10mm square guard bars with 6” pitch (152.4mm) max to be fixed wall to wall and all taxes complete for finished item of work		
588	TBSC-M.II-02	Providing and fixing of Two shutter Sliding Windows made of Galvanized Steel as per IS 513, D quality, galvanized as per IS 277 with powder coated with Pure polyester powder up to 50-60 microns thick with total coated thickness of 0.8 mm for Outer Frame and 0.58 mm thickness for Sliding Shutter Section, the Outer Frame for Two Tracks without grill provision is of 75 mm x 50 mm and the Window Shutter section of 58 mm x 36 mm and the outer Frame with two integrated guide tracks of 12mm width and 24mm deep for provision to slide the Shutter / sash frame and facilitates with a water drain outlet component made of PVC and the shutter frame fitted with 5mm thick plain float glass of reputed make and fixed with EPDM weathering seal resistant accessories and handle made of Aluminium 1 No. per each shutter including installation of window system at site using anchor fasteners, Silicon sealant applied at the Outer frame corners inclusive of conveyance of all materials accessories, labour charges, and erection at site with complete finished item of work for Window with Two Sliding Shutters and without Grill	1 Sqm	5,657.00
589	TBSC-M.II-03	Providing and fixing of Two shutter Sliding Windows made of Galvanized Steel as per IS 513, D quality, galvanized as per IS 277 with powder coated with Pure polyester powder up to 50-60 microns thick with total coated thickness of 0.8 mm for Outer Frame and 0.58	1 Sqm	6,273.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		mm thickness for Sliding Shutter Section, the Outer Frame for Two Tracks with Grill provision size of 90 mm x 50 mm and the Window Shutter section of 58 mm x 36 mm and the outer Frame with two integrated guide tracks of 12mm width and 24mm deep for provision to slide the Shutter / sash frame and facilitates with a water drain outlet component made of PVC and the shutter frame fitted with 5mm thick plain float glass of reputed make and fixed with EPDM weathering seal resistant accessories and handle made of Aluminium 1 No. per each shutter including installation of window system at site using anchor fasteners, Silicon sealant applied at the Outer frame corners inclusive of conveyance of all materials accessories, labour charges, and erection at site with complete finished item of work for Window with Two Sliding Shutters and with Grill		
590	TBSC-M.II-04	Providing and fixing of Three shutter Sliding Windows made of Galvanized Steel as per IS 513, D quality, galvanized as per IS 277 powder coated with Pure polyester powder and thickness of 0.8 mm for Outer Frame and 0.58 mm thickness for Sliding Shutter Section, with two integrated guide tracks of 12mm width and 24mm deep for provision to slide the Shutter / sash frame and facilitates with a water drain outlet component made of PVC and the shutter frame fitted with 5mm thick plain float glass of reputed make and fixed with EPDM weathering seal resistant accessories and handle made of Aluminium 1 No. per each shutter and including installation of window system at site using anchor fasteners, Silicon sealant applied at the Outer frame corners inclusive of conveyance of all materials accessories, labour charges, and erection at site with complete finished item of work for i) Centre Shutter Fixed: centre shutter frame made of section with size 20mm x 47mm should be fitted with 5mm thick plain float glass of reputed make, EPDM gasket all around the glass and fixed to the Outer Frame with the supporting section of size 29mm x 20mm of 0.58mm thick fixed horizontally on top and bottom of the shutter frame.	1 Sqm	6,626.00
591	TBSC-M.II-05	Providing and fixing of Three shutter Sliding Windows made of Galvanized Steel as per IS 513, D quality, galvanized as per IS 277 powder coated with Pure polyester powder and thickness of 0.8 mm for Outer Frame and	1 Sqm	7,256.00



Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		<p>0.58 mm thickness for Sliding Shutter Section, with two integrated guide tracks of 12mm width and 24mm deep for provision to slide the Shutter / sash frame and facilitates with a water drain outlet component made of PVC and the shutter frame fitted with 5mm thick plain float glass of reputed make and fixed with EPDM weathering seal resistant accessories and handle made of Aluminium 1 No. per each shutter and including installation of window system at site using anchor fasteners, Silicon sealant applied at the Outer frame corners inclusive of conveyance of all materials accessories, labour charges, and erection at site with complete finished item of work for ii) Centre Shutter Sliding: centre shutter frame made of section of size 20mm x 47mm should be fitted with 5 mm thick plain float glass of reputed make. The supporting guide section of size 15mm x 19mm of 0.58mm thick fixed horizontally at top and bottom of shutter frame and slides along the bottom and top guide tracks made of sections size 24mm x 20mm of 0.58mm thick and 29mm x 20mm of 0.58mm thick and iii) Centre Fly mesh Shutter Sliding: Section for Fly mesh Shutter frame should be of size 20mm x 40mm of 0.58mm thick and fitted with SS mesh (304 Grade). The supporting guide section of size 29mm x 20mm of 0.58mm thick at the bottom and 15mm x 19mm of 0.58mm thick at the top fixed horizontally to the Fly mesh frame and slides along the bottom and top guide tracks made of sections size 20mm x 20mm of 0.58mm and 29mm x 20mm of 0.58mm.</p>		
592	TBSC-M.II-06	<p>Providing and fixing of Three shutter Sliding Windows made of Galvanized Steel as per IS 513, D quality, galvanized as per IS 277 powder coated with Pure polyester powder and thickness of 0.8 mm for Outer Frame and 0.58 mm thickness for Sliding Shutter Section, with two integrated guide tracks of 12mm width and 24mm deep for provision to slide the Shutter / sash frame and facilitates with a water drain outlet component made of PVC and the shutter frame fitted with 5mm thick plain float glass of reputed make and fixed with EPDM weathering seal resistant accessories and handle made of Aluminium 1 No. per each shutter and including installation of window system at site using anchor fasteners, Silicon sealant applied at the Outer frame corners inclusive of</p>	1 Sqm	5,942.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		conveyance of all materials accessories, labour charges, and erection at site with complete finished item of work for Window with 3 shutters (Centre fixed shutter / Centre sliding shutter / centre Fly mesh shutter) and without Grill Window made of Outer Frame of size 90mm x 50mm. i) Centre Shutter Fixed: centre shutter frame made of section with size 20mm x 47mm of 0.58mm thick should be fitted with 5mm thick plain float glass of reputed make, EPDM gasket all around the glass and fixed to the Outer Frame with the supporting section of size 29mm x 20mm of 0.58mm thick fixed horizontally on top and bottom of the shutter frame.		
593	TBSC-M.II-07	Providing and fixing of Three shutter Sliding Windows made of Galvanized Steel as per IS 513, D quality, galvanized as per IS 277 powder coated with Pure polyester powder and thickness of 0.8 mm for Outer Frame and 0.58 mm thickness for Sliding Shutter Section, with two integrated guide tracks of 12mm width and 24mm deep for provision to slide the Shutter / sash frame and facilitates with a water drain outlet component made of PVC and the shutter frame fitted with 5mm thick plain float glass of reputed make and fixed with EPDM weathering seal resistant accessories and handle made of Aluminium 1 No. per each shutter and including installation of window system at site using anchor fasteners, Silicon sealant applied at the Outer frame corners inclusive of conveyance of all materials accessories, labour charges, and erection at site with complete finished item of work for Window with 3 shutters (Centre fixed shutter / Centre sliding shutter / centre Fly mesh shutter) and without Grill Window made of Outer Frame of size 90mm x 50mm. ii) Centre Shutter Sliding: centre shutter frame made of section with size 20mm x 47mm of 0.58mm thick should be fitted with 5 mm thick plain float glass of reputed make. The supporting guide section of size 15mm x 19mm of 0.58mm thick fixed horizontally at top and bottom of shutter frame and slides along the bottom and top guide tracks made of sections size 24mm x 20mm of 0.58mm thick and 29mm x 20mm of 0.58mm thick.	1 Sqm	6,502.00
594	TBSC-M.II-08	Providing and fixing of Three shutter Sliding Windows made of Galvanized Steel as per IS 513, D quality, galvanized as per IS 277 powder coated with Pure polyester powder and thickness of 0.8 mm for Outer Frame and	1 Sqm	6,502.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		<p>0.58 mm thickness for Sliding Shutter Section, with two integrated guide tracks of 12mm width and 24mm deep for provision to slide the Shutter / sash frame and facilitates with a water drain outlet component made of PVC and the shutter frame fitted with 5mm thick plain float glass of reputed make and fixed with EPDM weathering seal resistant accessories and handle made of Aluminium 1 No. per each shutter and including installation of window system at site using anchor fasteners, Silicon sealant applied at the Outer frame corners inclusive of conveyance of all materials accessories, labour charges, and erection at site with complete finished item of work for Window with 3 shutters (Centre fixed shutter / Centre sliding shutter / centre Fly mesh shutter) and without Grill Window made of Outer Frame of size 90mm x 50mm. iii) Centre Fly mesh Shutter Sliding: Section for Fly mesh shutter frame should be of size 20mm x 40mm and fitted with SS mesh (304 Grade). The supporting guide section of size 29mm x 20mm of 0.58mm thick at the bottom and 15mm x 19mm of 0.58mm thick at the top fixed horizontally to the Fly mesh frame and slides along the bottom and top guide tracks made of sections size 20mm x 20mm of 0.58mm thick and 29mm x 20mm of 0.58mm thick.</p>		
595	TBSC-M.II-09	<p>Supplying and fixing of Unplasticized Poly Vinyl Chloride (UPVC) 2 Track-2 Panel Sliding windows duly manufactured using UPVC reinforced profiles(Composition of profile shall consists a minimum of 5.5 PHR of TiO<sub>2</sub> and not more than 12 PHR of CaCo<sub>3</sub> for every 100 parts of PVC resin) of (62 mm x 60 mm)/(60 mm x 45 mm) x 2.20 mm for outer frames, (66 mm x 38 mm)/(58 mm x 39 mm) x 2.20 mm for sliding shutter frames capable of mounting single glazing system, structurally reinforced with hot dip galvanized up to 50 microns of minimum thickness of 1.0/1.2 mm prefabricated &amp; welded through fusion welding. The window sash shall be fitted with 5 mm thick clear float glass of reputed make duly fixed with Grey colour TPV Gasket for sash &amp; Glazing bead shall be co-extruded with Grey colour soft PVC. System shall have single point locking with Touch Lock and the system is to be installed at the site using anchor fasteners, silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials, accessories,</p>	1 Sqm	6,818.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		labour charges for transportation, erection at site complete for finished item of work.		
596	TBSC-M.II-10	Supplying and fixing of Unplasticized Poly Vinyl Chloride (UPVC) 3 track sliding windows with mesh shutter provision - (only 2-glass shutters) duly manufactured using UPVC reinforced profiles (Composition of profile shall consists a minimum of 5.5 PHR of TiO <sub>2</sub> and not more than 12 PHR of CaCo <sub>3</sub> for every 100 parts of PVC resin) of (80 mm x 52 mm)/(94 mm x 45 mm) x 2.20 mm for outer frames, (54 mm x 38 mm)/(39 mm x 58 mm) x 2.20 mm for sliding shutter frames capable of mounting single glazing system, structurally reinforced with hot dip galvanized up to 50 microns of minimum thickness of 1.0/1.2 mm prefabricated & welded through fusion welding. The window sash shall be fitted with 5 mm thick clear float glass of reputed make duly fixed with Grey colour TPV Gasket for sash & Glazing bead shall be co-extruded with Grey colour soft PVC. System shall have single point locking with Touch Lock and the system is to be installed at the site using anchor fasteners, silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site complete for finished item of work	1 Sqm	6,396.00
597	TBSC-M.II-11	Supplying and fixing of Unplasticized Poly Vinyl Chloride (UPVC) 3 track sliding windows with mesh shutter - (2-glass shutters and 1-mesh shutter) duly manufactured using UPVC reinforced profiles (Composition of profile shall consists a minimum of 5.5 PHR of TiO <sub>2</sub> and not more than 12 PHR of CaCo <sub>3</sub> for every 100 parts of PVC resin) of (94 mm x 45 mm)/(80 mm x 52 mm) x 2.20 mm for outer frames, (58 mm x 39 mm)/(54 mm x 38 mm) x 2.20 mm for sliding shutter frames capable of mounting single glazing system structurally reinforced with hot dip galvanized up to 50 microns of minimum thickness of 1.0/1.2 mm prefabricated & welded through fusion welding. The window sash shall be fitted with 5 mm thick clear float glass of reputed make and mesh shutter frame shall be (42 mm x 25 mm)/(52 mm x 21.5 mm) x 2.0 mm fitted with Vinyl Coated Fibre mesh- on rollers/ pulley duly fixed with Grey colour TPV Gasket for sash & Glazing bead shall be co-extruded with Grey colour soft PVC. System shall have single point locking with Touch Lock and the system is to be installed at the site using	1 Sqm	7,119.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		anchor fasteners, silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site complete for finished item of work.		
598	TBSC-M.II-12	<b>DELETED</b>		
599	TBSC-M.II-13	Providing and Fixing Pre painted Steel Sliding Windows / Doors - 3 track sliding window /doors shutter with mesh shutter - (2 - glass shutters and 1 - mesh shutter) fabricated from Roll formed sections made of galvanized Steel colour coated/powder coated (Base Steel as per IS 513 'D' quality, galvanized as per IS 277 with zinc of 120 GM/Sq.mtr) with total coated thickness of 0.58mm. Primer coat with epoxy primer of 5-7 microns thick, finish painted with a polyester paint of 12-16 microns thick and back coated with Alkyd backer of 5-7 microns or powder coated with pure polyester powder up to 50-60 microns thick. Section for external frame should be of 44 x 107mm .Section for glass shutter and mesh shutter in case of door should be of 35 x 67 mm Section for euro groove should be 25 x 31mm (Aluminium/ Plastic) (in case of window sections should be 35 x 49 mm and 25 x 24 mm and 30 x 41 mm) and Lap Strip should be of 39 x 41mm (30 x 41 mm & Touch lock for window ) (Aluminium/ Plastic. The doors/ windows should be paneled with 5mm thick plain float glass. Corner bracket for internal and external frame made of glass filled nylon. Gaskets are to be made of Ethyl Propylene Diamine Monomer (EPDM).The sections are to be cut to length, joined and assembled by means of corner bracket. The above frames should be fixed to the concrete/masonry walls by means of self-expanding brackets & screws including 10mm square guard bars with 6" pitch (152.4mm) (in case of windows only) and all Taxes complete for finished item of work.	1 Sqm	8,000.00
600	TBSC-M.II-14	Supplying and fixing of Unplasticized Poly Vinyl Chloride (UPVC) 2 Track-2 Panel Sliding windows duly manufactured using UPVC reinforced profiles of 60 mm x 49 mm x 2.20 mm for outer frames, 62 mm x 41 mm x 2.20 mm for sliding shutter frames capable of mounting single glazing system, structurally reinforced with 30 mm 15 mm x 1.5 mm with hot dip galvanized up to 50 microns of minimum thickness of 1.0/1.2 mm prefabricated & welded through fusion welding. The window sash shall be fitted with 5 mm thick clear float glass of reputed make	1 Sqm	7,013.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		duly fixed with Grey colour TPV Gasket for sash & Glazing bead shall be co-extruded with Grey colour soft PVC. System shall have single point locking with Touch Lock and the system is to be installed at the site using anchor fasteners, silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site complete for finished item of work.		
601	TBSC-M.II-15	Supplying and fixing of Unplasticized Poly Vinyl Chloride (UPVC) 2 Track-2 Panel Sliding windows with mesh duly manufactured using UPVC reinforced profiles of 91 mm x 49 mm x 2.20 mm for outer frames, 62 mm x 41 mm x 2.20 mm for sliding shutter frames capable of mounting single glazing system, structurally reinforced with 30 mm 15 mm x 1.5 mm with hot dip galvanized up to 50 microns of minimum thickness of 1.0/1.2 mm and the shutter of fly screen with fibre mesh shall be made of size 21mm x 58mm extruded uPVC window profile section of white colour having outer wall thickness of 2.2mm ( $\pm$ 0.3mm) provided with reinforcement of minimum 1.5mm thick G/J/U/S/O type GI section duly mitred cut and thermal welded at all corners and prefabricated & welded through fusion welding. The window sash shall be fitted with 5 mm thick clear float glass of reputed make & Glazing bead shall be co-extruded with Grey colour soft PVC. System shall have single point locking with Touch Lock and the system is to be installed at the site using anchor fasteners, silicon rubber sealant, easy glazing/ deglazing at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site complete for finished item of work.	1 Sqm	8,118.00
<b>III</b>	<b>SUB-SECTION</b>	<b>VENTILLATORS</b>		
602	TBSC-M.III-01	Supply and fixing of pre-painted steel top hung and fixed louvered ventilators made of pre - painted steel as per IS 513 of -0.58 mm thick 'D' quality, galvanized as per IS 277, finish painted with a polyester paint & 4 mm pinhead glass for ventilators with EPDM Gasket with handle made of high grade aluminium powder coated and nylon receiver, corner brackets made of CRCA with Zinc Phosphate, Mullion caps made of glass filled nylon, frames fixed to the concrete /masonry wall by means of self-expanding screws including 10 mm square guard bars with 6 pitch complete for finished item of work for (i) Ventilators: Top Hung 2 '0 x 2'-0	1 Sqm	7,388.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		(609.6x609.6mm) outer frame section size of 46mm x 52 mm shutter frame section size of 46mm x 46 mm and (ii) Ventilators: Top Hung 4'-0 x 2'-0 (1219.2x609.6mm) outer frame section size of 46 x 52 m shutter frame section size of 46 x 46 mm Mullion section size of 46 x 70 mm and (iii) Ventilators: Top Hung 4'-0 x 3'-0 (1219.2x914.4mm) outer frame section size of 46 x 52m m shutter frame section size of 46 x 46 mm Mullion section size of 46 x 70 mm		
603	TBSC-M.III-02	Supply and fixing of pre-painted steel top hung and fixed louvered ventilators made of pre - painted steel as per IS 513 of -0.58 mm thick 'D' quality, galvanized as per IS 277, finish painted with a polyester paint & 4 mm pinhead glass for ventilators with EPDM Gasket with handle made of high grade aluminium powder coated and nylon receiver, corner brackets made of CRCA with Zinc Phosphate, Mullion caps made of glass filled nylon, frames fixed to the concrete /masonry wall by means of self-expanding screws including 10 mm square guard bars with 6 pitch complete for finished item of work for (i) Ventilators: Fixed louvers 2'-0 x 2'-0 (609.6x609.6mm)(Box section) outer frame section size of 33 x 56 mm and (ii) Ventilators: Fixed louvers 4'-0 x 2'-0 (1219.2 x 609.6 mm) (Box section) outer frame section size of 33 x 56 mm Mullion section size of 33 x 56 mm and (iii) Ventilators: Fixed louvers 4'-0 x 3'-0 (1219.2 x 914.4 mm) (Box section) outer frame section size of 33 x 56 mm Mullion section size of 33 x 56 mm	1 Sqm	5,054.00
604	TBSC-M.III-03	Providing and fixing of top hung Ventilators made of pre-painted steel as per IS 513 of 0.80 mm thick galvanized as per IS 277 with a polyester paint with 1 No. of High grade nylon latch handle, window stopper, 2 nos. of with MS Powder coated /SS ball bearing butt Hinges provided per shutter and fitted with 4 mm thick plain float glass with rubber gaskets including fixing the frames in concrete/masonry wall by means of self-expanding screws, Including 10 mm Square guard bars with 6" (152.4mm) pitch etc., complete for finished item of work for (i) Single open able ventilator shutter size of 2' 0" x 2' 0" (609.6 x 609.6mm) outer frame section size of 80 x 45mm, shutter frame section size of 52 x 25mm thick and (ii) Double open able ventilator shutter Size of 4' 0" x 2' 0" (1219.2mm x 609.6mm) outer frame section size of 80 x 45mm,shutter	1 Sqm	6,512.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		frame section size of 52 x 25mm, vertical mullion section size of 80 x 60 mm and (iii) Double open able fix shutter size of 4'0" x 3'0" (1219.2mm x 914.4mm) outer frame section size of 80 x 45mm , shutter frame section size of 52 x 25 mm ,Vertical mullion section size of 80 x 60 mm		
605	TBSC-M.III-04	Providing and fixing of louvered Ventilators made of pre-painted steel as per IS 513 of 0.80 mm thick galvanized as per IS 277 with a polyester paint with and fitted with 4 mm thick plain float glass including fixing the frames in concrete/masonry wall by means of self-expanding screws, etc., complete for finished item of work for (i) Single fixed Louvers Ventilator size of 2' 0" x 2' 0" (609.6 x 609.6mm) outer frame box section size of 80 x 45mm and (ii) Double fixed Louvers ventilator Size of 4' 0" x 2' 0" (1219.2mm x 609.6mm) outer frame box section size of 80 x 45mm, vertical mullion section size of 80 x 60 mm and (iii) Double fixed Louvers Ventilator size of 4'0" x 3'0" (1219.2mm x 914.4mm) outer frame box section size of 80 x 45mm , Vertical mullion section size of 80 x 60 mm	1 Sqm	4,459.00
606	TBSC-M.III-05	Providing and fixing of top hung Ventilator with fly mesh made of pre-painted steel as per IS 513 of 0.80 mm thick galvanized as per IS 277 with Zinc, finish painted with a polyester paint, section for fly-shutter of 0.6 mm thick and fitted with stainless steel 32 gauge fly mesh of 304 grade and mullions to have double rebate for glazed shutter and fly-shutter with a provision for guard bars/grills and 1 No. of High grade nylon latch handle, window stopper, 2 nos. of with MS Powder coated /SS ball bearing butt Hinges provided per shutter and windows fitted with 4 mm thick plain float glass with rubber gaskets including fixing the frames in concrete/masonry wall by means of self-expanding screws, Including 10 mm Square guard bars with 6" (152.4mm) pitch etc., complete for finished item of work for (i) Single open able ventilator shutter window size of 2' 0" x 2' 0" (609.6 x 609.6mm) outer frame section size of 100 x 45mm, Glazed and fly mesh shutter frame section size of 52 x 25mm thick and (ii) Double open able ventilator shutter window Size of 4' 0" x 2' 0" (1219.2mm x 609.6mm) outer frame section size of 100 x 45mm, Glazed and fly mesh shutter frame section size of 52 x 25mm, vertical mullion section size of 100 x	1 Sqm	8,056.00



Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		60 mm and (iii) Double open able fix shutter window size of 4'0" x 3'0" (1219.2mm x 914.4mm) outer frame section size 100 x 45mm , Glazed and fly mesh shutter frame section size 52 x 25 mm ,Vertical mullion section size of 100 x 60 mm		
607	TBSC-M.III-06	Providing and fixing of top hung Ventilator with fly mesh made of pre-painted steel as per IS 513 of 0.80 mm thick galvanized as per IS 277 with Zinc, finish painted with a polyester paint, section for fly-shutter of 0.6 mm thick and fitted with stainless steel 32 gauge fly mesh of 304 grade and mullions to have double rebate for glazed shutter and fly-shutter with a provision for guard bars/grills and 1 No. of High grade nylon latch handle, window stopper, 2 nos. of with MS Powder coated /SS ball bearing butt Hinges provided per shutter and windows fitted with 4 mm thick plain float glass with rubber gaskets including fixing the frames in concrete/masonry wall by means of self-expanding screws, Including 10 mm Square guard bars with 6" (152.4mm) pitch etc., complete for finished item of work for (i) Single fixed Louvers Ventilator window size of 2' 0" x 2' 0" (609.6 x 609.6mm) outer frame box section size of 100 x 45mm, fly mesh shutter frame section size 52 x 25 mm and (ii) Double fixed Louvers ventilator window Size of 4' 0" x 2' 0" (1219.2mm x 609.6mm) outer frame box section size of 100 x 45mm, fly mesh shutter frame section size 52 x 25 mm, vertical mullion section size of 100 x 60 mm and (iii) Double fixed Louvers Ventilator window size of 4'0" x 3'0" (1219.2mm x 914.4mm) outer frame box section size 100 x 45mm , fly mesh shutter frame section size 52 x 25 mm Vertical mullion section size of 100 x 60 mm	1 Sqm	5,428.00
608	TBSC-M.III-07	Providing, supplying & fixing of Fixed Louvered Ventilator made out of multi chambered uPVC sections with Glazing bead shall be co-extruded with Grey colour soft PVC. having isolated drainage and reinforced with Galvanized Iron profiles throughout the window. The outer frame having an overall size of 60 mm x 55 mm x 2.40 with reinforcement of 1 mm thickness and Mullion with overall size of 74 mm x 60 mm x 2.40 mm with reinforcement of 1 mm thickness. (Composition of profile shall consists a minimum of 5.5 PHR of TiO2 and not more than 12 PHR of CaCo3 for every 100 parts of PVC resin).Ventilator shall be provided with	1 Sqm	6,407.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		4.5 mm Pin Head glass, standard hardware. Wall thickness of frame & Mullion shall be 2.4 mm., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site complete for finished item of work.		
609	TBSC-M.III-08	Providing, supplying & fixing of Top hung Ventilator With Exhaust Fan Provision made out of multi chambered uPVC sections with TPV Gasket for sash & Glazing bead shall be co-extruded with Grey colour soft PVC and reinforced with Galvanized Iron profiles throughout the window. The outer frame having an overall size of 60mm x 55 mm x 2.40 mm with reinforcement of 1 mm thickness, Mullion with overall size of 74 mm x 60 mm x 2.40 mm with reinforcement of 1 mm thickness and Sash with overall size of 75 mm x 60 mm x 2.40 mm with reinforcement of 1.0/1.2 mm thickness. (Composition of profile shall consists a minimum of 5.5 PHR of TiO2 and not more than 12 PHR of CaCo3 for every 100 parts of PVC resin).Glazing bead for fixing of glass shall be of size 34 x 20 mm coextruded with soft PVC gasket. Ventilator shall be provided with 4.5 mm Pin Head glass, standard hardware, single point locking using cockspur handle and friction stays. Wall thickness of frame, mullion and sash shall be 2.4 mm., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site complete for finished item of work.	1 Sqm	9,014.00
<b>N</b>	<b>SECTION</b>	<b>STRUCTURAL GLAZING &amp; CURTAIN WALLING</b> (Excluding taxes but including cost of loading, cost of conveyance, unloading & stacking)		
<b>I</b>	<b>SUB-SECTION</b>	<b>FIXED GLAZING</b>		
610	TBSC-N.I-01	Supplying and fixing of curtain Glazing made of pre painted steel as per IS 513 of 0.58 mm thick D quality, galvanized as per IS 277 Primer coated with epoxy, finish painted with a polyester paint using the section for outer frame of 46 x 52 mm, section for mullion of 46 x 70 mm and section for beading of 18 x 25 mm and the glazing with 5 mm thick plain float glass fitted with EPDM gaskets including handle made of high grade Aluminium powder coated and nylon receiver, corner brackets made of CRCA with zinc phosphating, mullion caps made of Glass filled nylon including fixing the frames in the concrete / masonry wall with self-expanding screws, etc., complete for finished item.- Fixed Glazing 2'-0 x 2'-0 (609.6x609.6mm) and Fixed Glazing	1 Sqm	6,414.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		2'-0 x 3'-0 (609.6x914.4mm)		
611	TBSC-N.I-02	Supplying and fixing of curtain Glazing made of pre painted steel as per IS 513 of 0.58 mm thick D quality, galvanized as per IS 277 Primer coated with epoxy, finish painted with a polyester paint using the section for outer frame of 46 x 52 mm, section for mullion of 46 x 70 mm and section for beading of 18 x 25 mm and the glazing with 5 mm thick plain float glass fitted with EPDM gaskets including handle made of high grade Aluminium powder coated and nylon receiver, corner brackets made of CRCA with zinc phosphating, mullion caps made of Glass filled nylon including fixing the frames in the concrete / masonry wall with self-expanding screws, etc., complete for finished item.- Fixed Glazing 3'-0 x 3'-0 (914.4x914.4mm) and Fixed Glazing 3'-0 x 4'-0 (914.4x1219.2mm)	1 Sqm	5,443.00
612	TBSC-N.I-03	Supplying and fixing of Unplasticized Poly Vinyl Chloride (UPVC) Fixed Glazing - 48 series duly manufactured using UPVC reinforced profiles of 60 mm x 48 mm x 2.25 mm for outer frames and the mullion sections are of 60 mm x 76 mm x 2.25 mm frames are structurally reinforced with hot dip galvanized up to 50 microns of minimum thickness of 1.2 mm the sash shall be fitted with 5 mm thick clear float glass of reputed make duly fixed with EPDM weathering seal resistant including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site with templates for casement sizing complete for finished item of work	1 Sqm	3,143.00
613	TBSC-N.I-04	Supplying and fixing of Unplasticized Poly Vinyl Chloride (UPVC) Fixed Glazing duly manufactured using UPVC reinforced profiles of 60 mm x 56 mm x 2.25 mm for outer frames and the mullion sections are of 60 mm x 70 mm x 2.25 mm frames are structurally reinforced with hot dip galvanized up to 50 microns of minimum thickness of 1.2 mm the sash shall be fitted with 5 mm thick clear float glass of reputed make duly fixed with EPDM weathering seal resistant including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site with templates for casement sizing complete for finished item of work	1 Sqm	3,756.00
614	TBSC-N.I-05	Supplying and fixing of Unplasticized Poly Vinyl Chloride (UPVC) Fixed Glazing/ Window duly manufactured using UPVC reinforced profiles of 60 mm x 60 mm x 2.60 mm for frames and the mullion sections are of 60 mm	1 Sqm	4,710.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		x 82 mm x 2.60 mm frames are structurally reinforced with hot dip galvanized up to 50 microns of size 35 mm x 28 mm of thickness 1.5 mm the sash shall be fitted with 5 mm thick clear float glass of reputed make duly fixed with EPDM weathering seal resistant and glazing bead 34.5 mm x 18 mm including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site with templates for casement sizing complete for finished item of work		
<b>II</b>	<b>SUB-SECTION</b>	<b>STRUCTURAL GLAZING</b>		
615	TBSC-N.II-01	Providing and fixing Structural Glazing fabricated from Roll formed sections made of Pre-painted Steel / Powder coated base steel as per IS 513 of 'D' quality, galvanized as per IS 277 and the glass holding section made of 304 grade stainless steel of 0.58 mm thick galvanized steel section as stiffeners inside the colour coated steel powder coated sections as per the design requirement & calculations to suit wind pressures as given in IS: 875, the primer coat with epoxy primer, finish painted with a polyester paint or powder coated with pure polyester powder and the vertical section of 50 mm x 99 mm x 0.72 mm, 33 mm x 56 mm x 0.72 mm for frame horizontal section, stiffener section of 47 mm x 97 mm x 1 mm, cover profiles sections of 20 mm x 58 mm x 0.58 mm, glass holding section of 37 mm x 37 mm & 37 mm x 18 mm including fixing 5mm thick Ocean Blue reflective glass, brackets made of CRCA powder coated/Electroplated to connect vertical to horizontal, vertical to slab, to fix verticals at top & bottom as per site requirement and EPDM gasket, U.V. resistant silicon sealant including fixing in concrete/masonry wall with self-expanding cap & screws inclusive of cost and conveyance of all materials to site, all labour charges, incidental charges, cost of all consumables etc. and fixing charges excluding scaffolding complete for finished item of work.	1 Sqm	7,776.00
616	TBSC-N.II-02	Providing and fixing Top Hung shutters in Structural Glazing fabricated from Roll formed sections made of Pre-painted Steel / Powder coated base steel as per IS 513 of 'D' quality, galvanized as per IS 277 and the glass holding section made of 304 grade stainless steel of 0.58 mm thick, duly providing stiffeners inside the colour coated steel/powder coated sections as per the design requirement, calculations to suit wind	1 Sqm	6,284.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		pressures as given in IS 875 and primer coat with epoxy primer and powder coated with pure polyester powder up to 50-60 microns thick and the outer frame of 20 mm x 58 mm x 0.58 mm, shutter sections of 57 mm x 33 mm x 0.72 mm, stiffener sections of 55 mm x 31 mm x 1mm, hinges - 2 Nos for each shutter and aluminium Stays - 2 Nos. for each shutter, aluminium Handle - 1 no. for each shutter including cost and conveyance of all materials to site, all labour charges, incidental charges, cost of all consumables etc. and fixing charges etc excluding scaffolding complete for finished item of work		
<b>III</b>	<b>SUB-SECTION</b>	<b>CURTAIN WALLING</b>		
617	TBSC-N.III-01	Supplying and fixing of Unplasticized Poly Vinyl Chloride (UPVC) Curtain Walling systems duly manufactured using UPVC reinforced profiles of 60 mm x 56 mm x 2.5 mm for outer frames, 60 mm x 70 mm x 2.5 mm for casement shutter frames and the mullion sections are of 60 mm x 70 mm x 2.5 mm or 60 mm x 62 mm x 2.5 mm for sliding shutter outer frames and 77 mm x 38 mm x 2.5 mm for sliding shutter frames structurally reinforced with hot dip galvanized up to 50 microns of minimum thickness of 1 mm the sash shall be fitted with 5 mm thick clear float glass of reputed make duly fixed with EPDM weathering seal resistant and accessories for casement window - friction stay hinges of stainless steel grade 304- 2 Nos., per sash, handle with mazak alloy casting 1 No. per sash, multipoint locking system suitably concealed 1 No., per sash provided with raiser wedges for smooth operation for sliding window - clipping locking system 1 No. made of aluminium including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site with templates for casement sizing excluding scaffolding complete for finished item of work	1 Sqm	6,694.00
<b>P</b>	<b>SECTION</b>	<b>FIXTURES FOR DOORS &amp; WINDOWS</b>		
		(Excluding taxes but including cost of loading, cost of conveyance, unloading & stacking)		
<b>I</b>	<b>SUB-SECTION</b>	<b>TOWER BOLTS</b>		
618	TBSC-P.I-01	Brass Tower Bolt-10 mm Bolt (IS:204) 100 mm Long	Each	170.00
619	TBSC-P.I-02	Brass Tower Bolt-10 mm Bolt (IS:204) 150 mm Long	Each	248.00
620	TBSC-P.I-03	Brass Tower Bolt-10 mm Bolt (IS:204) 200 mm	Each	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		Long		331.00
621	TBSC-P.I-04	Brass Tower Bolt-10 mm Bolt (IS:204) 250 mm Long	Each	411.00
622	TBSC-P.I-05	Brass Tower Bolt-10 mm Bolt (IS:204) 300 mm Long	Each	506.00
623	TBSC-P.I-06	Aluminium Tower Bolt-10 mm Bolt (IS:204) 75 mm Long	Each	47.00
624	TBSC-P.I-07	Aluminium Tower Bolt-10 mm Bolt (IS:204) 100 mm Long	Each	52.00
625	TBSC-P.I-08	Aluminium Tower Bolt-10 mm Bolt (IS:204) 150 mm Long	Each	70.00
626	TBSC-P.I-09	Aluminium Tower Bolt-10 mm Bolt (IS:204) 200 mm Long	Each	83.00
627	TBSC-P.I-10	Aluminium Tower Bolt-10 mm Bolt (IS:204) 250 mm Long	Each	101.00
628	TBSC-P.I-11	Aluminium Tower Bolt-10 mm Bolt (IS:204) 300 mm Long	Each	115.00
629	TBSC-P.I-12	Aluminium Tower Bolt-10 mm Bolt (IS:204) 350 mm Long	Each	303.00
630	TBSC-P.I-13	Aluminium Tower Bolt-10 mm Bolt (IS:204) 450 mm Long	Each	395.00
631	TBSC-P.I-14	MS-Powder Coated Tower Bolt-10 mm Bolt (IS:204) 100 mm Long	Each	26.00
632	TBSC-P.I-15	MS-Powder Coated Tower Bolt-10 mm Bolt (IS:204) 150 mm Long	Each	37.00
633	TBSC-P.I-16	MS-Powder Coated Tower Bolt-10 mm Bolt (IS:204) 200 mm Long	Each	55.00
634	TBSC-P.I-17	MS-Powder Coated Tower Bolt-10 mm Bolt (IS:204) 250 mm Long	Each	72.00
635	TBSC-P.I-18	MS-Powder Coated Tower Bolt-10 mm Bolt (IS:204) 300 mm Long	Each	90.00
636	TBSC-P.I-19	Stainless Steel Tower Bolt-10 mm Bolt (IS:15833) 75 mm Long	Each	89.00
637	TBSC-P.I-20	Stainless Steel Tower Bolt-10 mm Bolt (IS:15833) 100 mm Long	Each	103.00
638	TBSC-P.I-21	Stainless Steel Tower Bolt-10 mm Bolt (IS:15833) 150 mm Long	Each	155.00
639	TBSC-P.I-22	Stainless Steel Tower Bolt-10 mm Bolt (IS:15833) 200 mm Long	Each	206.00
640	TBSC-P.I-23	Stainless Steel Tower Bolt-10 mm Bolt (IS:15833) 250 mm Long	Each	258.00
641	TBSC-P.I-24	Stainless Steel Tower Bolt-10 mm Bolt (IS:15833) 300 mm Long	Each	308.00
<b>II</b>	<b>SUB-SECTION</b>	<b>HINGES</b>		
642	TBSC-P.II-01	Brass Butt hinges (IS:205)- 75 mm Long	Each	70.00
643	TBSC-P.II-02	Brass Butt hinges (IS:205)- 100 mm Long	Each	229.00
644	TBSC-P.II-03	Brass Butt hinges (IS:205)- 125 mm Long	Each	278.00
645	TBSC-P.II-04	Brass Butt hinges (IS:205)- 150 mm Long	Each	366.00
646	TBSC-P.II-05	Aluminium Butt hinges (IS:205)- 75 mm Long	Each	52.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
647	TBSC-P.II-06	Aluminium Butt hinges (IS:205)- 100 mm Long	Each	68.00
648	TBSC-P.II-07	Aluminium Butt hinges (IS:205)- 125 mm Long	Each	81.00
649	TBSC-P.II-08	Aluminium Butt hinges (IS:205)- 150 mm Long	Each	98.00
650	TBSC-P.II-09	MS-Powder Coated Butt hinges (IS:205)- 75 mm Long	Each	12.00
651	TBSC-P.II-10	MS-Powder Coated Butt hinges (IS:205)- 100 mm Long	Each	23.00
652	TBSC-P.II-11	MS-Powder Coated Butt hinges (IS:205)- 125 mm Long	Each	33.00
653	TBSC-P.II-12	MS-Powder Coated Butt hinges (IS:205)- 150 mm Long	Each	42.00
654	TBSC-P.II-13	Deluxe window stay Aluminium	Each	138.00
655	TBSC-P.II-14	Brass Windows Stay	Each	214.00
656	TBSC-P.II-15	GI Powder Coated Friction stay hinges of 10" Long for windows	Each	224.00
657	TBSC-P.II-16	Continuous Piano Hinges Powder coated Mild steel as per IS-3818 : 1992 of nominal size 25 mm (B) of thickness 0.8 to 1.0 mm	1 RM	34.00
658	TBSC-P.II-17	Box hinges for cup boards	1 Each	44.00
659	TBSC-P.II-18	GI Powder Coated Friction stay hinges of 14" Long for windows	1 Each	315.00
660	TBSC-P.II-19	Stainless Steel Butt hinges (IS:12817)- 75 mm Long	Each	67.00
661	TBSC-P.II-20	Stainless Steel Butt hinges (IS:12817)- 100 mm Long	Each	98.00
662	TBSC-P.II-21	Stainless Steel Butt hinges (IS:12817)- 125 mm Long	Each	125.00
663	TBSC-P.II-22	Stainless Steel Butt hinges (IS:12817)- 150 mm Long	Each	156.00
<b>III</b>	<b>SUB-SECTION</b>	<b>DOOR HANDLES</b>		
664	TBSC-P.III-01	Aluminium Door Handles (IS:208) 75 mm Long	Each	47.00
665	TBSC-P.III-02	Aluminium Door Handles (IS:208) 100 mm Long	Each	55.00
666	TBSC-P.III-03	Aluminium Door Handles (IS:208) 125 mm Long	Each	78.00
667	TBSC-P.III-04	Aluminium Door Handles (IS:208) 150 mm Long	Each	92.00
668	TBSC-P.III-05	MS-Powder Coated Door Handles (IS:208) 125 mm Long	Each	33.00
669	TBSC-P.III-06	MS-Powder Coated Door Handles (IS:208) 150 mm Long	Each	48.00
670	TBSC-P.III-07	Brass fancy handles 150 mm	Each	320.00
671	TBSC-P.III-08	Brass fancy handles 200 mm	Each	433.00
672	TBSC-P.III-09	Brass fancy handles 250 mm	Each	781.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
673	TBSC-P.III-10	Brass fancy handles 300 mm	Each	996.00
674	TBSC-P.III-11	Brass fancy handles 450 mm	Each	1,558.00
675	TBSC-P.III-12	Keyless lockset for toilet doors with CP or PC knob handles (complete set)	Each	332.00
676	TBSC-P.III-13	Keyless lock set for toilet doors with brass knob handles	Each	878.00
677	TBSC-P.III-14	Hard Nylon Window Handle	Each	68.00
678	TBSC-P.III-15	Stainless Steel Door Handles 100 mm Long	Each	101.00
679	TBSC-P.III-16	Stainless Steel Door Handles 125 mm Long	Each	120.00
680	TBSC-P.III-17	Stainless Steel Door Handles 150 mm Long	Each	147.00
681	TBSC-P.III-18	Stainless Steel Door Handles 200 mm Long	Each	165.00
<b>IV</b>	<b>SUB-SECTION</b>	<b>ALDROPS</b>		
682	TBSC-P.IV-01	Brass Aldrops (IS:2681) 300 mm long	Each	1,223.00
683	TBSC-P.IV-02	Brass Aldrops (IS:2681) 350 mm long	Each	2,356.00
684	TBSC-P.IV-03	Brass Aldrops (IS:2681) 450 mm long	Each	3,354.00
685	TBSC-P.IV-04	Aluminium Aldrops (IS:2681) 200 mm long	Each	175.00
686	TBSC-P.IV-05	Aluminium Aldrops (IS:2681) 250 mm long	Each	202.00
687	TBSC-P.IV-06	Aluminium Aldrops (IS:2681) 300 mm long	Each	221.00
688	TBSC-P.IV-07	MS-Powder Coated Aldrops (IS:2681) 200 mm long	Each	111.00
689	TBSC-P.IV-08	MS-Powder Coated Aldrops (IS:2681) 250 mm long	Each	144.00
690	TBSC-P.IV-09	MS-Powder Coated Aldrops (IS:2681) 300 mm long	Each	173.00
691	TBSC-P.IV-10	Stainless Steel Aldrops (IS:15834) 200 mm long	Each	248.00
692	TBSC-P.IV-11	Stainless Steel Aldrops (IS:15834) 250 mm long	Each	293.00
693	TBSC-P.IV-12	Stainless Steel Aldrops (IS:15834) 300 mm long	Each	322.00
<b>V</b>	<b>SUB-SECTION</b>	<b>LATCHES</b>		
694	TBSC-P.V-01	Brass latch heavy 300 mm	Each	614.00
695	TBSC-P.V-02	Brass latch heavy 350 mm	Each	706.00
696	TBSC-P.V-03	Brass latch heavy 450 mm	Each	931.00
697	TBSC-P.V-04	Aluminium Flat Latches: 200 mm long	Each	101.00
698	TBSC-P.V-05	Aluminium Flat Latches: 250 mm long	Each	111.00



Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
699	TBSC-P.V-06	Aluminium Flat Latches: 300 mm long	Each	120.00
700	TBSC-P.V-07	MS-Powder Coated Flat Latches: 250 mm long	Each	56.00
701	TBSC-P.V-08	MS-Powder Coated Flat Latches: 300 mm long	Each	70.00
<b>VI</b>	<b>SUB-SECTION</b>	<b>DOOR CLOSURES</b>		
702	TBSC-P.VI-01	Providing and fixing Cast Iron Body Bottle Type Hydraulic Door Closer (IS: 3564) with double speed adjustment, with necessary accessories and screws etc. complete	Each	1,005.00
703	TBSC-P.VI-02	Providing and fixing Aluminium Extruded Section Body Tubular Type Hydraulic Door Closer (IS: 3564) with double speed adjustment with necessary accessories and screws etc. complete (Type-1: for width of doors up to 700 mm)	Each	1,162.00
704	TBSC-P.VI-03	Providing and fixing Aluminium Extruded Section Body Tubular Type Hydraulic Door Closer (IS: 3564) with double speed adjustment with necessary accessories and screws etc. complete (Type-2: for width of doors 701 to 850 mm)	Each	1,244.00
705	TBSC-P.VI-04	Providing and fixing Aluminium Extruded Section Body Tubular Type Hydraulic Door Closer (IS: 3564) with double speed adjustment with necessary accessories and screws etc. complete (Type-3: for width of doors 851 to 1000 mm)	Each	1,306.00
<b>VII</b>	<b>SUB-SECTION</b>	<b>FLOOR SPRINGS</b>		
706	TBSC-P.VII-01	Double action Stainless steel cover plate and cast body iron floor spring (IS 6315- Table-1)	Each	1,821.00
707	TBSC-P.VII-02	Double action Brass cover plate and cast brass body floor spring (IS 6315- Table-1)	Each	4,320.00
708	TBSC-P.VII-03	Providing and fixing double action brass cast hydraulic floor spring (IS:6315-Table 1) for doors including cost of cutting floors as required, embedding in floors and S.S./ Brass cover plates with brass pivot and single piece M.S. Sheet outer box with slide plate etc. complete (door weight capacity up to 130 Kgs)	Each	3,674.00
709	TBSC-P.VII-04	Providing and fixing double action brass cast hydraulic floor spring (IS:6315-Table 1) for doors including cost of cutting floors as required, embedding in floors and S.S. cover plates with brass pivot and single piece M.S. Sheet outer box with slide plate etc. complete (door weight capacity up to 80 Kgs)	Each	2,733.00
710	TBSC-P.VII-05	Providing of brass cast body Floor Spring IS: 6315 sleek in size with the S.S. / Brass Cover plates of Length 320 mm x Breadth 130 mm size along with the Top Patch, Bottom Patch, Door Lock and Pivot with Double Cylinder etc.	Each	11,914.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		complete for Heavy duty Glass doors.		
<b>VIII</b>	<b>SUB-SECTION</b>	<b>MORTICE LOCKS</b>		
711	TBSC-P.VIII-01	Heavy duty mortise lock 6/7 levers (IS:2209) with PC or CP handles complete set	Each	891.00
712	TBSC-P.VIII-02	Heavy duty mortise lock 6/7 levers (IS:2209) with brass heavy handles	Each	2,291.00
<b>IX</b>	<b>SUB-SECTION</b>	<b>OTHER ACCESSORIES</b>		
713	TBSC-P.IX-01	Brass Door Stoppers	Each	189.00
714	TBSC-P.IX-02	MS-Powder Coated - Door Stoppers	Each	48.00
715	TBSC-P.IX-03	Heavy duty Aluminium Door stopper	Each	61.00
716	TBSC-P.IX-04	Rubber/ Nylon door stop bushes	1 Each	11.00
717	TBSC-P.IX-05	Supply & fixing Mild Steel Powder coated drapery curtain rods (25.4 mm) 1" x 21 G with PVC rings	1 RM	122.00
718	TBSC-P.IX-06	Supply & fixing design drapery curtain rod bracket - brass/ stainless steel powder coated heavy duty	pair	431.00
719	TBSC-P.IX-07	Nylon rollers for sliding glasses/ aluminium windows	1 Each	15.00
720	TBSC-P.IX-08	MS Z Hold fasts - 300 mm long of 40 x 40 x 5 mm ISA	1 Each	34.00
721	TBSC-P.IX-09	Magnetic Catchers	1 Each	15.00
722	TBSC-P.IX-10	Supplying and fixing Aluminium Curtain Drapery rod of 25 mm dia not less than 1.0 mm thick powder coated with premium finish, including rings, screws etc., complete	1 RM	90.00
723	TBSC-P.IX-11	Supplying and fixing Stainless Steel Curtain Drapery rod of 25 mm dia 1.0 mm thick of 304 Grade steel powder coated with premium finish, including rings, screws etc., complete	1 RM	260.00
724	TBSC-P.IX-12	Supplying and fixing Brass Curtain Drapery rod of 25 mm dia not less than 1.0 mm thick powder coated with premium finish, including rings, screws etc., complete	1 RM	290.00
<b>Q</b>	<b>SECTION</b>	<b>CONSTRUCTION CHEMICALS &amp; ADMIXTURES</b>		
		Approved brands, area of application, dosage etc have been appended to this SoR for the guidance for preparation of estimates only. However, Literature for usage/ application of construction/ water proofing materials, epoxies etc, may be obtained from the manufacturers, while in execution.		
<b>I</b>	<b>SUB-SECTION</b>	<b>PLASTICIZERS</b>		
725	TBSC-Q.I-01	Concrete Plasticizers and Water reducing admixture Conforming to IS:9103-1999	1 Ltr	192.00
726	TBSC-Q.I-02	Early High Strength, High water retention, Poly carboxylic plasticizers Conforming to IS:9103-1999	1 Kg	135.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
727	TBSC-Q.I-03	High performance super plasticizer and water reducing admixture Conforming to IS: 9103-1999	1 Kg	91.00
728	TBSC-Q.I-04	Super plasticizer for high range water reducing admixture Conforming to IS: 9103-1999	1 Kg	101.00
729	TBSC-Q.I-05	Super plasticizer, high range water reducing and retarding admixture complying with IS: 9103-1999	1 Kg	111.00
730	TBSC-Q.I-06	Plasticizer for accelerator for sprayed concrete Conforming to IS: 9103-1999.	1Kg	82.00
731	TBSC-Q.I-07	High Early Strength Concrete Admixture for Road Repairs	1 Ltr	28.00
II	SUB-SECTION	<b>WATER PROOFING COMPOUNDS</b>		
732	TBSC-Q.II-01	Integral Cement Waterproofing Liquid Conforming to IS: 2645-2003	1 Ltr	201.00
733	TBSC-Q.II-02	High durable cementitious acrylic based waterproofing systems	1 Kg	129.00
734	TBSC-Q.II-03	Acrylic Polymer Elastomeric Cementitious Waterproof Coatings	1 Ltr	334.00
735	TBSC-Q.II-04	Single component, elastomeric waterproof membrane coating	1 Ltr	406.00
736	TBSC-Q.II-05	Quick setting, rapid hardening and water proofing compound Conforming to IS: I.S. 2645-2003	1 Ltr	77.00
737	TBSC-Q.II-06	Highly Flexible Waterproof Acrylic Elastomeric bituminous Blended Coatings	1 Ltr	286.00
738	TBSC-Q.II-07	Two part system of fibre reinforced Acrylic Cementitious Waterproofing coating.	Kg	138.00
739	TBSC-Q.II-08	High strength cellulose fibre reinforced acrylic elastomeric liquid membrane waterproof coating	Ltr	293.00
740	TBSC-Q.II-09	High Strength Acrylic Penetrative U,V. Resistant concrete road top coatings.	Ltr	322.00
741	TBSC-Q.II-10	High performance polyurethane blended with bituminous Membrane coating ( Complies with ASTM C - 836 )	Ltr	597.00
742	TBSC-Q.II-11	Nano Technology water based transparent silicon water repellent	Ltr	688.00
743	TBSC-Q.II-12	Providing and applying Brush bond ( two component acrylic polymer modified elastomeric waterproofing membrane which consists of Brush bond powder and Brush bond liquid acrylic emulsion) for a minimum 2mm thickness coating. (Work shall be executed as per manufacturer's specification and instructions.	Ltr	236.00
III	SUB-SECTION	<b>BONDING AGENTS/ ADHESIVES</b>		
744	TBSC-Q.III-01	Acrylic based Bonding adhesive	1 Ltr	143.00
745	TBSC-Q.III-02	Styrene butadiene rubber based bonding agent	1 Kg	430.00
746	TBSC-Q.III-03	Two Parts system of Epoxy Bonding adhesive Conforming to ASTM-C 881	1 Kg	830.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
747	TBSC-Q.III-04	Liquid Polymer additive for cement & concrete mixes	1 Ltr	229.00
748	TBSC-Q.III-05	Polymer cementitious additive for fixing tiles/ stones etc	1 Kg	207.00
749	TBSC-Q.III-06	Highly multipurpose Roads Grade concrete bonding agent	Ltr	207.00
750	TBSC-Q.III-07	Polymer Modified Adhesive mortar for jointing AAC Blocks/ Other Blocks	1 Kg	14.00
<b>IV</b>	<b>SUB-SECTION</b>	<b>ANTI-CORROSIVE AGENTS</b>		
751	TBSC-Q.IV-01	Acrylic based Anti-corrosive coating	1 Ltr	334.00
752	TBSC-Q.IV-02	Rust converter -rust encapsulating coating for steel	1 Ltr	458.00
753	TBSC-Q.IV-03	High range of reinforcement / steel protector against corrosion zinc rich epoxy resin primer	1 Kg	714.00
754	TBSC-Q.IV-04	Anti-corrosion CRPPC (Corrosion Resistant) inhibitive admixture	1 Lit	330.00
<b>V</b>	<b>SUB-SECTION</b>	<b>GROUTS</b>		
755	TBSC-Q.V-01	High Power Polyester Resin Anchor Grout Conforming to ASTM-827	1 Kg	286.00
756	TBSC-Q.V-02	Non-shrink Free flow high strength precision grout Conforming to BS 1881 Part 1161983.	1 Kg	33.00
757	TBSC-Q.V-03	Low viscosity Epoxy resin injection grout	1 Kg	763.00
758	TBSC-Q.V-04	Three component epoxy grout Conforming to IS: ASTM 827 (Three components)	1 Kg	154.00
759	TBSC-Q.V-05	Expansive aqua -reactive water barrier and grouting system.	1 Kg	989.00
<b>VI</b>	<b>SUB-SECTION</b>	<b>MISCELLANEOUS CHEMICALS</b>		
760	TBSC-Q.VI-01	Moulds / Shutter releasing oil	1 Ltr	139.00
761	TBSC-Q.VI-02	Non oxidizing, heavy duty metallic Floor Hardeners	1 Kg	36.00
762	TBSC-Q.VI-03	Non-metallic Floor Hardeners	1 Kg	30.00
763	TBSC-Q.VI-04	High Strength, Non shrink Micro Concrete for structural repair product.	1 Kg	35.00
764	TBSC-Q.VI-05	Structural graded polymer modified reinstatement concrete / mortar (Two Part System)	1 Kg	82.00
765	TBSC-Q.VI-06	Three Component high performance elastomeric mortar.	1 Kg	906.00
766	TBSC-Q.VI-07	Surface treatment crystalline product.	1 Kg	344.00
767	TBSC-Q.VI-08	Polyurethane Sealant. 600 ml tube	1 No	696.00
768	TBSC-Q.VI-09	Polysulphide Sealant.	1 Kg	430.00
769	TBSC-Q.VI-10	Acrylic Latex caulking compound.	1 Kg	320.00
770	TBSC-Q.VI-11	Fast setting cement based plugging compound	1 Kg	82.00
771	TBSC-Q.VI-12	Highly Flexible High Range Polyurethane	1 Ltr	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		surface coatings		620.00
772	TBSC-Q.VI-13	Coal Tar Epoxy	1 Kg	334.00
773	TBSC-Q.VI-14	Water Based Acrylic Blended High power curing compound	1 Kg	96.00
774	TBSC-Q.VI-15	Bituminous hot sealing compound	1 Kg	115.00
775	TBSC-Q.VI-16	Bitumen solution primer coating.	1 Kg	82.00
776	TBSC-Q.VI-17	Air Entraining Agent Conforming to IS: 9103-99	1 Ltr	115.00
777	TBSC-Q.VI-18	Imidacloprid 30.5% S.C diluted @ 2.1 ml of formulation in one Liter of water for the termite treatment in the buildings during pre and post construction stages as per current BIS standard practices (IS:6313 part II and III)	1 Lit	3,500.00
778	TBSC-Q.VI-19	Multifilament Polypropylene fibers of 6/12/18 mm length for Plastering, Screeds, all Precasting items	1 Kg	276.00
779	TBSC-Q.VI-20	Macro Synthetic fibers of 45mm length for CC Roads, Ground Supported Slabs, Pavements, Sprayed Concrete, Tunnel linings, Mining	1 Kg	413.00
780	TBSC-Q.VI-21	Steel Fibers of 35 mm length for CC Roads, Ground Supported Slabs, Pavements, Sprayed Concrete, Tunnel linings, Mining	1 Kg	92.00
781	TBSC-Q.VI-22	High strength, Acrylic blended dry colour mortar /concrete	1 Kg	45.00
782	TBSC-Q.VI-23	Providing post construction anti termite treatment by drilling 1/2 inch dia., holes at the edges of wall floor junction and pouring anti termite chemical (Imidacloprid 30.5 SC, 10.5 ml for 5 Liters of water as per IS 16131.) with a hand operated pressure pump until refusal or to a maximum of one liter per hole. Holes shall be sealed with cement mortar after treatment and providing spraying and injecting termiticides for treating and applying to doors, windows, frames, removing, crusting treating in Treatment along outside of foundations (i.e., Soil in contact with external walls around the building and Concrete or Masonry apron around the building), Treatment of soil under floors - Inside Building, Treatment to voids in masonry, Treatment at points of contact of woodwork, Treatment of Wood Work, Treatment of Electrical Fixtures, as directed in IS 6313 Part 3 2013 with preventive chemicals duly taking precautions for health hazards and safety measures for the occupants including all costs, conveyances of all materials and labour charges etc for finished item of work to the satisfaction of the Engineer-in-Charge. The plinth area of	1 Sqm	130.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		the building each floor shall be taken for the purpose of payment.		
<b>VII</b>	<b>SUB-SECTION</b>	<b>REPAIRING &amp; TREATMENT WORKS</b>		
783	TBSC-Q.VII-01	Providing Tar Felting roof repair with approved brand Tar Felt duly applying one coat of appropriate grade of bitumen in hot condition @ 0.2 Kg/1 Sqm of roof area, fixing tar felt (Conforming to IS 1322-1972 specification), applying second coat of appropriate grade of hot bitumen at 1.20 Kg / 1 Sqm of roof area and spreading course aggregate (sand) at 0.063 Cum per 1 Sqm of roof area finished item.	1 Sqm	289.00
784	TBSC-Q.VII-02	Providing waterproofing treatment by supplying and fixing synthetic membrane felt of 1.50 mm thickness, 2.25 Kg per Sq. Mtr. duly applying one coat of Bituminous Emulsion, first coat of bituminous grade 85/25, fix waterproofing membrane, applying second coat of bitumen grade 90/15 after sealing all the joints and abutments with a Gas torch and applying one coat of bituminous aluminium paint for heat resistance for finished item.	1 Sqm	401.00
785	TBSC-Q.VII-03	Providing and laying of 3mm thick app modified bitumen membrane treatment to the terrace duly [1]removing of existing tar felt. [2]cleaning of the surface from dirt, dust and other contaminations. [3]application of one coat of Bitumen primer [4]providing and laying of 3mm thick APP Modified Bitumen Membrane with 100 mm overlap fixing with butane torch.	1 Sqm	545.00
786	TBSC-Q.VII-04	Providing specialized high performance acrylic polymer modified elastomeric cementitious waterproof coating to the terrace / walls / internal portion of the bathroom & toilets / internal portion of the water tanks duly cleaning of the surface from dirt, dust and other contaminations, providing and application of Two coats of High performance Acrylic polymer modified Elastomeric cementitious waterproof coating ( 1.8 Sq. Mtr. / Kg /Each Coat )	1 Sqm	433.00
787	TBSC-Q.VII-05	Providing specialized high build, elastomeric acrylic bituminous blended coating to the terrace / internal portion of the bathroom / toilets / basements / roofing duly a). Cleaning of the surface. b). Applying primer coat of High Build, Elastomeric Acrylic Bituminous Blended Coating c). Application of Two coats of High Build, Elastomeric Acrylic Bituminous Blended Coating	1 Sqm	401.00
788	TBSC-Q.VII-06	Providing specialized high solid, cold applied,	1 Sqm	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		acrylic elastomeric liquid membrane coating treatment to the terrace / roofing with fibre mesh / geo fabric duly a. Cleaning of the surface from dirt, dust and other contaminations. b. Applying one coat of High solid, Cold applied, Acrylic Elastomeric Liquid Membrane coating c. immediately, Application of one coat of High solid, Cold applied, Acrylic Elastomeric Liquid Membrane coating e. Laying of fibre mesh 40 GSM / Geo fabric 40 GSM on the surface. f. Over the Fibre mesh, Application of two coats of High solid, cold applied, Acrylic Elastomeric Liquid Membrane Coating		634.00
789	TBSC-Q.VII-07	Providing specialized polysulphide sealant treatment to the expansion joints (Size : 25 mm x 25 mm) duly a]. Chipping and removing of existing covering on expansion joints b]. Cleaning of the surface from dirt, dust and other contaminations c].Application of one coat of - High performance specially designed SBR latex polymer based bonding agent d]. Providing and application of Acrylic Polymer modified reinstatement concrete /mortar to the damaged edges of joint and making the groove. e]. Providing and fixing of masking tape on top of the joint both sides f]. Providing and fixing of Back up support material of PVC Solid Backer rod to leave the depth of 25 mm on the joint g]. Providing and application of one coat of polysulphide primer on inner edges of Joint. h]. Providing and application of Two part Polysulphide sealant to a width of 25 mm and depth of 25 mm with putty knife and neat finish i]. Removing of masking tape and providing and application of two coats of Acrylic elastomeric cementitious coating	1 RM	722.00
790	TBSC-Q.VII-08	Pressure grouting the drilled holes with neat cement slurry or with approved grout admixture using pump - excluding cost of drilling holes after fixing nozzles as technical specification approved by the department	1 Each	359.00
791	TBSC-Q.VII-09	Providing multi-coloured silicon fluorocarbon spray coating of thickness 1mm for exterior & interior wall finishes to give Natural Granite appearance comprising of 4 coats including application of primer, waterproof coat, Multi colour texture & finally UV resistant with repellent clear coat of low VOC, non-toxic, Green Building compliant material	1 Sqm	1,541.00
792	TBSC-Q.VII-10	Providing and applying epoxy based anti-skid coat over existing RCC/Concrete flooring surfaces of 2mm thickness for wear & tear protection in three part applications	1 Sqm	727.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		containing low solvent-coloured, epoxy resin based coating with thyrotrophic properties specially formulated for application in Car Parks having Mechanical / Physical Properties such as 1. Abrasion Resistance ~ 0.8mm thickness loss (According to IS 1237 - 1980 and IS 9162 - 1979) 2. Chemical Resistance to many chemicals 3. Thermal Resistance Exposure with Dry heat Permanent +50°C		
793	TBSC-Q.VII-11	Providing and applying epoxy resin based self levelling Conductive Floor System of 2mm thick Antistatic (ESD) Flooring System comprising of 1 coat of Primer followed by Application of copper tape and 1 layer of SL Conductive Undercoat and 1 layer of SL Conductive Top coat with Compressive strength after 7 days at +30° C: 50 N/mm <sup>2</sup> and Flexural strength after 7 days at +30° C: approx. 25N/mm <sup>2</sup> and Tensile strength after 7 days at +30° C: 16 N/mm <sup>2</sup> with a Surface resistance When measured for surface resistance in accordance with BS 2050: 1978 (A-1984) and DIN EN 1081, the static Conductive topping including under coat shall be less than 25k Ω.	1 Sqm	1,498.00
794	TBSC-Q.VII-12	Providing and applying food grade epoxy based water proof coat over existing RCC/Concrete flooring surfaces in three part applications containing low solvent-coloured, epoxy resin based coating with low VOC properties specially formulated for food grade application for potable water storage tanks in ambient temperatures	1 Kg	300.00
795	TBSC-Q.VII-13	Providing water proof treatment by supplying and fixing of MAT of 2mm thickness, 2.25 kg per sqm, first coat of bituminous emulsion, then one coat of bitumen 85/25 grade, fixing of water proofing membrane, sealing of joints with torch, applying second coat of bitumen 85/25 grade, and applying a coat of bituminous Aluminum paint for heat resistance for finished item of work as directed by the Engineer-in-Charge	1 Sqm	458.00
<b>VIII</b>	<b>SUB-SECTION</b>	<b>EXPANSION JOINTS</b>		
796	TBSC-Q.VIII-01	Supply of high performance expansion joint filler board conforming to IS: 1838 - 18 mm THICK	1 Sqm	766.00
797	TBSC-Q.VIII-02	Supply of high performance expansion joint filler board conforming to IS: 1838 - 20 mm THICK	1 Sqm	859.00
798	TBSC-Q.VIII-03	Supply of high performance expansion joint filler board conforming to IS: 1838 - 25 mm THICK	1 Sqm	1,074.00
799	TBSC-Q.VIII-04	Supply of expansion joint filler board conforming to IS: 1838 for buildings, columns,	1 Sqm	308.00



Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		beams and slabs 20 mm THICK		
800	TBSC-Q.VIII-05	Supply of expansion joint filler board conforming to IS: 1838 for buildings, columns, beams and slabs 25 mm THICK	1 Sqm	385.00
801	TBSC-Q.VIII-06	Supply of expansion joint filler board conforming to IS: 1838 for buildings, columns, beams and slabs 50 mm THICK	1 Sqm	766.00
802	TBSC-Q.VIII-07	Supply of back up to cold applied gun-grade polysulphide sealant conforming to IS:11433 (Part-1) in construction and longitudinal joint - 10 mm OD	1 RM	13.00
803	TBSC-Q.VIII-08	Supply of back up to cold applied gun-grade polysulphide sealant conforming to IS:11433 (Part-1) in construction and longitudinal joint - 12 mm OD	1 RM	15.00
804	TBSC-Q.VIII-09	Supply of back up to cold applied gun-grade polysulphide sealant conforming to IS:11433 (Part-1) in construction and longitudinal joint - 15 mm OD	1 RM	18.00
805	TBSC-Q.VIII-10	Supply of back up to cold applied gun-grade polysulphide sealant conforming to IS:11433 (Part-1) in construction and longitudinal joint - 20 mm OD	1 RM	26.00
806	TBSC-Q.VIII-11	Supply of back up to cold applied gun-grade polysulphide sealant conforming to IS:11433 (Part-1) in construction and longitudinal joint - 25 mm OD	1 RM	32.00
807	TBSC-Q.VIII-12	Chipping and scarifying the existing DPC/ plum concrete surface or impervious surface up to 50 mm thick to expose the virgin surface of the concrete using low/ medium vibratory chipping machine as a part of structural repair/ retrofitting	1 Sqm	22.00
808	TBSC-Q.VIII-13	Providing and filling the chipped and scarified surface with High Strength, Non shrink Free Flow Micro Concrete mixing with water 3.75 to 4 liters per 25 kg bag and 6 to 12 mm aggregate, if necessary as per the directions of the Engineer-in-charge as a part of structural repair/ retrofitting	1 Cum	37,750.00
809	TBSC-Q.VIII-14	Supplying and fixing of weld mesh of size 100 x 100 x 3 mm using "U" nails into the existing prepared surfaces of concrete/ masonry as per the directions of the Engineer-in-charge as a part of structural repair/ retrofitting	1 Sqm	285.00
810	TBSC-Q.VIII-15	Providing guniting to the treated surfaces of concrete/ masonry with 30-35 mm thick premixed polypropylene fibers in two layers with dry-gun concrete as per IS 9012:1978 and the directions of the Engineer-in-Charge as a part of structural repair/ retrofitting	1 Sqm	2,850.00
811	TBSC-Q.VIII-16	Providing shortcreting to the treated surfaces of concrete/ masonry with 25 - 30 mm thick premixed polypropylene fibers in two layers	1 Sqm	2,850.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		with wet-gun concrete as per IS 9012:1978 and the directions of the Engineer-in-Charge as a part of structural repair/ retrofitting		
812	TBSC-Q.VIII-17	Providing and fixing of horizontal floor to floor expansion joint system for specified gap width of 100/25 metallic system after laying of necessary EPDM membrane over the joint profile related with floor location as per drawings. The joints system will be of extruded aluminium base members, support plates with EPDM top seal etc. as per ASTM B221-02. The system shall be such that it provides floor to floor expansion control system for various vertical location in load application areas that accommodates multi directional seismic movement without stress to its components. System shall consist of metal profiles with a universal aluminium base member designed to accommodate various project conditions and finish floor treatments. The cover plate shall be designed of width and thickness required to satisfy projects movement and loading requirements and secured to base members . Expansion joint shall be tested for their watertight property & the same shall be watertight for a period of five years. (Material shall confirm to ASTM 6063.) Rates shall also be inclusive of material and labour of all exposed aluminium work, all as per manufacturers specifications. Rate should be exclusive of necessary scaffolding work, non-shrink grout, RCC cutting, edge preparation, stone fixing in recess part of joint etc complete.	1 RM	2,800.00
813	TBSC-Q.VIII-18	Providing and fixing of paintable - expansion joint system for specified gap width of 25mm for all Internal /external - vertical wall to wall /wall to corner /ceiling location as per drawings, applying of PU sealant on both side of the seal into the groves after applying of the masking tape on both side of the joint to ensure straight alignment and squeezing the seal into the joint with uniform hand pressure and sealing the same . remove the residue form the top and masking tape from the side to ensure watertight joint complete in all respects. Internal wall 25mm expansion gap	1 RM	1,850.00
814	TBSC-Q.VIII-19	Providing and fixing of paintable - expansion joint system for specified gap width of 25mm for all Internal /external - vertical wall to wall /wall to corner /ceiling location as per drawings, applying of PU sealant on both side of the seal into the groves after applying of the masking tape on both side of the joint to	1 RM	2,975.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		ensure straight alignment and squeezing the seal into the joint with uniform hand pressure and sealing the same . remove the residue form the top and masking tape from the side to ensure watertight joint complete in all respects. External Wall 25mm expansion gap		
<b>R</b>	<b>SECTION</b>	<b>MISCELLANEOUS ITEMS</b>		
815	TBSC-R.I-01	Supply of White Cement conforming to IS:8042-1989	1 Kg	31.00
816	TBSC-R.I-02	Supply of well burnt cinder aggregates as per IS: 2686-1977	1 Cum	849.00
817	TBSC-R.I-03	Supply of Aluminium anodized Sections for Doors, partitions, windows, Ventilators (including anodization cost) conforming to IS: 11857 - 1986/ Aluminium plates, sheets and sections for formwork and other industrial uses purposes	1 Kg	307.00
818	TBSC-R.I-04	Providing Powder coating as per IS:13871-1993 or colour anodization as per IS:7088-1973 - on any aluminium or mild steel section	1 Kg	32.00
819	TBSC-R.I-05	Providing hot dip galvanizing to any steel section as per IS:2629-1985	1 Kg	19.00
820	TBSC-R.I-06	Supply of Clear Silicone Sealant (Glass Glue Sealant) of Gun Applicator grade	1 Kg	222.00
821	TBSC-R.I-07	Supply of Sun Control film to the glazed windows partition including labour charges.	1 Sqm	314.00
822	TBSC-R.I-08	Supply of Aluminium Venetian Blinds horizontal 25.4 mm wide with all accessories.	1 Sqm	798.00
823	TBSC-R.I-09	Supply of Aluminium Venetian Blinds horizontal 20.0 mm wide with all accessories.	1 Sqm	761.00
824	TBSC-R.I-10	Supply of Venetian blinds Vertical blinds 100 mm wide with all accessories.	1 Sqm	1,291.00
825	TBSC-R.I-11	Supply of Rubber Beading for glass fixing	1 RM	4.00
826	TBSC-R.I-12	Supply of Soft Brush for painting, varnishing etc	Each	141.00
827	TBSC-R.I-13	Supply of Wire Brush for scraping	Each	33.00
828	TBSC-R.I-14	Providing and fixing PVC door cladding to the flush doors shutters, for the new doors it shall be pasted with synthetic glue or nailed to the old doors. complete as per direction of Engineer-in-charge, manufacturers specification and drawing - 1 mm thick	1 Sqm	377.00
829	TBSC-R.I-15	Providing and fixing PVC door cladding to the flush doors shutters, for the new doors it shall be pasted with Synthetic glue SSR 998 or nailed to the old doors. complete as per direction of Engineer-in-charge, manufacturers specification and drawing - 1.5 mm thick	1 Sqm	430.00
830	TBSC-R.I-16	Providing and fixing PVC door cladding to the flush doors shutters, for the new doors it shall be pasted with Synthetic glue SSR 998 or	1 Sqm	486.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		nailed to the old doors. complete as per direction of Engineer-in-charge, manufacturers specification and drawing - 2.0 mm thick		
831	TBSC-R.I-17	Supplying and fixing aluminium composite cladding with skin material 0.25 mm thick aluminium sheet cover material natural polyethylene aluminium cladding panel fixed with extruded aluminium basis frame (50x25x1.5mm) angle cleats, weather sealants, rivets, GI brackets all as approved, using suitable bolts on structural steel work including necessary accessories complete in all respects including labour charges etc., complete for finished item of work but excluding cost of structural steel fabrication, scaffolding charges, if any, <b>ACP Cladding - 3 mm thick</b>	1 Sqm	2,509.00
832	TBSC-R.I-18	Supplying and fixing aluminium composite cladding with skin material 0.25 mm thick aluminium sheet cover material natural polyethylene aluminium cladding panel fixed with extruded aluminium basis frame (50x25x1.5mm) angle cleats, weather sealants, rivets, GI brackets all as approved, using suitable bolts on structural steel work including necessary accessories complete in all respects including all labour charges etc., complete for finished item of work but excluding cost of structural steel fabrication, scaffolding charges, if any, <b>ACP Cladding - 4 mm thick</b>	1 Sqm	2,736.00
833	TBSC-R.I-19	Supplying and fixing aluminium composite cladding with skin material 0.5 mm thick aluminium sheet cover material natural polyethylene aluminium cladding panel fixed with extruded aluminium basis frame (50x25x1.5mm) angle cleats, weather sealants, rivets, GI brackets all as approved, using suitable bolts on structural steel work including necessary accessories complete in all respects including all labour charges etc., complete for finished item of work but excluding cost of structural steel fabrication, scaffolding charges, if any, <b>ACP Cladding - 4 mm thick</b>	1 Sqm	3,068.00
834	TBSC-R.I-20	S&F of pre-cast RCC Grills of any design of 25 mm thick manufactured with M-30 grade of concrete using vibro-compaction process using joint less FRP moulds to achieve shuttering finish and adequately reinforced for long use and to prevent damage during handling, transportation & erection etc.,	1 Sqm	368.00
835	TBSC-R.I-21	S&F of pre-cast RCC Grills of any design of 40 mm thick manufactured with M-30 grade of	1 Sqm	512.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		concrete using vibro-compaction process using joint less FRP moulds to achieve shuttering finish and adequately reinforced for long use and to prevent damage during handling, transportation & erection etc.,		
836	TBSC-R.I-22	S&F of pre-cast RCC Grills of any design of 50 mm thick manufactured with M-30 grade of concrete using vibro-compaction process using joint less FRP moulds to achieve shuttering finish and adequately reinforced for long use and to prevent damage during handling, transportation & erection etc.,	1 Sqm	602.00
837	TBSC-R.I-23	Supply of Aluminium sheet 24 Gauge	1 Sqm	288.00
838	TBSC-R.I-24	Supply of 7.5mm thick Aluminium Grill (as approved by the department) 3.58 Kg/1 Sqm	1 Sqm	1,060.00
		Design, fabrication & supply of light weight pre-engineered buildings for a maximum span of 9 meters with 50 x 50 x 2.8 mm M.S hollow square tubes for columns, trusses & purlins walls with sandwich panels made up of 2 Nos 10mm thick cement bonded particle/ fibre boards with 25mm thick 12 kg/cum density expanded polystyrene in between encased in 1.25 mm thick 24x7x26 mm 'W' tracks in bottom & top and 'H' section for sides with doors, windows & ventilators, roofing with 26 gauge pre painted profiled sheets fixed with self-tapping/ drilling screws, painting with enamel paint for steel items, OBD for interiors and ace for exteriors & providing base plates, templates & anchor bolts along with civil foundation designs & drawings for the finished item of work		
839	TBSC-R.I-25	Steel Structure: - Structure is made up of 50x50x2.8 m/33x66x2.8mm thick hollow M.S. sections for -Columns and purlins	1 RM	415.00
840	TBSC-R.I-26	Steel Structure: - Structure is made up of 50x50x2.8 m/33x66x2.8mm thick hollow M.S. sections for Trusses	1 RM	2,087.00
841	TBSC-R.I-27	10 mm thick 200 X 200 mm M.S Plates for base plates, 250mm long 12mm anchor bolts with plate washer and nuts complete with one coat of Asian or equivalent red oxide paint	Each	705.00
842	TBSC-R.I-28	Sandwich panels: Sandwich panels of 50 mm thick with 25 mm Thermocol of 12 kg / cum, fixed in between 2 Nos 10 mm cement bonded wood particle / fibre boards properly fixed together with 30 mmx30mmx30mm wood pieces along width & length wherever necessary	1 Sqm	1,502.00
843	TBSC-R.I-29	U' Tracks & 'H' Section:- Bottom & Top 'U' Tracks are made of 1.25 mm thick 120 GSM G.I. Sheet of size 24x51x26 mm size.	1 RM	163.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
844	TBSC-R.I-30	G I 'H' Section is made up of forming width of 275 mm single sheet roll formed in the shape of "H" section without any welding joint. 40mm width for flanges and 51 mm for web to hold 50 mm Sandwich panel	1RM	267.00
845	TBSC-R.I-31	Sandwich Panel joinery is made up of couplers or equivalent made from 0.6 mm G.I. roll formed section to hold 2 Nos of 10 mm board on both sides with 25 mm Thermocol in between.	1 RM	317.00
846	TBSC-R.I-32	150 mm X 150 mm X 2.0 mm size M. S. Corner Cover Plate	1 RM	381.00
847	TBSC-R.I-33	Window:- windows are made up of 51 x51 mm step 'U' section made from 1.25 thick MS Cold rolled Steel Sheet and Windows Shutters & Grill are made of 48x25mm mm size pre painted section with 4 mm glass complete with necessary hardware. Grills are made from 8 mm square rod at 100 mm spacing.	1 Sqm	4,372.00
848	TBSC-R.I-34	Door Frames :-51 X 51 Stepped ' U' section made from 1.25 mm thick C.R. section with a 32 mm rebate for 30 mm flush door and Door Shutters with 30 mm thick block board / flush doors with boiling water proof plywood complete with necessary Hard ware.	1 Sqm	4,184.00
849	TBSC-R.I-35	Ventilators:- Ventilators are made of 51x51 mm step 'U' section made From 1.25 mm thick C.R. sheet with fixed louvers and glass.	1 Sqm	4,682.00
850	TBSC-R.I-36	Painting:-1) Steel structure is to be painted with 2 coats of Grade I enamel paint.	1 Sqm	119.00
851	TBSC-R.I-37	2) Exterior walls are painted with one coast of primer and 2 coats of exterior emulsion paint .	1 Sqm	107.00
852	TBSC-R.I-38	3) Interiors are painted with 1+2 coat of O.B.D.	1 Sqm	93.00
853	TBSC-R.I-39	Toilets: - Toilets are provided as per plan with a provision for fixing the wash basin, W.C. etc only is made with M.S. steel section secured to the walls with toilet bracket provision excluding cost of WC/ Wash basin etc	Each	1,001.00
854	TBSC-R.I-40	Sun shades: - Sun shades will be provided wherever necessary with 300 mm more than the width of window. 25x25 mm angle frame to cover 450 mm in the front and the sides. 10mm cement bonded particle board will be fixed on the frame work and sealed with green paste or equivalent.	Each	3,372.00
855	TBSC-R.I-41	Roofing: - Roofing will be provided with 0.5mm thick galvanized / pre painted G.I. profiled sheets fixed to the purlins with 14 size self-drilling screws with neoprene washer. Side laps are stitched with self-tapping / drilling screws. End laps are to be	1 Sqm	762.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		sealed with 25x3 mm Butyl tape. The sheets are provided with anti-capillary groove.		
856	TBSC-R.I-42	Preparing gabions with jungle wood	Each	4.00
857	TBSC-R.I-43	Planting plants	Each	4.00
858	TBSC-R.I-44	Pruning plants	Each	4.00
859	TBSC-R.I-45	Maintaining avenues including fencing, weeding, mulching, watering etc per plant.	Each	8.00
860	TBSC-R.I-46	Maintaining avenues including fencing, weeding, mulching, watering etc per plant When scattered in hot weather with extra conveyance from March to June	Each	9.00
861	TBSC-R.I-47	Hoisting or lowering of slab	1 cum	116.00
862	TBSC-R.I-48	Drilling holes in hard rock surfaces up to 18mm Diameter	1 RM	324.00
863	TBSC-R.I-49	Drilling holes in hard rock above 18mm Diameter	1 RM	449.00
864	TBSC-R.I-50	Making holes up to 18mm Diameter in RCC/ any stones up to 50 mm thick	1 Each	54.00
865	TBSC-R.I-51	Making holes above 18mm Diameter in RCC/ any stones above 50 mm thick	1 Each	75.00
866	TBSC-R.I-52	Supplying EPDM Gasket for windows panes to the PPS shutter	1 RM	32.00
867	TBSC-R.I-53	Supplying SS 304 Grade Heavy Duty Pivot Hinges for windows	1 Each	82.00
868	TBSC-R.I-54	Making holes in Brick Masonry up to 12 mm dia up to 100 mm thick	1 Each	17.00
869	TBSC-R.I-55	Making holes in Brick Masonry up to 12 mm dia up to 150 mm thick	1 Each	21.00
870	TBSC-R.I-56	Designing, supplying and fixing/ erecting Cable and/or frame supported tensioned membrane-covered fabric structure; incorporating a fabric with low elongation characteristics under tension and capable of an anticlastic configuration, the Tensile Membrane structure using PET yarns covered with a thicker PVC-coating/ PVDF coating of 900 GSM on both sides to protect the fabric with properties of Anti-Wicking, Maximum Tensile Strength 5000/4300 N/cm <sup>2</sup> , Tear Resistance 600/500 N, Adhesion 140 N/cm <sup>2</sup> , cold and heat resistance in range - 50 to 70 degrees centigrade, light fastness >= 7, light transmission 6.46%, radiation transmission 7.79% complete for finished item of work including cables and fittings, Perimeter, catenary, and sectionalized aluminum clamping system, Structural steel, including masts, trusses, struts, and beams as indicated on the drawings, Fasteners and gaskets etc with a warranty of 20 years	1 Sqm	2,798.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
871	TBSC-R.I-57	Providing and fixing truly levelled and aligned structure made of MS angle of 35x35x3mm thick with 150/225mm x 1830mm x 12mm non asbestos fibre cement eaves board pre painted and designed Density >1225 Kg/m <sup>3</sup> Modulus of Rupture 15.85 MPA, Thermal conductivity 0.0862 W/mk confirming to IS 14862 and Type B category III of ISO 8336, reaction to fire A2-s1d0 tested as per EN 13801 Part 1 and BS 476 Part 4,5,6,7 with the help of full thread flat head steel or copper screws. The MS angle should be fixed on to the soffit with 6mm dia anchor fastener on 620mm cc. Finally the board should be painted with exterior paint. The gaps between the boards should be filled with paintable sealant. All complete as per the drawing and directions of Engineer-in-Charge	1 RM	904.00
872	TBSC-R.I-58	Providing and fixing 50mm thick Non asbestos fibre reinforced aerated cement sandwich modules made out of light weight fibre reinforced aerated cement/concrete core composed of Portland cement, flyash, binders etc and 4mm thick High pressure steam cured non asbestos fibre cement standard board Density>1200kg/m <sup>3</sup> confirming to IS 14862 and Type B category III of ISO 8336 E tested as per AS 1530 part 3 and BS 476 Part 4,5,6,7 on either side of the core having a tongue and groove on longitudinal side of the modules. These solid wall panel should be equivalent to ISO 354-1985, ASTM 423-90 and BS 476 Part 22 1987, IS 8225-1987 modules are erected/installed using galvanized iron steel tracks of 1mm thick and of size 15x51x25mm as bottom track, 25x51x25mm as top track for fixing to the floor and top of the wall respectively including all necessary materials required for erecting and fixing all panel complete as per direction of Engineer-in-Charge	1 Sqm	194.00
873	TBSC-R.I-59	Providing and fixing 75mm thick Non asbestos fibre reinforced aerated cement sandwich modules made out of light weight fibre reinforced aerated cement/concrete core composed of Portland cement, flyash, binders etc and 4mm thick High pressure steam cured non asbestos fibre cement standard board Density>1200kg/m <sup>3</sup> confirming to IS 14862 and Type B category III of ISO 8336 E tested as per AS 1530 part 3 and BS 476 Part 4,5,6,7 on either side of the core having a tongue and groove on longitudinal side of the modules. These solid wall panel should be equivalent to ISO 354-1985, ASTM 423-90 and BS 476 Part 22	1 Sqm	243.00



Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		1987, IS 8225-1987 modules are erected/installed using galvanized iron steel tracks of 1mm thick and of size 15x77x25mm as bottom track, 25x77x25mm as top track for fixing to the floor and top of the wall respectively including all necessary materials required for erecting and fixing all panel complete as per direction of Engineer-in-Charge		
874	TBSC-R.I-60	Roofing with Durasteel Roofs as per ER-32-251 Galvalume AZ150/PPGI of thickness 0.50mm thick with a tensile strength of 225 Mpa	1 Sqm	484.00
875	TBSC-R.I-61	Roofing with 6mm Non asbestos cement roofing sheets in natural stone grey confirming to BIS 14871: 2000 in standard width of 1097mm and length of 1m	1 Sqm	372.00
876	TBSC-R.I-62	Supply and Fixing of 84MM Thick Hollow Glass blocks , as directed by the Engineer- in-charge including cost of overheads & contractors profit etc., complete for finished item of work.	1 Sqm	12,500.00
877	TBSC-R.I-63	Supplying and laying Solid Wood Flooring of thickness 18 mm cut down to desired size using natural 100% wood board drawn and sawn from one piece of solid wood Oak, American Walnut, Burma Teak, Cumaru, Jatoba etc., including preparing the surface with 5 - 7 mm thick POP treatment, supplying 3 mm thick foam sheet and HDPE Plain Black Polythene Sheet, Tarpaulin Grade: GSM 150, Thickness: 100 Microns Sheeting to receive the wooden flooring	1 Sqm	3,874.00
878	TBSC-R.I-64	Supplying and laying Engineered Wooden Flooring of thickness 14 mm and varying width (53 to 207 mm) reapers of varying length in tongue and groove shape, the edges of the boards with finger lock groove and the bottom side with air pass groove using good quality Engineered Wood comprising of top layer of 3-4 mm thick specie wood drawn and sawn from one piece of solid wood Oak, American Walnut, Burma Teak, Cumaru, Jatoba etc., and bottom layer of 12-15 mm is wooden, spruce or pine or plywood Tongue and Groove 4 Sides machined to a hundredth of a millimeter, with beveled tongue in a tongue & groove section for easy jointing including preparing the surface with 5 - 7 mm thick POP treatment, supplying 3 mm thick foam sheet and HDPE Plain Black Polythene Sheet, Tarpaulin Grade: GSM 150, Thickness: 100 Microns Sheeting to receive the wooden flooring	1 Sqm	3,443.00
879	TBSC-R.I-65	Supplying and laying Laminate Wooden Flooring of thickness 8 mm and 53 to 92 mm	1 Sqm	861.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		wide reapers of varying length in tongue and groove shape, the edges of the boards with finger lock groove and the bottom side with air pass groove using good quality multi-layer synthetic flooring product, fused together with a lamination process the core layer with high-density fiberboard (HDF) including preparing the surface with 5 - 7 mm thick POP treatment, supplying 3 mm thick foam sheet and HDPE Plain Black Polythene Sheet, Tarpaulin Grade: GSM 150, Thickness: 100 Microns Sheeting to receive the wooden flooring		
880	TBSC-R.I-66	Supplying and Installation of Sports Flooring system of overall 80 mm thick (a+b+c) of which the top layer is of thickness (a) 22 mm and 53 to 92 mm wide reapers of varying length in tongue and groove shape, the edges of the boards with finger lock groove and the bottom side with air pass groove using natural 100% hardwood board drawn and sawn from one piece of solid wood Maple, Teak wood, Oak, etc., the under frame- made of pine wood runners of (b) 38 mm x 70 mm, treated with anti-termite solution and fixed on the bottom side with (c) 20 mm thick EPDM air cushioned pads, stapled through the two wings at 350 mm x 350 mm c/c, including laying HDPE Plain Black Polythene Sheet, Tarpaulin Grade: GSM 150, Thickness: 100 Microns Sheeting on existing IPS / RCC subfloor treated with a vapor barrier to be placed on the leveled IPS / RCC sub floor before laying the under frame, the runners having air cushion pads to be placed on the vapor barrier in perfect level at 350mm in 1 direction, the surface board to be screwed to the runner through the tongue only and will lock the screwed tongue by the groove of adjoining board, ends of the boards to be locked by inserting the wooden fingers through the edge grooves and fixed with suitable adhesive, an expansion of 12 to 15 mm to be left open between the wooden flooring and the surrounding tiled area / walls, duly finishing with machine sanded in uniform level and finishing with P.U. POLISHING water based polyurethane lacquer, etc, including game line marking to be carried out in required colors before applying the finishing coat, complete for finished item	1 Sqm	6,456.00
881	TBSC-R.I-67	Unlined Flax Canvas Hose pipe 3" size for firefighting as per IS 4927 : 1992	1 Rm	54.00
882	TBSC-R.I-68	Round cover blocks of M60 grade with cover size of 25 mm conforming to IS Code 456:200	Each	3.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		section 26.4. 1 .		
883	TBSC-R.I-69	Round cover blocks of M60 grade with cover size of 40 mm confirming to IS Code 456:200 section 26.4. 1 .	Each	6.00
884	TBSC-R.I-70	Round cover blocks of M60 grade with cover size of 50 mm confirming to IS Code 456:200 section 26.4. 1 .	Each	7.00
885	TBSC-R.I-71	Slab cover blocks of M60 grade with cover size of 20 mm confirming to IS Code 456:200 section 26.4. 1 .	Each	2.00
886	TBSC-R.I-72	Trapezoidal cover blocks of M60 grade with cover size of 75 mm confirming to IS Code 456:200 section 26.4. 1 .	Each	6.00
887	TBSC-R.I-73	Multiple cover blocks of M60 grade with cover size of -20*25*40*50mm and confirming to IS Code 456:200 section 26.4. 1 .	Each	3.00
888	TBSC-R.I-74	Multiple cover blocks with holes of M60 grade with cover size of 20*25*40*50mm confirming to IS Code 456:200 section 26.4. 1 .	Each	3.00
889	TBSC-R.I-75	Multiple cover blocks of M60 grade with cover size of 30mm*35mm confirming to IS Code 456:200 section 26.4. 1 .	Each	3.00
<b>S</b>	<b>SECTION</b>	<b>MACHINERY &amp; OTHER HIRE CHARGES</b>		
890	TBSC-S.I-01	Machine charges of rubbing/ polishing floor	1 Hr	293.00
891	TBSC-S.I-02	Power Saw Cutter - Hand Operated - Hire charges	1 Hr	137.00
892	TBSC-S.I-03	Power Drill - Hand Operated - Hire Charges	1 Hr	128.00
893	TBSC-S.I-04	Grinding Mortar (Special Grinding)	1 Hr	147.00
894	TBSC-S.I-05	Casuarinas Balli Props - 3" to 4" Diameter - 12'-0" Height	Each	80.00
895	TBSC-S.I-06	Casuarinas Balli Props - 4" to 8" Diameter - 20'-0" Height	Each	133.00
896	TBSC-S.I-07	Wall Plate Brackets / beam bottom supports	Each	233.00
897	TBSC-S.I-08	Wedge Plate fixture	Each	12.00
898	TBSC-S.I-09	Runner beams of approximately 4" x 4" size	RM	465.00
899	TBSC-S.I-10	Steel Plates for form works	1 Sqm	1,755.00
900	TBSC-S.I-11	Scaffolding Pipes & Centering accessories	1 Kg	133.00
901	TBSC-S.I-12	Scaffold Boards - Bamboo scaffolds - Bamboos - 8'0" long	Each	142.00
902	TBSC-S.I-13	Hire charges for stationary Concrete pump conforming to IS 21573 Part-1: 2006 to deliver the fresh green concrete	1 Hr	374.00
903	TBSC-S.I-14	Concrete delivery pipes conforming to IS 15947 Part I: 2012 to be connected to the pump to delivery point (150 mm Diameter) hire charges per 10 RM	1 Hr	6.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
<b>T</b>	<b>SECTION</b>	<b>LABOUR CHARGES</b>		
904	TBSC-T.I-01	Bailing out water for earth work excavation /concrete for foundation below water level. (For building items only) - Other than sandy soil - 0.0 M to 1.0 M	1 cum	310.00
905	TBSC-T.I-02	Bailing out water for earth work excavation /concrete for foundation below water level. (For building items only) - Other than sandy soil - 1.0 M to 2.0 M	1 cum	367.00
906	TBSC-T.I-03	Bailing out water for earth work excavation /concrete for foundation below water level. (For building items only) - Other than sandy soil - 2.0 M to 3.0 M	1 cum	428.00
907	TBSC-T.I-04	Bailing out water for earth work excavation / for concrete foundation below water level. (For building items only) Sandy soil - 0.0 M to 1.0 M	1 cum	492.00
908	TBSC-T.I-05	Bailing out water for earth work excavation /for concrete foundation below water level. (For building items only) Sandy soil - 1.0 M to 2.0 M	1 cum	765.00
909	TBSC-T.I-06	Bailing out water for earth work excavation /concrete for foundation below water level. (For building items only) Sandy soil - 2.0 M to 3.0 M	1 cum	924.00
910	TBSC-T.I-07	Labour charges for making, fabricating office racks, cup-board shutters etc with ply-wood/ MDF sheets, decolam/ veneer laminations including fixing cutting, making, assembling, fixing hinges, fixing fixtures, fixing locks, pasting sheets/ laminations fixing in position with necessary screws excluding cost of materials, accessories, fittings	1 Sqm	1,306.00
911	TBSC-T.I-08	Labour charges for making, fabricating kitchen furniture, cup-boards with shutters, box cup-boards, box racks, work-station furniture etc with ply-wood/ MDF sheets, decolam/ veneer laminations including fixing cutting, making, assembling, fixing hinges, fixing fixtures, fixing locks, pasting sheets/ laminations fixing in position with necessary screws excluding cost of materials, accessories, fittings	1 Sqm	1,953.00
912	TBSC-T.I-09	Labour charges for making, fabricating any aluminium door/ window/ glazing including fixing cutting, making, assembling, fixing hinges, fixing fixtures, fixing locks, fixing in position with necessary screws excluding cost of materials, accessories, fittings excluding cost of anodization	1 Sqm	604.00
913	TBSC-T.I-10	Rounding the edges of Kadapa / Shahabad stone slabs of any thickness including polishing the same	1 Rm	134.00
914	TBSC-T.I-11	Half Rounding the edges of Marble/ Granite	1 Rm	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		stone slabs of all thicknesses including polishing the same.		407.00
915	TBSC-T.I-12	Full Rounding the edges of Marble/ Granite stone slabs of all thicknesses including polishing the same.	1 Rm	527.00
916	TBSC-T.I-13	Machine Cutting charges - for Marble/ Granite slabs up to 50 mm thick by mechanical device.	1 RM	21.00
917	TBSC-T.I-14	Flat nosing to Kadapa/ Shahabad stone slabs of any thick	1 Rm	65.00
918	TBSC-T.I-15	Grooves 2-3 mm	1 Rm	72.00
919	TBSC-T.I-16	Labour charges for fabricating steel works like Window Grills, Compound Wall Grills, Iron Doors, Windows including cost of welding rods, power charges, excluding cost of fixing in position	1 Kg	33.00
920	TBSC-T.I-17	Labour charges for fixing Iron Doors, Iron Windows and Window Grills in position	1 Kg	5.00
921	TBSC-T.I-18	Labour charges for fabricating all structural steel works like heavy steel works like Trusses, Stanchions, Heavy Beams and Girders including cost of welding rods, power charges, etc excluding cost of fixing in position	1 Kg	30.00
922	TBSC-T.I-19	Labour charges for erecting & fixing all structural steel works like heavy iron grills, Trusses, Stanchions, Heavy Beams and Girders erecting in position and fixing by using chain pulley blocks, Derek pole arrangements and cranes etc., complete in position	1 Kg	27.00
923	TBSC-T.I-20	Labour charges for Fabrication of stainless steel railing works using stainless steel welding rods including buffing, polishing, lacquer finishing, to present seamless finish	1 Kg	168.00
924	TBSC-T.I-21	Labour charges for Fabrication of stainless steel sheet cladding works using stainless steel welding rods including buffing, polishing, lacquer finishing, to present seamless finish	1 Sqm	2,249.00
925	TBSC-T.I-22	Labour charges for Glass designing works on any thickness of Glass including fixing at site - Etching works	1 Sqm	1,224.00
926	TBSC-T.I-23	Labour charges for Glass designing works on any thickness of Glass including fixing at site - Reverse Etching work	1 Sqm	1,514.00
927	TBSC-T.I-24	Labour charges for Glass designing works on any thickness of Glass including fixing at site - Acid wash works	1 Sqm	1,893.00
928	TBSC-T.I-25	Labour charges for fixing Flush door shutters of any thickness to the existing door frame including fixing the fixtures to the door shutter excluding cost of shutter	1 Sqm	491.00
929	TBSC-T.I-26	Labour charges for fixing glass panes of any thickness to the existing door / window panes	1 Sqm	366.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		including fixing the beading excluding cost of beading		
930	TBSC-T.I-27	Labour charges for wrought and put up including fixing in position for Teak wood Fully paneled doors external or internal including frame	1 Sqm	2,219.00
931	TBSC-T.I-28	Labour charges for wrought and put up including fixing in position for Teak wood Glazed and paneled doors including fixing glass including frame	1 Sqm	2,069.00
932	TBSC-T.I-29	Labour charges for wrought and put up including fixing in position for Teak wood Framed and planked doors including frame	1 Sqm	1,840.00
933	TBSC-T.I-30	Labour charges for wrought and put up including fixing in position for Teak wood Ledged, braced and planked doors including frame	1 Sqm	1,439.00
934	TBSC-T.I-31	Labour charges for wrought and put up including fixing in position for Teak wood Flush type door shutter including frame	1 Sqm	1,057.00
935	TBSC-T.I-32	Labour charges for wrought and put up including fixing in position for Teak wood Windows glazed including outer frame and shutter frame	1 Sqm	1,397.00
936	TBSC-T.I-33	Labour charges for wrought and put up including fixing in position for Teak wood Windows paneled including outer frame and shutter frame	1 Sqm	2,141.00
937	TBSC-T.I-34	Labour charges for wrought and put up including fixing in position for Teak wood Windows ledged, braced and planked including outer frame	1 Sqm	1,463.00
938	TBSC-T.I-35	Labour charges for wrought and put up including fixing in position for Teak wood Windows framed and planked including outer frame and shutter frame	1 Sqm	1,747.00
939	TBSC-T.I-36	Labour charges for wrought and put up including fixing in position for Teak wood Ventilators glazed, fixed with double frame with wire netting including frame	1 Sqm	1,105.00
940	TBSC-T.I-37	Labour charges for wrought and put up including fixing in position for Teak wood Swing ventilators glazed including outer frame and shutter frame	1 Sqm	1,416.00
941	TBSC-T.I-38	Labour charges for wrought and put up including fixing in position for Teak wood Weld mesh doors and windows including outer frame and shutter frame	1 Sqm	749.00
942	TBSC-T.I-39	Labour charges for wrought and put up including fixing in position for Teak wood G.I or .AC sheet door & windows including outer frame and shutter frame	1 Sqm	841.00
943	TBSC-T.I-40	Labour charges for wrought and put up including fixing in position for Other than	1 Sqm	1,895.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		teakwood Fully paneled doors external or internal including frame		
944	TBSC-T.I-41	Labour charges for wrought and put up including fixing in position for Other than teakwood Glazed and paneled doors including fixing glass including frame	1 Sqm	3,150.00
945	TBSC-T.I-42	Labour charges for wrought and put up including fixing in position for Other than teakwood Framed and planked doors including frame	1 Sqm	1,571.00
946	TBSC-T.I-43	Labour charges for wrought and put up including fixing in position for Other than teakwood Ledged, braced and planked doors including frame	1 Sqm	1,229.00
947	TBSC-T.I-44	Labour charges for wrought and put up including fixing in position for Other than teakwood Flush type door shutter including frame	1 Sqm	849.00
948	TBSC-T.I-45	Labour charges for wrought and put up including fixing in position for Other than teakwood Windows glazed including outer frame and shutter frame	1 Sqm	1,241.00
949	TBSC-T.I-46	Labour charges for wrought and put up including fixing in position for Other than teakwood Windows paneled including outer frame and shutter frame	1 Sqm	1,860.00
950	TBSC-T.I-47	Labour charges for wrought and put up including fixing in position for Other than teakwood Windows ledged, braced and planked including outer frame	1 Sqm	1,273.00
951	TBSC-T.I-48	Labour charges for wrought and put up including fixing in position for Other than teakwood Windows framed and planked including outer frame and shutter frame	1 Sqm	1,518.00
952	TBSC-T.I-49	Labour charges for wrought and put up including fixing in position for Other than teakwood Ventilators glazed, fixed with double frame with wire netting including frame	1 Sqm	1,049.00
953	TBSC-T.I-50	Labour charges for wrought and put up including fixing in position for Other than teakwood Swing ventilators glazed including outer frame and shutter frame	1 Sqm	1,321.00
954	TBSC-T.I-51	Labour charges for wrought and put up including fixing in position for Other than teakwood Weld mesh doors and windows including outer frame and shutter frame	1 Sqm	676.00
955	TBSC-T.I-52	Labour charges for wrought and put up including fixing in position for Other than teakwood G.I or .AC sheet door & windows including outer frame and shutter frame	1 Sqm	767.00
956	TBSC-T.I-53	Dressing faces of granite stone (double line dressing)	1 Sqm	224.00
957	TBSC-T.I-54	Dressing faces of other than granite	1 Sqm	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		stone(double line dressing)		140.00
958	TBSC-T.I-55	Labour charges for removing and refixing with complete servicing of the MS Windows	1 Sqm	478.00
<b>U</b>	<b>SECTION</b>	<b>DISMANTLING</b>		
959	TBSC-U.I-01	Stone masonry in cement mortar	1 Cum	510.00
960	TBSC-U.I-02	Terracing work in roofs or floors	1 Sqm	21.00
961	TBSC-U.I-03	Flat stones in roof or floors including lifting	1Sqm	19.00
962	TBSC-U.I-04	Pan tiled or Mangalore tiled roof without roof timbers.	1Sqm	17.00
963	TBSC-U.I-05	Flat and pan tiles or Mangalore tiles over flat tiles without roof timbers	1Sqm	19.00
964	TBSC-U.I-06	Wrought and framed timber in roofs or floors	1 Cum	265.00
965	TBSC-U.I-07	Old lime mortar plaster	1Sqm	6.00
966	TBSC-U.I-08	Old cement mortar plaster	1Sqm	7.00
967	TBSC-U.I-09	Dry rough stone revetment for aprons and stacking within 40 M lead	1 Cum	82.00
968	TBSC-U.I-10	Revetment for aprons and stacking grouted within 40 lead	1 Cum	62.00
969	TBSC-U.I-11	Kadapa slabs or Shahabad stone slabs flooring on sand bed	1Sqm	9.00
970	TBSC-U.I-12	Through scraping of old plastered surface	1Sqm	6.00
971	TBSC-U.I-13	Washing of plastered surface with soap, soda and water (or with soda lime and water)	1Sqm	3.00
972	TBSC-U.I-14	Clean removal of lime plaster from walls and raking out joints 20 mm deep or from terraced roof and raking out joints up to 50 mm deep	1Sqm	6.00
973	TBSC-U.I-15	Clean removal of cement plaster from walls and raking out joints 20 mm deep or from terraced roof and raking out joints from 50 mm to 100 mm deep	1Sqm	7.00
<b>V</b>	<b>SECTION</b>	<b>GYPSUM PLASTER</b>		
974	TBSC-V.I-01	Supply and applying 20 mm thick fine Gypsum plaster on internal RCC surfaces like Ceilings, Beams, Columns, walls duly preparing the surfaces clean and dry including cost of material, application charges to make even surface, labour charges, unloading, loading, scaffolding etc complete for finished item of work.	1Sqm	533.00
975	TBSC-V.I-02	Supply and applying 12 mm thick fine Gypsum plaster on internal RCC surfaces like Ceilings, Beams, Columns, walls duly preparing the surfaces clean and dry including cost of material, application charges to make even surface, labour charges, unloading, loading, scaffolding etc complete for finished item of	1Sqm	320.00



Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		work.		
<b>W</b>	<b>SECTION</b>	<b>PANELS</b>		
976	TBSC-W.I-01	Providing and fixing in position, 200mm thick factory made Expanded Polystyrene Core (EPS Core) wall panels consisting of EPS core sandwiched between two Engineered sheets of welded wire fabric mesh duly finished with shotcrete materials on outer faces. The fabric mesh shall be made of 3mm dia GI wire mesh with 50 mm pitch in both the directions and on both faces of the wall kept at 120-135 mm gap and connected by the zig zag GI wire of 3mm dia at alternate row by welding (at an angle ranging from 50-70 degree). The EPS core shall consist of 100 mm thick EPS of density not less than 20 kg/cum. Both the outer faces of the panel shall be finished by applying the layer of 50 mm thick cement mortar 1:3 ( 1 cement; 3 coarse sand (not having more than 40% stone chips of size up to 6mm) with the help of shortcreting/guniting equipment etc at a pressure not less than 1 bar (100 kN/m <sup>2</sup> ) and both surfaces finished with trowel. Fixing operations of wall panels shall be completed in all respects as per drawing and specifications and under the overall direction of the Engineer-in-Charge	1Sqm	3,409.00
977	TBSC-W.I-02	Providing and fixing in position, 230 thick factory made Expanded Polystyrene Core (EPS Core) roof/floor panels made of 3mm GI wire mesh with 50 mm pitch in both the directions and on both faces of the panel kept at 120-135 mm gap and connected by the zig zag GI wire of 3mm dia at alternate row by welding (at an angle ranging from 50-70 degree). The EPS core shall consist of 100 mm thick EPS of density not less than 20 kg/cum. The bottom side of the panel shall be finished by applying a layer of 60-65 mm thick cement mortar 1:3 ( 1 cement; 3 coarse sand (not having more than 40% stone chips of size up to 6mm) with the help of shortcreting equipment etc at a pressure not less than 1 bar (100 kN/m <sup>2</sup> ) and surfaces finished with trowel. The top face of the panel shall be provided and finished by applying 70-75mm thick layer of cement concrete 1:1.5:3 (1 Cement : 1.5 Coarse sand : 3 graded stone aggregate 20 mm nominal size)Fixing operations of roof/floor panels shall be completed in all respects as per drawing and specifications and under the overall direction of the Engineer-in-Charge	1Sqm	3,609.00
978	TBSC-W.I-03	Supply and Installation of 12 mm thick Flux standing seam polycarbonate panel system of	1Sqm	3,266.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		<p>DPI Daylighting or Equivalent, Supply and installation of translucent roof with DPI flux standing seam multicell polycarbonate panel system. The system with complete assembly of co extruded UV protected multicell panels incorporated into a complete system. Co extruded UV protected polycarbonate panel system of min 12 mm thick of 900 mm min width with angular daylighting concept. Panels shall have minimum six layers with truss bridge design for higher flexibility and strength. Panels with all fixing accessories to ensure best performance for wind uplift vibration, oil canning and visual appearance. Panels shall be manufactured with vertical standing seam at both sides of the panel. Panels shall be fixed on Purlin with snap on connectors with double tooth grip lock locking mechanism and will be secured on MS structure (will be paid separately) with 3 numbers self-drilling screws and trapezoid SS fasteners holding the base of the standing seam offering best stability having a pull out load of min 7000N tested as per ISO 6892-1998 and IS 1608-2005 as per design requirement. Panels must satisfy dart drop impact test as per IS 14443-97 shall show no sign of breakage on Polycarbonate sheets which have been exposed to UV for a min of 500 Hours as per ASTM G 155. Panels shall not have yellowness index as per ASTM D 1925 of 15 units when tested on a sample exposed to UV for 500 Hours as per ASTM G 155. U value shall not be more than 1.6 W/m<sup>2</sup>K as per EN ISO 10077-2;2018. Panel shall be with additional end cap/ Aluminium U/F profile/Glazing Bar for ends as required. Panel shall be fixed over MS structural steel/MS purlin (paid separately) conforming to the detail technical specifications as per approved architectural drawings. Trained and factory authorized labour with supervision to complete the entire panel installation as per drawing &amp; direction of the Engineer-in-Charge.</p>		
979	TBSC-W.I-04	<p>Supply and Installation of 16 mm thick Flux standing seam polycarbonate panel system of DPI Daylighting or Equivalent Supply and installation of DPI Flux translucent roof with standing seam multicell polycarbonate panel system. The system with complete assembly of co extruded UV protected multicell panels incorporated into a complete system. Co extruded UV protected polycarbonate panel system of min 16 mm thick of 1200 mm min</p>	1Sqm	4,151.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		width with angular daylighting concept. Panels shall have minimum seven layers in a truss bridge design for higher flexibility and strength. Panels with opaque translucent clear combination as per required flux level and design requirements with all fixing accessories to ensure best performance for wind uplift vibration, oil canning and visual appearance. Panels shall be manufactured with vertical standing seam at both sides of the panel. Panels shall be fixed on Purlin with snap on connectors with double tooth grip lock locking mechanism and will be secured on MS structure (will be paid separately) with 3 numbers self-drilling screws and trapezoid SS fasteners holding the base of the standing seam offering best stability having a pull out load of min 7000N tested as per ISO 6892-1998 and IS 1608-2005 as per design requirement. Panels must satisfy dart drop impact test as per IS 14443-97 shall show no sign of breakage on Polycarbonate sheets which have been exposed to UV for a min of 500 Hours as per ASTM G 155. Panels shall not have yellowness index as per ASTM D 1925 of 15 units when tested on a sample exposed to UV for 500 Hours as per ASTM G 155. U value shall not be more than 1.9 W/m <sup>2</sup> K as per EN ISO 10077-2;2018. Panel shall be with additional end cap/ Aluminium U/F profile/Glazing Bar for ends as required. Panel shall be fixed over MS structural steel/MS purlin (paid separately) conforming to the detail technical specifications as per approved architectural drawings. Trained and factory authorized labour with supervision to complete the entire panel installation as per drawing & direction of the Engineer-in-Charge.		
980	TBSC-W.I-05	Supply and Installation of 18 mm thick Flux standing seam polycarbonate panel system of DPI Daylighting or Equivalent, Supply and installation of DPI Flux translucent roof with standing seam multicell polycarbonate panel system. The system with complete assembly of co extruded UV protected multicell panels incorporated into a complete system. Co extruded UV protected polycarbonate panel system of min 18 mm thick of 1200 mm min width with angular daylighting concept. Panels shall have minimum seven layers in a truss bridge design for higher flexibility and strength. Panels with opaque translucent clear combination as per required flux level and design requirements with all fixing	1Sqm	4,505.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		accessories to ensure best performance for wind uplift vibration, oil canning and visual appearance. Panels shall have an additional IR Blocking features for enhance thermal comfort. Panels shall be manufactured with vertical standing seam at both sides of the panel. Panels shall be fixed on Purlin with snap on connectors with double tooth grip lock locking mechanism and will be secured on MS structure (will be paid separately) with a continuous aluminium I Beam holding the base of the standing seam along the length of the panel and fixed with purlin with self-drilling hex head screws offering best stability with a pull out load of min 21000N tested as per ISO 6892-1998 and IS 1608-2005 as per design requirement. Panels must satisfy dart drop impact test as per IS 14443-97 shall show no sign of breakage on Polycarbonate sheets which have been exposed to UV for a min of 500 Hours as per ASTM G 155. U value shall not be more than 1.9 W/m <sup>2</sup> K as per EN ISO 10077-2;2018. Panel shall be with additional end cap/ Aluminium U/F profile/Glazing Bar for ends as required. Panel shall be fixed over MS structural steel/MS purlin (paid separately) conforming to the detail technical specifications as per approved architectural drawings. Trained and factory authorized labour with supervision to complete the entire panel installation as per drawing & direction of the Engineer-in-Charge.		
<b>X</b>	<b>SECTION</b>	<b>POST-TENSIONING WORKS</b>		
981	TBSC-X.I-01	Supply of Freyssinet type wedge action anchorage cone block, couplers, anchor heads and wedges of cast iron make shot blasting finish complete assembly of size 400 x 300 mm as per IS 1343 : 2012	1 No	1,900.00
982	TBSC-X.I-02	Supply of GI corrugated sheathing duct of 0.3mm thick of 90 mm size for installing the tendons for bonded post tensioning work as per IS 1343 : 2012	1 RM	50.00
983	TBSC-X.I-03	Supply of HDPE grout hose with flanges for bonded post tensioning work as per IS 1343 : 2012	1 RM	30.00
984	TBSC-X.I-04	Design and execution of post tensioning work, including supplying, laying of HT tendon strands, decoiling, the strands, cutting to the required lengths, laying of HT strands in sheathing (GI corrugated ducts 0.3mm thick) jointing with couplers and inserting the strands, profiling, fixing live end anchorages, making dead end anchorages, including flowering the strands, fixing tendon support bars, supervising the fixing of antibursting	1 MT	1,90,000.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	Scheduled Rate for 2021-22
		reinforcement, stressing the cables using hydraulic jack, end trimming, grouting the cables, with cement slurry, mixed with admixtures with required tools, plants, and machineries, and consumables etc., including all leads, lifts, coordination, with the post-tensioning agency, preparation of drawings, obtaining approval from the Engineer-in-Charge with supply of approved grade tendons but excluding the cost of concrete, reinforcement steel, shuttering, anchors, sheathing duct etc.,		
1		All the items to be used on the works are of first quality & ISI and as approved by the Engineer-In-charge of the work.		
2		Supply Rates for all the materials are basic rates based on market rates/quoted rates/ derived rates, excluding Taxes.		
3		The applicable GST (works contract) shall be added at applicable rate in Part B of the estimates.		
4		SSR Rates for Building items are purely for the guidance of the officers in preparation of estimates vide para.113 of APPWD code. Authority who prepares the estimate is however responsible for proper rates as envisaged in para.45 of APPWD code.		
	<b>LEGEND</b>	"TBSC" -A.I-01		
		"TBSC" -R.I-22		
		"TBSC" -S.III-14		
		TBS - Denotes Telangana Buildings SoR		
		A.I/ R.IV - Denotes the Section & Sub-section		
		01/22 - Denotes the serial number of the item		



### SCAFFOLDING CHARGES

Providing rigid steel cup lock scaffolding system using steel pipes, adjustable Jack screw props, RHS spans, couplers, bracings and horizontal connecting members, supporting brackets, RHS span beams as per the approved scaffolding designs & plan and other accessories as per the IS Norms and stability calculations including hire charges for cup lock scaffolding pipes, RHS spans, runners, wooden members and cost and conveyance of all other consumable accessories, taxes etc complete for finished item of work

- A. Hire Charges for Centring Deck Sheets - 9 Ply - 19 mm thick Plywood conforming to IS:303 BWR Grade
- B. Hire Charges for Centring with MS Steel Plate - form work
- C. Hire Charges for Centring with Aluminium anodized sheets and sections conforming to IS: 11857 - 1986

Sl	NAME OF THE STRUCTURAL MEMBER	Material Hire charges	Labour charges	Centring Charges for 2021-22	Unit of Measurement
1	2	3	4	5	6
<b>A. HIRE CHARGES FOR CENTERING &amp; SCAFFOLDING - CUPLOCK + MARINE GRADE PLYWOOD</b>					
A	FOOTINGS	Rs. 495.00	Rs. 718.00	Rs. 1213.00	per 1 cum
B	BED BLOCKS, BANDS	Rs. 109.00	Rs. 370.00	Rs. 479.00	per 1 cum
C	PEDESTALS	Rs. 562.00	Rs. 1141.00	Rs. 1703.00	per 1 cum
D	PLINTH BEAMS	Rs. 2385.00	Rs. 1730.00	Rs. 4115.00	per 1 cum
<b>HIRE CHARGES FOR CENTERING &amp; SCAFFOLDING - Unsupported Height up to 3.66 M - MS Cup lock System + Marine Grade Plywood shuttering</b>					
E	LINTELS	Rs. 2025.00	Rs. 1836.00	Rs. 3861.00	per 1 cum
F	CHAJJAS - SUNSHADES	Rs. 400.00	Rs. 282.00	Rs. 682.00	per 1 sqm
G	COLUMNS	Rs. 609.00	Rs. 2578.00	Rs. 3187.00	per 1 cum
H	BEAMS	Rs. 3578.00	Rs. 2162.00	Rs. 5740.00	per 1 cum
I	SLABS - Up to 150 mm thick	Rs. 406.00	Rs. 245.00	Rs. 651.00	per 1 sqm
J	SLABS - above 150 mm - Up to 300 mm thick	Rs. 417.00	Rs. 252.00	Rs. 669.00	per 1 sqm
K	SLABS - above 300 mm thick	Rs. 436.00	Rs. 264.00	Rs. 700.00	per 1 sqm
L	WAFFLE - (GRID) SLABS (Rib Beams with Slabs)	Rs. 1473.00	Rs. 890.00	Rs. 2363.00	per 1 sqm
M	PERGOLA SLABS (Only Rib Beams)	Rs. 1033.00	Rs. 624.00	Rs. 1657.00	per 1 sqm
N	ARCH BEAMS - up to 1.5 M Span	Rs. 4067.00	Rs. 2458.00	Rs. 6525.00	per 1 cum
O	ARCH BEAMS - above 1.5 M Span	Rs. 4125.00	Rs. 2493.00	Rs. 6618.00	per 1 cum
P	DOME SLABS	Rs. 6578.00	Rs. 3975.00	Rs. 10553.00	per 1 cum
Q	HELICAL STAIRCASES	Rs. 501.00	Rs. 303.00	Rs. 804.00	per 1 sqm
R	SHEAR WALLS, RCC WALLS, WATER TANK WALLS	Rs. 834.00	Rs. 576.00	Rs. 1410.00	per 1 sqm
<b>B. HIRE CHARGES FOR CENTERING &amp; SCAFFOLDING - CUPLOCK + MS PLATES</b>					
A	FOOTINGS	Rs. 480.00	Rs. 718.00	Rs. 1198.00	per 1 cum
B	BED BLOCKS, BANDS	Rs. 106.00	Rs. 370.00	Rs. 476.00	per 1 cum
C	PEDESTALS	Rs. 545.00	Rs. 1141.00	Rs. 1686.00	per 1 cum
D	PLINTH BEAMS	Rs. 2313.00	Rs. 1730.00	Rs. 4043.00	per 1 cum
<b>HIRE CHARGES FOR CENTERING &amp; SCAFFOLDING - Unsupported Height up to 3.66 M - MS Cup lock System + MS Plate shuttering</b>					
E	LINTELS	Rs. 1964.00	Rs. 1836.00	Rs. 3800.00	per 1 cum
F	CHAJJAS - SUNSHADES	Rs. 388.00	Rs. 282.00	Rs. 670.00	per 1 sqm
G	COLUMNS	Rs. 591.00	Rs. 2578.00	Rs. 3169.00	per 1 cum
H	BEAMS	Rs. 3469.00	Rs. 2162.00	Rs. 5631.00	per 1 cum

Sl	NAME OF THE STRUCTURAL MEMBER	Material Hire charges		Labour charges		Centring Charges for 2021-22		Unit of Measurement
1	2	3		4		5		6
I	SLABS - Up to 150 mm thick	Rs.	393.00	Rs.	245.00	Rs.	638.00	per 1 sqm
J	SLABS - above 150 mm - Up to 300 mm thick	Rs.	404.00	Rs.	252.00	Rs.	656.00	per 1 sqm
K	SLABS - above 300 mm thick	Rs.	423.00	Rs.	264.00	Rs.	687.00	per 1 sqm
L	WAFFLE - (GRID) SLABS (Rib Beams with Slabs)	Rs.	1428.00	Rs.	890.00	Rs.	2318.00	per 1 sqm
M	PERGOLA SLABS (Only Rib Beams)	Rs.	1002.00	Rs.	624.00	Rs.	1626.00	per 1 sqm
N	ARCH BEAMS - up to 1.5 M Span	Rs.	3944.00	Rs.	2458.00	Rs.	6402.00	per 1 cum
O	ARCH BEAMS - above 1.5 M Span	Rs.	3999.00	Rs.	2493.00	Rs.	6492.00	per 1 cum
P	DOME SLABS	Rs.	6377.00	Rs.	3975.00	Rs.	10352.00	per 1 cum
Q	HELICAL STAIRCASES	Rs.	486.00	Rs.	303.00	Rs.	789.00	per 1 sqm
R	SHEAR WALLS, RCC WALLS, WATER TANK WALLS	Rs.	809.00	Rs.	576.00	Rs.	1385.00	per 1 sqm
<b>C. HIRE CHARGES FOR CENTERING &amp; SCAFFOLDING - CUPLOCK + ALUMINIUM PLATES</b>								
A	FOOTINGS	Rs.	671.00	Rs.	718.00	Rs.	1389.00	per 1 cum
B	BED BLOCKS, BANDS	Rs.	148.00	Rs.	370.00	Rs.	518.00	per 1 cum
C	PEDESTALS	Rs.	762.00	Rs.	1141.00	Rs.	1903.00	per 1 cum
D	PLINTH BEAMS	Rs.	3232.00	Rs.	1730.00	Rs.	4962.00	per 1 cum
<b>HIRE CHARGES FOR CENTERING &amp; SCAFFOLDING - Unsupported Height up to 3.66 M - MS Cup lock System + Aluminium Plate shuttering</b>								
E	LINTELS	Rs.	2744.00	Rs.	1836.00	Rs.	4580.00	per 1 cum
F	CHAJJAS - SUNSHADES	Rs.	542.00	Rs.	282.00	Rs.	824.00	per 1 sqm
G	COLUMNS	Rs.	826.00	Rs.	2578.00	Rs.	3404.00	per 1 cum
H	BEAMS	Rs.	4847.00	Rs.	2162.00	Rs.	7009.00	per 1 cum
I	SLABS - Up to 150 mm thick	Rs.	550.00	Rs.	245.00	Rs.	795.00	per 1 sqm
J	SLABS - above 150 mm - Up to 300 mm thick	Rs.	565.00	Rs.	252.00	Rs.	817.00	per 1 sqm
K	SLABS - above 300 mm thick	Rs.	591.00	Rs.	264.00	Rs.	855.00	per 1 sqm
L	WAFFLE - (GRID) SLABS (Rib Beams with Slabs)	Rs.	1996.00	Rs.	890.00	Rs.	2886.00	per 1 sqm
M	PERGOLA SLABS (Only Rib Beams)	Rs.	1400.00	Rs.	624.00	Rs.	2024.00	per 1 sqm
N	ARCH BEAMS - up to 1.5 M Span	Rs.	5511.00	Rs.	2458.00	Rs.	7969.00	per 1 cum
O	ARCH BEAMS - above 1.5 M Span	Rs.	5589.00	Rs.	2493.00	Rs.	8082.00	per 1 cum
P	DOME SLABS	Rs.	8912.00	Rs.	3975.00	Rs.	12887.00	per 1 cum
Q	HELICAL STAIRCASES	Rs.	679.00	Rs.	303.00	Rs.	982.00	per 1 sqm
R	SHEAR WALLS, RCC WALLS, WATER TANK WALLS	Rs.	1130.00	Rs.	576.00	Rs.	1706.00	per 1 sqm
Note: - Centering & scaffolding charges for steel scaffolding with pipes, jack props, centring for unsupported heights of every 610 mm height above 3.66 M may be allowed at 16.666% more than the basic material hire charges and relevant labour charges of the applicable floor and item								



Sl	NAME OF THE STRUCTURAL MEMBER	Material Hire charges	Labour charges	Centring Charges for 2021-22	Unit of Measurement			
1	2	3	4	5	6			
<b>HIRE CHARGES FOR ACCESS SCAFFOLDING - up to 3.66 M using MS Jack Prop Cup lock Pipe Scaffolds for BRICK MASONRY/ STONE MASONRY - 1 sqm (Wall Area)</b>								
A	1st - Floor	Rs.	12.22	Rs.	90.22	Rs.	102.44	per 1 sqm
B	2nd - Floor	Rs.	12.22	Rs.	129.23	Rs.	141.45	per 1 sqm
C	3rd - Floor	Rs.	12.22	Rs.	168.23	Rs.	180.45	per 1 sqm
D	4th - Floor	Rs.	12.22	Rs.	207.23	Rs.	219.45	per 1 sqm
E	5th - Floor	Rs.	12.22	Rs.	246.23	Rs.	258.45	per 1 sqm
F	6th - Floor	Rs.	12.22	Rs.	285.23	Rs.	297.45	per 1 sqm
G	7th - Floor	Rs.	12.22	Rs.	324.24	Rs.	336.46	per 1 sqm
H	8th - Floor	Rs.	12.22	Rs.	363.24	Rs.	375.46	per 1 sqm
I	9th - Floor	Rs.	12.22	Rs.	402.24	Rs.	414.46	per 1 sqm
J	10th - Floor	Rs.	12.22	Rs.	441.24	Rs.	453.46	per 1 sqm
K	11th - Floor	Rs.	12.22	Rs.	480.24	Rs.	492.46	per 1 sqm
L	12th - Floor	Rs.	12.22	Rs.	519.25	Rs.	531.47	per 1 sqm
M	13th - Floor	Rs.	12.22	Rs.	558.25	Rs.	570.47	per 1 sqm
N	14th - Floor	Rs.	12.22	Rs.	597.25	Rs.	609.47	per 1 sqm
O	15th - Floor	Rs.	12.22	Rs.	636.25	Rs.	648.47	per 1 sqm
<b>HIRE CHARGES FOR ACCESS SCAFFOLDING - up to 3.66 M using MS Jack Prop Cup lock Pipe Scaffolds., for PLASTERING/ PAINTING/ TEXTURE to WALLS - 1 sqm</b>								
A	1st - Floor	Rs.	1.22	Rs.	9.02	Rs.	10.24	per 1 sqm
B	2nd - Floor	Rs.	1.22	Rs.	12.92	Rs.	14.14	per 1 sqm
C	3rd - Floor	Rs.	1.22	Rs.	16.82	Rs.	18.04	per 1 sqm
D	4th - Floor	Rs.	1.22	Rs.	20.72	Rs.	21.95	per 1 sqm
E	5th - Floor	Rs.	1.22	Rs.	24.62	Rs.	25.85	per 1 sqm
F	6th - Floor	Rs.	1.22	Rs.	28.52	Rs.	29.75	per 1 sqm
G	7th - Floor	Rs.	1.22	Rs.	32.42	Rs.	33.65	per 1 sqm
H	8th - Floor	Rs.	1.22	Rs.	36.32	Rs.	37.55	per 1 sqm
I	9th - Floor	Rs.	1.22	Rs.	40.22	Rs.	41.45	per 1 sqm
J	10th - Floor	Rs.	1.22	Rs.	44.12	Rs.	45.35	per 1 sqm
K	11th - Floor	Rs.	1.22	Rs.	48.02	Rs.	49.25	per 1 sqm
L	12th - Floor	Rs.	1.22	Rs.	51.92	Rs.	53.15	per 1 sqm
M	13th - Floor	Rs.	1.22	Rs.	55.82	Rs.	57.05	per 1 sqm
N	14th - Floor	Rs.	1.22	Rs.	59.73	Rs.	60.95	per 1 sqm
O	15th - Floor	Rs.	1.22	Rs.	63.63	Rs.	64.85	per 1 sqm
<b>HIRE CHARGES FOR STAGE SCAFFOLDING - up to 3.66 M using MS Jack Prop Cup lock Scaffolds, Staging Boards, for CEILING PLASTERING - 1 sqm</b>								
A	1st - Floor	Rs.	3.81	Rs.	18.96	Rs.	22.77	per 1 sqm
B	2nd - Floor	Rs.	3.81	Rs.	26.53	Rs.	30.34	per 1 sqm
C	3rd - Floor	Rs.	3.81	Rs.	34.11	Rs.	37.92	per 1 sqm
D	4th - Floor	Rs.	3.81	Rs.	41.68	Rs.	45.49	per 1 sqm
E	5th - Floor	Rs.	3.81	Rs.	49.26	Rs.	53.07	per 1 sqm
F	6th - Floor	Rs.	3.81	Rs.	56.83	Rs.	60.64	per 1 sqm
G	7th - Floor	Rs.	3.81	Rs.	64.41	Rs.	68.22	per 1 sqm
H	8th - Floor	Rs.	3.81	Rs.	71.98	Rs.	75.79	per 1 sqm
I	9th - Floor	Rs.	3.81	Rs.	79.56	Rs.	83.37	per 1 sqm
J	10th - Floor	Rs.	3.81	Rs.	87.13	Rs.	90.94	per 1 sqm
K	11th - Floor	Rs.	3.81	Rs.	94.71	Rs.	98.52	per 1 sqm
L	12th - Floor	Rs.	3.81	Rs.	102.28	Rs.	106.09	per 1 sqm
M	13th - Floor	Rs.	3.81	Rs.	109.86	Rs.	113.67	per 1 sqm
N	14th - Floor	Rs.	3.81	Rs.	117.43	Rs.	121.24	per 1 sqm
O	15th - Floor	Rs.	3.81	Rs.	125.01	Rs.	128.82	per 1 sqm

Note: - Centering & scaffolding charges for steel scaffolding with pipes, jack props, centring for unsupported heights of every 610 mm height above 3.66 M may be allowed at 16.66% more than the basic material hire charges and relevant labour charges of the applicable floor and item

**Note:** All the estimating authorities are requested to invariably adopt the steel scaffolding/ cup-lock scaffolding in the works owing to safety concerns. It is recommended not to adopt centring and scaffolding rates of Casuarinas Ballies, Bamboos, Wooden Reapers, Runners, Wood Posts, Wall Plates for 3rd and above floors and works where ECV is Rs. 1.0 Crore and above. This stipulation is applicable for STAGE scaffold, ACCESS scaffold and regular centring and shuttering items due to safety concerns.

**A. CENTERING & SCAFFOLDING CHARGES- FLOOR WISE RATES for CUPLOCK SCAFFOLD SYSTEM USING PLYWOOD SHUTTER for unsupported height 3.66 M**

FLOOR		LINTELS	CHAJJAS - SUN- SHADES	COLUMNS	BEAMS	SLABS - Up to 150 mm thick	SLABS- above 150 mm - Up to 300 mm thick	SLABS - above 300 mm thick	WAFFLE - (GRID) SLABS (Rib Beams with Slabs)	PERGOLA SLABS (Only Rib Beams)	ARCH BEAMS - up to 1.5 M Span	ARCH BEAMS - above 1.5 M Span	DOME SLABS	HELICAL STAIR- CASES	SHEAR WALLS, RCC WALLS, WATER TANK WALLS
Material Hire for any Floor	H	2025.00	400.00	609.00	3578.00	406.00	417.00	436.00	1473.00	1033.00	4067.00	4125.00	6578.00	501.00	834.00
Labour Charges for 1st Floor	L	1836.00	282.00	2578.00	2162.00	245.00	252.00	264.00	890.00	624.00	2458.00	2493.00	3975.00	303.00	576.00
Total Hire Charges (H+L)	T	3861.00	682.00	3187.00	5740.00	651.00	669.00	700.00	2363.00	1657.00	6525.00	6618.00	10553.00	804.00	1410.00
1st - Floor	L	1836.00	282.00	2578.00	2162.00	245.00	252.00	264.00	890.00	624.00	2458.00	2493.00	3975.00	303.00	576.00
2nd - Floor	L	2020.00	310.00	2836.00	2378.00	270.00	277.00	290.00	979.00	686.00	2704.00	2742.00	4373.00	333.00	634.00
3rd - Floor	L	2203.00	338.00	3094.00	2594.00	294.00	302.00	317.00	1068.00	749.00	2950.00	2992.00	4770.00	364.00	691.00
4th - Floor	L	2387.00	367.00	3351.00	2811.00	319.00	328.00	343.00	1157.00	811.00	3195.00	3241.00	5168.00	394.00	749.00
5th - Floor	L	2570.00	395.00	3609.00	3027.00	343.00	353.00	370.00	1246.00	874.00	3441.00	3490.00	5565.00	424.00	806.00
6th - Floor	L	2754.00	423.00	3867.00	3243.00	368.00	378.00	396.00	1335.00	936.00	3687.00	3740.00	5963.00	455.00	864.00
7th - Floor	L	2938.00	451.00	4125.00	3459.00	392.00	403.00	422.00	1424.00	998.00	3933.00	3989.00	6360.00	485.00	922.00
8th - Floor	L	3121.00	479.00	4383.00	3675.00	417.00	428.00	449.00	1513.00	1061.00	4179.00	4238.00	6758.00	515.00	979.00
9th - Floor	L	3305.00	508.00	4640.00	3892.00	441.00	454.00	475.00	1602.00	1123.00	4424.00	4487.00	7155.00	545.00	1037.00
10th - Floor	L	3488.00	536.00	4898.00	4108.00	466.00	479.00	502.00	1691.00	1186.00	4670.00	4737.00	7553.00	576.00	1094.00
11th - Floor	L	3672.00	564.00	5156.00	4324.00	490.00	504.00	528.00	1780.00	1248.00	4916.00	4986.00	7950.00	606.00	1152.00
12th - Floor	L	3856.00	592.00	5414.00	4540.00	515.00	529.00	554.00	1869.00	1310.00	5162.00	5235.00	8348.00	636.00	1210.00
13th - Floor	L	4039.00	620.00	5672.00	4756.00	539.00	554.00	581.00	1958.00	1373.00	5408.00	5485.00	8745.00	667.00	1267.00
14th - Floor	L	4223.00	649.00	5929.00	4973.00	564.00	580.00	607.00	2047.00	1435.00	5653.00	5734.00	9143.00	697.00	1325.00
15th - Floor	L	4406.00	677.00	6187.00	5189.00	588.00	605.00	634.00	2136.00	1498.00	5899.00	5983.00	9540.00	727.00	1382.00

**Note:** - Centering & scaffolding charges for unsupported heights of every 610 mm height or part thereof over and above 3.66 M may be allowed at 16.666% more than the basic material hire charges and relevant labour charges of the applicable floor and item

**B. CENTERING & SCAFFOLDING CHARGES- FLOOR WISE RATES for CUPLOCK SCAFFOLD SYSTEM USING MS STEEL PLATE SHUTTER for unsupported height 3.66 M**

FLOOR		LINTELS	CHAJJAS - SUNSHADES	COLUMNS	BEAMS	SLABS - Up to 150 mm thick	SLABS - above 150 mm - Up to 300 mm thick	SLABS - above 300 mm thick	WAFFLE - (GRID) SLABS (Rib Beams with Slabs)	PERGOLA SLABS (Only Rib Beams)	ARCH BEAMS - up to 1.5 M Span	ARCH BEAMS - above 1.5 M Span	DOME SLABS	HELICAL STAIR- CASES	SHEAR WALLS, RCC WALLS, WATER TANK WALLS
Material Hire for any Floor	H	1964.00	388.00	591.00	3469.00	393.00	404.00	423.00	1428.00	1002.00	3944.00	3999.00	6377.00	486.00	809.00
Labour Charges for 1st Floor	L	1836.00	282.00	2578.00	2162.00	245.00	252.00	264.00	890.00	624.00	2458.00	2493.00	3975.00	303.00	576.00
Total Hire Charges (H+L)	T	3800.00	670.00	3169.00	5631.00	638.00	656.00	687.00	2318.00	1626.00	6402.00	6492.00	10352.00	789.00	1385.00
1st - Floor	L	1836.00	282.00	2578.00	2162.00	245.00	252.00	264.00	890.00	624.00	2458.00	2493.00	3975.00	303.00	576.00
2nd - Floor	L	2020.00	310.00	2836.00	2378.00	270.00	277.00	290.00	979.00	686.00	2704.00	2742.00	4373.00	333.00	634.00
3rd - Floor	L	2203.00	338.00	3094.00	2594.00	294.00	302.00	317.00	1068.00	749.00	2950.00	2992.00	4770.00	364.00	691.00
4th - Floor	L	2387.00	367.00	3351.00	2811.00	319.00	328.00	343.00	1157.00	811.00	3195.00	3241.00	5168.00	394.00	749.00
5th - Floor	L	2570.00	395.00	3609.00	3027.00	343.00	353.00	370.00	1246.00	874.00	3441.00	3490.00	5565.00	424.00	806.00
6th - Floor	L	2754.00	423.00	3867.00	3243.00	368.00	378.00	396.00	1335.00	936.00	3687.00	3740.00	5963.00	455.00	864.00
7th - Floor	L	2938.00	451.00	4125.00	3459.00	392.00	403.00	422.00	1424.00	998.00	3933.00	3989.00	6360.00	485.00	922.00
8th - Floor	L	3121.00	479.00	4383.00	3675.00	417.00	428.00	449.00	1513.00	1061.00	4179.00	4238.00	6758.00	515.00	979.00
9th - Floor	L	3305.00	508.00	4640.00	3892.00	441.00	454.00	475.00	1602.00	1123.00	4424.00	4487.00	7155.00	545.00	1037.00
10th - Floor	L	3488.00	536.00	4898.00	4108.00	466.00	479.00	502.00	1691.00	1186.00	4670.00	4737.00	7553.00	576.00	1094.00
11th - Floor	L	3672.00	564.00	5156.00	4324.00	490.00	504.00	528.00	1780.00	1248.00	4916.00	4986.00	7950.00	606.00	1152.00
12th - Floor	L	3856.00	592.00	5414.00	4540.00	515.00	529.00	554.00	1869.00	1310.00	5162.00	5235.00	8348.00	636.00	1210.00
13th - Floor	L	4039.00	620.00	5672.00	4756.00	539.00	554.00	581.00	1958.00	1373.00	5408.00	5485.00	8745.00	667.00	1267.00
14th - Floor	L	4223.00	649.00	5929.00	4973.00	564.00	580.00	607.00	2047.00	1435.00	5653.00	5734.00	9143.00	697.00	1325.00
15th - Floor	L	4406.00	677.00	6187.00	5189.00	588.00	605.00	634.00	2136.00	1498.00	5899.00	5983.00	9540.00	727.00	1382.00

**Note:** - Centering & scaffolding charges for unsupported heights of every 610 mm height or part thereof over and above 3.66 M may be allowed at 16.666% more than the basic material hire charges and relevant labour charges of the applicable floor and item

## C. CENTERING &amp; SCAFFOLDING CHARGES- FLOOR WISE RATES for CUPLOCK SCAFFOLD SYSTEM USING ALUMINIUM PLATE SHUTTER for unsupported height 3.66 M

FLOOR		LINTELS	CHAJJAS - SUN- SHADES	COLUMNS	BEAMS	SLABS - Up to 150 mm thick	SLABS- above 150 mm - Up to 300 mm thick	SLABS - above 300 mm thick	WAFFLE - (GRID) SLABS (Rib Beams with Slabs)	PERGOLA SLABS (Only Rib Beams)	ARCH BEAMS - up to 1.5 M Span	ARCH BEAMS - above 1.5 M Span	DOME SLABS	HELICAL STAIR- CASES	SHEAR WALLS, RCC WALLS, WATER TANK WALLS
Material Hire for any Floor	H	2744.00	542.00	826.00	4847.00	550.00	565.00	591.00	1996.00	1400.00	5511.00	5589.00	8912.00	679.00	1130.00
Labour Charges for 1st Floor	L	1836.00	282.00	2578.00	2162.00	245.00	252.00	264.00	890.00	624.00	2458.00	2493.00	3975.00	303.00	576.00
Total Hire Charges (H+L)	T	4580.00	824.00	3404.00	7009.00	795.00	817.00	855.00	2886.00	2024.00	7969.00	8082.00	12887.00	982.00	1706.00
1st - Floor	L	1836.00	282.00	2578.00	2162.00	245.00	252.00	264.00	890.00	624.00	2458.00	2493.00	3975.00	303.00	576.00
2nd - Floor	L	2020.00	310.00	2836.00	2378.00	270.00	277.00	290.00	979.00	686.00	2704.00	2742.00	4373.00	333.00	634.00
3rd - Floor	L	2203.00	338.00	3094.00	2594.00	294.00	302.00	317.00	1068.00	749.00	2950.00	2992.00	4770.00	364.00	691.00
4th - Floor	L	2387.00	367.00	3351.00	2811.00	319.00	328.00	343.00	1157.00	811.00	3195.00	3241.00	5168.00	394.00	749.00
5th - Floor	L	2570.00	395.00	3609.00	3027.00	343.00	353.00	370.00	1246.00	874.00	3441.00	3490.00	5565.00	424.00	806.00
6th - Floor	L	2754.00	423.00	3867.00	3243.00	368.00	378.00	396.00	1335.00	936.00	3687.00	3740.00	5963.00	455.00	864.00
7th - Floor	L	2938.00	451.00	4125.00	3459.00	392.00	403.00	422.00	1424.00	998.00	3933.00	3989.00	6360.00	485.00	922.00
8th - Floor	L	3121.00	479.00	4383.00	3675.00	417.00	428.00	449.00	1513.00	1061.00	4179.00	4238.00	6758.00	515.00	979.00
9th - Floor	L	3305.00	508.00	4640.00	3892.00	441.00	454.00	475.00	1602.00	1123.00	4424.00	4487.00	7155.00	545.00	1037.00
10th - Floor	L	3488.00	536.00	4898.00	4108.00	466.00	479.00	502.00	1691.00	1186.00	4670.00	4737.00	7553.00	576.00	1094.00
11th - Floor	L	3672.00	564.00	5156.00	4324.00	490.00	504.00	528.00	1780.00	1248.00	4916.00	4986.00	7950.00	606.00	1152.00
12th - Floor	L	3856.00	592.00	5414.00	4540.00	515.00	529.00	554.00	1869.00	1310.00	5162.00	5235.00	8348.00	636.00	1210.00
13th - Floor	L	4039.00	620.00	5672.00	4756.00	539.00	554.00	581.00	1958.00	1373.00	5408.00	5485.00	8745.00	667.00	1267.00
14th - Floor	L	4223.00	649.00	5929.00	4973.00	564.00	580.00	607.00	2047.00	1435.00	5653.00	5734.00	9143.00	697.00	1325.00
15th - Floor	L	4406.00	677.00	6187.00	5189.00	588.00	605.00	634.00	2136.00	1498.00	5899.00	5983.00	9540.00	727.00	1382.00

**Note:** - Centering & scaffolding charges for unsupported heights of every 610 mm height or part thereof over and above 3.66 M may be allowed at 16.666% more than the basic material hire charges and relevant labour charges of the applicable floor and item

Sl	NAME OF THE STRUCTURAL MEMBER	Material Hire charges	Labour charges	Centring Charges for 2021-22	Unit of Measurement
1	2	3	4	5	6
<b>D. HIRE CHARGES FOR CENTERING &amp; SCAFFOLDING</b>					
A	FOOTINGS	Rs. 304.00	Rs. 718.00	Rs. 1022.00	per 1 cum
B	BED BLOCKS, BANDS	Rs. 67.00	Rs. 370.00	Rs. 437.00	per 1 cum
C	PEDESTALS	Rs. 346.00	Rs. 1141.00	Rs. 1487.00	per 1 cum
D	PLINTH BEAMS	Rs. 1467.00	Rs. 1730.00	Rs. 3197.00	per 1 cum
HIRE CHARGES FOR CENTERING & SCAFFOLDING - Unsupported Height up to 3.66 M Steel scaffolding pipes, jack Props, Wallers, Foot plates, brackets, steel Centering Plates, etc.,					
E	LINTELS	Rs. 1246.00	Rs. 1836.00	Rs. 3082.00	per 1 cum
F	CHAJJAS - SUNSHADES	Rs. 246.00	Rs. 282.00	Rs. 528.00	per 1 sqm
G	COLUMNS	Rs. 375.00	Rs. 2578.00	Rs. 2953.00	per 1 cum
H	BEAMS	Rs. 2201.00	Rs. 2162.00	Rs. 4363.00	per 1 cum
I	SLABS - Up to 150 mm thick	Rs. 249.00	Rs. 245.00	Rs. 494.00	per 1 sqm
J	SLABS - above 150 mm - Up to 300 mm thick	Rs. 257.00	Rs. 252.00	Rs. 509.00	per 1 sqm
K	SLABS - above 300 mm thick	Rs. 268.00	Rs. 264.00	Rs. 532.00	per 1 sqm
L	WAFFLE - (GRID) SLABS (Rib Beams with Slabs)	Rs. 906.00	Rs. 890.00	Rs. 1796.00	per 1 sqm
M	PERGOLA SLABS (Only Rib Beams)	Rs. 635.00	Rs. 624.00	Rs. 1259.00	per 1 sqm
N	ARCH BEAMS - up to 1.5 M Span	Rs. 2502.00	Rs. 2458.00	Rs. 4960.00	per 1 cum
O	ARCH BEAMS - above 1.5 M Span	Rs. 2537.00	Rs. 2493.00	Rs. 5030.00	per 1 cum
P	DOME SLABS	Rs. 4046.00	Rs. 3975.00	Rs. 8021.00	per 1 cum
Q	HELICAL STAIRCASES	Rs. 308.00	Rs. 303.00	Rs. 611.00	per 1 sqm
R	SHEAR WALLS, RCC WALLS, WATER TANK WALLS	Rs. 513.00	Rs. 576.00	Rs. 1089.00	per 1 sqm
<b>E. HIRE CHARGES FOR CENTERING &amp; SCAFFOLDING - Unsupported Height up to 3.66 M Casuarinas Ballies, Bamboos, Wooden Reapers, Runners, Wood Posts, Wall Plates etc.,</b>					
E	LINTELS	Rs. 831.00	Rs. 1399.00	Rs. 2230.00	per 1 cum
F	CHAJJAS - SUNSHADES	Rs. 164.00	Rs. 215.00	Rs. 379.00	per 1 sqm
G	COLUMNS	Rs. 250.00	Rs. 1965.00	Rs. 2215.00	per 1 cum
H	BEAMS	Rs. 1467.00	Rs. 1648.00	Rs. 3115.00	per 1 cum
I	SLABS - Up to 150 mm thick	Rs. 166.00	Rs. 187.00	Rs. 353.00	per 1 sqm
J	SLABS - above 150 mm - Up to 300 mm thick	Rs. 171.00	Rs. 192.00	Rs. 363.00	per 1 sqm

Sl	NAME OF THE STRUCTURAL MEMBER	Material Hire charges		Labour charges		Centring Charges for 2021-22		Unit of Measurement
1	2	3		4		5		6
K	SLABS - above 300 mm thick	Rs.	179.00	Rs.	201.00	Rs.	380.00	per 1 sqm
L	WAFFLE - (GRID) SLABS (Rib Beams with Slabs)	Rs.	604.00	Rs.	679.00	Rs.	1283.00	per 1 sqm
M	PERGOLA SLABS (Only Rib Beams)	Rs.	424.00	Rs.	476.00	Rs.	900.00	per 1 sqm
N	ARCH BEAMS - up to 1.5 M Span	Rs.	1668.00	Rs.	1874.00	Rs.	3542.00	per 1 cum
O	ARCH BEAMS - above 1.5 M Span	Rs.	1692.00	Rs.	1900.00	Rs.	3592.00	per 1 cum
P	DOME SLABS	Rs.	2698.00	Rs.	3030.00	Rs.	5728.00	per 1 cum
Q	HELICAL STAIRCASES	Rs.	206.00	Rs.	231.00	Rs.	437.00	per 1 sqm
R	SHEAR WALLS, RCC WALLS, WATER TANK WALLS	DELETED						
HIRE CHARGES FOR ACCESS SCAFFOLDING - up to 3.66 M using Casuarinas Ballies, Bamboos, Wooden Reapers, Runners, Wood Posts, Wall Plates etc., for BRICK MASONRY/ STONE MASONRY - 1 sqm (Wall Area)								
A	1st - Floor	Rs.	10.86	Rs.	88.60	Rs.	99.46	per 1 sqm
B	2nd - Floor	Rs.	10.86	Rs.	127.46	Rs.	138.33	per 1 sqm
C	3rd - Floor	Rs.	10.86	Rs.	166.33	Rs.	177.20	per 1 sqm
D	4th - Floor	Rs.	10.86	Rs.	205.20	Rs.	216.06	per 1 sqm
E	5th - Floor	Rs.	10.86	Rs.	244.06	Rs.	254.93	per 1 sqm
F	6th - Floor	Rs.	10.86	Rs.	282.93	Rs.	293.79	per 1 sqm
G	7th - Floor	Rs.	10.86	Rs.	321.80	Rs.	332.66	per 1 sqm
H	8th - Floor	Rs.	10.86	Rs.	360.66	Rs.	371.53	per 1 sqm
I	9th - Floor	Rs.	10.86	Rs.	399.53	Rs.	410.39	per 1 sqm
J	10th - Floor	Rs.	10.86	Rs.	438.40	Rs.	449.26	per 1 sqm
K	11th - Floor	Rs.	10.86	Rs.	477.26	Rs.	488.13	per 1 sqm
L	12th - Floor	Rs.	10.86	Rs.	516.13	Rs.	526.99	per 1 sqm
M	13th - Floor	Rs.	10.86	Rs.	554.99	Rs.	565.86	per 1 sqm
N	14th - Floor	Rs.	10.86	Rs.	593.86	Rs.	604.73	per 1 sqm
O	15th - Floor	Rs.	10.86	Rs.	632.73	Rs.	643.59	per 1 sqm
HIRE CHARGES FOR ACCESS SCAFFOLDING - up to 3.66 M using Casuarinas Ballies, Bamboos, Wooden Reapers, Runners, Wood Posts, Wall Plates etc., for PLASTERING to WALLS - 1 sqm								
A	1st - Floor	Rs.	1.09	Rs.	8.86	Rs.	9.95	per 1 sqm
B	2nd - Floor	Rs.	1.09	Rs.	12.75	Rs.	13.83	per 1 sqm
C	3rd - Floor	Rs.	1.09	Rs.	16.63	Rs.	17.72	per 1 sqm
D	4th - Floor	Rs.	1.09	Rs.	20.52	Rs.	21.61	per 1 sqm
E	5th - Floor	Rs.	1.09	Rs.	24.41	Rs.	25.49	per 1 sqm
F	6th - Floor	Rs.	1.09	Rs.	28.29	Rs.	29.38	per 1 sqm
G	7th - Floor	Rs.	1.09	Rs.	32.18	Rs.	33.27	per 1 sqm
H	8th - Floor	Rs.	1.09	Rs.	36.07	Rs.	37.15	per 1 sqm
I	9th - Floor	Rs.	1.09	Rs.	39.95	Rs.	41.04	per 1 sqm
J	10th - Floor	Rs.	1.09	Rs.	43.84	Rs.	44.93	per 1 sqm
K	11th - Floor	Rs.	1.09	Rs.	47.73	Rs.	48.81	per 1 sqm
L	12th - Floor	Rs.	1.09	Rs.	51.61	Rs.	52.70	per 1 sqm
M	13th - Floor	Rs.	1.09	Rs.	55.50	Rs.	56.59	per 1 sqm
N	14th - Floor	Rs.	1.09	Rs.	59.39	Rs.	60.47	per 1 sqm
O	15th - Floor	Rs.	1.09	Rs.	63.27	Rs.	64.36	per 1 sqm

Sl	NAME OF THE STRUCTURAL MEMBER	Material Hire charges	Labour charges	Centring Charges for 2021-22	Unit of Measurement
1	2	3	4	5	6
HIRE CHARGES FOR STAGE SCAFFOLDING - up to 3.66 M using Casuarinas Ballies, Bamboos, Wooden Reapers, Runners, Wood Posts, Wall Plates etc., for CEILING PLASTERING - 1 sqm					
A	1st - Floor	Rs. 2.59	Rs. 17.79	Rs. 20.38	per 1 sqm
B	2nd - Floor	Rs. 2.59	Rs. 25.39	Rs. 27.98	per 1 sqm
C	3rd - Floor	Rs. 2.59	Rs. 32.99	Rs. 35.58	per 1 sqm
D	4th - Floor	Rs. 2.59	Rs. 40.59	Rs. 43.18	per 1 sqm
E	5th - Floor	Rs. 2.59	Rs. 48.19	Rs. 50.78	per 1 sqm
F	6th - Floor	Rs. 2.59	Rs. 55.79	Rs. 58.38	per 1 sqm
G	7th - Floor	Rs. 2.59	Rs. 63.40	Rs. 65.99	per 1 sqm
H	8th - Floor	Rs. 2.59	Rs. 71.00	Rs. 73.59	per 1 sqm
I	9th - Floor	Rs. 2.59	Rs. 78.60	Rs. 81.19	per 1 sqm
J	10th - Floor	Rs. 2.59	Rs. 86.20	Rs. 88.79	per 1 sqm
K	11th - Floor	Rs. 2.59	Rs. 93.80	Rs. 96.39	per 1 sqm
L	12th - Floor	Rs. 2.59	Rs. 101.40	Rs. 103.99	per 1 sqm
M	13th - Floor	Rs. 2.59	Rs. 109.00	Rs. 111.59	per 1 sqm
N	14th - Floor	Rs. 2.59	Rs. 116.60	Rs. 119.19	per 1 sqm
O	15th - Floor	Rs. 2.59	Rs. 124.20	Rs. 126.79	per 1 sqm
<b>Note:</b> - Centering & scaffolding charges for steel scaffolding with pipes, jack props, steel centring plates for unsupported heights of every 610 mm height above 3.66 M may be allowed at 16.666% more than the basic material hire charges and relevant labour charges of the applicable floor and item					

**Note:** It is recommended not to adopt centering and scaffolding rates of Casuarinas Ballies, Bamboos, Wooden Reapers, Runners, Wood Posts, Wall Plates for 3rd and above floors for stage scaffold, access scaffold and regular centering and shuttering items due to safety concerns.

For 3rd and upper floors, it is recommended to adopt CUP LOCK SCAFFOLD SYSTEM for stage scaffold, access scaffold and regular centering and shuttering items as appended in above sections.

CIVIL ITEMS

Scaffolding&Centeringcharges

D.CENTERING & SCAFFOLDING CHARGES-FLOOR WISE RATES for Steel scaffolding pipes, jack Props, Steel Centering Plates, etc.,for unsupported height 3.66 M

FLOOR		LINTELS	CHAJJ AS - SUN- SHADES	COLUMNS	BEAMS	SLABS - Up to 150 mm thick	SLABS- above 150 mm - Up to 300 mm thick	SLABS above 300 mm thick	WAFFLE - (GRID) SLABS (Rib Beams with Slabs)	PERGOLA SLABS (Only Rib Beams)	ARCH BEAMS - up to 1.5 M Span	ARCH BEAMS - above 1.5 M Span	DOME SLABS	HELICAL STAIR- CASES	SHEAR WALLS, RCC WALLS, WATER TANK WALLS
Material Hire for any Floor	H	1246.00	246.00	375.00	2201.00	249.00	257.00	268.00	906.00	635.00	2502.00	2537.00	4046.00	308.00	513.00
Labour Charges for 1st Floor	L	1836.00	282.00	2578.00	2162.00	245.00	252.00	264.00	890.00	624.00	2458.00	2493.00	3975.00	303.00	576.00
Total Hire Charges (H+L)	T	3082.00	528.00	2953.00	4363.00	494.00	509.00	532.00	1796.00	1259.00	4960.00	5030.00	8021.00	611.00	1089.00
1st - Floor	L	1836.00	282.00	2578.00	2162.00	245.00	252.00	264.00	890.00	624.00	2458.00	2493.00	3975.00	303.00	576.00
2nd - Floor	L	2020.00	310.00	2836.00	2378.00	270.00	277.00	290.00	979.00	686.00	2704.00	2742.00	4373.00	333.00	634.00
3rd - Floor	L	2203.00	338.00	3094.00	2594.00	294.00	302.00	317.00	1068.00	749.00	2950.00	2992.00	4770.00	364.00	691.00
4th - Floor	L	2387.00	367.00	3351.00	2811.00	319.00	328.00	343.00	1157.00	811.00	3195.00	3241.00	5168.00	394.00	749.00
5th - Floor	L	2570.00	395.00	3609.00	3027.00	343.00	353.00	370.00	1246.00	874.00	3441.00	3490.00	5565.00	424.00	806.00
6th - Floor	L	2754.00	423.00	3867.00	3243.00	368.00	378.00	396.00	1335.00	936.00	3687.00	3740.00	5963.00	455.00	864.00
7th - Floor	L	2938.00	451.00	4125.00	3459.00	392.00	403.00	422.00	1424.00	998.00	3933.00	3989.00	6360.00	485.00	922.00
8th - Floor	L	3121.00	479.00	4383.00	3675.00	417.00	428.00	449.00	1513.00	1061.00	4179.00	4238.00	6758.00	515.00	979.00
9th - Floor	L	3305.00	508.00	4640.00	3892.00	441.00	454.00	475.00	1602.00	1123.00	4424.00	4487.00	7155.00	545.00	1037.00
10th - Floor	L	3488.00	536.00	4898.00	4108.00	466.00	479.00	502.00	1691.00	1186.00	4670.00	4737.00	7553.00	576.00	1094.00
11th - Floor	L	3672.00	564.00	5156.00	4324.00	490.00	504.00	528.00	1780.00	1248.00	4916.00	4986.00	7950.00	606.00	1152.00
12th - Floor	L	3856.00	592.00	5414.00	4540.00	515.00	529.00	554.00	1869.00	1310.00	5162.00	5235.00	8348.00	636.00	1210.00
13th - Floor	L	4039.00	620.00	5672.00	4756.00	539.00	554.00	581.00	1958.00	1373.00	5408.00	5485.00	8745.00	667.00	1267.00
14th - Floor	L	4223.00	649.00	5929.00	4973.00	564.00	580.00	607.00	2047.00	1435.00	5653.00	5734.00	9143.00	697.00	1325.00
15th - Floor	L	4406.00	677.00	6187.00	5189.00	588.00	605.00	634.00	2136.00	1498.00	5899.00	5983.00	9540.00	727.00	1382.00

**Note:** - Centering & scaffolding charges for steel scaffolding with pipes, jack props, steel centring plates for unsupported heights of every 610 mm height or part thereof over and above 3.66 M may be allowed at 16.666% more than the basic material hire charges and relevant labour charges of the applicable floor and item



CIVIL ITEMS

Scaffolding&Centeringcharges

E. CENTERING & SCAFFOLDING CHARGES- FLOOR WISE RATES for Casuarina Ballies, Bamboos, Wooden Reapers, Runners, Wood Posts, Wall Plates, Steel Centring Plates etc., for unsupported height 3.66 M

FLOOR		LINTELS	CHAJJAS - SUN-SHADES	COLUMNS	BEAMS	SLABS - Up to 150 mm thick	SLABS - above 150 mm - Up to 300 mm thick	SLABS - above 300 mm thick	WAFFLE - (GRID) SLABS (Rib Beams with Slabs)	PERGOLA SLABS (Only Rib Beams)	ARCH BEAMS - up to 1.5 M Span	ARCH BEAMS - above 1.5 M Span	DOME SLABS	HELICAL STAIR-CASES
Material Hire for any Floor	H	831.00	164.00	250.00	1467.00	166.00	171.00	179.00	604.00	424.00	1668.00	1692.00	2698.00	206.00
Labour Charges for 1st Floor	L	1399.00	215.00	1965.00	1648.00	187.00	192.00	201.00	679.00	476.00	1874.00	1900.00	3030.00	231.00
Total Hire Charges (H+L)	T	2230.00	379.00	2215.00	3115.00	353.00	363.00	380.00	1283.00	900.00	3542.00	3592.00	5728.00	437.00
1st - Floor	L	1399.00	215.00	1965.00	1648.00	187.00	192.00	201.00	679.00	476.00	1874.00	1900.00	3030.00	231.00
2nd - Floor	L	1539.00	237.00	2162.00	1813.00	206.00	211.00	221.00	747.00	524.00	2061.00	2090.00	3333.00	254.00
3rd - Floor	L	1679.00	258.00	2358.00	1978.00	224.00	230.00	241.00	815.00	571.00	2249.00	2280.00	3636.00	277.00
4th - Floor	L	1819.00	280.00	2555.00	2142.00	243.00	250.00	261.00	883.00	619.00	2436.00	2470.00	3939.00	300.00
5th - Floor	L	1959.00	301.00	2751.00	2307.00	262.00	269.00	281.00	951.00	666.00	2624.00	2660.00	4242.00	323.00
6th - Floor	L	2099.00	323.00	2948.00	2472.00	281.00	288.00	302.00	1019.00	714.00	2811.00	2850.00	4545.00	347.00
7th - Floor	L	2238.00	344.00	3144.00	2637.00	299.00	307.00	322.00	1086.00	762.00	2998.00	3040.00	4848.00	370.00
8th - Floor	L	2378.00	366.00	3341.00	2802.00	318.00	326.00	342.00	1154.00	809.00	3186.00	3230.00	5151.00	393.00
9th - Floor	L	2518.00	387.00	3537.00	2966.00	337.00	346.00	362.00	1222.00	857.00	3373.00	3420.00	5454.00	416.00
10th - Floor	L	2658.00	409.00	3734.00	3131.00	355.00	365.00	382.00	1290.00	904.00	3561.00	3610.00	5757.00	439.00
11th - Floor	L	2798.00	430.00	3930.00	3296.00	374.00	384.00	402.00	1358.00	952.00	3748.00	3800.00	6060.00	462.00
12th - Floor	L	2938.00	452.00	4127.00	3461.00	393.00	403.00	422.00	1426.00	1000.00	3935.00	3990.00	6363.00	485.00
13th - Floor	L	3078.00	473.00	4323.00	3626.00	411.00	422.00	442.00	1494.00	1047.00	4123.00	4180.00	6666.00	508.00
14th - Floor	L	3218.00	495.00	4520.00	3790.00	430.00	442.00	462.00	1562.00	1095.00	4310.00	4370.00	6969.00	531.00
15th - Floor	L	3358.00	516.00	4716.00	3955.00	449.00	461.00	482.00	1630.00	1142.00	4498.00	4560.00	7272.00	554.00

**Note:** - Centring & scaffolding charges for steel scaffolding with pipes, jack props, steel centring plates for unsupported heights of every 610 mm height or part thereof over and above 3.66 M may be allowed at 16.666% more than the basic material hire charges and relevant labour charges of the applicable floor and item

Sl. No	SECTION	NAMES OF THE APPROVED BRAND/ MANUFACTURER/ SUPPLIER
A	SECTION	<b>BRICKS &amp; BUILDING BLOCKS</b>
III	SUB-SECTION	Aerocon, Siporex, Nucon, NCL Aerated Blocks
C	SECTION	<b>WALL &amp; FLOOR TILES</b>
		<b>(Landing cost - including material VAT, loading, cost of conveyance, unloading &amp; stacking)</b>
I	SUB-SECTION	NON-PORCELAIN CERAMIC FLOOR TILES - Somany, H & R Johnson, Naveen Ceramics, Kajaria, Nitco, Sphinx, Orient Bell, AGL, Hindware, Cera, Varmora, Vitero, Ambani, SUNHEART CERAMIK
II	SUB-SECTION	PORCELAIN VITRIFIED FLOOR TILES - H & R Johnson, H & R Johnson Marbonite, H & R Johnson Endura, H & R Johnson GPS, Naveen Ceramics, Kajaria, Nitco, Orient Bell, Hindware, AGL, RicasilCermaics Exxaro, Cera, Varmora, VITERO, Ambani, SUNHEART CERAMIK
III	SUB-SECTION	CERAMIC WALL TILES - Somany, H & R Johnson, Kajaria, Sphinx, Orient Bell, AGL, Hindware, RicasilCermaics Exxaro, Cera, Varmora, Vitero, Ambani, SUNHEART CERAMIK
IV	SUB-SECTION	PORCELAIN WALL TILES - Somany, H & R Johnson, Kajaria, Sphinx, Orient Bell, Hindware, Ricasil Cermaics Exxaro, Cera, Varmora, VITERO, Ambani, NCL Vitristik for Ceramic vitrified tiles on floor, NCL Tilostik for fixing Granite stones and NCL Marbostik for fixing Marble stones, SUNHEART CERAMIK
V	SUB-SECTION	GLASS MOSAIC TILES - Bisazza * Palladio * Expansive acqua reactive water barrier grouting system - NCL Tile grout
VI	SUB-SECTION	WALL CLADDING TILES - Somany, H & R Johnson, Kajaria, Sphinx, Orient Bell, Hindware, Cera, SUNHEART CERAMIK
VII	SUB-SECTION	TERRAZZO FLOOR TILES (PLAIN & CHEQUERED) - Super Decorative, Aditya Designer, Maha Bhima, Tricon, Pheonix, Eurocon, Ultra, Sphinx, Cemtech
VIII	SUB-SECTION	CEMENT CONCRETE FLOOR TILES (PLAIN & CHEQUERED) - Super Decorative, Aditya Designer, Maha Bhima, Tricon, Pheonix, Eurocon, Ultra, Sphinx
IX	SUB-SECTION	PRE-CAST CONCRETE BLOCKS FOR PAVING - Super Decorative, Aditya Designer, Maha Bhima, Tricon, Pheonix, Eurocon, Ultra, Sphinx, Cemtech, DEC Industries PVT LTD
X	SUB-SECTION	VINYL FLOORING - Marblex, Amstrong
		TILE ADHESIVE - MYK LATICRETE, Ambani, JK TileMaxX * Wall dado with cement based adhesive - NCL Vitristik for Ceramic vitrified tiles * Cement based adhesive - NCL Tilostik for fixing Granite stones and NCL Marbostik for fixing Marble stones * Cement based Polymer modified jointing mortar - NCL Masonry glue * Cement based Polymer modified plastering mortar - NCL Render
D	SECTION	<b>ROOFING MATERIAL - DEC Industries PVT LTD</b>
E	SECTION	<b>STAINLESS STEEL MATERIALS - DEC Industries PVT LTD</b>
F	SECTION	<b>GLASS MATERIALS - Modifloat, Asahi, Saint-Gobain, Binani, HNG,</b>
G	SECTION	<b>PAINTS &amp; POLISHES - Asian Paints, Berger, Nerolac, British Paints, JK Cements, Nexon paints, Indocem, ESSAR, Sheenlac, Suryacem, Neon, Wallz, Walrus - SYNTHETIC PLASTER - NCL-Cement Primer (Interior, Exterior), NCL White Cement Putty, NCL-Alltek Spray Plaster, NCL-Skimcoat, Allteck Spray Plaster, NCL Gaiety, NCL-Delight, NCL-Harmony, NCL-Alltek Dune, NCL Alltek Acrylic Coarse, NCL Grey Coarse Putty, NCL Base Coat, NCL Flora, Allteck Deco Orient, MYK LATICRETE, Multichem, Essar, JK ShieldMaxX - White Cement, JK WhiteMaxX, LevelMaxX , JK GypsoMaxX , JK BondMaxX , Wall Putty (White cement based) JK WallMaxX, JK Primaxx(White Cement Based Primer), Smoothtek, Shalimar, Snowcem, Nippon, New World Paints Pvt. Ltd, Fortune Paints Pvt. Ltd, BAKELITE COATINGS AND PAINTS, NCL Topcoat paint, Alltek Trendy, Alltek Goldline</b>
H	SECTION	<b>PARTICLE BOARDS - NCL Bison, Ramco-Hilux, Ramco-Hicem, Everest-board, Visaka-board, Rajshri, Innsula, Birla Aerocon, Aerolite, Novopan, Bhutan-board, Greenply, Greenpanel, Kajariaply, ECOBOARD</b>
J	SECTION	<b>PLYWOODS, LAMINATES &amp; VENEERS - Kitply, Century Ply, National Ply, Bhutan Ply, Samrat, Gurjan ply, Aamoda, Mayur, Amul Boards, Greenply, Greenpanel, Kajariaply, PRAYAG POLYMERS, Archidply/ M/S DEC Industries PVT Ltd</b>
K	SECTION	<b>CEILINGS, WALL PARTITIONS &amp; WALL LININGS -Ramco-Hilux, Everest-board, Visakha-board, Rajshri, Innsula, Gypsum India, Saint-Gobain, Armstrong-Knauf Ceilings, Daikin, NCL-Seccolor, NC Bison, Rock Strength, Aerolite, USG Boral, Birla Aerocon, Diamond, Aerolite, DIAMOND FRAMES</b>

Sl. No	SECTION	NAMES OF THE APPROVED BRAND/ MANUFACTURER/ SUPPLIER
L	SECTION	<b>DOORS, SHUTTERS &amp; FRAMES</b> -NCL Buildtek, Anand, Raavila, Kutty, Standard, Shubhdwar, ITP, Rajshri, NCL-Bison, Elixir, Sintex, Elgi, Oasis, Polywood, Sintex, NCL Prelaminated ABS door shutter, NCL FPS Door Frame, NCL Scientific Door Frames, NCL UPVC Door Shutter, NCL-Wintech, Fenesta, LG, Masonite, Everest, Vishaka, Ambience, Aamoda, Rehau, Arpitha, Nandi, Aparna-Venster, Ecoste, DEC Infrastructure & Projects(I) Pvt. Ltd, Ecocell, Marcolini, Greenpanel, Kajariaply, HDHMR Doors - NCL, Yashpoly EUREKA WINDOOR SYSTEMS, ULTIMATE SAFETY METAL DOORS, SUDHAKAR PROFILE SYSTEMS, SHREEJI WOODCRAFT PVT LTD, DEC Industries PVT LTD
M	SECTION	<b>WINDOWS</b> - NCL-Buildtek, NCL-Bison, Elixir, Sintex, Elgi, Oasis, Polywood, NCL-Wintech, Fenesta, LG, Ahlada, Rehau, Arpitha, Win-Eshatas-Viswajeet Industries, Aparna Venster, ecoVUE, EcoCell, Yashpoly, Marcolini, EUREKA WINDOOR SYSTEMS, DEC Industries PVT LTD - Aluminium Windows - Schueco
N	SECTION	<b>STRUCTURAL GLAZING &amp; CURTAIN WALLING</b> - NCL Buildtek, NCL-Bison, Elixir, Sintex, Elgi, Oasis, Polywood, Sintex, NCL-Wintech, Fenesta, LG, Rehau, Arpitha, EUREKA WINDOOR SYSTEMS
P	SECTION	<b>FIXTURES FOR DOORS &amp; WINDOWS</b> - Jyoti, Classic, Hardwyn, AKS for SS, Crown, GLOBEL (Aluminium Udyog)/Prayag Polymer, EUREKA WINDOOR SYSTEMS, M/s DEC Industries Pvt Ltd
Q	SECTION	<b>CONSTRUCTION CHEMICALS &amp; ADMIXTURES</b>
		<b>MAKE, APPLICATION METHOD, AREA AND DOSAGE</b>
I	SUB-SECTION	<b>PLASTICIZERS</b>
	TBSC-Q.I-01	* Consplax of Armstrong Chemicals Pvt Ltd, Bengaluru * Conplast of Fosroc Chemicals India Pvt Ltd, Bengaluru (200ml /50Kgs Cement)* Zoriplax of Protect More Construction chemicals, Hyderabad. (Dosage 20ml per 50 Kgs cement). for M 20 + grade concrete works in slabs /canal lining works/ roads works**MYK SAVEMIX SERIES M/S by MYK Schomburg,Hyderabad.* "MYK SAVEMIX" dosage from 0.5% - 1.5% by weight of cement * BONDUF CONSTRUCTION CHEMICALS/ Sunanda Speciality Coatings Pvt Ltd / Asian Paints - Water Proofing, Industrial Floorings and Admixtures Products/ DEC Industries PVT LTD
	TBSC-Q.I-02	* Roofplast HS 100 of Armstrong Chemicals Pvt Ltd, Bengaluru * Structuro100 of Fosroc Chemicals India Pvt Ltd, Bengaluru * Zoriplast HS of Protect More Construction Chemicals, ** MYK Remecrete P30 M/S by MYK Schomburg,Hyderabad.* Dosage 0.5 to 1 Ltr per 100kgs of Cement *BONDUF CONSTRUCTION CHEMICALS/ Sunanda Speciality Coatings Pvt Ltd / Asian Paints - Water Proofing, Industrial Floorings and Admixtures Products / DEC Industries PVT LTD
	TBSC-Q.I-03	*Roofplast SP 35of Armstrong Chemicals Pvt Ltd. Bengaluru *Conplast SP 337 of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoriplast SP 350 of Protect More Construction chemicals. * Rheomac 707 of BASF *Conflow (Dosage: 200ml to 500ml per bag of 50 Kgs Cement) . for M30+ grade concrete works like road projects / Canal linings / Dams / Reservoirs / Building's concrete works * Power35 of EBT (Dosage : 300 ml to 500 ml Per Bag of 50 Kgs Cement) * MYK Savemix RP 333 M/S by MYK Schomburg,Hyderabad.* Dosage at a rate between 0.15 and 0.40 kgs /50 kg cement * NCL Vitristik * BONDUF CONSTRUCTION CHEMICALS * Sunanda Speciality Coatings Pvt Ltd / Asian Paints - Water Proofing, Industrial Floorings and Admixtures Products / DEC Industries PVT LTD
	TBSC-Q.I-04	*Roofplast SP 45 of Armstrong Chemicals Pvt Ltd, Bengaluru*Consplast SP 430 of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoriplast SP 450 of Protect More Construction Chemicals (Dosage: 200ml to 500ml per bag of 50 Kgs Cement) for high early strength and high range water reducing admixture for M40+ grade concrete works like road projects/Canal linings/Dams/Reservoirs /Building's concrete works *Power45 of EBT (Dosage : 300 ml to 500 ml Per Bag of 50 Kgs Cement) * MYK Remecrete PC10 M/S by MYK Schomburg,Hyderabad.* Dosage rangebetween0.3to2.5ltrs/100 kg of cementitious material * BONDUF CONSTRUCTION CHEMICALS * Sunanda Speciality Coatings Pvt Ltd / Asian Paints - Water Proofing, Industrial Floorings and Admixtures Products / DEC Industries PVT LTD
	TBSC-Q.I-05	*Roofplast SR 45 of Armstrong Chemicals Pvt Ltd, Bengaluru*Conplast RP264 of Fosroc Chemicals India Pvt Ltd, Bengaluru*Zoriplast SRT 5 of Protect More Construction Chemicals (Dosage : 300ml to 400ml per bag of 50 Kgs Cement).For

Sl. No	SECTION	NAMES OF THE APPROVED BRAND/ MANUFACTURER/ SUPPLIER
		delaying of initial setting time and M 40+ Grade concrete works * Power SR 45 of EBT (Dosage: 200 ml to 500 ml per bag of 50 Kgs Cement) * MYK Savemix RP 333 M/S by MYK Schomburg,Hyderabad.* Dosage at a rate between 0.15 and 0.40 kgs /50 kg cement * BONDUF CONSTRUCTION CHEMICALS * Sunanda Speciality Coatings Pvt Ltd / Asian Paints - Water Proofing, Industrial Floorings and Admixtures Products / DEC Industries PVT LTD
	TBSC-Q.I-06	*Roofplast SCA of Armstrong Chemicals Pvt Ltd, Bengaluru*Conplast NC of Fosroc Chemicals India Pvt Ltd, Bengaluru*Zoriset of Protect More Construction Chemicals (Dosage:1 Kg to 3 Kgs per bag of 50 Kgs Cement depending on the setting time required).For shotcrete / Guniting / Emergency concrete works * Power-200 of EBT or Equivalent (Dosage:1 Kg to 3 Kgs per bag of 50 Kgs Cement depending on the setting time required) * BONDUF CONSTRUCTION CHEMICALS * Sunanda Speciality Coatings Pvt Ltd / Asian Paints - Water Proofing, Industrial Floorings and Admixtures Products / DEC Industries PVT LTD
	TBSC-Q.I-07	ALSTRONG CA 353 of M/s. Armstrong Chemicals Pvt Ltd , Bengaluru / ZORIBOND CRA 35 of M/s. Protect More Construction Chemicals ( PMCC). POWER n STRENGTH of M/s. EBT Construction Chemicals/ FOSROC ( 500ml Per Bag of 50 Kgs Cement) * BONDUF CONSTRUCTION CHEMICALS * Sunanda Speciality Coatings Pvt Ltd / Asian Paints - Water Proofing, Industrial Floorings and Admixtures Products / DEC Industries PVT LTD
II	SUB-SECTION	<b>WATER PROOFING COMPOUNDS</b>
	TBSC-Q.II-01	*Rainproof No.1 of Armstrong Chemicals Pvt Ltd Bengaluru *Conplast 421 of Fosroc Chemicals India Pvt Ltd Bengaluru (125ml Per 50 Kgs Cement) *Zoriproof No.1 of Protect More construction Chemicals. : (Dosage : 100ml Per Bag of 50 Kgs Cement) *MYK PROOF WP10 M/S by MYK SCHOMBURG,Hyderabad. Dosage - 150-200Gms per bag of cement * E160 of Ardex Endura : (200 ml per 50 Kgs Bag), Pidilite * Sunanda Speciality Coatings Pvt Ltd / Asian Paints - Water Proofing, Industrial Floorings and Admixtures Products * Asian Paints - Water Proofing, Industrial Floorings and Admixtures Products
	TBSC-Q.II-02	*Roofbond RFX of Armstrong Chemicals Pvt Ltd, Bengaluru. *Brushbond RFX of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoricoat RX of Protect More Construction Chemicals.*Masreseal 550 Grey of Base. (12-14 m2 in two coats to achieve 1mm thickness ). Terrace, Water Tanks, Walls Waterproof Coatings : of Two Part System: *EBT - Power RFX *MYK BETOCRETE C-35 M/S by MYK Schomburg, Hyderabad Dosage - 0.8 - 1.5% by weight of cement * WPM 004 of Ardex Endura : (12-14 m2 in two coats to achieve 1mm thickness) * PIDILITE INDUSTRIES LIMITED * Sunanda Speciality Coatings Pvt Ltd / Asian Paints - Water Proofing, Industrial Floorings and Admixtures Products * Asian Paints - Water Proofing, Industrial Floorings and Admixtures Products
	TBSC-Q.II-03	* Roof coat of Armstrong Chemicals Pvt Ltd, Bengaluru * Brushbond of Fosroc Chemicals India Pvt Ltd, Bengaluru * Zoricoat of Protect More Construction Chemicals Terrace, Water Tanks, Walls, Reservoirs Waterproofing Coatings : Surface treatments* Asian Paints *MYK AQUAFIN ADMIX M/S by MYK Schomburg, Hyderabad-Dosage Rate: w/c ratio < 0.45: 2 % of cement content w/c ratio > 0.45: 3 % of cement content * WPM 004 OF Ardex Endura * PIDILITE INDUSTRIES LIMITED * Sunanda Speciality Coatings Pvt Ltd / Asian Paints - Water Proofing, Industrial Floorings and Admixtures Products
	TBSC-Q.II-04	*Rainseal of Armstrong Chemicals Pvt Ltd, Bengaluru *Proofex SM of Fosroc Chemicals India Pvt Ltd, Bengaluru, *Zoricoat XL of Protect More Construction Chemicals. wherever highly flexible, crack bridging ,waterproofing required (Coverage : 50 to 60 SFT Per/Ltr/Coat) (for brush / spray application add 20% water per Ltr) Terrace, Walls Highly Flexible Waterproof Liquid Membrane pure Acrylic Coatings : **MYK Coat WPU-1K(E) M/S by MYK Schomburg, Hyderabad-Coverage at minimum of 1.8 kg per m2 for thickness of 1.1 mm * WPM 004 OF Ardex Endura * PIDILITE INDUSTRIES LIMITED * Sunanda Speciality Coatings Pvt Ltd / Asian Paints - Water Proofing, Industrial Floorings and Admixtures Products
	TBSC-Q.II-05	*Rapid strong QS of Armstrong Chemicals Pvt Ltd Bengaluru *Patchro C of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zorirapidr of Protect More Construction Chemicals * Conflow (Dosage : 1 to 3 Ltrs per bag of 50 Kgs Cement depending on the setting time required). * CLEAN TECH CORROSION CHEMICALS Concure

Sl. No	SECTION	NAMES OF THE APPROVED BRAND/ MANUFACTURER/ SUPPLIER
		Plus (200 -250 ml per Bag of cement)For emergency works/Anti wash and under water concreting: *MYK AQUAFINTGM/ Sby MYK Schomburg, Hyderabad Dosage Rate:at1.5-2.5kg/m <sup>2</sup> . * A4/5 WPM 401 of Ardex Endura * Sunanda Speciality Coatings Pvt Ltd / Asian Paints - Water Proofing, Industrial Floorings and Admixtures Products
	TBSC-Q.II-06	*Rainseal Flexi Coat B30 of Armstrong Chemicals Pvt Ltd, Bengaluru *Fosroc Chemicals India Pvt Ltd, Bengaluru. *Zoricoat BL of Protect More Construction Chemicals. : wherever highly flexible, crack bridging, Sewage treatment plants, pipe lines, Reservoirs and waterproofing required. *MYK Schomburg * WPM 004 of Ardex Endura * PIDILITE INDUSTRIES LIMITED * Sunanda Speciality Coatings Pvt Ltd / Asian Paints - Water Proofing, Industrial Floorings and Admixtures Products
	TBSC-Q.II-07	ROOFBOND FRC of M/s. Armstrong Chemicals Pvt Ltd, Bengaluru / ZORICOAT FRC of M/s. Protect More Construction Chemicals ( PMCC). POWER n BOND FRX 2 of M/s. EBT Construction Chemicals / FOSROC ( Coverage : 30 to 40 SFT / Ltr / Two coats ) * PIDILITE INDUSTRIES LIMITED * Sunanda Speciality Coatings Pvt Ltd / Asian Paints - Water Proofing, Industrial Floorings and Admixtures Products
	TBSC-Q.II-08	RAINSEAL CFR of M/s. Armstrong Chemicals Pvt Ltd, Bengaluru / ZORICOAT EFC of M/s. Protect More Construction Chemicals ( PMCC). POWER n COAT EFC of M/s.EBT Construction Chemicals/FOSROC *PIDILITE INDUSTRIES LIMITED * Sunanda Speciality Coatings Pvt Ltd / Asian Paints - Water Proofing, Industrial Floorings and Admixtures Products
	TBSC-Q.II-09	ALSTRONG CC 153 of M/s. Armstrong Chemicals Pvt Ltd, Bengaluru / ZORIBOND CTC 15 of M/s. Protect More Construction Chemicals ( PMCC) ( Coverage : 1 Ltr 20 SFT / 2 Coats ). POWER n STRENGTH PEN of M/s. EBT Construction Chemicals /FOSROC *PIDILITE INDUSTRIES LIMITED * Sunanda Speciality Coatings Pvt Ltd / Asian Paints - Water Proofing, Industrial Floorings and Admixtures Products
	TBSC-Q.II-10	ROOFCARE PU of M/s. Armstrong Chemicals Pvt Ltd, Bengaluru / ZORICOAT PU of M/s. Protect More Construction Chemicals ( PMCC) , POWER n COAT BPU of M/s. EBT Construction Chemicals / FOSROC. *PIDILITE INDUSTRIES LIMITED * Sunanda Speciality Coatings Pvt Ltd / Asian Paints - Water Proofing, Industrial Floorings and Admixtures Products
	TBSC-Q.II-11	ROOFCARE WR of M/s. Armstrong Chemicals Pvt Ltd, Bengaluru / ZORICOAT WR of M/s. Protect More Construction Chemicals ( PMCC),POWER n REPEL WR of M/s. EBT Construction Chemicals / FOSROC/ PIDILITE INDUSTRIES LIMITED * Sunanda Speciality Coatings Pvt Ltd / Asian Paints - Water Proofing, Industrial Floorings and Admixtures Products
III	SUB-SECTION	<b>BONDING AGENTS/ ADHESIVES</b>
	TBSC-Q.III-01	*Roofbond PB of Armstrong Chemicals Pvt Ltd Bengaluru *Nitobond AR of Fosroc Chemical India Pvt Ltd Bengaluru *Zoribond PB of Protect More Construction Chemicals. (Mix: 1:1 ratio of cement )50 SFT / Ltr /coat depending on the substrate) On terrace old concrete to new mortar / screed : *MYK bond AR 43 M/S by MYK Schomburg, Hyderabad*Coverage: as a bonding agent: approximate 4 - 5 m <sup>2</sup> / kg depending on substrate porosity* E135 of Ardex Endura (2.5 Lit for 50 Kgs of cement)
	TBSC-Q.III-02	*Roofbond SBR of Armstrong Chemicals Pvt Ltd Bengaluru *Nitobond SBR of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoribond SBR of Protect More Construction Chemicals. (50 SFT / Ltr /coat depending on the substrate) For ceiling / concrete repairs and bonding : mortar/concrete *MYK bond SBR 45 M/S by MYK Schomburg, Hyderabad* Dosage :For patching and repair mortars and plaster for masonry 10 Ltr of MYK Bond SBR per 50 Kgs- cement* E135 of Ardex Endura(2.5Litfor50Kgs of cement)/ M/S DEC Industries manufactured products
	TBSC-Q.III-03	*Roofbond EP of Armstrong Chemicals Pvt Ltd, Bengaluru *Nitobond EP of Fosroc Chemicals India Pvt Ltd, Bengaluru*Zoribond EP of Protect More Construction Chemicals. (Coverage : 20 - 25 SFT / Kg /Coat) For Structural concrete repairs / bonding : Old concrete to new concrete epoxy bonding : *MYK Bond EB A M/Sby MYK Schomburg, Hyderabad* Coverage Approx.2.6 Sq.Mtr per 1 kgs * EP 300 of Ardex Endura (10 sqm per 5 Lit per coat of 50 microns)* Epoxy emulsion grout/synthetic/resin adhesive -NCL Vitristik Ceramic & Vitriified tile
	TBSC-Q.III-04	Admix AD1 of Ardex Endura
		Silver/Diamond &Platinum stars of Ardex Endura
		ALSTRONG CA 353 of M/s. Armstrong Chemicals Pvt Ltd , Bengaluru /

Sl. No	SECTION	NAMES OF THE APPROVED BRAND/ MANUFACTURER/ SUPPLIER
		ZORIBOND CRA 35 of M/s. Protect More Construction Chemicals ( PMCC). POWER n STRENGTH of M/s. EBT Construction Chemicals / FOSROC ( 500ml Per Bag of 50 Kgs Cement)
		ALSTRONG CB 253 of M/s. Armstrong Chemicals Pvt Ltd , Bengaluru / ZORIBOND CB 25 of M/s. Protect More Construction Chemicals ( PMCC). POWER n BOND RGB of M/s. EBT Construction Chemicals / FOSROC ( Coverage : 1 Ltr / 40 SFT / Coat )
	TBSC-Q.III-05	M/S DEC Industries manufactured products
IV	SUB-SECTION	<b>ANTI-CORROSIVE AGENTS</b>
	TBSC-Q.IV-01	*Roofguard AC of Armstrong Chemicals Pvt Ltd Bengaluru *Fosroc Chemicals India Pvt Ltd Bengaluru*Zoriguard AC of Protect More Construction Chemicals.( 40 SFT Per Ltr / Coat ) * CLEAN TECH CORROSION CHEMICALS Concure-XL (200 ml to 250 ml per Bag of Cement To protect the exposed reinforcement / steel structures against corrosion : *MYK RUST Remover M/S by MYK Schomburg, Hyderabad*
	TBSC-Q.IV-02	*Roofguard RC of Armstrong Chemicals Pvt Ltd Bengaluru *Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoriguard RC of Protect More Construction Chemicals Hyderabad. ( 50 SFT Per Ltr / Coat ) During repairs to protect, to convert the rust of reinforcement / steel : *MYK RUST CONVERTOR M/S by MYK Schomburg, Hyderabad*
	TBSC-Q.IV-03	*Roofguard ZP of Armstrong Chemicals Pvt Ltd, Bengaluru *Nitoprime Zinc Rich of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoriguard ZP of Protect More Construction Chemicals, Hyderabad. (Coverage : 4 Sq.Mtr. /Ltr / Coat) *MYK Savemix CN 100 M/S by MYK Schomburg, Hyderabad - Recommended 0.90 chloride to nitrite ratio 30% CaNO2 Sol * EP 410 of Ardex Endura (Coverage : 10 Sq.Mtr. /5 Ltr / Coat of 250 Microns)
	TBSC-Q.IV-04	Supply of anti-corrosion admixture inhibitor liquid as per Central Electro Chemical Research Institute developed specification and licensee of Concure or Concure Plus or Equivalent (300 ml to 500 ml per Bag of 50 Kgs Cement)/ DEC Industries PVT LTD
V	SUB-SECTION	<b>GROUTS</b>
	TBSC-Q.V-01	*Rapidstrong Grout AG of Armstrong Chemicals Pvt Ltd, Bengaluru*Lock fix of Fosroc Chemicals India Pvt Ltd, Bengaluru*Zori fix of Protect More Construction Chemicals (Yield 0.5 Ltrs / 1 Kg Pack ) Anchoring /fix the steel bars into the rocks, concrete for foundations, extension of concrete :*EBT Power Anchor grout . (Yield 0.5 Ltrs / 1 Kg Pack) *MYK GROUT M 65 Yield: 13.0 Ltsatflowableconsistencyfor25KgsofHDPEbags/ M/S DEC Industries manufactured products
	TBSC-Q.V-02	*Rapidstrong Grout GP2 of Armstrong Chemicals Pvt Ltd, Bengaluru*Conbextra GP2 of Fosroc Chemicals India Pvt Ltd, Bengaluru*Zori grout GP 2 of Protect More Construction Chemicals For machinery / thin sections of concrete joints Filling : *EBT Power GP2 Grout (Yield 13.5 Ltrs Per 25 Kgs Bag). *MYK Schomburg MYK Grout Inject E-200 Approx. 1.06 kg for filling up of 1000 cc/ M/S DEC Industries manufactured products
	TBSC-Q.V-03	*Rapidstrong Grout EP of Armstrong Chemicals Pvt Ltd , Bengaluru*Conbextra EP10 of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zori grout EP of Protect More Construction Chemicals. (Two parts system).(Density 1.07 Kg Per Ltr )For Structural strengthening, filling of honey comb / voids in the concrete : *EBT Power EPL Grout *MYK Schomburg MYK Grout EP750 (Yield: Approx. 9.5 Liter volume per 19 kg pack)
	TBSC-Q.V-04	*Rapidstrong Grout EP3 of Armstrong Chemicals Pvt Ltd, Bengaluru *Conbextra EP300 of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zori grout EP3 of Protect More Construction Chemicals. Concrete strengthening and filling concrete repairs *EBT Power EP Grout *MYK Schomburg MYK INDUGROUT-EP10 approx. 1.60 kg/liters or 16.0 k g/10 mm thick gap/m2.
	TBSC-Q.V-05	RAPIDSTRONG GROUT PU of M/s. Armstrong Chemicals Pvt Ltd , Bengaluru / ZORIGROUT PU of M/s. Protect More Construction Chemicals (PMCC). M/s. POWER n GROUT RPU of M/s. EBT Construction Chemicals / FOSROC
VI	SUB-SECTION	<b>MISCELLANEOUS CHEMICALS</b>
	TBSC-Q.VI-01	*Roofcare MRA of Armstrong Chemicals Pvt Ltd, Bengaluru *Reebol of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zorislip of Protect More Construction

Sl. No	SECTION	NAMES OF THE APPROVED BRAND/ MANUFACTURER/ SUPPLIER
		Chemicals (Coverage: 1 Ltr will cover approx. 20 to 30m2 on method and material of the form ) *MY Schomburg * DEC Industries PVT LTD
	TBSC-Q.VI-02	*Rapidstrong FM of Armstrong Chemicals Pvt Ltd, Bengaluru *Fosroc Chemicals India Pvt Ltd. Bengaluru. *Zorifloor NH of Protect More Construction Chemicals. :( Coverage : May be applied at rate 3.5 Kgs /m2 over green concrete for normal traffic & 6-12 Kg / M2 for heavy traffic. Higher application rates yield better abrasion resistance)* EBT PowerHard M-100 *MYK Schomburg
	TBSC-Q.VI-03	* Rapidstrong NH of Armstrong Chemicals Pvt Ltd, Bengaluru *Nitoflor Hardtop/Hard Standard of Fosroc Chemicals India Pvt Ltd, Bengaluru. * Zorifloor DH of Protect More Construction Chemicals* Mastertof 100 Grey of BASF :( Coverage : May be applied at rate 3.5 Kgs /m2 over green concrete for normal traffic & 6-12 Kg / M2 for heavy traffic. Higher application rates yield better abrasion resistance) *EBT PowerHard NM-100. (Coverage: May be applied at rate 3.5 Kgs /m2 over green concrete for normal traffic & 6-12 Kg / M2 for heavy traffic) *MYK Schomburg MYK TOP 150 Application rate Kg/M2 Intended traffic use AvgWear (IS1237-1980) 7 kgs Heavy <2mm 5 Kgs Medium >2<3.5mm 3 kgs Light>3.5<4mm
	TBSC-Q.VI-04	*Roofcrete MC of Armstrong Chemicals Pvt Ltd, Bengaluru / *Rendroc RG of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoricrete MC of Protect More Construction Chemicals. *MYK Schomburg MYK Top 200 Coverage : Light traffic 2.5 to 3.5 edium traffic 4 to 5 kg/m <sup>2</sup> Heavy traffic 6 to 7 kg/m <sup>2</sup> / M/S DEC Industries manufactured products
	TBSC-Q.VI-05	*Roofcrete AR of Armstrong Chemicals Pvt Ltd, Bengaluru *Cemtop 400 SD of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoricrete CMG of Protect More Construction Chemicals. To achieve High Strength Concreting / Structural rehabilitation / concrete repairs : *MYK Schomburg MYK SOLOPLAN -30 For layers of less than 20 mm recommend 5.0 - 5.4 L of water to 25 kg of SOLOPLAN-30.Forlayersof 20mmandhigher,werecommend4.7- 5.1Lofwaterto25kgof SOLOPLAN-30 * Expansive acqua reactive water barrier grouting system - NCL Tile grout
	TBSC-Q.VI-06	*Roofcrete EM of Armstrong Chemicals Pvt Ltd, Bengaluru *Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoricrete ERM of Protect More Construction Chemicals. For wherever repeated failures takes place, resistance to chemicals. Repairing of Deteriorated concrete with High Strength Flexural / Compressive Strength with High Standard Bonding: *MYK Schomburg MYK Crete CMS 4500 M/Sby MYK Schomburg, Hyderabad*appliedupto50mmthicknessat2kgperm2 at 1mmthickness.
	TBSC-Q.VI-07	*Roofex of Armstrong Chemicals Pvt Ltd, Bengaluru *Brushbond Tap of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoripex of Protect More Construction Chemicals. For Negative Water Pressure Treatments like Cellar / Ceiling areas etc., : *MYK Schomburg
	TBSC-Q.VI-08	*Roofseal PU of Armstrong Chemicals Pvt Ltd, Bengaluru *Nitoseal PU 280 of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoriseal PU of Protect More Construction Chemicals. For Expansion Joints / Terrace Cracks / Wall & Beam junction cracks ; Runway Joints etc., : *MYK Schomburg
	TBSC-Q.VI-09	* Roofseal PS of Armstrong Chemicals Pvt Ltd, Bengaluru * Thioflex 600 of Fosroc Chemicals India Pvt Ltd, Bengaluru * Zoriseal PS of Protect More Construction Chemicals. For Expansion Joints / Terrace Cracks : *MYK Schomburg
	TBSC-Q.VI-10	*Wonderseal XL of Armstrong Chemicals Pvt Ltd, Bengaluru *Decofil of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoriseal XL of Protect More Construction Chemicals. External / Internal Wall Cracks Sealing *MYK Schomburg
	TBSC-Q.VI-11	*Wonderseal Plug of Armstrong Chemicals Pvt Ltd, Bengaluru *Renderroc Plug of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoriseal Plug of Protect More Construction Chemicals.
	TBSC-Q.VI-12	*Roofcoat PU400 of Armstrong Chemicals Pvt Ltd, Bengaluru *Nitocote UR 512 of Fosroc Chemicals India Pvt Ltd, Bengaluru*Zoricoat PU of Protect More Construction Chemicals. for floorings / Walls.
	TBSC-Q.VI-13	*Roofguard CTE of Armstrong Chemicals Pvt Ltd, Bengaluru*Nitocote ET 550 of Fosroc Chemicals India Pvt Ltd, Bengaluru/ *Zoriguard CTE of Protect More Construction Chemical. : tar based epoxy coating for sewage treatment plants,

Sl. No	SECTION	NAMES OF THE APPROVED BRAND/ MANUFACTURER/ SUPPLIER
		pipe lines protective coating for steel reinforcement.
	TBSC-Q.VI-14	*Roofexure WB of Armstrong Chemicals Pvt Ltd, Bengaluru *Concure WB of Fosroc Chemicals Pvt Ltd, Bengaluru *Zoricure WB of Protect More Construction Chemicals. (Coverage : 4 Sq. Mtrs / Ltr / Coat )/ M/S DEC Industries manufactured products
	TBSC-Q.VI-15	*Rainseal BS of Armstrong Chemicals Pvt Ltd, Bengaluru *Fosroc Chemicals India Pvt Ltd, Bengaluru. *Zoriseal BS Grade 'A' of Protect More Construction Chemicals. for construction joints of roads / bridges.
	TBSC-Q.VI-16	*Rainseal BT Primer of Armstrong Chemicals Pvt Ltd, Bengaluru *Nitoproof 100 of Fosroc Chemicals India Pvt Ltd, Bengaluru *Zoriprime BT of Protect More Construction Chemicals.
	TBSC-Q.VI-17	*Roofplast AEA of Armstrong Chemicals Pvt Ltd Bengaluru*Conplast AEA of Fosroc Chemicals India Pvt Ltd, Bengaluru (Dosage : 200ml Per 50 Kgs Cement)*Zoriplast AEA of Protect More Construction Chemicals. (Dosage : 15ml to 20ml per bag of 50 Kgs Cement) For entrainment of air, recommended for canal lining works, mass concreting etc : *EBT Power AEA Plasticizer (Dosage : 15ml per Bag of 50 Kgs Cement)
		Multifilament Polypropylene fibers of Belmixbelgian fibers ISO 9001 Certified 6/12/18 mm length for Plastering, Screeds, All Precasting items 90 gms per each cement bag. * Multifilament Polypropylene fibers of Belmixbelgian fibers ISO 9001 Certified 6/12/18 mm length for CC Roads, Car Parkings, Pavements each 900 gms per each Cubic Meter Concrete.
		Macro Synthetic Fibers of Propex ASTM C1116/ 1116M -45mm length for CC Roads, Ground Supported Slabs, Pavements, Sprayed Concrete, Tunnel linings, Mining etc., 4 to7 kg per 1 CuM
		Steel Fibers of PropexNovocon HE05535 EN 14889-1:2006 -35mm length for CC Roads, Ground Supported Slabs, Pavements, Sprayed Concrete, Tunnel linings, Mining etc., 15 to 22 kg per 1 CuM
		ALSTRONG CM 666 of M/s. Armstrong Chemicals Pvt Ltd , Bengaluru / ZORICOAT CM of M/s. Protect More Construction Chemicals ( PMCC). M/s. POWER n GUARD ADM of EBT Construction Chemicals / FOSROC( Coverage : 1 Ltr / 40 SFT / Coat)
VII	SUB-SECTION	<b>REPAIRING &amp; TREATMENT WORKS</b>
	TBSC-Q.VII-1	RAINSEAL FELT of Armstrong / Fosroc / ZORIFELT BT of PMCC, Supreme Tar Products/ Shivam Tarfelt ( Membrane felt)
	TBSC-Q.VII-2	RAINSEAL HDP 1500 of Armstrong / Fosroc / ZORISHIELD 1500 of PMCC/Roofshield/ Shivam Tarfelt
	TBSC-Q.VII-3	RAINSEAL BT PRIMER of Armstrong / Fosroc /STP/PMCC/ Asian/ LeakShield
	TBSC-Q.VII-4	ROOFBOND RFX of Armstrong /BRUSHBOND RFX of Fosroc / ZORIBOND RFX of PMCC. * MYK Schomburg MYK AQUAFIN TG M/S by MYK Schomburg,Hyderabad.* MYK AQUAFIN TG is a two component cementations, polymer dispersion based flexible protective coating and water proof barrier. This product is two-component and resistant to water, moisture and abrasion. Dosage Rate: MYK AQUAFINTG to be applied typically at 1.5-2.5kg/m <sup>2</sup> .
	TBSC-Q.VII-5	RAINSEAL FLEXICOAT B 300 of Armstrong / NITOPROOF 120 of Fosroc /ZORICOAT BL of PMCC (Coverage : 1Ltr /100 SFT/ Each Coat) diluting with water at 1:1 ratio as a primer coat. RAINSEAL FLEXICOAT B 300 of Armstrong / NITOPROOF 120 of Fosroc /ZORICOAT BL of PMCC top coat diluting with 20% of water (Coverage : 1Ltr /5 Sqm /Each Coat)
	TBSC-Q.VII-6	RAINSEAL of Armstrong /PROOFEX SM of Fosroc / ZORICOAT XL of SMCC(1 Ltr/10 Sq.Mtr./Each Coat) diluting with water at 1:1 ratio as a primer coat , Next coat with with -RAINSEAL of Armstrong / PROOFEX SM of Fosroc / ZORICOAT XL of PMCC mixing with 20 % of Water. (1 Ltr/5 Sq.Mtr/Each Coat) final coat with--RAINSEAL of Armstrong /PROOFEX SM of Fosroc / ZORICOAT XL of PMCC (1 Ltr/2 Sq.Mtr/Each Coat)diluting with 20% of water. * MYK Schomburg MYK Coat WPU-1K(e) M/S by MYK Schomburg,Hyderabad.* Recommended coverage at minimum of 1.8kg per m <sup>2</sup> for thickness of 1.1 mm
	TBSC-Q.VII-7	Polymer bonding agent: - ROOFBOND SBR of Armstrong / NITOBOND SBR of Fosroc / ZORIBOND SBR of PMCC (Coverage : 1 Ltr /5 Sqm / Each Coat), next with - Acrylic Polymer modified reinstatement concrete /mortar ROOFCRETE AR of Armstrong / CEMTOP 400 SD of Fosroc/ZORICRETE CMG of PMCC to finish and



Sl. No	SECTION	NAMES OF THE APPROVED BRAND/ MANUFACTURER/ SUPPLIER
		polysulphide sealant with ROOFSEALPS of Armstrong/THIOFLEX600 of Fosroc / ZORISEAL PS of PMCC (Coverage : 1 Kg Per 1.8 RMT ) finally with - ROOFCOAT of Armstrong / BRUSHBOND of Fosroc / ZORICOAT of PMCC mixing with Cement at 1: 2 ratio. (Coverage : 1 Ltr / 2.5 Sqm /Coat)* MYK Schomburg SealPS * COHERE TECH INDIA PVT LTD / M/s DEC Industries Pvt Ltd
	TBSC-Q.VII-09	Ador Granite Series of MYK Schomburg Coverage: Primer Approx. 0.350 kg/m <sup>2</sup> - final Texture Coat Approx. 0.70 to 0.80 kg/m <sup>2</sup>
	TBSC-Q.VII-10	MYK Schomburg Parking System - Coverage: Primer Approx. 0.350 kg/m <sup>2</sup> - final Coat Approx. 0.70 to 0.80 kg/m <sup>2</sup>
	TBSC-Q.VII-11	MYK Schomburg Conductive Flooring System - Coverage: Primer Approx. 0.350 kg/m <sup>2</sup> - final Coat Approx. 0.70 to 0.80 kg/m <sup>2</sup>
	TBSC-Q.VII-12	MYK Schomburg-Coverage: Approximately 0.450 kg/m <sup>2</sup> in two coats for a DFT of approx 200 micron. Primer (10 % dilution with water) is approx. 0.150 to 0.200 kg/m <sup>2</sup> Note: Higher consumption is expected on rough surfaces.
VIII	TBSC-Q.VIII-01-11	Silseal, Silflex, Armour, Shalitex
R	SECTION	<b>MISCELLANEOUS ITEMS</b>
		(a) Sintex, Aquatech for PVC tanks (b) Centurywells & Sudarshana for Galvalume sheets (c) Elixir for PEB structures (d) Aluminium Sections - Hindalco, Nalco, Jindal, Geetha series (e) ACP Sheets - Alucopanel, alucobonel, Reynobond, Lennox Durabuid, lstronglegame, Alpolic, Alcomat, Alshine, Viva, Aludecorf) Gypsum plaster-NKV Home Depot, Gyplite, (f) AC Sheets - Charminar Fortune (g) Ant termite Treatment - Bayer (h) MPC ( Mineral Polymer Composite) Grills/Jali - Esoste, Carpets - Welspun (i) Polycarbonate sheets - DPI Daylighting (j) Design, fabrication & supply of light weight pre engineered buildings - DEC Industries PVT LTD, NCL Buildtek, Kirby



# PLUMBING ITEMS



**INDEX FOR PLUMBING ITEMS OF TELANAGANA BUILDINGS SOR 2021-22**

Sl. No	SECTION	ITEM CODE	DESCRIPTION OF THE ITEM	FROM	TO
<b>A</b>	<b>SECTION</b>		<b>S.W.G. PIPES &amp; FITTINGS</b>		
			(Landing cost - including material VAT, loading, cost of conveyance, unloading & stacking)		
I	SUB-SECTION	TBSP-A.I-01-09	SUPPLY & LAYING OF SWG PIPES		
II	SUB-SECTION	TBSP-A.II-01-63	S.W.G. FITTINGS		
III	SUB-SECTION	TBSP-A.III-01-05	LABOUR CHARGES FOR SWG WORKS		
<b>B</b>	<b>SECTION</b>		<b>MANHOLES &amp; INSPECTION CHAMBERS</b>		
I	SUB-SECTION	TBSP-B.I-01-04	MANHOLES		
II	SUB-SECTION	TBSP-B.II-01-13	INSPECTION CHAMBERS		
III	SUB-SECTION	TBSP-B.III-01-01	LABOUR CHARGES FOR IC WORKS		
<b>C</b>	<b>SECTION</b>		<b>CENTRIFUGAL CI PIPES &amp; FITTINGS - IS : 1729</b>		
I	SUB-SECTION	TBSP-C.I-01-06	SUPPLY & LAYING OF CAST IRON PIPES		
II	SUB-SECTION	TBSP-C.II-01-33	SUPPLYING & LAYING OF C.I. FITTINGS		
III	SUB-SECTION	TBSP-C.III-01-08	LABOUR CHARGES FOR CI PIPE WORKS		
<b>D</b>	<b>SECTION</b>		<b>CENTRIFUGAL CI PIPES &amp; FITTINGS - IS : 3989</b>		
I	SUB-SECTION	TBSP-D.I-01-13	SUPPLY OF CENTRIFUGAL CI PIPES		
II	SUB-SECTION	TBSP-D.II-01-95	SUPPLY OF C.I. SPUN FITTINGS		
<b>E</b>	<b>SECTION</b>		<b>VITREOUS CHINAWARE - SANITARY APPLIANCES</b>		
I	SUB-SECTION	TBSP-E.I-01-07	INDIAN WATER CLOSETS		
II	SUB-SECTION	TBSP-E.II-01-06	FLOOR MOUNTED EWC		
III	SUB-SECTION	TBSP-E.III-01-03	WALL MOUNTED EWC		
IV	SUB-SECTION	TBSP-E.IV-01-03	CISTERNS FOR WATER CLOSETS		
V	SUB-SECTION	TBSP-E.V-01-02	PLASTIC SEATS FOR WATER CLOSETS		
VI	SUB-SECTION	TBSP-E.VI-01-16	WASH HAND BASINS		
VII	SUB-SECTION	TBSP-E.VII-01-05	URINALS		
VIII	SUB-SECTION	TBSP-E.VIII-01-12	LABOUR CHARGES FOR SANITARY WARE		
<b>F</b>	<b>SECTION</b>		<b>CP FITTINGS - TAPS, FAUCETS &amp; ACCESSORIES</b>		
I	SUB-SECTION	TBSP-F.I-01-08	TAPS & FAUCETS - BIB TAPS		
II	SUB-SECTION	TBSP-F.II-01-09	TAPS & FAUCETS - PILLAR TAPS		
III	SUB-SECTION	TBSP-F.III-01-07	TAPS & FAUCETS - OTHER TAPS & SPOUTS		
IV	SUB-SECTION	TBSP-F.IV-01-07	STOP & ANGLE VALVES		
V	SUB-SECTION	TBSP-F.V-01-09	COMBINATION FAUCETS		
VI	SUB-SECTION	TBSP-F.VI-01-08	SHOWER ROSES & FITTINGS		
VII	SUB-SECTION	TBSP-F.VII-01-41	MISCELLANEOUS CP FITTINGS		
VIII	SUB-SECTION	TBSP-F.VIII-01-05	LABOUR CHARGES		
<b>G</b>	<b>SECTION</b>		<b>G.I. PIPES &amp; FITTINGS</b>		
I	SUB-SECTION	TBSP-G.I-01-13	G.I. PIPES		
II	SUB-SECTION	TBSP-G.II-01-24	G.I. FITTINGS		
III	SUB-SECTION	TBSP-G.III-01-27	BRONZE (COPPER ALLOY) VALVES		
IV	SUB-SECTION	TBSP-G.IV-01-03	LABOUR CHARGES FOR G.I PLUMBING		
<b>H</b>	<b>SECTION</b>		<b>PVC PIPES &amp; FITTINGS</b>		
I	SUB-SECTION	TBSP-H.I-01-44	PVC PIPES		
II	SUB-SECTION	TBSP-H.II-01-96	PVC FITTINGS		
III	SUB-SECTION	TBSP-H.III-01-10	PVC PLUMBING ACCESSORIES		
IV	SUB-SECTION	TBSP-H.IV-01-03	LABOUR CHARGES FOR PVC PLUMBING		
<b>J</b>	<b>SECTION</b>		<b>MISCELLANEOUS ITEMS</b>		
I	SUB-SECTION	TBSP-J.I-01-42	MISCELLANEOUS PLUMBING WORK ITEMS		
II	SUB-SECTION	TBSP-J.II-01-17	POLYETHYLENE-ALUMINIUM-POLYETHYLENE COMPOSITE PIPES		
III	SUB-SECTION	TBSP-J.III-01-218	OTHER VARIETIES OF PIPES		

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
1	2	3	4	5
		Note: All the prices of the materials are excluding taxes but including cost of loading, cost of conveyance, unloading & stacking		
<b>A</b>	<b>SECTION</b>	<b>S.W.G. PIPES &amp; FITTINGS</b>		
<b>I</b>	<b>SUB-SECTION</b>	<b>SUPPLY &amp; LAYING OF S.W.G. PIPES</b>		
1	TBSP-A.I-01	Supplying, laying, jointing and testing 101.6 mm SWG SP-1 pipes of ISI make conforming to ISI 651 & 4127 with airtight cement joints in CM 1.5:1 prop. Including excavation of trenches and socket pits in any soil (except rock requiring blasting) up to 1524 mm(5'0") depth and refilling with watering and tamping.	1 RM	<b>550.00</b>
2	TBSP-A.I-02	Supplying, laying, jointing and testing 101.6 mm SWG SP-1 pipes of ISI make conforming to ISI 651 & 4127 with airtight cement joints in CM 1:5:1 prop. including excavation of trenches and socket pits in any soil (except rock requiring blasting) up to 914.4 mm (3'0") depth and refilling with watering and tamping.	1 RM	<b>475.00</b>
3	TBSP-A.I-03	Supplying, laying, jointing and testing 152.4 mm SWG SP-1 pipes of ISI make conforming to ISI 651 & 4127 with airtight cement joints in CM 1.5:1 prop. including excavation of trenches and socket pits in any soil (except rock requiring blasting) up to 1524 mm(5'0") depth and refilling with watering and tamping.	1 RM	<b>795.00</b>
4	TBSP-A.I-04	Supplying, laying, jointing and testing 152.4 mm SWG SP-1 pipes of ISI make conforming to ISI 651 & 4127 with airtight cement joints in CM 1.5:1 prop. including excavation of trenches and socket pits in any soil (except rock requiring blasting) up to 914.4 mm (3'0")) depth and refilling with watering and tamping.	1 RM	<b>707.00</b>
5	TBSP-A.I-05	Providing 152.4 mm CC bed 1:2:4 Prop:using19.05mm gauge graded granite metal chips and cradling 101.6 mm SWG pipe line all round to have 75 mm nominal size thick cover over the sockets.	1 RM	<b>156.00</b>
6	TBSP-A.I-06	Providing 152.4 mm CC bed 1:2:4 Prop: using 19.05 mm gauge graded granite metal chips and cradling 152.4 mm SWG pipe line all round to have 75 mm nominal size thick cover over the sockets.	1 RM	<b>266.00</b>
7	TBSP-A.I-07	Supplying & Laying 101.6 mm SWG channels with cement mortar joints with suitable brick masonry for fixing the channels in position	1 RM	<b>107.00</b>
8	TBSP-A.I-08	Supplying & Laying 152.4 mm SWG channels with cement mortar joints with suitable brick masonry for fixing the channels in position	1 RM	<b>200.00</b>
9	TBSP-A.I-09	Supplying & fixing 150 mm x 100 mm SWG gully traps conforming to ISI 651 & 4127 with C.I Grating & Cost. Brick masonry in CM 1:6 prop. Intermediate chamber and fitted with 304.8 mm x 288.6mm (12"x9") C.I Frame and hinged cover	Each	<b>693.00</b>
<b>II</b>	<b>SUB-SECTION</b>	<b>S.W.G. PIPES (1m or above lengths)&amp; FITTINGS</b>		
10	TBSP-A.II-01	Supply of SWG SP-1 pipe conforming to ISI 651 - 4"dia(101.6mm)	1 RM	<b>207.00</b>
11	TBSP-A.II-02	Supply of SWG SP-1 pipe conforming to ISI 651 - 6"dia(152.4mm)	1 RM	<b>359.00</b>
12	TBSP-A.II-03	Supply of SWG SP-1 pipe conforming to ISI 651 - 8" dia(203.2mm)	1 RM	<b>555.00</b>
13	TBSP-A.II-04	Supply of SWG SP-1 pipe conforming to ISI 651 - 10" dia (254 mm)	1 RM	<b>1,015.00</b>
14	TBSP-A.II-05	Supply of SWG SP-1 pipe conforming to ISI 651 - 12" dia (300	1 RM	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
		mm)		1,463.00
15	TBSP-A.II-06	Supply of SWG SP-1 pipe conforming to ISI 651 - 14" dia (350 mm)	1 RM	1,991.00
16	TBSP-A.II-07	Supply of SWG SP-2 pipe conforming to ISI 651 - 4" dia(101.6mm)	1 RM	257.00
17	TBSP-A.II-08	Supply of SWG SP-2 pipe conforming to ISI 651 - 6" dia(152.4mm)	1 RM	381.00
18	TBSP-A.II-09	Supply of SWG SP-2 pipe conforming to ISI 651 - 8" dia(203.2mm)	1 RM	685.00
19	TBSP-A.II-10	Supply of SWG SP-2 pipe conforming to ISI 651 - 10" dia (254 mm)	1 RM	1,075.00
20	TBSP-A.II-11	Supply of SWG SP-2 pipe conforming to ISI 651 - 12" dia (300 mm)	1 RM	1,653.00
21	TBSP-A.II-12	Supply of SWG SP-2 pipe conforming to ISI 651 - 14" dia (350 mm)	1 RM	2,142.00
22	TBSP-A.II-13	Supply of SWG SP-2 pipe conforming to ISI 651 - 16" dia (400 mm)	1 RM	2,467.00
23	TBSP-A.II-14	Supply of SWG SP-2 pipe conforming to ISI 651 - 18" dia (450 mm)	1 RM	3,150.00
24	TBSP-A.II-15	Supply of SWG SP-3 pipe conforming to ISI 651 - 4" dia(101.6mm)	1 RM	327.00
25	TBSP-A.II-16	Supply of SWG SP-3 pipe conforming to ISI 651 - 6" dia(152.4mm)	1 RM	475.00
26	TBSP-A.II-17	Supply of SWG SP-3 pipe conforming to ISI 651 - 8" dia(203.2mm)	1 RM	840.00
27	TBSP-A.II-18	Supply of SWG SP-3 pipe conforming to ISI 651 - 10" dia (254 mm)	1 RM	1,275.00
28	TBSP-A.II-19	Supply of SWG SP-3 pipe conforming to ISI 651 - 12" dia (300 mm)	1 RM	1,781.00
29	TBSP-A.II-20	Supply of SWG SP-3 pipe conforming to ISI 651 - 14" dia (350 mm)	1 RM	2,261.00
30	TBSP-A.II-21	Supply of SWG SP-2 pipe conforming to ISI 651 - 16" dia (400 mm)	1 RM	2,602.00
31	TBSP-A.II-22	Supply of SWG SP-3 pipe conforming to ISI 651 - 18" dia (450 mm)	1 RM	3,541.00
32	TBSP-A.II-23	Supply of SWG Bends conforming to IS standards -100 mm dia	Each	105.00
33	TBSP-A.II-24	Supply of SWG Bends conforming to IS standards -150 mm dia	Each	194.00
34	TBSP-A.II-25	Supply of SWG Bends conforming to IS standards -200 mm dia	Each	363.00
35	TBSP-A.II-26	Supply of SWG Bends conforming to IS standards -250 mm dia	Each	735.00
36	TBSP-A.II-27	Supply of SWG Bends conforming to IS standards -300 mm dia	Each	934.00
37	TBSP-A.II-28	Supply of SWG Bends conforming to IS standards -350 mm dia	Each	1,166.00
38	TBSP-A.II-29	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 100 x 100	Each	201.00
39	TBSP-A.II-30	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 150 x 100	Each	295.00
40	TBSP-A.II-31	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 150 x 150	Each	322.00
41	TBSP-A.II-32	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 200 x 100	Each	458.00
42	TBSP-A.II-33	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 200 x 150	Each	536.00
43	TBSP-A.II-34	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 200 x 200	Each	614.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
44	TBSP-A.II-35	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 250 x 100	Each	723.00
45	TBSP-A.II-36	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 250 x 150	Each	953.00
46	TBSP-A.II-37	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 250 x 200	Each	1,179.00
47	TBSP-A.II-38	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 250 x 250	Each	1,412.00
48	TBSP-A.II-39	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 300 x 100	Each	1,029.00
49	TBSP-A.II-40	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 300 x 150	Each	1,317.00
50	TBSP-A.II-41	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 300 x 200	Each	1,615.00
51	TBSP-A.II-42	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 300 x 250	Each	1,897.00
52	TBSP-A.II-43	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 300 x 300	Each	2,184.00
53	TBSP-A.II-44	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 350 x 100	Each	1,283.00
54	TBSP-A.II-45	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 350 x 150	Each	1,646.00
55	TBSP-A.II-46	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 350 x 200	Each	2,006.00
56	TBSP-A.II-47	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 350 x 250	Each	2,365.00
57	TBSP-A.II-48	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 350 x 300	Each	2,728.00
58	TBSP-A.II-49	Supply of SWG Junctions (T's & Y's) conforming to IS standards with length of barrel 60 cm for - 350 x 350	Each	3,086.00
59	TBSP-A.II-50	Supply of SWG Plugs conforming to IS standards for 100 mm dia	Each	39.00
60	TBSP-A.II-51	Supply of SWG Plugs conforming to IS standards for 150 mm dia	Each	74.00
61	TBSP-A.II-52	Supply of SWG Plugs conforming to IS standards for 200 mm dia	Each	138.00
62	TBSP-A.II-53	Supply of SWG Plugs conforming to IS standards for 250 mm dia	Each	239.00
63	TBSP-A.II-54	Supply of SWG Plugs conforming to IS standards for 300 mm dia	Each	378.00
64	TBSP-A.II-55	Supply of SWG Plugs conforming to IS standards for 350 mm dia	Each	473.00
65	TBSP-A.II-56	Supply of SWG Gully Traps (Round & Square) conforming to IS standards 150 x 100 mm	Each	291.00
66	TBSP-A.II-57	Supply of SWG Saddles conforming to IS standards 150 x 100mm	Each	213.00
67	TBSP-A.II-58	Supply of SWG Saddles conforming to IS standards 200 x 100mm	Each	363.00
68	TBSP-A.II-59	Supply of SWG Saddles conforming to IS standards 250 x 100mm	Each	588.00
69	TBSP-A.II-60	Supply of SWG Rubber Rings, glue & Fixing Charges conforming to IS standards 150mm	Each	44.00
70	TBSP-A.II-61	Supply of SWG Rubber Rings, glue & Fixing Charges conforming to IS standards 200mm	Each	64.00
71	TBSP-A.II-62	Supply of SWG Rubber Rings, glue & Fixing Charges conforming to IS standards 250mm	Each	86.00
72	TBSP-A.II-63	Supply of SWG Rubber Rings, glue & Fixing Charges conforming to IS standards 300mm	Each	143.00
III	SUB-	LABOUR CHARGES FOR SWG WORKS		



Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
	<b>SECTION</b>			
73	TBSP-A.III-01	Labour charges only for laying, jointing and testing SWG pipes of any dia with airtight cement joints including excavation of trenches and socket pits in any soil up to 914.4 mm (3'0") depth (except rock requiring blasting) and refilling with watering and tamping.	1 RM	<b>291.00</b>
74	TBSP-A.III-02	Labour charges only for laying, jointing and testing SWG pipes of any dia with airtight cement joints including excavation of trenches and socket pits in any soil up to 1524 mm (5'-0") depth (except rock requiring blasting) and refilling with watering and tamping.	1 RM	<b>362.00</b>
75	TBSP-A.III-03	Labour charges only for laying 101.6 mm SWG channels with cement mortar joints with suitable brick masonry for fixing the channels in position	1 RM	<b>47.00</b>
76	TBSP-A.III-04	Labour charges only for laying 152.4 mm SWG channels with cement mortar joints with suitable brick masonry for fixing the channels in position	1 RM	<b>63.00</b>
77	TBSP-A.III-05	Labour charges only for fixing and laying the SWG Junctions/ Plugs/ Bends of any dia with airtight cement joints as per standard practice	Each	<b>39.00</b>
<b>B</b>	<b>SECTION</b>	<b>MANHOLES&amp;INSPECTIONCHAMBERS-ASPER- IS 4111 : Part 1 :1986</b>		
<b>I</b>	<b>SUB-SECTION</b>	<b>MANHOLES</b>		
78	TBSP-B.I-01	Constructing 904.0 mm (3'0") dia solid block masonry inspection chamber as per IS - 4111: Part-1:1986 with cement mortar (1:6) prop using fly-ash blocks of 225 mm thick from approved source having a minimum crushing strength of 10 N/sq.mm including plastering with cement mortar 1:3 prop; ½" thick both inside and outside fitted with 20" dia RCC manhole covers and frames including excavating pits up to a depth of 904 mm (3'-0") in all sorts of soils (excluding rock) and laying cement concrete (1:4:8) 150 mm thick using 40 mm HBG Metal and P.C.C. 1:2:4 benching and channel 100 mm thick as per Standard specification and including cost and conveyance of all materials like cement, sand, bricks, water etc., to site, cost of seigniorage charges on all materials and all incidental and operational, labour charges like mixing cement mortar, constructing masonry, lift charges, curing etc., complete for finished item of work as per Standard specification.	Each	<b>7,826.00</b>
79	TBSP-B.I-02	Constructing 904.0 mm (3'0") dia solid block masonry inspection chamber as per IS - 4111: Part-1:1986 with cement mortar (1:6) prop using fly-ash blocks of 225 mm thick from approved source having a minimum crushing strength of 10 N/sq.mm including plastering with cement mortar 1:3 prop; ½" thick both inside and outside fitted with 20" dia RCC manhole covers and frames including excavating pits up to a depth of 1524 mm (5'-0") in all sorts of soils (excluding rock) and laying cement concrete (1:4:8) 150 mm thick using 40 mm HBG Metal and P.C.C. 1:2:4 benching and channel 100 mm thick as per Standard specification and including cost and conveyance of all materials like cement, sand, bricks, water etc., to site, cost of seigniorage charges on all materials and all incidental and operational, labour charges like mixing cement mortar, constructing masonry, lift charges, curing etc., complete for finished item of work as per Standard specification.	Each	<b>12,510.00</b>

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
80	TBSP-B.I-03	Constructing 904.0 mm (3'0") dia brick masonry inspection chamber as per IS - 4111: Part-1:1986 with cement mortar (1:6) prop using 2nd Class Clay Bricks of 225 mm thick from approved source having a minimum crushing strength of 5 N/sq.mm including plastering with cement mortar 1:3 prop; ½" thick both inside and outside fitted with 20" dia RCC manhole covers and frames including excavating pits up to a depth of 904 mm (3'-0") in all sorts of soils (excluding rock) and laying cement concrete (1:4:8) 150 mm thick using 40 mm HBG Metal and P.C.C. 1:2:4 benching and channel 100 mm thick as per Standard specification and including cost and conveyance of all materials like cement, sand, bricks, water etc., to site, cost of seigniorage charges on all materials and all incidental and operational, labour charges like mixing cement mortar, constructing masonry, lift charges, curing etc., complete for finished item of work as per Standard specification.	Each	7,835.00
81	TBSP-B.I-04	Constructing 904.0 mm (3'0") dia brick masonry inspection chamber as per IS - 4111: Part-1:1986 with cement mortar (1:6) prop using 2nd Class Clay Bricks of 225 mm thick from approved source having a minimum crushing strength of 5 N/sq.mm including plastering with cement mortar 1:3 prop; ½" thick both inside and outside fitted with 20" dia RCC manhole covers and frames including excavating pits up to a depth of 1524 mm (5'-0") in all sorts of soils (excluding rock) and laying cement concrete (1:4:8) 150 mm thick using 40 mm HBG Metal and P.C.C. 1:2:4 benching and channel 100 mm thick as per Standard specification and including cost and conveyance of all materials like cement, sand, bricks, water etc., to site, cost of seigniorage charges on all materials and all incidental and operational, labour charges like mixing cement mortar, constructing masonry, lift charges, curing etc., complete for finished item of work as per Standard specification.	Each	12,509.00
II	<b>SUB-SECTION</b>	<b>INSPECTION CHAMBERS &amp; COVERS</b>		
82	TBSP-B.II-01	Constructing 914.4 mm x 457.2 mm (3'0"x1'6") brick in CM 1:6 prop. Masonry Inspection chamber up to 914.4 mm (3'0") and fitted with light weight 914.4 mm x 457.2 mm (3'0"x1'6") C.I frame and cover of 40 Kg.	Each	7,087.00
83	TBSP-B.II-02	Constructing 457.2 mm x 457.2 mm (1'6"x1'6") brick in CM 1:6 prop. Masonry. Inspection chamber up to 914.4 mm (3'0") and fitted with light weight 457.2 mm x 457.2 mm (1'6"x1'6") C.I frame and cover of 20 Kg.	Each	4,273.00
84	TBSP-B.II-03	Constructing Brick masonry chamber over the gully trap or peet valve and fitted with 304.8 x 228.6 mm size CI frame and hinged cover.	Each	530.00
85	TBSP-B.II-04	Constructing Brick masonry support for G.I pipe with C.M 304.8 x 228.6 x 228.6 mm size including plastering and finishing etc. complete.	Each	86.00
86	TBSP-B.II-05	Supply & fixing RCC cover 22" dia with nominal reinforcement 3 " thick and hooks for lifting	Each	821.00
87	TBSP-B.II-06	Supplying & fixing 304.8 x 228.6 mm CI frame & cover over gully taps	Each	140.00
88	TBSP-B.II-07	Supplying & fixing CI Nahany trap grating	Each	24.00
89	TBSP-B.II-08	Supplying & fixing CI gully trap grating	Each	58.00
90	TBSP-B.II-09	Supplying & fixing 914.4 x 457.2 mm CI man hole frame and cover (light weight) 30 Kgs	Each	2,255.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
91	TBSP-B.II-10	Supplying & fixing 602 x 602 mm CI man hole frame and cover (light weight) 30 Kgs	Each	3,361.00
92	TBSP-B.II-11	Supplying & fixing CI steps for septic tank.	Each	74.00
93	TBSP-B.II-12	Supplying & fixing 50.8 cm dia C.I. Man hole frame & cover for 914.4 mm dia chamber (20 Kgs - Lightweight)	Each	1,451.00
94	TBSP-B.II-13	Supplying & fixing 50.8 cm dia C.I. Man hole frame & cover for 914.4 mm dia chamber (Medium weight) as per IS:1726 - 40 Kgs	Each	2,996.00
III	<b>SUB-SECTION</b>	<b>LABOUR CHARGES FOR IC WORKS</b>		
95	TBSP-B.III-01	Making drainage connection from a drainage line in to an existing inspection chamber/ manhole including making a hole in to the chambers, placing necessary pipes in the connection and making good the junction in and out of the chambers including cost of necessary cement, sand and aggregate etc.,	Each	150.00
<b>C</b>	<b>SECTION</b>	<b>C.I. PIPES &amp; FITTINGS - AS PER - IS 1729:1979 (Materials shall be procured from the list of approved Brands/Manufacturers/Suppliers)</b>		
<b>I</b>	<b>SUB-SECTION</b>	<b>SUPPLYING &amp; LAYING OF C.I. PIPES</b>		
96	TBSP-C.I-01	Supplying and fixing of C.I. soil pipes ISI marked conforming to IS:1729-1979 of approved make with cement caulked joints and fixing as per site requirements including painting black with Japan paint and fixing with necessary wooden blocks fixed in the masonry walls in cement mortar (1½:1) including fixing of M.S. clamps if necessary with required no. of Bombay nailsetc., complete for 3" dia (75mm nominal size) Single Socket	1 RM	843.00
97	TBSP-C.I-02	Supplying and fixing of C.I. soil pipes ISI marked conforming to IS:1729-1979 of approved make with cement caulked joints and fixing as per site requirements including painting black with Japan paint and fixing with necessary wooden blocks fixed in the masonry walls in cement mortar (1½:1) including fixing of M.S. clamps if necessary with required no. of Bombay nails etc., complete for 4" dia (101.6mm) Single Socket	1 RM	1,107.00
98	TBSP-C.I-03	Supplying and fixing of C.I. soil pipes ISI marked conforming to IS:1729-1979 of approved make with cement caulked joints and fixing as per site requirements including painting black with Japan paint and fixing with necessary wooden blocks fixed in the masonry walls in cement mortar (1½:1) including fixing of M.S. clamps if necessary with required no. of Bombay nails etc., complete for 6" dia (152.4mm) Single Socket	1 RM	1,770.00
99	TBSP-C.I-04	Supplying and fixing of C.I. soil pipes ISI marked conforming to IS:1729-1979 of approved make with cement caulked joints and fixing as per site requirements including painting black with Japan paint and fixing with necessary wooden blocks fixed in the masonry walls in cement mortar (1½:1) including fixing of M.S. clamps if necessary with required no. of Bombay nailsetc., complete for 3" dia (75mm nominal size) Double Socket	1 RM	921.00
100	TBSP-C.I-05	Supplying and fixing of C.I. soil pipes ISI marked conforming to IS:1729-1979 of approved make with cement caulked joints and fixing as per site requirements including painting black with Japan paint and fixing with necessary wooden blocks fixed in the masonry walls in cement mortar (1½:1) including fixing of M.S. clamps if necessary with required	1 RM	1,229.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
		no. of Bombay nails etc., complete for 4" dia (101.6mm) Double Socket		
101	TBSP-C.I-06	Supplying and fixing of C.I. soil pipes ISI marked conforming to IS:1729-1979 of approved make with cement caulked joints and fixing as per site requirements including painting black with Japan paint and fixing with necessary wooden blocks fixed in the masonry walls in cement mortar (1½:1) including fixing of M.S. clamps if necessary with required no. of Bombay nails etc., complete for 6" dia (152.4mm) Double Socket	1 RM	2,041.00
II	<b>SUB-SECTION</b>	<b>SUPPLYING &amp; LAYING OF C.I. FITTINGS</b>		
102	TBSP-C.II-01	Supplying & fixing CI Plain bends 1st quality ISI marked conforming to IS:1729-1979 with cement caulked joints and fixing as per site requirements with standard practice for 3" dia (75 mm nominal size)	Each	328.00
103	TBSP-C.II-02	Supplying & fixing CI Plain bends 1st quality ISI marked conforming to IS:1729-1979 with cement caulked joints and fixing as per site requirements with standard practice for 4" dia (101.6mm)	Each	417.00
104	TBSP-C.II-03	Supplying & fixing CI Plain bends 1st quality ISI marked conforming to IS:1729-1979 with cement caulked joints and fixing as per site requirements with standard practice for 6" dia (152.4 mm)	Each	692.00
105	TBSP-C.II-04	Supplying & fixing CI Plug (Door) bends 1st quality ISI marked conforming to IS:1729-1979 with cement caulked joints and fixing as per site requirements with standard practice for 3" dia (75 mm nominal size)	Each	407.00
106	TBSP-C.II-05	Supplying & fixing CI Plug (Door) bends 1st quality ISI marked conforming to IS:1729-1979 with cement caulked joints and fixing as per site requirements with standard practice for 4" dia (101.6 mm)	Each	504.00
107	TBSP-C.II-06	Supplying & fixing CI Plug (Door) bends 1st quality ISI marked conforming to IS:1729-1979 with cement caulked joints and fixing as per site requirements with standard practice for 6" dia (152.4 mm)	Each	1,102.00
108	TBSP-C.II-07	Supplying and fixing of 75 mm nominal size (3") CIS oil single junction with plug: conforming to IS:1729-1979 with cement caulked joints and fixing	Each	512.00
109	TBSP-C.II-08	Supplying and fixing of 101.6 mm (4") CI soil single junction with plug : conforming to IS:1729-1979 with cement caulked joints and fixing	Each	802.00
110	TBSP-C.II-09	Supplying and fixing of 152.4 mm (6") CI soil single junction with plug : conforming to IS:1729-1979 with cement caulked joints and fixing	Each	1,899.00
111	TBSP-C.II-10	Supplying and fixing of 75 mm nominal size (3") CIS oil plain single junction : conforming to IS:1729-1979 with cement caulked joints and fixing	Each	431.00
112	TBSP-C.II-11	Supplying and fixing of 101.6 mm (4") CI soil plain single junction : conforming to IS:1729-1979 with cement caulked joints and fixing	Each	590.00
113	TBSP-C.II-12	Supplying and fixing of 152.4 mm (6") CI soil plain single junction : conforming to IS:1729-1979 with cement caulked joints and fixing	Each	1,414.00
114	TBSP-C.II-13	Supplying and Fixing of 75 mm nominal size (3") CI soil Double junction with plug: conforming to IS:1729- 1979 with cement caulked joints and fixing	Each	779.00
115	TBSP-C.II-14	Supplying and Fixing of 101.6 mm (4") CI soil Double junction with plug : conforming to IS:1729-1979 with cement caulked joints and fixing	Each	948.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
116	TBSP-C.II-15	Supplying and Fixing of 152.4 mm (6") CI soil Double junction with plug : conforming to IS:1729-1979 with cement caulked joints and fixing	Each	2,216.00
117	TBSP-C.II-16	Supplying and Fixing of 75 mm nominal size (3") CI soil plain Double junction : conforming to IS:1729- 1979 with cement caulked joints and fixing	Each	675.00
118	TBSP-C.II-17	Supplying and Fixing of 101.6 mm (4") CI soil plain Double junction : conforming to IS:1729-1979 with cement caulked joints and fixing	Each	886.00
119	TBSP-C.II-18	Supplying and Fixing of 152.4 mm (6") CI soil plain Double junction : conforming to IS:1729-1979 with cement caulked joints and fixing	Each	2,074.00
120	TBSP-C.II-19	Supplying and Fixing of 75mm C.I. Offsets 1st quality conforming to IS:1729-1979 with cement caulked joints and fixing -for 76.20 mm (3") C.I. Pipe	Each	330.00
121	TBSP-C.II-20	Supplying and Fixing of 75mm C.I. Offsets 1st quality conforming to IS:1729-1979 with cement caulked joints and fixing -for 101.6 mm (4") C.I. Pipe	Each	462.00
122	TBSP-C.II-21	Supplying and Fixing of 75mm C.I. Offsets 1st quality conforming to IS:1729-1979 with cement caulked joints and fixing -for 152.4 mm (6") C.I. Pipe	Each	1,007.00
123	TBSP-C.II-22	Supplying and Fixing of 115 mm C.I. Offsets 1st quality conforming to IS:1729-1979 with cement caulked joints and fixing - for 76.20 mm (3") C.I. Pipe	Each	394.00
124	TBSP-C.II-23	Supplying and Fixing of 115 mm C.I. Offsets 1st quality conforming to IS:1729-1979 with cement caulked joints and fixing - for 101.6 mm (4") C.I. Pipe	Each	524.00
125	TBSP-C.II-24	Supplying and Fixing of 115 mm C.I. Offsets 1st quality conforming to IS:1729-1979 with cement caulked joints and fixing - for 152.4 mm (6") C.I. Pipe	Each	1,033.00
126	TBSP-C.II-25	Supplying and Fixing of 150 mm C.I. Offsets 1st quality conforming to IS:1729-1979 with cement caulked joints and fixing for 76.20 mm (3") C.I. Pipe	Each	456.00
127	TBSP-C.II-26	Supplying and Fixing of 150 mm C.I. Offsets 1st quality conforming to IS:1729-1979 with cement caulked joints and fixing for 101.6 mm (4") C.I. Pipe	Each	590.00
128	TBSP-C.II-27	Supplying and Fixing of 150 mm C.I. Offsets 1st quality conforming to IS:1729-1979 with cement caulked joints and fixing for 152.4 mm (6") C.I. Pipe	Each	1,199.00
129	TBSP-C.II-28	Supplying & fixing CI floor traps 1st quality ISI marked conforming to IS:1729-1979 with C.P. Grating fixing with white cement as per site requirements with standard practice for nominal dia 75 mm (3") and grating size 165 mm dia of weight not less than 5.5 Kgs	Each	599.00
130	TBSP-C.II-29	Supplying & fixing CI floor traps 1st quality ISI marked with C.P. Grating fixing with white cement as per site requirements with standard practice for nominal dia 100 mm (4") and grating size 100 mm dia of weight not less than 6 Kgs	Each	732.00
131	TBSP-C.II-30	Supplying & fixing CI floor traps 1st quality ISI marked conforming to IS:1729-1979 with C.P. Grating fixing with white cement as per site requirements with standard practice for nominal dia 75 mm (3") and grating size 100 mm dia of weight not less than 4.0 Kgs	Each	366.00
132	TBSP-C.II-31	Supplying & fixing CI Collars (double socket) 1st quality ISI marked conforming to IS:1729-1979 with cement caulked joints and fixing as per site requirements with standard practice for 76.20 mm (3") C.I. Pipe	Each	201.00
133	TBSP-C.II-32	Supplying & fixing CI Collars (double socket) 1st quality ISI marked conforming to IS:1729-1979 with cement caulked	Each	252.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
		joints and fixing as per site requirements with standard practice for 101.6 mm (4") C.I. Pipe		
134	TBSP-C.II-33	Supplying & fixing CI Collars (double socket) Ist quality ISI marked conforming to IS:1729-1979 with cement caulked joints and fixing as per site requirements with standard practice for 152.4 mm (6") C.I. Pipe	Each	723.00
III	<b>SUB-SECTION</b>	<b>LABOUR CHARGES FOR CI PIPE WORKS</b>		
135	TBSP-C.III-01	Labour charges only for fixing of C.I. Single/ Double Socket soil pipes of any dia with cement caulked joints and fixing as per site requirements including painting black with Japan paint and fixing with necessary wooden blocks fixed in the masonry walls in cement mortar and including fixing of M.S. clamps if necessary with required nails	1 RM	284.00
136	TBSP-C.III-02	Labour charges only for fixing CI Plain/ Plug (Door) bends with cement caulked joints and fixing as per site requirements with standard practice	Each	91.00
137	TBSP-C.III-03	Labour charges only fixing CI soil single junctions with cement caulked joints and fixing as per site requirements with standard practice	Each	114.00
138	TBSP-C.III-04	Labour charges only fixing CI soil Double junctions with cement caulked joints and fixing as per site requirements with standard practice	Each	122.00
139	TBSP-C.III-05	Labour charges only fixing CI soil Collars, Bends, Offsets etc., with cement caulked joints and fixing as per site requirements with standard practice	Each	56.00
140	TBSP-C.III-06	Labour charges only for fixing CI Nahany/ Floor traps with C.P. Grating fixing with white cement as per site requirements with standard practice	Each	74.00
141	TBSP-C.III-07	Boxing of Nahany traps in RCC floors	Each	239.00
142	TBSP-C.III-08	Boxing of W.C Traps in R.C.C floors	Each	479.00
D	<b>SECTION</b>	<b>CENTRIFUGALCASTIRONPIPES&amp;FITTINGSASPER IS: 3989 - 1984</b>		
I	<b>SUB-SECTION</b>	<b>SUPPLY OF CENTRIFUGAL CI PIPES</b>		
143	TBSP-D.I-01	75 mm dia CI (spun) soils Waste & Ventilating pipe (3 M)	Each	1,633.00
144	TBSP-D.I-02	100 mm dia CI (spun) soils Waste & Ventilating pipe(3M)	Each	2,173.00
145	TBSP-D.I-03	150 mm dia CI (spun) soils Waste & Ventilating pipe(3M)	Each	3,982.00
146	TBSP-D.I-04	75 mm dia CI (spun) soils Waste & Ventilating pipe (3 M) Double socket	Each	1,812.00
147	TBSP-D.I-05	100 mm dia CI (spun) soils Waste & Ventilating pipe(3 M) Double socket	Each	2,445.00
148	TBSP-D.I-06	75 mm dia 9'-0" (2743.2 mm) CI (Spun) pipes	Each	1,468.00
149	TBSP-D.I-07	100 mm dia 9'-0" (2743.2 mm) CI (Spun) pipes	Each	1,961.00
150	TBSP-D.I-08	75 mm dia 8'-0" (2438.4 mm) CI (Spun) pipes	Each	1,314.00
151	TBSP-D.I-09	100 mm dia 8'-0" (2438.4 mm) CI (Spun) pipes	Each	1,746.00
152	TBSP-D.I-10	75 mm dia 6'-0" (1828.8 mm) CI (Spun) pipes	Each	1,069.00
153	TBSP-D.I-11	100 mm dia 6'-0" (1828.8 mm) CI (Spun) pipes	Each	1,394.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
154	TBSP-D.I-12	75 mm dia 6'-0" (1828.8 mm) Double Socket CI (Spun) pipes	Each	1,124.00
155	TBSP-D.I-13	100 mm dia 6'-0" (1828.8 mm) Double Socket CI (Spun) pipes	Each	1,394.00
II	<b>SUB-SECTION</b>	<b>SUPPLY OF C.I. SPUN FITTINGS</b>		
156	TBSP-D.II-01	75 mm dia Cut pipes (pieces) 1 foot (304.8 mm) CI (Spun) fittings	Each	390.00
157	TBSP-D.II-02	100 mm dia Cut pipes (pieces) 1 foot (304.8 mm) CI (Spun) fittings	Each	448.00
158	TBSP-D.II-03	75 mm dia Cut pipes (pieces) 1'.6" (457.2 mm) CI (Spun) fittings	Each	559.00
159	TBSP-D.II-04	100 mm dia Cut pipes (pieces) 1'.6" (457.2 mm) CI (Spun) fittings	Each	642.00
160	TBSP-D.II-05	150 mm dia Cut pipes (pieces) 1'.6" (457.2 mm) CI (Spun) fittings	Each	1,224.00
161	TBSP-D.II-06	75 mm dia Cut pipes (pieces ) 2 feet (609.6 mm) CI (Spun) fittings	Each	769.00
162	TBSP-D.II-07	100 mm dia Cut pipes (pieces ) 2 feet (609.6 mm) CI (Spun) fittings	Each	850.00
163	TBSP-D.II-08	150 mm dia Cut pipes (pieces ) 2 feet (609.6 mm) CI (Spun) fittings	Each	1,533.00
164	TBSP-D.II-09	75 mm dia Cut pipes (pieces ) 3 feet (914.4 mm) CI (Spun) fittings	Each	1,180.00
165	TBSP-D.II-10	100 mm dia Cut pipes (pieces ) 3 feet (914.4 mm) CI (Spun) fittings	Each	1,592.00
166	TBSP-D.II-11	75 mm dia Cut pipes (pieces ) 4 feet (1219.2 mm) CI (Spun) fittings	Each	1,298.00
167	TBSP-D.II-12	100 mm dia Cut pipes (pieces ) 4 feet (1219.2 mm) CI (Spun) fittings	Each	1,943.00
168	TBSP-D.II-13	75 mm dia Plain Bend - CI (Spun) fittings	Each	402.00
169	TBSP-D.II-14	100 mm dia Plain Bend - CI (Spun) fittings	Each	472.00
170	TBSP-D.II-15	150 mm dia Plain Bend - CI (Spun) fittings	Each	1,125.00
171	TBSP-D.II-16	75 mm dia Door Bend - CI (Spun) fittings	Each	415.00
172	TBSP-D.II-17	100 mm dia Door Bend - CI (Spun) fittings	Each	538.00
173	TBSP-D.II-18	150 mm dia Door Bend - CI (Spun) fittings	Each	1,230.00
174	TBSP-D.II-19	75 mm dia Plain Bend 45 Degrees - CI (Spun) fittings	Each	402.00
175	TBSP-D.II-20	100 mm dia Plain Bend 45 Degrees - CI (Spun) fittings	Each	472.00
176	TBSP-D.II-21	150 mm dia Plain Bend 45 Degrees - CI (Spun) fittings	Each	1,125.00
177	TBSP-D.II-22	75 mm dia Door Bend 45 Degrees - CI (Spun) fittings	Each	415.00
178	TBSP-D.II-23	100 mm dia Door Bend 45 Degrees - CI (Spun) fittings	Each	538.00
179	TBSP-D.II-24	150 mm dia Door Bend 45 Degrees - CI (Spun) fittings	Each	1,230.00
180	TBSP-D.II-25	Horn Bend Plain 101.6 x 50 mm nominal size (4" x 2") 100 mm dia - CI (Spun) fittings	Each	817.00
181	TBSP-D.II-26	Horn Bend door 101.6 x 50 mm nominal size (4" x 2") 100 mm dia - CI (Spun) fittings	Each	953.00
182	TBSP-D.II-27	75 mm dia Heel Rest Bend - CI (Spun) fittings	Each	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
				<b>427.00</b>
183	TBSP-D.II-28	100 mm dia Heel Rest Bend - CI (Spun) fittings	Each	<b>546.00</b>
184	TBSP-D.II-29	150 mm dia Heel Rest Bend - CI (Spun) fittings	Each	<b>1,159.00</b>
185	TBSP-D.II-30	75 mm dia Single Branch Plain "T" - CI (Spun) fittings	Each	<b>538.00</b>
186	TBSP-D.II-31	100 mm dia Single Branch Plain "T" - CI (Spun) fittings	Each	<b>725.00</b>
187	TBSP-D.II-32	150 mm dia Single Branch Plain "T" - CI (Spun) fittings	Each	<b>1,496.00</b>
188	TBSP-D.II-33	75 mm dia Single Branch Door "T" - CI (Spun) fittings	Each	<b>634.00</b>
189	TBSP-D.II-34	100 mm dia Single Branch Door "T" - CI (Spun) fittings	Each	<b>842.00</b>
190	TBSP-D.II-35	150 mm dia Single Branch Door "T" - CI (Spun) fittings	Each	<b>1,580.00</b>
191	TBSP-D.II-36	75 mm dia Single Branch plain "Y" - CI (Spun) fittings	Each	<b>634.00</b>
192	TBSP-D.II-37	100 mm dia Single Branch plain "Y" - CI (Spun) fittings	Each	<b>842.00</b>
193	TBSP-D.II-38	150 mm dia Single Branch plain "Y" - CI (Spun) fittings	Each	<b>1,854.00</b>
194	TBSP-D.II-39	75 mm dia Single Branch Door "Y" - CI (Spun) fittings	Each	<b>695.00</b>
195	TBSP-D.II-40	100 mm dia Single Branch Door "Y" - CI (Spun) fittings	Each	<b>929.00</b>
196	TBSP-D.II-41	150 mm dia Single Branch Door "Y" - CI (Spun) fittings	Each	<b>1,998.00</b>
197	TBSP-D.II-42	75 mm dia Double Branch Plain "T" - CI (Spun) fittings	Each	<b>735.00</b>
198	TBSP-D.II-43	100 mm dia Double Branch Plain "T" - CI (Spun) fittings	Each	<b>988.00</b>
199	TBSP-D.II-44	75 mm dia Double Branch Door "T" - CI (Spun) fittings	Each	<b>819.00</b>
200	TBSP-D.II-45	100 mm dia Double Branch Door "T" - CI (Spun) fittings	Each	<b>1,031.00</b>
201	TBSP-D.II-46	75 mm dia Double Branch Plain "Y" - CI (Spun) fittings	Each	<b>819.00</b>
202	TBSP-D.II-47	100 mm dia Double Branch Plain "Y" - CI (Spun) fittings	Each	<b>1,031.00</b>
203	TBSP-D.II-48	75 mm dia Double Branch Door "Y" - CI (Spun) fittings	Each	<b>864.00</b>
204	TBSP-D.II-49	100 mm dia Double Branch Door "Y" - CI (Spun) fittings	Each	<b>1,119.00</b>
205	TBSP-D.II-50	75 mm dia Shoe Bend - CI (Spun) fittings	Each	<b>506.00</b>
206	TBSP-D.II-51	100 mm dia Shoe Bend - CI (Spun) fittings	Each	<b>592.00</b>
207	TBSP-D.II-52	150 mm dia Shoe Bend - CI (Spun) fittings	Each	<b>1,203.00</b>
208	TBSP-D.II-53	75 mm dia Collar - CI (Spun) fittings	Each	<b>347.00</b>
209	TBSP-D.II-54	100 mm dia Collar - CI (Spun) fittings	Each	<b>421.00</b>
210	TBSP-D.II-55	150 mm dia Collar - CI (Spun) fittings	Each	<b>864.00</b>
211	TBSP-D.II-56	75 mm dia Cowl - CI (Spun) fittings	Each	<b>306.00</b>



Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
212	TBSP-D.II-57	100 mm dia Cowl - CI (Spun) fittings	Each	347.00
213	TBSP-D.II-58	150 mm dia Cowl - CI (Spun) fittings	Each	778.00
214	TBSP-D.II-59	75 mm dia Offset 3" (75 mm nominal size ) projection - CI (Spun) fittings	Each	444.00
215	TBSP-D.II-60	100 mm dia Offset 3" (75 mm nominal size ) projection - CI (Spun) fittings	Each	538.00
216	TBSP-D.II-61	150 mm dia Offset 3" (75 mm nominal size ) projection - CI (Spun) fittings	Each	1,086.00
217	TBSP-D.II-62	75 mm dia Offset 6" (152.4mm ) projection - CI (Spun) fittings	Each	484.00
218	TBSP-D.II-63	100 mm dia Offset 6" (152.4mm ) projection - CI (Spun) fittings	Each	634.00
219	TBSP-D.II-64	150 mm dia Offset 6" (152.4mm ) projection - CI (Spun) fittings	Each	1,264.00
220	TBSP-D.II-65	75 mm dia Long Door Bend - CI (Spun) fittings	Each	1,019.00
221	TBSP-D.II-66	100 mm dia Long Door Bend - CI (Spun) fittings	Each	1,096.00
222	TBSP-D.II-67	75 mm dia Hand Hole pipe ( Inspection pipe)	Each	586.00
223	TBSP-D.II-68	100 mm dia Hand Hole pipe ( Inspection pipe)	Each	797.00
224	TBSP-D.II-69	150 mm dia Hand Hole pipe ( Inspection pipe)	Each	1,062.00
225	TBSP-D.II-70	75 mm dia P Traps - CI (Spun) fittings	Each	634.00
226	TBSP-D.II-71	100 mm dia P Traps - CI (Spun) fittings	Each	869.00
227	TBSP-D.II-72	4" x 3" (101.6 mm x 76.2mm ) P. Traps 100 mm dia - CI (Spun) fittings	Each	996.00
228	TBSP-D.II-73	4" x 3" (101.6 mm x 76.2mm ) Vent Traps 100 mm dia - CI (Spun) fittings	Each	996.00
229	TBSP-D.II-74	4" x 3" (101.6 mm x 76.2mm ) Reducer 75 mm dia - CI (Spun) fittings	Each	619.00
230	TBSP-D.II-75	6" x 4" (152.4 mm x101.6 mm ) Reducer 75 mm dia - CI (Spun) fittings	Each	847.00
231	TBSP-D.II-76	3" x 2" ( 75 mm nominal size x 50 mm nominal size ) plain T 75 mm dia - CI (Spun) fittings	Each	530.00
232	TBSP-D.II-77	3" x 2" ( 75 mm nominal size x 50 mm nominal size ) Door T 75 mm dia - CI (Spun) fittings	Each	825.00
233	TBSP-D.II-78	3" x 2" ( 75 mm nominal size x 50 mm nominal size ) Plain Y 75 mm dia - CI (Spun) fittings	Each	825.00
234	TBSP-D.II-79	3" x 2" ( 75 mm nominal size x 50 mm nominal size ) Door Y 75 mm dia - CI (Spun) fittings	Each	825.00
235	TBSP-D.II-80	4" x 3" (101.6 mm x 76.2mm ) Plain T 75 mm dia - CI (Spun) fittings	Each	825.00
236	TBSP-D.II-81	4" x 3" (101.6 mm x 76.2mm ) Door T 75 mm dia - CI (Spun) fittings	Each	874.00
237	TBSP-D.II-82	4" x 3" (101.6 mm x 76.2mm ) Plain Y 75 mm dia - CI (Spun) fittings	Each	874.00
238	TBSP-D.II-83	4" x 3" (101.6 mm x 76.2mm ) Door Y 75 mm dia - CI (Spun) fittings	Each	933.00
239	TBSP-D.II-84	6" x 4" (152.4 mm x101.6 mm ) Plain T 75 mm dia - CI (Spun) fittings	Each	1,221.00
240	TBSP-D.II-85	6" x 4" (152.4 mm x101.6 mm ) Door T 75 mm dia - CI (Spun) fittings	Each	1,324.00
241	TBSP-D.II-86	6" x 4" (152.4 mm x101.6 mm ) Plain Y 75 mm dia - CI (Spun)	Each	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
		fittings		1,400.00
242	TBSP-D.II-87	6" x 4" (152.4 mm x101.6 mm ) Door Y 75 mm dia - CI (Spun) fittings	Each	1,710.00
243	TBSP-D.II-88	75 mm dia Plain " T" 27 " (685.8 mm ) Special Types of Long Fittings	Each	1,773.00
244	TBSP-D.II-89	100 mm dia - Plain " T" 27 " (685.8 mm ) Special Types of Long CI (Spun) fittings	Each	2,490.00
245	TBSP-D.II-90	75 mm dia Door "T" 27" (685.8 mm ) Special Types of Long CI (Spun) fittings	Each	1,979.00
246	TBSP-D.II-91	100mm dia Door "T" 27" (685.8 mm ) Special Types of Long CI (Spun) fittings	Each	2,735.00
247	TBSP-D.II-92	75 mm dia Plain " Y" 27" (685.8 mm) Special Types of Long CI (Spun) fittings	Each	1,979.00
248	TBSP-D.II-93	100mm dia Plain " Y" 27" (685.8 mm) Special Types of Long CI (Spun) fittings	Each	2,735.00
249	TBSP-D.II-94	75 mm dia Door " Y" 27" (685.8 mm) Special Types of Long CI (Spun) fittings	Each	2,207.00
250	TBSP-D.II-95	100mm dia Door " Y" 27" (685.8 mm) Special Types of Long CI (Spun) fittings	Each	3,003.00
<b>E</b>	<b>SECTION</b>	<b>VITREOUS CHINAWARE - SANITARY APPLIANCES as per IS:2556 - 2004 (Materials shall be procured from the list of approved Brands/ Manufacturers/ Suppliers)</b>		
<b>I</b>	<b>SUB-SECTION</b>	<b>INDIAN WATER CLOSETS</b>		
251	TBSP-E.I-01	Supplying & fixing approved make Indian pattern white glazed W.C 1st quality ISI marked conforming to IS:2556-Part-3-2004 with "P" or "S" trap: 580 mm Long	Each	1,509.00
252	TBSP-E.I-02	Supplying & fixing approved make Indian pattern white glazed W.C 1st quality ISI marked conforming to IS:2556-Part-3-2004 with "P" or "S" trap: 630 mm Long	Each	1,509.00
253	TBSP-E.I-03	Supplying & fixing approved make Orissa Pan white glazed W.C 1st quality ISI marked conforming to IS:2556-Part-3-2004 with "P" or "S" trap: 580 mm x 440 mm	Each	2,018.00
254	TBSP-E.I-04	Supplying & fixing approved make Orissa Pan white glazed W.C 1st quality ISI marked conforming to IS:2556-Part-3-2004 with "P" or "S" trap: 630 mm x 450 mm	Each	2,018.00
255	TBSP-E.I-05	Supplying & fixing approved make porcelain foot rest for squatting I.W.C.(Rectangular pair)of sizes250mm x 125 mm x 15 mm thick each foot rest 1st quality ISI markedconformingtoIS:2556-Part-10:1974	Pair	239.00
256	TBSP-E.I-06	Providing Brick masonry seat for Orissa pan/ Indian W.C. using traditional common burnt clay bricks as per standard practice	Each	308.00
257	TBSP-E.I-07	Providing Cement Concrete Squatting plate for Orissa pan/ Indian W.C. in P.C.C. 1:2:4 as per standard practice	Each	92.00
<b>II</b>	<b>SUB-SECTION</b>	<b>FLOOR MOUNTED EWC</b>		
258	TBSP-E.II-01	Supplying and fixing approved make wash down European Water Closet of 1st quality conforming to IS:2556-Part-2-2004 of white glazed with 'P' trap	Each	1,799.00
259	TBSP-E.II-02	Supplying and fixing approved make wash down European Water Closet of 1st quality conforming to IS:2556-Part-2-2004 of white glazed with 'S' trap	Each	1,929.00
260	TBSP-E.II-03	Supply, Installation and commissioning approved make floor mounted Anglo Indian wash down EWC conforming to IS:2556 (Part 8)-2004 suit with 'P' or 'S' trap with dual flush porcelain cistern fixed on wash down EWC with all internal parts of dual flush cistern, ultra-solid seat cover of approved make with rubber buffer and cap & 15 mm angle stop cock & 450 mm long PVC inter connection pipe wall	Each	5,719.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
		flanges all of approved make etc. complete for finished item of work in all respects: White Colour		
261	TBSP-E.II-04	Supply, Installation and commissioning approved make floor mounted Close Coupled wash down EWC conforming to IS:2556 (Part 8)-2004 suit with 'P' trap with dual flush porcelain cistern fixed on wash down EWC with all internal parts of dual flush cistern, ultra-solid seat cover of approved make with rubber buffer and cap & 15 mm angle stop cock & 450 mm long PVC inter connection pipe wall flanges all of approved make etc. complete for finished item of work in all respects: White Colour	Each	11,075.00
262	TBSP-E.II-05	Supply, Installation and commissioning approved make floor mounted Close Coupled wash down EWC conforming to IS:2556 (Part 8)-2004 suit with 'P' trap with dual flush porcelain cistern fixed on wash down EWC with all internal parts of dual flush cistern, ultra-solid seat cover of approved make with rubber buffer and cap & 15 mm angle stop cock & 450 mm long PVC inter connection pipe wall flanges all of approved make etc. complete for finished item of work in all respects: Coloured-Grade-I/Grade-II	Each	13,922.00
263	TBSP-E.II-06	Supply, Installation and commissioning approved make floor mounted Close Coupled wash down EWC conforming to IS:2556 (Part 8)-2004 with 'P' or 'S' trap with dual flush porcelain cistern fixed on wash down EWC with all internal parts of dual flush cistern, ultra-solid seat cover of approved make with rubber buffer and cap & 15 mm angle stop cock & 450 mm long PVC inter connection pipe wall flanges all of approved make etc. complete for finished item of work in all respects: Special Colour-Grade-III	Each	16,015.00
III	<b>SUB-SECTION</b>	<b>WALL MOUNTED EWC</b>		
264	TBSP-E.III-01	Supply, Installation and commissioning approved make wash down wall mounted EWC conforming to IS:2556 (Part 16)-2002 with 'P' or 'S' trap with concealed flush cistern fixed in wall with all internal parts of dual flush cistern, ultra-solid seat cover of approved make with rubber buffer and cap all of approved make etc. complete for finished item of work in all respects: White colour	Each	10,484.00
265	TBSP-E.III-02	Supply, Installation and commissioning approved make wash down wall mounted EWC conforming to IS:2556 (Part 16)-2002 with 'P' or 'S' trap with concealed flush cistern fixed in wall with all internal parts of dual flush cistern, ultra-solid seat cover of approved make with rubber buffer and cap all of approved make etc. complete for finished item of work in all respects: Coloured Grade-I&II	Each	14,413.00
266	TBSP-E.III-03	Supply, Installation and commissioning approved make wash down wall mounted EWC conforming to IS:2556 (Part 16)-2002 with 'P' or 'S' trap with concealed flush cistern fixed in wall with all internal parts of dual flush cistern, ultra-solid seat cover of approved make with rubber buffer and cap all of approved make etc. complete for finished item of work in all respects: Special Coloured Grade-III	Each	15,006.00
IV	<b>SUB-SECTION</b>	<b>CISTERNS FOR WATER CLOSETS</b>		
267	TBSP-E.IV-01	Supplying & Fixing low down porcelain flushing tank with lid 10 Lit Capacity with internal components	Each	2,908.00
268	TBSP-E.IV-02	Supplying & Fixing internal cistern fittings for dual flush cisterns	Each	1,616.00
269	TBSP-E.IV-03	Supplying & Fixing ultra slim concealed flushing cistern of HDPE body and of size 460 x 450 x 80 mm with internal	Each	4,468.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
		component for wall mounted Wash down WC		
V	<b>SUB-SECTION</b>	<b>PLASTIC SEATS FOR WATER CLOSETS</b>		
270	TBSP-E.V-01	Supplying and Fixing best Indian make plastic seat and lid for European water closets with rubber or plastic Buffers as per IS2548-1996	Each	<b>1,186.00</b>
271	TBSP-E.V-02	Supplying and Fixing best Indian make soft plastic closing seat and lid for European water closets with rubber or plastic Buffers as per IS 2548-1996	Each	<b>1,581.00</b>
VI	<b>SUB-SECTION</b>	<b>WASH HAND BASINS</b>		
272	TBSP-E.VI-01	Supplying & Fixing Indian make Flat Back Wash Hand Basin 1st quality conforming to IS:2556-Part-4:1972 with waste fittings like rubber plug, chain, 32 mm nominal size C.P. Fitting with parallel pipe thread conforming to IS:2963-1979 and fitted with 15 mm nominal bore Chromium Plated Pillar Tap of 1st quality Indian make 400 grams Seiko/ Senior/ Nice/ Esso or equivalent complete with standard CI brackets including wooden block: 660 x 460 mm - Single C.P. Pillar cock	Each	<b>3,666.00</b>
273	TBSP-E.VI-02	Supplying & Fixing Indian make Flat Back Wash Hand Basin 1st quality conforming to IS:2556-Part-4:1972 with waste fittings like rubber plug, chain, 32 mm nominal size C.P. Fitting with parallel pipe thread conforming to IS:2963-1979 and fitted with 15 mm nominal bore Chromium Plated Pillar Tap of 1st quality Indian make 400 grams Seiko/ Senior/ Nice/ Esso or equivalent complete with standard CI brackets including wooden block: 630 x 450 mm - Single C.P. Pillar cock	Each	<b>2,681.00</b>
274	TBSP-E.VI-03	Supplying & Fixing Indian make Flat Back Wash Hand Basin 1st quality conforming to IS:2556-Part-4:1972 with waste fittings like rubber plug, chain, 32 mm nominal size C.P. Fitting with parallel pipe thread conforming to IS:2963-1979 and fitted with 15 mm nominal bore Chromium Plated Pillar Tap of 1st quality Indian make 400 grams Seiko/ Senior/ Nice/ Esso or equivalent complete with standard CI brackets including wooden block: 630 x 450 mm - Double C.P. Pillar cock	Each	<b>2,791.50</b>
275	TBSP-E.VI-04	Supplying & Fixing Indian make Flat Back Wash Hand Basin 1st quality conforming to IS:2556-Part-4:1972 with waste fittings like rubber plug, chain, 32 mm nominal size C.P. Fitting with parallel pipe thread conforming to IS:2963-1979 and fitted with 15 mm nominal bore Chromium Plated Pillar Tap of 1st quality Indian make 400 grams Seiko/ Senior/ Nice/ Esso or equivalent complete with standard CI brackets including wooden block: 550 x 400 mm - Single C.P. Pillar cock	Each	<b>2,136.00</b>
276	TBSP-E.VI-05	Supplying & Fixing Indian make Flat Back Wash Hand Basin 1st quality conforming to IS:2556-Part-4:1972 with waste fittings like rubber plug, chain, 32 mm nominal size C.P. Fitting with parallel pipe thread conforming to IS:2963-1979 and fitted with 15 mm nominal bore Chromium Plated Pillar Tap of 1st quality Indian make 400 grams Seiko/ Senior/ Nice/ Esso or equivalent complete with standard CI brackets including wooden block: 550 x 400 mm - Double C.P. Pillar cock	Each	<b>2,486.00</b>
277	TBSP-E.VI-06	Supplying & Fixing Indian make Flat Back Wash Hand Basin 1st quality conforming to IS:2556-Part-4:1972 with waste fittings like rubber plug, chain, 32 mm nominal size C.P. Fitting with parallel pipe thread conforming to IS:2963-	Each	<b>1,397.25</b>

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
		1979 and fitted with 15 mm nominal bore Chromium Plated Pillar Tap of 1st quality Indian make 400 grams Seiko/ Senior/ Nice/ Esso or equivalent complete with standard CI brackets including wooden block: 450 x 300 mm - Single C.P. Pillar cock		
278	TBSP-E.VI-07	Supplying & Fixing Indian make Flat Back Wash Hand Basin 1st quality conforming to IS:2556-Part-4:1972 with waste fittings like rubber plug, chain, 32 mm nominal size C.P. Fitting with parallel pipe thread conforming to IS:2963-1979 and fitted with 15 mm nominal bore Chromium Plated Pillar Tap of 1st quality Indian make 400 grams Seiko/ Senior/ Nice/ Esso or equivalent complete with standard CI brackets including wooden block: 450 x 300 mm - Double C.P. Pillar cock	Each	1,862.00
279	TBSP-E.VI-08	Supplying & Fixing Indian make below counter Wash Hand Basin 1st quality with waste fittings like rubber plug, chain, 32 mm nominal size C.P. Fitting with parallel pipe thread conforming to IS:2963-1979 and fitted with 15 mm nominal bore Chromium Plated Pillar Tap of 1st quality Indian make 400 grams Seiko/ Senior/ Nice/ Esso or equivalent complete with standard CI brackets including wooden block with single CP pillar cock	Each	3,911.00
280	TBSP-E.VI-09	Supplying & Fixing Indian make white glazed vitreous China porcelain sink conforming to IS:2556-Part-5- 1994 on cantilever brackets with waste fittings like rubber plug, chain, 32 mm nominal size C.P. Fitting with parallel pipe thread conforming to IS:2963-1979: 600 x 400 x250	Each	4,579.00
281	TBSP-E.VI-10	Supplying & Fixing Indian make white glazed vitreous China porcelain sink conforming to IS:2556-Part-5- 1994 on cantilever brackets with waste fittings like rubber plug, chain, 32 mm nominal size C.P. Fitting with parallel pipe thread conforming to IS:2963-1979: 750 x 450 x250	Each	5,153.00
282	TBSP-E.VI-11	Supplying & fixing oval shape basin white (520x410mm) parry or equivalent	Each	2,522.00
283	TBSP-E.VI-12	Supplying and Fixing Pedestal for Wash Hand Basin	Each	1,472.00
284	TBSP-E.VI-13	Supplying & fixing stainless steel sink size 36" x 18" (914.4x457.2mm) 1 mm thick with accessories	Each	6,992.00
285	TBSP-E.VI-14	Supplying & fixing SINGLE BOWL stainless steel sink size 24"x18"x8 " (609.6 x 457.2 x 203.2mm) 1 mm thick with accessories	Each	5,156.00
286	TBSP-E.VI-15	Supplying & fixing stainless steel sink size 20" x18" x 8 " (508x457.2x203.2mm) 1 mm thick with accessories	Each	4,680.00
287	TBSP-E.VI-16	S & F 609.6 x 457.2 x 254 mm RCC terrazzo finished sink (or constructed at site with 50.8mm thick) brass plug and chain including CI cantilever brackets	Each	731.00
VII	<b>SUB-SECTION</b>	<b>URINALS</b>		
288	TBSP-E.VII-01	Supplying & Fixing white glazed flat back Bowl urinals of size 440 mm x 265 mm x 315 mm with internal flushing rim fixed with screws complete Indian make conforming to IS:2556-1995	Each	1,007.00
289	TBSP-E.VII-02	Supplying & Fixing white glazed flat back half stall urinals 1st quality conforming to IS:2556-1995 with standard C.P. Spreader fixed with screws complete Indian make : 410 x 265 x 305 mm	Each	3,217.00
290	TBSP-E.VII-03	Supplying & Fixing white glazed flat back half stall urinals 1st quality conforming to IS:2556-1995 with standard C.P. Spreader fixed with screws complete Indian make : 590 x 375 x 390 mm	Each	3,659.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
291	TBSP-E.VII-04	Supplying & fixing 4 " x 24 " (101.6x609.6mm) white glazed porcelain channel fixed in brick masonry white cement pointing.	Each	503.00
292	TBSP-E.VII-05	Supplying and Fixing Odorless, Waterless Urinal Commode, of size 600mm x 340mmx320 mm/470 mm x 356mm x 305mm made of Specially designed curvature profile and the non-stick ceramic Coating help to ensure maximum slippery index. All the urine or water which is poured, slip into cartridge and does not stick to urinal basin. The Cartridge works on a Uni-directional system i.e., It gets opened only For the amount of urine passed through and gets closed immediately. This ensures bad odor behind trap in the drainage system can't pass back into the lavatory/ restroom. Cartridge has been sealed for high durability With no leakage	Each	20,852.00
VIII	<b>SUB-SECTION</b>	<b>LABOUR CHARGES FOR SANITARY WARE</b>		
293	TBSP-E.VIII-01	Labour charges only for fixing Indian pattern W.C with "P" or "S" trap	Each	378.00
294	TBSP-E.VIII-02	Labour charges only Fixing Orissa pan W.C with "P" or "S" trap	Each	471.00
295	TBSP-E.VIII-03	Labour charges only for fixing porcelain foot rest for squatting I.W.C. (Rectangular pair)	Pair	87.00
296	TBSP-E.VIII-04	Labour charges only for fixing low down porcelain flushing tank with internal components	Each	659.00
297	TBSP-E.VIII-05	Labour charges only for fixing internal cistern fittings of any flushing tank	Each	327.00
298	TBSP-E.VIII-06	Labour charges only for fixing European Water Closet with 'P' or 'S' trap as per standard practice	Each	330.00
299	TBSP-E.VIII-07	Labour charges only for fixing plastic seat and lid for European water closet	Each	96.00
300	TBSP-E.VIII-08	Labour charges only for fixing Indian make Flat Back Wash Hand Basin with waste fittings like rubber plug, chain, 32 mm nominal size C.P. Fitting Pillar Taps complete with standard CI brackets including wooden block	Each	471.00
301	TBSP-E.VIII-09	Labour charges only for fixing pedestal for wash hand basin	Each	171.00
302	TBSP-E.VIII-10	Labour charges only for fixing bottle trap to the wash hand basin	Each	66.00
303	TBSP-E.VIII-11	Labour charges only Fixing flat back Bowl/ Half stall urinals with fixing C.P. Spreader and screws complete	Each	188.00
304	TBSP-E.VIII-12	Labour charges only for fixing Vitreous China porcelain sinks with waste fittings, rubber plug, chain, cantilever brackets etc.	Each	471.00
F	<b>SECTION</b>	<b>CPFITTINGS (Materials shall be procured from the list of approved Brands/ Manufacturers/ Suppliers)</b>		
I	<b>SUB-SECTION</b>	<b>TAPS &amp; FAUCETS - BIB TAPS</b>		
305	TBSP-F.I-01	S&F of 15 mm brass body CP finish bib tap of not less than 300 grams weight screw type (full turn) with internal / external threaded connection conforming to IS 8931	Each	250.00
306	TBSP-F.I-02	S&F of 15 mm brass body CP finish bib tap of not less than 300 grams weight with quarter turn spindle with either internal or external threaded connection conforming to IS 8931	Each	609.00
307	TBSP-F.I-03	S&F of 15 mm brass body premium variety Chromium Plated finish bib tap with wall flange of not less than 500 grams weight with quarter turn spindle with either internal or external threaded connection conforming to IS 8931 and with 10 years warranty	Each	865.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
308	TBSP-F.I-04	S&F of 15 mm brass body premium variety Chromium Plated finish bib tap angular shape with wall flange of not less than 500 grams weight with quarter turn spindle with either internal or external threaded connection conforming to IS 8931 and with 10 years warranty	Each	1,219.00
309	TBSP-F.I-05	S&F of 15 mm brass body CP finish two way bib tap of not less than 400 grams weight with quarter turn spindle internal/ external threaded connection conforming to IS 8931	Each	871.00
310	TBSP-F.I-06	S&F of 15 mm brass body premium variety Chromium Plated finish two way bib tap with flange of not less than 500 grams weight with quarter turn spindle internal/ external threaded connection conforming to IS 8931 and with 10 years warranty	Each	1,118.00
311	TBSP-F.I-07	S&F of Chromium plated finish brass body quarter turn Bibcock cum Health Faucet with 1m long tube and wall hook with 10 years warranty	Each	3,266.00
312	TBSP-F.I-08	S&F of 15 mm brass body CP finish long body bib tap of not less than 400 grams weight with quarter turn spindle internal / external threaded connection conforming to IS 8931	Each	777.00
II	<b>SUB-SECTION</b>	<b>TAPS &amp; FAUCETS - PILLAR TAPS</b>		
313	TBSP-F.II-01	S&F of 15 mm brass body CP finish pillar tap of not less than 300 grams weight screw type (full turn) conforming to IS 8931	Each	637.00
314	TBSP-F.II-02	S&F of 15 mm brass body CP finish pillar tap of not less than 500 grams weight quarter turn spindle conforming to IS 8931	Each	823.00
315	TBSP-F.II-03	S&F of 15 mm brass body Premium variety Chromium plated finish pillar cock with aerator of not less than 500 grams weight quarter turn spindle conforming to IS 8931 and with a warranty of 10 years	Each	840.00
316	TBSP-F.II-04	S&F of 15 mm brass body Premium variety Chromium plated finish long neck pillar cock with aerator of not less than 500 grams weight quarter turn spindle conforming to IS 8931 and with a warranty of 10 years	Each	1,118.00
317	TBSP-F.II-05	S&F of 15 mm brass body Premium variety Chromium plated finish single lever pillar cock with aerator of not less than 500 grams weight quarter turn spindle conforming to IS 8931 and with a warranty of 10 years	Each	1,219.00
318	TBSP-F.II-06	S&F premium make Sensotronic sensor faucet for wash basin, and with 10 years warranty	Each	14,764.00
319	TBSP-F.II-07	S&F premium make Sensotronic concealed type flushing valve for urinal complete set with installation box with control cock, and with 10 years warranty	Each	14,764.00
320	TBSP-F.II-08	S&F premium make Auto closing system pillar cockforwashbasin,andwith10years warranty	Each	2,447.00
321	TBSP-F.II-09	S&F premium make Auto Closing system Bibcock, and with 10 years warranty	Each	2,567.00
III	<b>SUB-SECTION</b>	<b>TAPS &amp; FAUCETS - OTHER TAPS &amp; SPOUTS</b>		
322	TBSP-F.III-01	S&F of 15 mm brass body CP finish self-closing tap push type conforming to IS 1711	Each	275.00
323	TBSP-F.III-02	S&F of 15 mm brass body CP finish self-closing tap lift type conforming to IS1711	Each	241.00
324	TBSP-F.III-03	S&F of 15 mm brass body Premium variety Chromium plated finish Swan neck tap with right/left hand operating knob with aerator of not less than 500 grams weight quarter turn spindle conforming to IS 8931 and with a warranty of 10	Each	1,627.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
		years		
325	TBSP-F.III-04	S&F of 15 mm brass body CP finish wall mounted sink spout with connecting legs & wall flanges swinging nozzle conforming to IS 8931 and with a warranty of 10 years	Each	2,337.00
326	TBSP-F.III-05	S&F of 15 mm brass body CP finish wall mounted sink spout with connecting legs & wall flanges fixed nozzle conforming to IS 8931 and with a warranty of 10years	Each	1,423.00
327	TBSP-F.III-06	S&F of 15 mm bath tub spout minimum 180 mm projection with diverter system	Each	1,325.00
328	TBSP-F.III-07	S&F of 15 mm bath tub spout with tip ton minimum 180 mm projection with diverter system	Each	1,784.00
IV	<b>SUB-SECTION</b>	<b>STOP &amp; ANGLE VALVES</b>		
329	TBSP-F.IV-01	S & F 15 mm nominal size CP finish brass stop valve screw type with internal /external threaded conforming to IS 8931	Each	236.00
330	TBSP-F.IV-02	S & F 15 mm nominal size brass concealed stop valve screw type with internal /external threaded conforming to IS 8931	Each	252.00
331	TBSP-F.IV-03	S & F 15 mm nominal size CP finish brass angled stop valve screw type with internal /external threaded conforming to IS 8931	Each	241.00
332	TBSP-F.IV-04	S&F of 15 mm CP finish brass stop valve of not less than 400 grams weight quarter turn spindle with internal threaded conforming to IS 8931	Each	797.00
333	TBSP-F.IV-05	S&F of 15 mm CP finish brass concealed stop valve of not less than 400 grams weight quarter turn spindle conforming to IS 8931	Each	618.00
334	TBSP-F.IV-06	S&F of 15 mm CP finish brass concealed stop valve of not less than 400 grams weight with adjustable wall flange and quarter turn spindle conforming to IS 8931 and with 10 years warranty	Each	966.00
335	TBSP-F.IV-07	S&F of 15 mm brass angle stop valve of quarter turn spindle type of not less than 400 grams weight with internal threaded conforming to IS 8931	Each	619.00
V	<b>SUB-SECTION</b>	<b>COMBINATION FAUCETS</b>		
336	TBSP-F.V-01	S&F of 15 mm CP finish brass body wall mixer with hand shower with center distance 150 mm conforming to IS 8931	Each	2,832.00
337	TBSP-F.V-02	S&F of 15 mm CP finish brass body wall mixer conforming to IS 8931 with center distance 150 mm conforming to IS 8931	Each	2,182.00
338	TBSP-F.V-03	S&F of 15 mm premium variety Chromium plated finish brass body wall mixer with hand shower with a provision for overhead shower with 115 mm long bend pipe on upper side, connecting legs & wall flanges conforming to IS 8931 with 10 years warranty	Each	3,711.00
339	TBSP-F.V-04	S&F of 15 mm brass forged body concealed diverter with regular flow	Each	3,435.00
340	TBSP-F.V-05	S&F of 15 mm brass forged body concealed diverter with high flow	Each	4,455.00
341	TBSP-F.V-06	S&F of 15 mm brass forged body concealed diverter forged body with 3 way in let	Each	4,272.00
342	TBSP-F.V-07	S&F of 15 mm central hole Chromium plated finish brass body basin mixer 450 mm long pipe for hot & cold water mixing conforming to IS 8931 and with 10 years warranty	Each	2,787.00
343	TBSP-F.V-08	S&F of 15 mm central hole Chromium plated finish brass body single lever basin mixer 450 mm long breaded pipe for hot & cold water mixing conforming to IS 8931 and with 10 years warranty	Each	3,253.00
344	TBSP-F.V-09	S&F of 15 mm central hole Chromium plated finish brass body sink mixer with swinging cascade round shape spout (wall/ table mounted model) with connecting legs & wall	Each	2,845.00



Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
		flanges conforming to IS 8931 and with 10 years warranty		
VI	<b>SUB-SECTION</b>	<b>SHOWER ROSES &amp; FITTINGS</b>		
345	TBSP-F.VI-01	S&F 15 mm nominal size 152.0 mm CP finish iron body shower rose	Each	192.00
346	TBSP-F.VI-02	S&F 15 mm nominal size 137.0 mm CP finish iron body shower rose	Each	183.00
347	TBSP-F.VI-03	S&F 15 mm nominal size 101.6 mm CP finish iron body shower rose	Each	174.00
348	TBSP-F.VI-04	S&F 15 mm nominal size CP finish shower rose 200 mm dia with CP finish flexible pipe	Each	587.00
349	TBSP-F.VI-05	S&F 15 mm nominal size CP finish brass overhead shower arm of 450 mm long with 90 degree bend & wall flange suitable for rain shower	Each	1,252.00
350	TBSP-F.VI-06	S&F 15 mm nominal size Chromium plated finish brass overhead shower arm of 450 mm long with 90 degree bend & wall flange suitable for rain shower and with 10 years warranty	Each	1,525.00
351	TBSP-F.VI-07	S&F 15 mm nominal size overhead 5 flow round massage shower rose	Each	888.00
352	TBSP-F.VI-08	S&F 15 mm nominal size 5 flow hand shower with rub-bit cleaning system and 1.5 m long flexible hose and wall hook.	Each	1,829.00
VII	<b>SUB-SECTION</b>	<b>MISCELLANEOUS CP FITTINGS</b>		
353	TBSP-F.VII-01	S&F of 15 mm Stainless steel flexible hose 1.0 m long for hand shower / health faucet with brass nuts	Each	260.00
354	TBSP-F.VII-02	S&F of 15 mm CP finish brass body health faucet gun	Each	215.00
355	TBSP-F.VII-03	S&F CP finish brass bottle trap 250 mm long with wall connection pipe & wall Flange	Each	966.00
356	TBSP-F.VII-04	S&F CP finish brass bottle trap 190mm long with wall connection pipe & wall Flange	Each	972.00
357	TBSP-F.VII-05	S&F PVC bottle trap with wall connection pipe	Each	146.00
358	TBSP-F.VII-06	S&F CP finish brass body 32 mm dia nominal size waste coupling with half/full thread & brass check nut conforming to IS 2963: 1979	Each	238.00
359	TBSP-F.VII-07	S&F CP finish brass body 32 mm dia nominal size waste coupling with half/ full thread & brass body check nut and chain & plug conforming to IS 2963: 1979	Each	260.00
360	TBSP-F.VII-08	S&F CP finish brass body 32 mm dia nominal size waste coupling doom type with half/ full thread & brass body check nut conforming to IS 2963: 1979	Each	306.00
361	TBSP-F.VII-09	S&F brass body CP spreader for urinals	Each	159.00
362	TBSP-F.VII-10	S&F CP finish steel towel rod of 600 mm long and 20 mm dia with brackets	Each	404.00
363	TBSP-F.VII-11	S&F CP finish brass towel rod 600 mm long and 20 mm dia with brackets	Each	1,089.00
364	TBSP-F.VII-12	S&F of Towel rod 24 " premium make powder coated stainless steel body with 10 years warranty	Each	3,293.00
365	TBSP-F.VII-13	S&F CP finish brass wall mounted towel ring	Each	627.00
366	TBSP-F.VII-14	S&F of Chromium plated finish stainless steel body Towel Ring with 10 years warranty	Each	1,019.00
367	TBSP-F.VII-15	S&F of powder coated brass body finish Towel ring premium make with 10 years warranty	Each	2,107.00
368	TBSP-F.VII-16	S&F of Chromium plated finish stainless steel body towel rail 24" with 10 years warranty	Each	1,647.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
369	TBSP-F.VII-17	S&F powder coated stainless steel body wall mounted towel rack 600 mm long	Each	3,457.00
370	TBSP-F.VII-18	S&F CP finish brass metal body single coat hook	Each	413.00
371	TBSP-F.VII-19	S&F CP finish brass robe hook	Each	321.00
372	TBSP-F.VII-20	Supply & Fixing Double coat hook with 10 years warranty	Each	762.00
373	TBSP-F.VII-21	S&F CP finish brass soap dish	Each	577.00
374	TBSP-F.VII-22	S&F Stainless steel liquid soap container wall mounted and bottle type	Each	459.00
375	TBSP-F.VII-23	S&F premium make wall mirror with provision for overhead shower and 115 mm long bend pipe with wall flange and with 10 years warranty	Each	5,598.00
376	TBSP-F.VII-24	S&F premium make wall mirror with provision for overhead shower and 115 mm long bend pipe with wall flange powder coated with 10 years warranty	Each	8,805.00
377	TBSP-F.VII-25	S&F of Chromium plated finish stainless steel body Toilet paper holder with 10 years warranty	Each	888.00
378	TBSP-F.VII-26	S&F Stainless steel 4" dia round Grating with frame for nahany or floor trap cover with or without hole	Each	65.00
379	TBSP-F.VII-27	S&F Stainless steel 5" square Grating with frame for nahany or floor trap cover with or without hole	Each	77.00
380	TBSP-F.VII-28	S&F Stainless steel 4" dia round Grating for nahany or floor trap cover with cockroach trap with or without hole	Each	169.00
381	TBSP-F.VII-29	S&F Stainless steel 5" square Grating for nahany or floor trap cover with cockroach trap with or without hole	Each	175.00
382	TBSP-F.VII-30	S&F brass body plumber union of size 31.75 mm dia with check nut	Each	71.00
383	TBSP-F.VII-31	S&F brass body plumber union of size 38.1 mm dia with check nut	Each	76.00
384	TBSP-F.VII-32	S&F 4" dia CP thimble pipe: 150 mm long	Each	422.00
385	TBSP-F.VII-33	S&F 4" dia CP thimble pipe: 220 mm long	Each	627.00
386	TBSP-F.VII-34	S&F 4" dia CP thimble pipe: 300 mm long	Each	840.00
387	TBSP-F.VII-35	S&F CP long bend	Each	356.00
388	TBSP-F.VII-36	S&F CP short bend	Each	179.00
389	TBSP-F.VII-37	Supply & fixing of LLC handle set 1st quality	Each	81.00
390	TBSP-F.VII-38	S&F premium make copper pipe 450 mm long with nuts & washers with 10 years warranty	Each	426.00
391	TBSP-F.VII-39	S&F premium make copper pipe 450 mm long with nuts & washers power colour coated and with 10 years warranty	Each	824.00
392	TBSP-F.VII-40	S&F of Chromium plated finish stainless steel body Tumbler holder with 10 years warranty	Each	1,110.00
393	TBSP-F.VII-41	S&F of Chromium plated finish stainless steel body Glass shelf 22" with 10 years warranty	Each	2,183.00
VII	<b>SUB-SECTION</b>	<b>LABOUR CHARGES</b>		
394	TBSP-F.VIII-01	Labour charges for fixing all types of CP Taps & faucets	Each	61.00
395	TBSP-F.VIII-02	Labour charges for fixing all types of CP Stop & Angle Valves	Each	114.00
396	TBSP-F.VIII-	Labour charges for fixing all types of wall combination taps,	Each	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
	03	mixers & diverters		201.00
397	TBSP-F.VIII-04	Labour charges for fixing all types of miscellaneous CP fittings	Each	114.00
398	TBSP-F.VIII-05	Cleaning of water tanks, Sumps and PVC/RCC tank through 'T' clean process undertaking cleaning by using latest German state of art technology with High pressure Rotary Jet cleaning and usage of the most effective Anti-bacterial agents, which is Bio degradable and eco friendly in nature, UV radiation in following stages: 1. First stage of Mechanized dewatering, 2. Cleaning of wall and ceiling to the sump with high pressure rotary jet which dislodges the layer of dirt and algae, 3. Dirty water and sludge are removed by using sludge pump, 4. Removing dirt is again removed by using industrial vacuum, 5. Treatment of wall ceiling roof with anti-bacterial liquid (which is bio degradable and ecofriendly in nature), 6. Final important treatment is ultra violet radiation which kills suspended or floating bacteria(for sumps)	1000	89.00
G	SECTION	<b>G.I. PIPES &amp; FITTINGS (Materials shall be procured from the list of approved Brands/ Manufacturers/ Suppliers)</b>		
I	SUB-SECTION	<b>G.I. PIPES</b>		
399	TBSP-G.I-01	S& F 15 mm Nominal Bore GI pipe Light Grade properties & weight as per IS 1239 ISI mark with GI fittings including the cost of pipe & its fittings &labour charges complete	1 RM	186.00
400	TBSP-G.I-02	S& F 20 mm Nominal Bore GI pipe Light Grade properties & weight as per IS 1239 ISI mark with GI fittings including the cost of pipe & its fittings &labour charges complete	1 RM	215.00
401	TBSP-G.I-03	S& F 25 mm Nominal Bore GI pipe Light Grade properties & weight as per IS 1239 ISI mark with GI fittings including the cost of pipe & its fittings &labour charges complete	1 RM	281.00
402	TBSP-G.I-04	S& F 32 mm Nominal Bore GI pipe Light Grade properties & weight as per IS 1239 ISI mark with GI fittings including the cost of pipe & its fittings &labour charges complete	1 RM	391.00
403	TBSP-G.I-05	S& F 40 mm Nominal Bore GI pipe Light Grade properties & weight as per IS 1239 ISI mark with GI fittings including the cost of pipe & its fittings &labour charges complete	1 RM	439.00
404	TBSP-G.I-06	S& F 50 mm Nominal Bore GI pipe Light Grade properties & weight as per IS 1239 ISI mark with GI fittings including the cost of pipe & its fittings &labour charges complete	1 RM	480.00
405	TBSP-G.I-07	S& F 15 mm Nominal Bore GI pipe Medium Grade properties & weight as per IS 1239 ISI mark with GI fittings including the cost of pipe & its fittings &labour charges complete	1 RM	206.00
406	TBSP-G.I-08	S& F 20 mm Nominal Bore GI pipe Medium Grade properties & weight as per IS 1239 ISI mark with GI fittings including the cost of pipe & its fittings &labour charges complete	1 RM	230.00
407	TBSP-G.I-09	S& F 25 mm Nominal Bore GI pipe Medium Grade properties & weight as per IS 1239 ISI mark with GI fittings including the cost of pipe & its fittings &labour charges complete	1 RM	301.00
408	TBSP-G.I-10	S& F 32 mm Nominal Bore GI pipe Medium Grade properties & weight as per IS 1239 ISI mark with GI fittings including the cost of pipe & its fittings &labour charges complete	1 RM	421.00
409	TBSP-G.I-11	S& F 40 mm Nominal Bore GI pipe Medium Grade properties & weight as per IS 1239 ISI mark with GI fittings including the cost of pipe & its fittings &labour charges complete	1 RM	472.00
410	TBSP-G.I-12	S& F 50 mm Nominal Bore GI pipe Medium Grade properties & weight as per IS 1239 ISI mark with GI fittings including the cost of pipe & its fittings &labour charges complete	1 RM	506.00
411	TBSP-G.I-13	S & F 65 mm Nominal Bore GI pipe Medium Grade properties & weight as per IS 1239 with GI fittings such as elbows tees	1 RM	899.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
		couplings, nipples, plugs including excavation for trenches and refilling the trenches complete except for GI bends union and GI connectors with checkout and socket Tata or Zenith make or equivalent.		
II	<b>SUB-SECTION</b>	<b>G.I. FITTINGS</b>		
412	TBSP-G.II-01	S& F GI union 15 mm nominal size 1st Quality	Each	47.00
413	TBSP-G.II-02	S& F GI union 20 mm nominal size 1st Quality	Each	55.00
414	TBSP-G.II-03	S& F GI union 25 mm nominal size 1st Quality	Each	83.00
415	TBSP-G.II-04	S& F GI union 30 mm nominal size 1st Quality	Each	103.00
416	TBSP-G.II-05	S& F GI union 40 mm nominal size 1st Quality	Each	123.00
417	TBSP-G.II-06	S& F GI union 50 mm nominal size 1st Quality	Each	153.00
418	TBSP-G.II-07	S& F GI connector 25 mm nominal size dia	Each	92.00
419	TBSP-G.II-08	S& F 15 mm nominal size GI 'T' A class 1st quality	Each	57.00
420	TBSP-G.II-09	S& F 30 mm nominal size dia GI bend 1st quality	Each	83.00
421	TBSP-G.II-10	S & F 30 mm nominal size dia GI 'T' 1st Quality	Each	82.00
422	TBSP-G.II-11	S & F 25 mm nominal size copper body float valve with PVC ball Indian make ISI mark	Each	473.00
423	TBSP-G.II-12	S & F 20 mm nominal size copper body float valve with PVC ball Indian make ISI mark	Each	389.00
424	TBSP-G.II-13	S & F 15 mm nominal size copper body float valve with PVC ball Indian make ISI mark	Each	252.00
425	TBSP-G.II-14	Supplying & fixing leather washers for 15 mm nominal size bib tap and stop cock	Each	3.00
426	TBSP-G.II-15	Supplying & fixing leather washers for 20 mm nominal size bib tap and stop cock	Each	5.00
427	TBSP-G.II-16	Supplying & Fixing 15 mm nominal size fibre washers	Each	5.00
428	TBSP-G.II-17	Supplying & Fixing 20 mm nominal size fibre washers	Each	5.00
429	TBSP-G.II-18	S & F 15 mm nominal size holder bat clamps	Each	14.00
430	TBSP-G.II-19	S & F 20 mm nominal size holder bat clamps	Each	21.00
431	TBSP-G.II-20	S & F 25 mm nominal size holder bat clamps	Each	28.00
432	TBSP-G.II-21	S & F 40 mm nominal size holder bat clamps	Each	33.00
433	TBSP-G.II-22	Supplying & fixing 15 mm nominal size GI drain pipe with plug for tanks (Mud valve) including making a hole	Each	49.00
434	TBSP-G.II-23	Supplying & fixing 20 mm nominal size GI drain pipe with plug for tanks (Mud valve) including making a hole	Each	70.00
435	TBSP-G.II-24	Supplying & fixing 25 mm nominal size GI drain pipe with plug for tanks (Mud valve) including making a hole	Each	82.00
III	<b>SUB-SECTION</b>	<b>BRONZE (COPPER ALLOY) VALVES</b>		
436	TBSP-G.III-01	S & F Bronze Gate/ Globe valve as per IS - 778 Class - I, Indian make heavy type - 15mm NBSize	Each	648.00
437	TBSP-G.III-02	S & F Bronze Gate/ Globe valve as per IS - 778 Class -	Each	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
		I,Indianmakeheavytype-20mmNBSize		873.00
438	TBSP-G.III-03	S & F Bronze Gate/ Globe valve as per IS - 778 Class - I,Indianmakeheavytype-25mmNBSize	Each	1,254.00
439	TBSP-G.III-04	S & F Bronze Gate/ Globe valve as per IS - 778 Class - I,Indianmakeheavytype-32mmNBSize	Each	1,907.00
440	TBSP-G.III-05	S & F Bronze Gate/ Globe valve as per IS - 778 Class - I,Indianmakeheavytype-40mmNBSize	Each	2,572.00
441	TBSP-G.III-06	S & F Bronze Gate/ Globe valve as per IS - 778 Class - I,Indianmakeheavytype-50mmNBSize	Each	3,772.00
442	TBSP-G.III-07	S & F Bronze Gate/ Globe valve as per IS - 778 Class - I,Indianmakeheavytype-65mmNBSize	Each	5,822.00
443	TBSP-G.III-08	S & F Bronze Gate/ Globe valve as per IS - 778 Class - I,Indianmakeheavytype-80mmNBSize	Each	8,631.00
444	TBSP-G.III-09	Supplying & fixing Bronze Horizontal Check (Non return) Valve as per IS-778 I-class heavy duty - 15 mm NB Size	Each	478.00
445	TBSP-G.III-10	Supplying & fixing Bronze Horizontal Check (Non return) Valve as per IS-778 I-class heavy duty - 20 mm NB Size	Each	698.00
446	TBSP-G.III-11	Supplying & fixing Bronze Horizontal Check (Non return) Valve as per IS-778 I-class heavy duty - 25 mm NB Size	Each	1,091.00
447	TBSP-G.III-12	Supplying & fixing Bronze Horizontal Check (Non return) Valve as per IS-778 I-class heavy duty - 32 mm NB Size	Each	1,601.00
448	TBSP-G.III-13	Supplying & fixing Bronze Horizontal Check (Non return) Valve as per IS-778 I-class heavy duty - 40 mm NB Size	Each	2,220.00
449	TBSP-G.III-14	Supplying & fixing Bronze Vertical Check (Non return) Valve as per IS-778 I-class heavy duty - 15 mm NB Size	Each	450.00
450	TBSP-G.III-15	Supplying & fixing Bronze Vertical Check (Non return) Valve as per IS-778 I-class heavy duty - 20 mm NB Size	Each	587.00
451	TBSP-G.III-16	Supplying & fixing Bronze Vertical Check (Non return) Valve as per IS-778 I-class heavy duty - 25 mm NB Size	Each	886.00
452	TBSP-G.III-17	Supplying & fixing Bronze Vertical Check (Non return) Valve as per IS-778 I-class heavy duty - 32 mm NB Size	Each	1,219.00
453	TBSP-G.III-18	Supplying & fixing Bronze Vertical Check (Non return) Valve as per IS-778 I-class heavy duty - 40 mm NB Size	Each	1,474.00
454	TBSP-G.III-19	Supplying & fixing Bronze Vertical Check (Non return) Valve as per IS-778 I-class heavy duty - 50 mm NB Size	Each	2,337.00
455	TBSP-G.III-20	S & F Bronze Ball valve with SS Ball and SS Spindle as per IS - Class - I, Indian make heavy type - 15 mm NB Size	Each	212.00
456	TBSP-G.III-21	S & F Bronze Ball valve with SS Ball and SS Spindle as per IS - Class - I, Indian make heavy type - 20 mm NB Size	Each	306.00
457	TBSP-G.III-22	S & F Bronze Ball valve with SS Ball and SS Spindle as per IS - Class - I, Indian make heavy type - 25 mm NB Size	Each	431.00
458	TBSP-G.III-23	S & F Bronze Ball valve with SS Ball and SS Spindle as per IS - Class - I, Indian make heavy type - 32 mm NB Size	Each	763.00
459	TBSP-G.III-24	S & F Bronze Ball valve with SS Ball and SS Spindle as per IS - Class - I, Indian make heavy type - 40 mm NB Size	Each	1,051.00
460	TBSP-G.III-25	S & F Bronze Ball valve with SS Ball and SS Spindle as per IS - Class - I, Indian make heavy type - 50 mm NB Size	Each	1,578.00
461	TBSP-G.III-26	S & F Bronze Compact pressure reducing valve (Screwed) as per IS - Class -I, Indian make heavy type- 15 mm NB Size	Each	1,371.00
462	TBSP-G.III-27	S & F Bronze Compact pressure reducing valve (Screwed) as per IS - Class -I, Indian make heavy type- 20 mm NB Size	Each	1,744.00
IV	<b>SUB-SECTION</b>	<b>LABOUR CHARGES FOR G.I PLUMBING</b>		
463	TBSP-G.IV-01	Taking branch water connection from the existing 25 mm nominal size GI pipe including cutting threading, etc., complete with fitting	Each	194.00
464	TBSP-G.IV-02	Taking branch water connection from the existing 20 mm nominal size GI pipe including cutting threading, etc., complete with fitting	Each	111.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
465	TBSP-G.IV-03	Taking branch water connection from the existing 15 mm nominal size GI pipe including cutting threading, etc., complete with fitting	Each	72.00
H	SECTION	<b>PVC PIPES &amp; FITTINGS (Materials shall be procured from the list of approved Brands/ Manufacturers/ Suppliers)</b>		
I	SUB-SECTION	<b>PVC PIPES</b>		
466	TBSP-H.I-01	75 mm dia 3 M Single Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	278.00
467	TBSP-H.I-02	90 mm dia 3 M single Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	442.00
468	TBSP-H.I-03	110 mm dia 3 M Single Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	527.00
469	TBSP-H.I-04	75 mm dia 3 M Kg/sq.cm Double Socket PVC/SWR pipe - 4	Each	314.00
470	TBSP-H.I-05	90 mm dia 3 M Kg/sq.cm Double Socket PVC/SWR pipe - 4	Each	500.00
471	TBSP-H.I-06	110 mm dia 3 M Kg/sq.cm Double Socket PVC/SWR pipe - 4	Each	612.00
472	TBSP-H.I-07	75 mm dia 1828.8 mm (6'-0") Single Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	195.00
473	TBSP-H.I-08	90 mm dia 1828.8 mm (6'-0") Single Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	302.00
474	TBSP-H.I-09	110 mm dia 1828.8 mm (6'-0") Single Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	376.00
475	TBSP-H.I-10	75 mm dia 1828.8 mm (6'-0") Double Socket PVC/SWR pipe - 4Kg/sq.cm	Each	209.00
476	TBSP-H.I-11	90 mm dia 1828.8 mm (6'-0") Double /SWR pipe - 4Kg/sq.cm	Each	321.00
477	TBSP-H.I-12	110 mm dia 1828.8 mm (6'-0") Double Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	388.00
478	TBSP-H.I-13	75 mm dia 1219. mm (4'-0") Double Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	145.00
479	TBSP-H.I-14	90 mm dia 1219. mm (4'-0") Double Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	220.00
480	TBSP-H.I-15	110 mm dia 1219. mm (4'-0") Double Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	266.00
481	TBSP-H.I-16	75 mm dia 914.4mm (3'-0") Double Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	121.00
482	TBSP-H.I-17	90 mm dia 914.4mm (3'-0") Double Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	179.00
483	TBSP-H.I-18	110 mm dia 914.4mm (3'-0") Double Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	230.00
484	TBSP-H.I-19	75 mm dia 609.6mm (2'-0") Double Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	74.00
485	TBSP-H.I-20	90 mm dia 609.6mm (2'-0") Double Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	123.00
486	TBSP-H.I-21	110 mm dia 609.6mm (2'-0") Double Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	153.00
487	TBSP-H.I-22	160 MM dia 3 M Double Socket PVC/SWR pipe - 4 Kg/sq.cm	Each	1,254.00
488	TBSP-H.I-23	75 mm dia 3 M Single Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	471.00
489	TBSP-H.I-24	90 mm dia 3 M single Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	758.00
490	TBSP-H.I-25	110 mm dia 3 M Single Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	901.00
491	TBSP-H.I-26	75 mm dia 3 M Kg/sq.cm Double Socket PVC/SWR pipe - 6	Each	516.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
492	TBSP-H.I-27	90 mm dia 3 M Kg/sq.cm Double Socket PVC/SWR pipe - 6	Each	817.00
493	TBSP-H.I-28	110 mm dia 3 M Kg/sq.cm Double Socket PVC/SWR pipe - 6	Each	995.00
494	TBSP-H.I-29	75 mm dia 1828.8 mm (6'-0") Single Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	310.00
495	TBSP-H.I-30	90 mm dia 1828.8 mm (6'-0") Single Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	480.00
496	TBSP-H.I-31	110 mm dia 1828.8 mm (6'-0") Single Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	572.00
497	TBSP-H.I-32	75 mm dia 1828.8 mm (6'-0") Double /SWR pipe - 6Kg/sq.cm	Each	330.00
498	TBSP-H.I-33	90 mm dia 1828.8 mm (6'-0") Double /SWR pipe - 6Kg/sq.cm	Each	500.00
499	TBSP-H.I-34	110 mm dia 1828.8 mm (6'-0") Double Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	618.00
500	TBSP-H.I-35	75 mm dia 1219. mm (4'-0") Double Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	224.00
501	TBSP-H.I-36	90 mm dia 1219. mm (4'-0") Double Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	347.00
502	TBSP-H.I-37	110 mm dia 1219. mm (4'-0") Double Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	422.00
503	TBSP-H.I-38	75 mm dia 914.4mm (3'-0") Double Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	193.00
504	TBSP-H.I-39	90 mm dia 914.4mm (3'-0") Double Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	283.00
505	TBSP-H.I-40	110 mm dia 914.4mm (3'-0") Double Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	341.00
506	TBSP-H.I-41	75 mm dia 609.6mm (2'-0") Double Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	125.00
507	TBSP-H.I-42	90 mm dia 609.6mm (2'-0") Double Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	194.00
508	TBSP-H.I-43	110 mm dia 609.6mm (2'-0") Double Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	248.00
509	TBSP-H.I-44	160 mm dia 3 M Double Socket PVC/SWR pipe - 6 Kg/sq.cm	Each	2,051.00
III	<b>SUB-SECTION</b>	<b>PVC FITTINGS</b>		
510	TBSP-H.II-01	Providing & Placing on Terrace (at all floor levels) polyethylene water storage tank with Double layer approved brand & manufacture with cover and suitable locking arrangement & making necessary holes for inlet & outlets and over flow pipes but without fittings & base support for tanks	1 Lit	8.00
511	TBSP-H.II-02	Supply of Plastic storage tank lid with hinges	Each	83.00
512	TBSP-H.II-03	Supply & Fixing 75 mm nominal size dia PVC elbow 1st quality	Each	52.00
513	TBSP-H.II-04	Supply & fixing 30 mm nominal size dia PVC flexible waste pipe of 914.4 mm length of 1st quality	Each	29.00
514	TBSP-H.II-05	Supply & Fixing 40 mm nominal size dia PVC solid waste pipe outlet	Each	99.00
515	TBSP-H.II-06	Supply & fixing Fancy PVC shelf including all fittings	Each	236.00
516	TBSP-H.II-07	Supply & fixing of PVC low level system with internal components & short bend: 10 Liters capacity Single Flush	Each	1,613.00
517	TBSP-H.II-08	Supply & fixing of PVC low level system with internal components & short bend: 10 liters capacity Dual Flush	Each	1,895.00
518	TBSP-H.II-09	Supply & fixing of PVC low level system with internal components & short bend: 8 Liters capacity single Flush	Each	912.00
519	TBSP-H.II-10	75 mm dia - Plain Bend 87.5 Degree - UPVC/SWR Pipe	Each	55.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
		fittings		
520	TBSP-H.II-11	90 mm dia - Plain Bend 87.5 Degree - UPVC/SWR Pipe fittings	Each	77.00
521	TBSP-H.II-12	110 mm dia - Plain Bend 87.5 Degree - UPVC/SWR Pipe fittings	Each	92.00
522	TBSP-H.II-13	75 mm dia - Door Bend 87.5 Degree - UPVC/SWR Pipe fittings	Each	74.00
523	TBSP-H.II-14	90 mm dia - Door Bend 87.5 Degree - UPVC/SWR Pipe fittings	Each	104.00
524	TBSP-H.II-15	110 mm dia - Door Bend 87.5 Degree - UPVC/SWR Pipe fittings	Each	118.00
525	TBSP-H.II-16	75 mm dia - 45 Degree Bend - UPVC/SWR Pipe fittings	Each	43.00
526	TBSP-H.II-17	90 mm dia - 45 Degree Bend - UPVC/SWR Pipe fittings	Each	60.00
527	TBSP-H.II-18	110 mm dia - 45 Degree Bend - UPVC/SWR Pipe fittings	Each	77.00
528	TBSP-H.II-19	75 mm dia - Cleaning Pipe - UPVC/SWR Pipe fittings	Each	74.00
529	TBSP-H.II-20	90 mm dia - Cleaning Pipe - UPVC/SWR Pipe fittings	Each	107.00
530	TBSP-H.II-21	110 mm dia - Cleaning Pipe - UPVC/SWR Pipe fittings	Each	129.00
531	TBSP-H.II-22	75 mm dia - Single Tee - UPVC/SWR Pipe fittings	Each	65.00
532	TBSP-H.II-23	90 mm dia - Single Tee - UPVC/SWR Pipe fittings	Each	98.00
533	TBSP-H.II-24	110 mm dia - Single Tee - UPVC/SWR Pipe fittings	Each	119.00
534	TBSP-H.II-25	75 mm dia - Single Tee with Door - UPVC/SWR Pipe fittings	Each	80.00
535	TBSP-H.II-26	90 mm dia - Single Tee with Door - UPVC/SWR Pipe fittings	Each	119.00
536	TBSP-H.II-27	110 mm dia - Single Tee with Door - UPVC/SWR Pipe fittings	Each	142.00
537	TBSP-H.II-28	75 mm dia - Double Tee - UPVC/SWR Pipe fittings	Each	137.00
538	TBSP-H.II-29	90 mm dia - Double Tee - UPVC/SWR Pipe fittings	Each	200.00
539	TBSP-H.II-30	110 mm dia - Double Tee - UPVC/SWR Pipe fittings	Each	283.00
540	TBSP-H.II-31	75 mm dia - Double Tee with Door - UPVC/SWR Pipe fittings	Each	218.00
541	TBSP-H.II-32	90 mm dia - Double Tee with Door - UPVC/SWR Pipe fittings	Each	312.00
542	TBSP-H.II-33	110 mm dia - Double Tee with Door - UPVC/SWR Pipe fittings	Each	322.00
543	TBSP-H.II-34	75 mm dia - Single 'Y' - UPVC/SWR Pipe fittings	Each	81.00
544	TBSP-H.II-35	90 mm dia - Single 'Y' - UPVC/SWR Pipe fittings	Each	129.00
545	TBSP-H.II-36	110 mm dia - Single 'Y' - UPVC/SWR Pipe fittings	Each	149.00
546	TBSP-H.II-37	75 mm dia - Single 'Y' with Door - UPVC/SWR Pipe fittings	Each	104.00
547	TBSP-H.II-38	90 mm dia - Single 'Y' with Door - UPVC/SWR Pipe fittings	Each	163.00
548	TBSP-H.II-39	110 mm dia - Single 'Y' with Door - UPVC/SWR Pipe fittings	Each	187.00
549	TBSP-H.II-40	75 mm dia - Double 'Y' - UPVC/SWR Pipe fittings	Each	112.00
550	TBSP-H.II-41	90 mm dia - Double 'Y' - UPVC/SWR Pipe fittings	Each	173.00
551	TBSP-H.II-42	110 mm dia - Double 'Y' - UPVC/SWR Pipe fittings	Each	195.00
552	TBSP-H.II-43	75 mm dia - Double 'Y' with Door - UPVC/SWR Pipe fittings	Each	145.00



Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
553	TBSP-H.II-44	90 mm dia - Double 'Y' with Door - UPVC/SWR Pipe fittings	Each	225.00
554	TBSP-H.II-45	110 mm dia - Double 'Y' with Door - UPVC/SWR Pipe fittings	Each	252.00
555	TBSP-H.II-46	75 mm dia - Coupler - UPVC/SWR Pipe fittings	Each	39.00
556	TBSP-H.II-47	90 mm dia - Coupler - UPVC/SWR Pipe fittings	Each	55.00
557	TBSP-H.II-48	110 mm dia - Coupler - UPVC/SWR Pipe fittings	Each	63.00
558	TBSP-H.II-49	90 x 75 mm dia - Reducer - UPVC/SWR Pipe fittings	Each	65.00
559	TBSP-H.II-50	110 x 75 mm dia - Reducer - UPVC/SWR Pipe fittings	Each	63.00
560	TBSP-H.II-51	90 x 110 mm dia - Reducer - UPVC/SWR Pipe fittings	Each	87.00
561	TBSP-H.II-52	63 mm dia - Vent Cowl - UPVC/SWR Pipe fittings	Each	11.00
562	TBSP-H.II-53	75 mm dia - Vent Cowl - UPVC/SWR Pipe fittings	Each	16.00
563	TBSP-H.II-54	90 mm dia - Vent Cowl - UPVC/SWR Pipe fittings	Each	19.00
564	TBSP-H.II-55	110 mm dia - Vent Cowl - UPVC/SWR Pipe fittings	Each	21.00
565	TBSP-H.II-56	40 mm dia - Pipe Clip - UPVC/SWR Pipe fittings - Pipe Clip - UPVC/SWR Pipe fittings	Each	13.00
566	TBSP-H.II-57	50 mm dia - Pipe Clip - UPVC/SWR Pipe fittings	Each	16.00
567	TBSP-H.II-58	63 mm dia - Pipe Clip - UPVC/SWR Pipe fittings	Each	16.00
568	TBSP-H.II-59	75 mm dia - Pipe Clip - UPVC/SWR Pipe fittings	Each	17.00
569	TBSP-H.II-60	90 mm dia - Pipe Clip - UPVC/SWR Pipe fittings	Each	19.00
570	TBSP-H.II-61	110 mm - Pipe Clip - UPVC/SWR Pipe fittings	Each	20.00
571	TBSP-H.II-62	160 mm dia - Pipe Clip - UPVC/SWR Pipe fittings	Each	39.00
572	TBSP-H.II-63	P' Trap ( Small without Air vent ) 110 mm - UPVC/SWR Pipe fittings	Each	206.00
573	TBSP-H.II-64	P' Trap ( Small with Air vent ) 110 mm - UPVC/SWR Pipe fittings	Each	227.00
574	TBSP-H.II-65	P' Trap (Big with Air vent ) 110 mm - UPVC/SWR Pipe fittings	Each	260.00
575	TBSP-H.II-66	P' Trap ( Big without Air vent ) 110 mm - UPVC/SWR Pipe fittings	Each	239.00
576	TBSP-H.II-67	Floor Trap (Bell Mouth ) 110 mm - UPVC/SWR Pipe fittings	Each	248.00
577	TBSP-H.II-68	Bell Mouth Trap 7 " ( 177.8 mm ) - UPVC/SWR Pipe fittings	Each	360.00
578	TBSP-H.II-69	4" (101.6 mm ) Nahany Trap ( Without Jali with inlet)UPVC/SWR Pipe fittings	Each	123.00
579	TBSP-H.II-70	3" (75 mm nominal size ) Nahany Trap ( without Jali without inlet)UPVC/SWR Pipe fittings	Each	96.00
580	TBSP-H.II-71	4" (101.6 mm ) Nahany Trap ( without inlet without Jali)UPVC/SWR Pipe fittings	Each	119.00
581	TBSP-H.II-72	Mini Trap - UPVC/SWR Pipe fittings	Each	59.00
582	TBSP-H.II-73	3" (75 mm nominal size ) Nahany Trap with Jali - UPVC/SWR	Each	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
		Pipe fittings		112.00
583	TBSP-H.II-74	4" (101.6 mm ) multi floor trap with Jali- UPVC/SWR Pipe fittings	Each	158.00
584	TBSP-H.II-75	4" (101.6) multi floor trap without Jali- UPVC/SWR Pipe fittings	Each	123.00
585	TBSP-H.II-76	Round Jali - UPVC/SWR Pipe fittings	Each	27.00
586	TBSP-H.II-77	Square tile &Jali - UPVC/SWR Pipe fittings	Each	43.00
587	TBSP-H.II-78	Pipe connector ( with LIP ring) - UPVC/SWR Pipe fittings	Each	165.00
588	TBSP-H.II-79	Pipe connector ( without LIP ring) - UPVC/SWR Pipe fittings	Each	128.00
589	TBSP-H.II-80	4" (101.6 mm ) Floor Trap - UPVC/SWR Pipe fittings	Each	151.00
590	TBSP-H.II-81	5" (127.mm ) floor Trap - UPVC/SWR Pipe fittings	Each	160.00
591	TBSP-H.II-82	75 mm dia - Door cap - UPVC/SWR Pipe fittings	Each	63.00
592	TBSP-H.II-83	90 mm dia - Door cap - UPVC/SWR Pipe fittings	Each	71.00
593	TBSP-H.II-84	110 mm dia - Door cap - UPVC/SWR Pipe fittings	Each	81.00
594	TBSP-H.II-85	75 mm dia - Socket plug - UPVC/SWR Pipe fittings	Each	59.00
595	TBSP-H.II-86	90 mm dia - Socket plug - UPVC/SWR Pipe fittings	Each	68.00
596	TBSP-H.II-87	110 mm dia - Socket plug - UPVC/SWR Pipe fittings	Each	71.00
597	TBSP-H.II-88	75 mm dia - Rubber ring for Socket - UPVC/SWR Pipe fittings	Each	10.00
598	TBSP-H.II-89	90 mm dia - Rubber ring for Socket - UPVC/SWR Pipe fittings	Each	11.00
599	TBSP-H.II-90	110 mm dia - Rubber ring for Socket - UPVC/SWR Pipe fittings	Each	13.00
600	TBSP-H.II-91	75 mm dia - Door Socket - UPVC/SWR Pipe fittings	Each	11.00
601	TBSP-H.II-92	90 mm dia - Door Socket - UPVC/SWR Pipe fittings	Each	13.00
602	TBSP-H.II-93	110 mm dia - Door Socket - UPVC/SWR Pipe fittings	Each	16.00
603	TBSP-H.II-94	LIP ring 110 mm - UPVC/SWR Pipe fittings	Each	76.00
604	TBSP-H.II-95	110mm x 90 mm - Internal Reducer - UPVC/SWR Pipe fittings	Each	99.00
605	TBSP-H.II-96	160 mm x 110 mm - Internal Reducer - UPVC/SWR Pipe fittings	Each	245.00
III	<b>SUB-SECTION</b>	<b>PVC PLUMBING ACCESSORIES</b>		
606	TBSP-H.III-01	Rubber Lubricant - 100 Grams	Each	33.00
607	TBSP-H.III-02	Rubber Lubricant - 250 Grams	Each	72.00
608	TBSP-H.III-03	Rubber Lubricant - 500 Grams	Each	129.00
609	TBSP-H.III-04	Rubber Lubricant - 1000 Grams	Each	239.00
610	TBSP-H.III-05	P' Trap with lip UPVC/SWR Pipe fittings	Each	325.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
611	TBSP-H.III-06	50 ml - Solvent Cement	Each	17.00
612	TBSP-H.III-07	100 ml - Solvent Cement	Each	28.00
613	TBSP-H.III-08	250 ml - Solvent Cement	Each	65.00
614	TBSP-H.III-09	500 ml - Solvent Cement	Each	127.00
615	TBSP-H.III-10	1000 ml - Solvent Cement	Each	248.00
IV	<b>SUB-SECTION</b>	<b>LABOUR CHARGES FOR PVC PLUMBING</b>		
616	TBSP-H.IV-01	Labour charges for laying, fixing and commissioning the PVC pipes including couplers/ bends/ tees etc. any diameter including fixing necessary fittings like bends, plugs, couplers, junctions, tees, etc. with solvent jointing as per standard practice	1 RM	88.00
617	TBSP-H.IV-02	Labour charges for laying, joining, welding, fixing and commissioning the PPR pipes including all specials such as couplers/ bends/ tees etc. including fixing necessary fittings like bends, plugs, couplers, junctions, tees, etc. with welding the joint as per standard practice - up to 40 mm dia	1 RM	40.00
618	TBSP-H.IV-03	Labour charges for laying, joining, welding, fixing and commissioning the PPR pipes including all specials such as couplers/ bends/ tees etc. including fixing necessary fittings like bends, plugs, couplers, junctions, tees, etc. with welding the joint as per standard practice - above 40 mm dia	1 RM	67.00
J	<b>SECTION</b>	<b>MISCELLANEOUS ITEMS</b>		
I	<b>SUB-SECTION</b>	<b>MISCELLANEOUS PLUMBING WORK ITEMS</b>		
619	TBSP-J.I-01	Supplying & Fixing solder joints up to 50 mm nominal size dia	Each	63.00
620	TBSP-J.I-02	Supplying & Fixing solution joints up to 50.8 dia 1st quality.	Each	13.00
621	TBSP-J.I-03	Chiseling the stone masonry wall for fixing of wooden blocks including finishing as directed by the department	Each	35.00
622	TBSP-J.I-04	Chiseling the stone masonry wall and repairs as directed by the department.	1 Rm	164.00
623	TBSP-J.I-05	Chiseling the brick masonry wall and repairs as directed by the department.	1 Rm	35.00
624	TBSP-J.I-06	Painting the flushing tank with white enamel paint	Each	110.00
625	TBSP-J.I-07	S & F internal cistern fittings for PVC flush tank	Each	956.00
626	TBSP-J.I-08	Repairing and over hauling flushing tank	Each	107.00
627	TBSP-J.I-09	Removing and refixing W.C s	Each	280.00
628	TBSP-J.I-10	Removing and refixing wash hand basins of any size with fittings complete	Each	250.00
629	TBSP-J.I-11	Removing 15 mm nominal size GI pipe and refixing the same	Mr.	77.00
630	TBSP-J.I-12	Removing 20 mm nominal size GI pipe and refixing the same	Mr.	88.00
631	TBSP-J.I-13	Removing 25 mm nominal size GI pipe and refixing the same	Mr.	127.00
632	TBSP-J.I-14	Removing 40 mm nominal size GI pipe and refixing the	Rm	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
		same		163.00
633	TBSP-J.I-15	Removing 50 mm nominal size GI pipe and refixing the same	Rm	189.00
634	TBSP-J.I-16	Cleaning the W.C with acid and Vim powder	Each	53.00
635	TBSP-J.I-17	Cleaning the Urinal with acid and Vim power	Each	53.00
636	TBSP-J.I-18	Cleaning the wash basin with acid and Vim powder	Each	53.00
637	TBSP-J.I-19	Cleaning the E.W.C with acid and Vim power	Each	53.00
638	TBSP-J.I-20	Cutting holes in C.C; basement & repairs Labour charges only	Each	123.00
639	TBSP-J.I-21	Cutting holes in stone masonry & basement and repairs Labour charges only	Each	82.00
640	TBSP-J.I-22	Cutting holes in Brick masonry & repairs Labour charges only	Each	55.00
641	TBSP-J.I-23	Cutting holes in RCC slab floor & repairs Labour charges only	Each	82.00
642	TBSP-J.I-24	Supplying & Fixing NP chain rubber and plug for basin	Each	43.00
643	TBSP-J.I-25	S & F 25 mm nominal size dia & 609.6 mm long aluminum anodized towel rod with brackets and aluminum screws	Each	168.00
644	TBSP-J.I-26	S & F 19.04 mm dia & 609.6 mm long aluminum anodized towel rod with brackets and aluminum screws	Each	147.00
645	TBSP-J.I-27	S & F 609.6 mm long 127 mm wide plate glass shelf with superior quality aluminum railing complete with aluminum screws	Each	215.00
646	TBSP-J.I-28	S & F 609.6 mm long 127 mm wide plate glass shelf only	Each	71.00
647	TBSP-J.I-29	Supplying & fixing 88.9 mm A.C cowls	Each	73.00
648	TBSP-J.I-30	Supplying & fixing A.C Cowl 63.5 mm dia	Each	50.00
649	TBSP-J.I-31	S & F 76.2 x 101.6 mm teak wood block complete	Each	27.00
650	TBSP-J.I-32	Supplying & Fixing 15 mm nominal size PVC connection with brass union nut C.P coated	Each	114.00
651	TBSP-J.I-33	Removing of 101.6 m or 75 mm nominal size CI pipe	1 RM	45.00
652	TBSP-J.I-34	Supplying & fixing 75 mm nominal size W.I clamps	Each	26.00
653	TBSP-J.I-35	Supplying and fixing TV shape mirror with plastic frame size 609.6 mm x 457 .2 mm	Each	522.00
654	TBSP-J.I-36	Supplying & fixing GI pipe plug of size 15 mm nominal size dia	Each	11.00
655	TBSP-J.I-37	Supplying & fixing 20 mm dia GI plug	Each	16.00
656	TBSP-J.I-38	Supplying and fixing 40 mm nominal size dia of GI plug	Each	81.00
657	TBSP-J.I-39	Supplying & fixing 50 mm nominal size dia of GI PLUG	Each	124.00
658	TBSP-J.I-40	Supplying & fixing 75 mm nominal size dia of GI PLUG	Each	223.00
659	TBSP-J.I-41	Supplying and fixing Rectangular Mirror Frameless of size 457 .2 mm x 609.6 mm	Each	1,500.00
660	TBSP-J.I-42	Supplying and fixing Rectangular Mirror Frameless of size 609.6 mm x 914.4 mm	Each	2,900.00
III	SUB-	POLYETHYLENE-ALUMINIUM-POLYETHYLENE COMPOSITE		

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
	<b>SECTION</b>	<b>PIPES</b>		
661	TBSP-J.II-01	S&F Polyethylene-Aluminum-Polyethylene (PE-AL- PE) composite pressure pipes conforming to IS- 15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc. complete for external works including laying pipes, fixing in position, testing and commissioning etc. : 16 mm OD pipe	1 RM	160.00
662	TBSP-J.II-02	S&F Polyethylene-Aluminum-Polyethylene (PE-AL- PE) composite pressure pipes conforming to IS- 15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc. complete for external works including laying pipes, fixing in position, testing and commissioning etc. : 20 mm	1 RM	198.00
663	TBSP-J.II-03	S&F Polyethylene-Aluminum-Polyethylene (PE-AL- PE) composite pressure pipes conforming to IS- 15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc. complete for external works including laying pipes, fixing in position, testing and commissioning etc. : 25mm	1 RM	249.00
664	TBSP-J.II-04	S&F Polyethylene-Aluminum-Polyethylene (PE-AL- PE) composite pressure pipes conforming to IS- 15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc. complete for external works including laying pipes, fixing in position, testing and commissioning etc. : 32 mm	1 RM	334.00
665	TBSP-J.II-05	S&F Polyethylene-Aluminum-Polyethylene (PE-AL- PE) composite pressure pipes conforming to IS- 15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc. complete for external works including laying pipes, fixing in position, testing and commissioning etc. : 40 mm	1 RM	438.00
666	TBSP-J.II-06	S&F Polyethylene-Aluminum-Polyethylene (PE-AL- PE) composite pressure pipes conforming to IS- 15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc. complete for external works including laying pipes, fixing in position, testing and commissioning etc.:50mmODpipe	1 RM	557.00
667	TBSP-J.II-07	S&F Polyethylene-Aluminum-Polyethylene (PE-AL- PE) composite pressure pipes conforming to IS- 15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc. complete with MS Iron clamps at 1.0 M spacing including cutting, chasing walls, making good, laying pipes, fixing in position, testing and commissioning etc. 16 mm	1 RM	231.00
668	TBSP-J.II-08	S&F Polyethylene-Aluminum-Polyethylene (PE-AL- PE) composite pressure pipes conforming to IS- 15450-2004 with	1 RM	277.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
		UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc. complete with MS Iron clamps at 1.0 M spacing including cutting, chasing walls, making good, laying pipes, fixing in position, testing and commissioning etc. 20 mm		
669	TBSP-J.II-09	S&F Polyethylene-Aluminum-Polyethylene (PE-AL- PE) composite pressure pipes conforming to IS- 15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, , couplers, connectors etc. complete with MS Iron clamps at 1.0 M spacing including cutting, chasing walls, making good, laying pipes, fixing in position, testing and commissioning etc. 25mm	1 RM	343.00
670	TBSP-J.II-10	S&F Polyethylene-Aluminum-Polyethylene (PE-AL- PE) composite pressure pipes conforming to IS- 15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, , couplers, connectors etc. complete with MS Iron clamps at 1.0 M spacing including cutting, chasing walls, making good, laying pipes, fixing in position, testing and commissioning etc. 32 mm	1 RM	450.00
671	TBSP-J.II-11	S&F Polyethylene-Aluminum-Polyethylene (PE-AL- PE) composite pressure pipes conforming to IS- 15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, , couplers, connectors etc. complete with MS Iron clamps at 1.0 M spacing including cutting, chasing walls, making good, laying pipes, fixing in position, testing and commissioning etc. 40 mm	1 RM	583.00
672	TBSP-J.II-12	S&F Polyethylene-Aluminum-Polyethylene (PE-AL- PE) composite pressure pipes conforming to IS- 15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, , couplers, connectors etc. complete with MS Iron clamps at 1.0 M spacing including cutting, chasing walls, making good, laying pipes, fixing in position, testing and commissioning etc. 50 mm	1 RM	739.00
673	TBSP-J.II-13	S&F Polyethylene-Aluminum-Polyethylene (PE-AL- PE) composite pressure pipes conforming to IS- 15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc. complete including excavating trenches up to 1.0 M deep laying pipes, fixing in position, testing, refilling excavated earth and commissioning etc. 16 mm	1 RM	191.00
674	TBSP-J.II-14	S&F Polyethylene-Aluminum-Polyethylene (PE-AL- PE) composite pressure pipes conforming to IS- 15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc. complete including excavating trenches up to 1.0 M deep laying pipes, fixing in position, testing, refilling excavated earth and	1 RM	225.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
		commissioning etc. 20 mm		
675	TBSP-J.II-15	S&F Polyethylene-Aluminum-Polyethylene (PE-AL- PE) composite pressure pipes conforming to IS- 15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc. complete including excavating trenches up to 1.0 M deep laying pipes, fixing in position, testing, refilling excavated earth and commissioning etc. 25mm	1 RM	272.00
676	TBSP-J.II-16	S&F Polyethylene-Aluminum-Polyethylene (PE-AL- PE) composite pressure pipes conforming to IS- 15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc. complete including excavating trenches up to 1.0 M deep laying pipes, fixing in position, testing, refilling excavated earth and commissioning etc. 32 mm	1 RM	351.00
677	TBSP-J.II-17	S&F Polyethylene-Aluminum-Polyethylene (PE-AL- PE) composite pressure pipes conforming to IS- 15450-2004 with UV stabilized, carbon black for hot & cold water supply, capable to withstand pressure up to 80 C including all special composite fittings, plastic & brass blend inserts for elbows, tees, reducers, couplers, connectors etc. complete including excavating trenches up to 1.0 M deep laying pipes, fixing in position, testing, refilling excavated earth and commissioning etc. 40 mm	1 RM	449.00
III	<b>SUB-SECTION</b>	<b>OTHER VARIETIES OF PIPES</b>		
678	TBSP-J.III-01	S&F premium make CPVC Pipes of 15.90mm OD Pipe- SDR 13.5	1 RM	143.00
679	TBSP-J.III-02	S&F premium make CPVC Pipes of 22.20mm OD Pipe- SDR 13.5	1 RM	164.00
680	TBSP-J.III-03	S&F premium make CPVC Pipes of 28.60mm OD Pipe- SDR 13.5	1 RM	217.00
681	TBSP-J.III-04	S&F premium make CPVC Pipes of 34.90mm OD Pipe- SDR 13.5	1 RM	295.00
682	TBSP-J.III-05	S&F premium make CPVC Pipes of 41.30mm OD Pipe- SDR 13.5	1 RM	367.00
683	TBSP-J.III-06	S&F premium make CPVC Pipes of 54.00mm OD Pipe- SDR 13.5	1 RM	534.00
684	TBSP-J.III-07	S&F premium make CPVC Pipes of 15.90mm OD Pipe- SDR 11	1 RM	159.00
685	TBSP-J.III-08	S&F premium make CPVC Pipes of 22.20mm OD Pipe- SDR 11	1 RM	193.00
686	TBSP-J.III-09	S&F premium make CPVC Pipes of 28.60mm OD Pipe- SDR 11	1 RM	231.00
687	TBSP-J.III-10	S&F premium make CPVC Pipes of 34.90mm OD Pipe- SDR 11	1 RM	315.00
688	TBSP-J.III-11	S&F premium make CPVC Pipes of 41.30mm OD Pipe- SDR 11	1 RM	391.00
689	TBSP-J.III-12	S&F premium make CPVC Pipes of 54.00mm OD Pipe- SDR 11	1 RM	569.00
690	TBSP-J.III-13	Supply of 20mm x 1.9mm PN 10/PPR pipe conforming to DIN Standards 8077/8078	1 RM	49.00
691	TBSP-J.III-14	Supply of 25mm x 2.3mm PN 10/PPR pipe conforming to DIN Standards 8077/8078	1 RM	73.00
692	TBSP-J.III-15	Supply of 32mm x 2.9mm PN 10/PPR pipe conforming to DIN Standards 8077/8079	1 RM	116.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
693	TBSP-J.III-16	Supply of 40mm x 3.7mm PN 10/PPR pipe conforming to DIN Standards 8077/8079	1 RM	180.00
694	TBSP-J.III-17	Supply of 50mm x 4.6mm PN 10/PPR pipe conforming to DIN Standards 8077/8080	1 RM	322.00
695	TBSP-J.III-18	Supply of 63mm x 5.8mm PN 10/PPR pipe conforming to DIN Standards 8077/8081	1 RM	504.00
696	TBSP-J.III-19	Supply of 75mm x 6.8mm PN 10/PPR pipe conforming to DIN Standards 8077/8082	1 RM	701.00
697	TBSP-J.III-20	Supply of 90mm x 8.2mm PN 10/PPR pipe conforming to DIN Standards 8077/8083	1 RM	961.00
698	TBSP-J.III-21	Supply of 110mm x 10mm PN 10/PPR pipe conforming to DIN Standards 8077/8084	1 RM	1,424.00
699	TBSP-J.III-22	Supply of 20mm x 2.8mm PN 16/PPR pipe conforming to DIN Standards 8077/8078	1 RM	66.00
700	TBSP-J.III-23	Supply of 25mm x 3.5mm PN 16/PPR pipe conforming to DIN Standards 8077/8078	1 RM	103.00
701	TBSP-J.III-24	Supply of 32mm x 4.4mm PN 16/PPR pipe conforming to DIN Standards 8077/8079	1 RM	163.00
702	TBSP-J.III-25	Supply of 40mm x 5.5mm PN 16/PPR pipe conforming to DIN Standards 8077/8079	1 RM	251.00
703	TBSP-J.III-26	Supply of 50mm x 6.9mm PN 16/PPR pipe conforming to DIN Standards 8077/8080	1 RM	449.00
704	TBSP-J.III-27	Supply of 63mm x 8.6mm PN 16/PPR pipe conforming to DIN Standards 8077/8081	1 RM	706.00
705	TBSP-J.III-28	Supply of 75mm x 10.3mm PN 16/PPR pipe conforming to DIN Standards 8077/8082	1 RM	998.00
706	TBSP-J.III-29	Supply of 90mm x 12.3mm PN 16/PPR pipe conforming to DIN Standards 8077/8083	1 RM	1,423.00
707	TBSP-J.III-30	Supply of 110mm x 15.1mm PN 16/PPR pipe conforming to DIN Standards 8077/8084	1 RM	2,129.00
708	TBSP-J.III-31	Supply of 20mm x 3.4mm PN 20/PPR pipe conforming to DIN Standards 8077/8078	1 RM	77.00
709	TBSP-J.III-32	Supply of 25mm x 4.2mm PN 20/PPR pipe conforming to DIN Standards 8077/8078	1 RM	118.00
710	TBSP-J.III-33	Supply of 32mm x 5.4mm PN 20/PPR pipe conforming to DIN Standards 8077/8079	1 RM	191.00
711	TBSP-J.III-34	Supply of 40mm x 6.7mm PN 20/PPR pipe conforming to DIN Standards 8077/8079	1 RM	293.00
712	TBSP-J.III-35	Supply of 50mm x 8.3mm PN 20/PPR pipe conforming to DIN Standards 8077/8080	1 RM	519.00
713	TBSP-J.III-36	Supply of 63mm x 10.5mm PN 20/PPR pipe conforming to DIN Standards 8077/8081	1 RM	818.00
714	TBSP-J.III-37	Supply of 75mm x 12.5mm PN 20/PPR pipe conforming to DIN Standards 8077/8082	1 RM	1,160.00
715	TBSP-J.III-38	Supply of 90mm x 15mm PN 20/PPR pipe conforming to DIN Standards 8077/8083	1 RM	1,576.00
716	TBSP-J.III-39	Supply of 110mm x 18.3mm PN 20/PPR pipe conforming to DIN Standards 8077/8084	1 RM	2,481.00
717	TBSP-J.III-40	Supply of 20mm PPR Socket conforming to DIN Standards 8077/8084	Each	11.00
718	TBSP-J.III-41	Supply of 25mm PPR Socket conforming to DIN Standards 8077/8085	Each	16.00
719	TBSP-J.III-42	Supply of 32mm PPR Socket conforming to DIN Standards 8077/8086	Each	21.00
720	TBSP-J.III-43	Supply of 40mm PPR Socket conforming to DIN Standards 8077/8087	Each	37.00
721	TBSP-J.III-44	Supply of 50mm PPR Socket conforming to DIN Standards 8077/8088	Each	71.00
722	TBSP-J.III-45	Supply of 63mm PPR Socket conforming to DIN Standards	Each	



Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
		8077/8089		135.00
723	TBSP-J.III-46	Supply of 75mm PPR Socket conforming to DIN Standards 8077/8090	Each	204.00
724	TBSP-J.III-47	Supply of 90mm PPR Socket conforming to DIN Standards 8077/8091	Each	391.00
725	TBSP-J.III-48	Supply of 110mm PPR Socket conforming to DIN Standards 8077/8092	Each	695.00
726	TBSP-J.III-49	Supply of 32mm PPR Core Flange conforming to DIN Standards 8077/8086	Each	42.00
727	TBSP-J.III-50	Supply of 40mm PPR Core Flange conforming to DIN Standards 8077/8087	Each	68.00
728	TBSP-J.III-51	Supply of 50mm PPR Core Flange conforming to DIN Standards 8077/8088	Each	87.00
729	TBSP-J.III-52	Supply of 63mm PPR Core Flange conforming to DIN Standards 8077/8089	Each	139.00
730	TBSP-J.III-53	Supply of 75mm PPR Core Flange conforming to DIN Standards 8077/8090	Each	162.00
731	TBSP-J.III-54	Supply of 90mm PPR Core Flange conforming to DIN Standards 8077/8091	Each	411.00
732	TBSP-J.III-55	Supply of 110mm PPR Core Flange conforming to DIN Standards 8077/8092	Each	531.00
733	TBSP-J.III-56	Supply of 20mm PPR Elbow conforming to DIN Standards 8077/8084	Each	19.00
734	TBSP-J.III-57	Supply of 25mm PPR Elbow conforming to DIN Standards 8077/8085	Each	22.00
735	TBSP-J.III-58	Supply of 32mm PPR Elbow conforming to DIN Standards 8077/8086	Each	43.00
736	TBSP-J.III-59	Supply of 40mm PPR Elbow conforming to DIN Standards 8077/8087	Each	75.00
737	TBSP-J.III-60	Supply of 50mm PPR Elbow conforming to DIN Standards 8077/8088	Each	141.00
738	TBSP-J.III-61	Supply of 63mm PPR Elbow conforming to DIN Standards 8077/8089	Each	274.00
739	TBSP-J.III-62	Supply of 75mm PPR Elbow conforming to DIN Standards 8077/8090	Each	443.00
740	TBSP-J.III-63	Supply of 90mm PPR Elbow conforming to DIN Standards 8077/8091	Each	823.00
741	TBSP-J.III-64	Supply of 110mm PPR Elbow conforming to DIN Standards 8077/8092	Each	1,527.00
742	TBSP-J.III-65	Supply of 20mm PPR Tee conforming to DIN Standards 8077/8084	Each	17.00
743	TBSP-J.III-66	Supply of 25mm PPR Tee conforming to DIN Standards 8077/8085	Each	29.00
744	TBSP-J.III-67	Supply of 32mm PPR Tee conforming to DIN Standards 8077/8086	Each	51.00
745	TBSP-J.III-68	Supply of 40mm PPR Tee conforming to DIN Standards 8077/8087	Each	91.00
746	TBSP-J.III-69	Supply of 50mm PPR Tee conforming to DIN Standards 8077/8088	Each	161.00
747	TBSP-J.III-70	Supply of 63mm PPR Tee conforming to DIN Standards 8077/8089	Each	325.00
748	TBSP-J.III-71	Supply of 75mm PPR Tee conforming to DIN Standards 8077/8090	Each	635.00
749	TBSP-J.III-72	Supply of 90mm PPR Tee conforming to DIN Standards 8077/8091	Each	921.00
750	TBSP-J.III-73	Supply of 110mm PPR Tee conforming to DIN Standards 8077/8092	Each	1,594.00
751	TBSP-J.III-74	Supply of 20mm PPR End Cap conforming to DIN Standards 8077/8084	Each	8.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
752	TBSP-J.III-75	Supply of 25mm PPR End Cap conforming to DIN Standards 8077/8085	Each	11.00
753	TBSP-J.III-76	Supply of 32mm PPR End Cap conforming to DIN Standards 8077/8086	Each	21.00
754	TBSP-J.III-77	Supply of 40mm PPR End Cap conforming to DIN Standards 8077/8087	Each	37.00
755	TBSP-J.III-78	Supply of 50mm PPR End Cap conforming to DIN Standards 8077/8088	Each	64.00
756	TBSP-J.III-79	Supply of 63mm PPR End Cap conforming to DIN Standards 8077/8089	Each	135.00
757	TBSP-J.III-80	Supply of 75mm PPR End Cap conforming to DIN Standards 8077/8090	Each	225.00
758	TBSP-J.III-81	Supply of 90mm PPR End Cap conforming to DIN Standards 8077/8091	Each	358.00
759	TBSP-J.III-82	Supply of 110mm PPR End Cap conforming to DIN Standards 8077/8092	Each	708.00
760	TBSP-J.III-83	Supply of 25mm x 20mm PPR Reducer conforming to DIN Standards 8077/8092	Each	14.00
761	TBSP-J.III-84	Supply of 32mm x 25mm PPR Reducer conforming to DIN Standards 8077/8092	Each	22.00
762	TBSP-J.III-85	Supply of 32mm x 20mm PPR Reducer conforming to DIN Standards 8077/8092	Each	21.00
763	TBSP-J.III-86	Supply of 40mm x 32mm PPR Reducer conforming to DIN Standards 8077/8092	Each	38.00
764	TBSP-J.III-87	Supply of 40mm x 25mm PPR Reducer conforming to DIN Standards 8077/8092	Each	37.00
765	TBSP-J.III-88	Supply of 40mm x 20mm PPR Reducer conforming to DIN Standards 8077/8092	Each	36.00
766	TBSP-J.III-89	Supply of 50mm x 20mm PPR Reducer conforming to DIN Standards 8077/8092	Each	55.00
767	TBSP-J.III-90	Supply of 50mm x 25mm PPR Reducer conforming to DIN Standards 8077/8092	Each	57.00
768	TBSP-J.III-91	Supply of 50mm x 32mm PPR Reducer conforming to DIN Standards 8077/8092	Each	58.00
769	TBSP-J.III-92	Supply of 50mm x 40mm PPR Reducer conforming to DIN Standards 8077/8092	Each	58.00
770	TBSP-J.III-93	Supply of 63mm x 20mm PPR Reducer conforming to DIN Standards 8077/8092	Each	125.00
771	TBSP-J.III-94	Supply of 63mm x 25mm PPR Reducer conforming to DIN Standards 8077/8092	Each	125.00
772	TBSP-J.III-95	Supply of 63mm x 32mm PPR Reducer conforming to DIN Standards 8077/8092	Each	126.00
773	TBSP-J.III-96	Supply of 63mm x 40mm PPR Reducer conforming to DIN Standards 8077/8092	Each	126.00
774	TBSP-J.III-97	Supply of 63mm x 50mm PPR Reducer conforming to DIN Standards 8077/8092	Each	127.00
775	TBSP-J.III-98	Supply of 75mm x 40mm PPR Reducer conforming to DIN Standards 8077/8092	Each	185.00
776	TBSP-J.III-99	Supply of 75mm x 50mm PPR Reducer conforming to DIN Standards 8077/8092	Each	186.00
777	TBSP-J.III-100	Supply of 75mm x 63mm PPR Reducer conforming to DIN Standards 8077/8092	Each	235.00
778	TBSP-J.III-101	Supply of 90mm x 63mm PPR Reducer conforming to DIN Standards 8077/8092	Each	449.00
779	TBSP-J.III-102	Supply of 90mm x 75mm PPR Reducer conforming to DIN Standards 8077/8092	Each	476.00
780	TBSP-J.III-103	Supply of 110mm x 63mm PPR Reducer conforming to DIN Standards 8077/8092	Each	599.00
781	TBSP-J.III-	Supply of 110mm x 75mm PPR Reducer conforming to DIN	Each	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
	104	Standards 8077/8092		697.00
782	TBSP-J.III-105	Supply of 110mm x 90mm PPR Reducer conforming to DIN Standards 8077/8092	Each	752.00
783	TBSP-J.III-106	Supply of 25mm x 20mm x 25mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	36.00
784	TBSP-J.III-107	Supply of 32mm x 25mm x 32mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	62.00
785	TBSP-J.III-108	Supply of 32mm x 20mm x 32mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	63.00
786	TBSP-J.III-109	Supply of 40mm x 20mm x 40mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	102.00
787	TBSP-J.III-110	Supply of 40mm x 25mm x 40mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	103.00
788	TBSP-J.III-111	Supply of 40mm x 32mm x 40mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	106.00
789	TBSP-J.III-112	Supply of 50mm x 20mm x 50mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	147.00
790	TBSP-J.III-113	Supply of 50mm x 25mm x 50mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	148.00
791	TBSP-J.III-114	Supply of 50mm x 32mm x 50mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	152.00
792	TBSP-J.III-115	Supply of 50mm x 40mm x 50mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	153.00
793	TBSP-J.III-116	Supply of 63mm x 20mm x 63mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	423.00
794	TBSP-J.III-117	Supply of 63mm x 25mm x 63mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	425.00
795	TBSP-J.III-118	Supply of 63mm x 32mm x 63mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	431.00
796	TBSP-J.III-119	Supply of 63mm x 40mm x 63mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	437.00
797	TBSP-J.III-120	Supply of 63mm x 50mm x 63mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	444.00
798	TBSP-J.III-121	Supply of 75mm x 50mm x 75mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	597.00
799	TBSP-J.III-122	Supply of 75mm x 63mm x 75mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	607.00
800	TBSP-J.III-123	Supply of 90mm x 50mm x 90mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	803.00
801	TBSP-J.III-124	Supply of 90mm x 63mm x 90mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	854.00
802	TBSP-J.III-125	Supply of 110mm x 75mm x 110mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	1,456.00
803	TBSP-J.III-126	Supply of 110mm x 90mm x 110mm PPR Reducer Tee conforming to DIN Standards 8077/8092	Each	1,514.00
804	TBSP-J.III-127	Supply of 20mm x 1/2" PPR Female Threaded Adaptor conforming to DIN Standards 8077/8092	Each	113.00
805	TBSP-J.III-128	Supply of 25mm x 1/2" PPR Female Threaded Adaptor conforming to DIN Standards 8077/8092	Each	116.00
806	TBSP-J.III-129	Supply of 25mm x 3/4" PPR Female Threaded Adaptor conforming to DIN Standards 8077/8092	Each	202.00
807	TBSP-J.III-130	Supply of 32mm x 1/2" PPR Female Threaded Adaptor conforming to DIN Standards 8077/8092	Each	205.00
808	TBSP-J.III-131	Supply of 32mm x 3/4" PPR Female Threaded Adaptor conforming to DIN Standards 8077/8092	Each	213.00
809	TBSP-J.III-132	Supply of 32mm x 1" PPR Female Threaded Adaptor conforming to DIN Standards 8077/8092	Each	327.00
810	TBSP-J.III-133	Supply of 40mm x 1 1/4" PPR Female Threaded Adaptor conforming to DIN Standards 8077/8092	Each	483.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
811	TBSP-J.III-134	Supply of 50mm x 1½" PPR Female Threaded Adaptor conforming to DIN Standards 8077/8092	Each	675.00
812	TBSP-J.III-135	Supply of 63mm x 2" PPR Female Threaded Adaptor conforming to DIN Standards 8077/8092	Each	898.00
813	TBSP-J.III-136	Supply of 75mm x 2½" PPR Female Threaded Adaptor conforming to DIN Standards 8077/8092	Each	1,730.00
814	TBSP-J.III-137	Supply of 20mm x ½" PPR Male Threaded Adaptor conforming to DIN Standards 8077/8092	Each	174.00
815	TBSP-J.III-138	Supply of 25mm x ½" PPR Male Threaded Adaptor conforming to DIN Standards 8077/8092	Each	180.00
816	TBSP-J.III-139	Supply of 25mm x ¾" PPR Male Threaded Adaptor conforming to DIN Standards 8077/8092	Each	262.00
817	TBSP-J.III-140	Supply of 32mm x ¾" PPR Male Threaded Adaptor conforming to DIN Standards 8077/8092	Each	274.00
818	TBSP-J.III-141	Supply of 32mm x 1" PPR Male Threaded Adaptor conforming to DIN Standards 8077/8092	Each	509.00
819	TBSP-J.III-142	Supply of 40mm x 1¼" PPR Male Threaded Adaptor conforming to DIN Standards 8077/8092	Each	596.00
820	TBSP-J.III-143	Supply of 50mm x 1½" PPR Male Threaded Adaptor conforming to DIN Standards 8077/8092	Each	832.00
821	TBSP-J.III-144	Supply of 63mm x 2" PPR Male Threaded Adaptor conforming to DIN Standards 8077/8092	Each	1,280.00
822	TBSP-J.III-145	Supply of 75mm x 2½" PPR Male Threaded Adaptor conforming to DIN Standards 8077/8092	Each	2,048.00
823	TBSP-J.III-146	Supply of 20mm x ½" PPR Female Threaded Elbow conforming to DIN Standards 8077/8092	Each	120.00
824	TBSP-J.III-147	Supply of 25mm x ½" PPR Female Threaded Elbow conforming to DIN Standards 8077/8092	Each	126.00
825	TBSP-J.III-148	Supply of 25mm x ¾" PPR Female Threaded Elbow conforming to DIN Standards 8077/8092	Each	194.00
826	TBSP-J.III-149	Supply of 32mm x ½" PPR Female Threaded Elbow conforming to DIN Standards 8077/8092	Each	186.00
827	TBSP-J.III-150	Supply of 32mm x ¾" PPR Female Threaded Elbow conforming to DIN Standards 8077/8092	Each	217.00
828	TBSP-J.III-151	Supply of 32mm x 1" PPR Female Threaded Elbow conforming to DIN Standards 8077/8092	Each	361.00
829	TBSP-J.III-152	Supply of 20mm x ½" PPR Male Threaded Elbow conforming to DIN Standards 8077/8092	Each	180.00
830	TBSP-J.III-153	Supply of 25mm x ½" PPR Male Threaded Elbow conforming to DIN Standards 8077/8092	Each	197.00
831	TBSP-J.III-154	Supply of 25mm x ¾" PPR Male Threaded Elbow conforming to DIN Standards 8077/8092	Each	261.00
832	TBSP-J.III-155	Supply of 32mm x ½" PPR Male Threaded Elbow conforming to DIN Standards 8077/8092	Each	251.00
833	TBSP-J.III-156	Supply of 32mm x 1" PPR Male Threaded Elbow conforming to DIN Standards 8077/8092	Each	541.00
834	TBSP-J.III-157	Supply of 20mm x ½" PPR Female Threaded Tee conforming to DIN Standards 8077/8092	Each	117.00
835	TBSP-J.III-158	Supply of 25mm x ½" PPR Female Threaded Tee conforming to DIN Standards 8077/8092	Each	127.00
836	TBSP-J.III-159	Supply of 25mm x ¾" PPR Female Threaded Tee conforming to DIN Standards 8077/8092	Each	213.00
837	TBSP-J.III-160	Supply of 32mm x ½" PPR Female Threaded Tee conforming to DIN Standards 8077/8092	Each	224.00
838	TBSP-J.III-161	Supply of 32mm x ¾" PPR Female Threaded Tee conforming to DIN Standards 8077/8092	Each	251.00
839	TBSP-J.III-162	Supply of 32mm x 1" PPR Female Threaded Tee conforming to DIN Standards 8077/8092	Each	352.00
840	TBSP-J.III-	Supply of 20mm x ½" PPR Male Threaded Tee conforming to	Each	

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
	163	DIN Standards 8077/8092		181.00
841	TBSP-J.III-164	Supply of 25mm x ½” PPR Male Threaded Tee conforming to DIN Standards 8077/8092	Each	194.00
842	TBSP-J.III-165	Supply of 25mm x ¾” PPR Male Threaded Tee conforming to DIN Standards 8077/8092	Each	278.00
843	TBSP-J.III-166	Supply of 32mm x ½” PPR Male Threaded Tee conforming to DIN Standards 8077/8092	Each	283.00
844	TBSP-J.III-167	Supply of 32mm x ¾” PPR Male Threaded Tee conforming to DIN Standards 8077/8092	Each	300.00
845	TBSP-J.III-168	Supply of 32mm x 1” PPR Male Threaded Tee conforming to DIN Standards 8077/8092	Each	552.00
846	TBSP-J.III-169	Supply of 20mm x ½” PPR Female Threaded Union conforming to DIN Standards 8077/8092	Each	466.00
847	TBSP-J.III-170	Supply of 25mm x ¾” PPR Female Threaded Union conforming to DIN Standards 8077/8092	Each	697.00
848	TBSP-J.III-171	Supply of 32mm x 1” PPR Female Threaded Union conforming to DIN Standards 8077/8092	Each	930.00
849	TBSP-J.III-172	Supply of 40mm x 1¼” PPR Female Threaded Union conforming to DIN Standards 8077/8092	Each	1,303.00
850	TBSP-J.III-173	Supply of 50mm x 1½” PPR Female Threaded Union conforming to DIN Standards 8077/8092	Each	2,095.00
851	TBSP-J.III-174	Supply of 63mm x 2” PPR Female Threaded Union conforming to DIN Standards 8077/8092	Each	3,327.00
852	TBSP-J.III-175	Supply of 20mm x ½” PPR Male Threaded Union conforming to DIN Standards 8077/8092	Each	534.00
853	TBSP-J.III-176	Supply of 25mm x ¾” PPR Male Threaded Union conforming to DIN Standards 8077/8092	Each	710.00
854	TBSP-J.III-177	Supply of 32mm x 1” PPR Male Threaded Union conforming to DIN Standards 8077/8092	Each	930.00
855	TBSP-J.III-178	Supply of 40mm x 1¼” PPR Male Threaded Union conforming to DIN Standards 8077/8092	Each	1,163.00
856	TBSP-J.III-179	Supply of 50mm x 1½” PPR Male Threaded Union conforming to DIN Standards 8077/8092	Each	2,210.00
857	TBSP-J.III-180	Supply of 63mm x 2” PPR Male Threaded Union conforming to DIN Standards 8077/8092	Each	3,723.00
858	TBSP-J.III-181	Supply of 20mm PPR Union conforming to DIN Standards 8077/8092	Each	103.00
859	TBSP-J.III-182	Supply of 25mm PPR Union conforming to DIN Standards 8077/8092	Each	119.00
860	TBSP-J.III-183	Supply of 32mm PPR Union conforming to DIN Standards 8077/8092	Each	196.00
861	TBSP-J.III-184	Supply of 20mm PPR Ball Valve conforming to DIN Standards 8077/8092	Each	186.00
862	TBSP-J.III-185	Supply of 25mm PPR Ball Valve conforming to DIN Standards 8077/8092	Each	246.00
863	TBSP-J.III-186	Supply of 32mm PPR Ball Valve conforming to DIN Standards 8077/8092	Each	257.00
864	TBSP-J.III-187	Supply of 40mm PPR Ball Valve conforming to DIN Standards 8077/8092	Each	526.00
865	TBSP-J.III-188	Supply of 50mm PPR Ball Valve conforming to DIN Standards 8077/8092	Each	612.00
866	TBSP-J.III-189	Supply of 63mm PPR Ball Valve conforming to DIN Standards 8077/8092	Each	990.00
867	TBSP-J.III-190	Supply of 75mm PPR Ball Valve conforming to DIN Standards 8077/8092	Each	1,630.00
868	TBSP-J.III-191	Supply of 90mm PPR Ball Valve conforming to DIN Standards 8077/8092	Each	2,327.00
869	TBSP-J.III-192	Supply of 20mm PPR Clamp conforming to DIN Standards 8077/8092	Each	11.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
870	TBSP-J.III-193	Supply of 25mm PPR Clamp conforming to DIN Standards 8077/8092	Each	15.00
871	TBSP-J.III-194	Supply of 32mm PPR Clamp conforming to DIN Standards 8077/8092	Each	17.00
872	TBSP-J.III-195	Supply of 40mm PPR Clamp conforming to DIN Standards 8077/8092	Each	19.00
873	TBSP-J.III-196	Supply of 20mm civic coupler where in the compound should confirm to IS 15778 CPVC pipe and IS 15225 CPVC compound with high range of pressure and high range of thickness in SDR 11 and SDR 13.5	Each	12.00
874	TBSP-J.III-197	Supply of 25mm civic coupler where in the compound should confirm to IS 15778 CPVC pipe and IS 15225 CPVC compound high range of pressure and high range of thickness in SDR 11 and SDR 13.5	Each	16.00
875	TBSP-J.III-198	Supply of 32mm civic coupler where in the compound should confirm to IS 15778 CPVC pipe IS 15225 CPVC compound with high range of pressure and high range of thickness in SDR 11 and SDR 13.5	Each	26.00
876	TBSP-J.III-199	Supply of 50mm civic coupler where in the compound should confirm to IS 15778 CPVC pipe IS 15225 CPVC compound with high range of pressure and high range of thickness in SDR 11 and SDR 13.5	Each	80.00
877	TBSP-J.III-200	Supply of 20mm civic end cap where in the compound should confirm to IS 15778 CPVC pipe IS 15225 CPVC compound with high range of pressure and high range of thickness in SDR 11 and SDR 13.5	Each	9.00
878	TBSP-J.III-201	Supply of 25mm civic end cap where in the compound should confirm to IS 15778 CPVC pipe IS 15225 CPVC compound with high range of pressure and high range of thickness in SDR 11 and SDR 13.5	Each	13.00
879	TBSP-J.III-202	Supply of 32mm civic end cap where in the compound should confirm to IS 15778 CPVC pipe IS 15225 CPVC compound with high range of pressure and high range of thickness in SDR 11 and SDR 13.5	Each	19.00
880	TBSP-J.III-203	Supply of 50mm civic end cap where in the compound should confirm to IS 15778 CPVC pipe IS 15225 CPVC compound with high range of pressure and high range of thickness in SDR 11 and SDR 13.5	Each	60.00
881	TBSP-J.III-204	Supply of 25mm civic elbow where in the compound should confirm to IS 15778 CPVC pipe IS 15225 CPVC compound with high range of pressure and high range of thickness in SDR 11 and SDR 13.5	Each	24.00
882	TBSP-J.III-205	Supply of 50mm civic elbow where in the compound should confirm to IS 15778 CPVC pipe IS 15225 CPVC compound with high range of pressure and high range of thickness in SDR 11 and SDR 13.5	Each	124.00
883	TBSP-J.III-206	Supply of 50x32 mm civic reducing elbow where in the compound should confirm to IS 15778 CPVC pipe IS 15225 CPVC compound with high range of pressure and high range of thickness in SDR 11 and SDR 13.5	Each	98.00
884	TBSP-J.III-207	Supply of 50mm civic tee where in the compound should confirm to IS 15778 CPVC pipe IS 15225 CPVC compound with high range of pressure and high range of thickness in SDR 11 and SDR 13.5	Each	150.00
885	TBSP-J.III-208	Supply of 25x20mm civic reducer where in the compound should confirm to IS 15778 CPVC pipe and IS 15225 CPVC compound with high range of pressure and high range of thickness in SDR 11 and SDR 13.5	Each	18.00
886	TBSP-J.III-209	Supply of 32x25mm civic reducer where in the compound should confirm to IS 15778 CPVC pipe IS 15225 CPVC	Each	24.00

Sl. No	ITEM CODE	DESCRIPTION OF THE ITEM	UNIT	SCHEDULED RATE FOR 2021-22
		compound with high range of pressure and high range of thickness in SDR 11 and SDR 13.5		
887	TBSP-J.III-210	Supply of 20x15mm CPVC brass fta where in the compound should confirm to IS 15778 CPVC pipe IS 15225 CPVC compound with high range of pressure and high range of thickness in SDR 11 and SDR 13.5	Each	28.00
888	TBSP-J.III-211	Supply of 20mm civic elbow where in the compound should confirm to IS 15778 CPVC pipe IS 15225 CPVC compound with high range of pressure and high range of thickness in SDR 11 and SDR 13.5	Each	16.00
889	TBSP-J.III-212	Supply of 32mm civic elbow where in the compound should confirm to IS 15778 CPVC pipe IS 15225CPVC compound with high range of pressure and high range of thickness in SDR 11 and SDR 13.5	Each	40.00
890	TBSP-J.III-213	Supply of 25x20 mm civic reducing tee where in the compound should confirm to IS 15778 CPVC pipe IS 15225 CPVC compound with high range of pressure and high range of thickness in SDR 11 and SDR 13.5	Each	259.00
891	TBSP-J.III-214	Supply of 20x15mm civic brass elbow where in the compound should confirm to IS 15778 CPVC pipe IS 15225 CPVC compound with high range of pressure and high range of thickness in SDR 11 and SDR 13.5	Each	138.00
892	TBSP-J.III-215	Supply of 32x20 mm civic reducing tee where in the compound should confirm to IS 15778 CPVC pipe IS 15225 CPVC compound with high range of pressure and high range of thickness in SDR 11 and SDR 13.5	Each	9.00
893	TBSP-J.III-216	Supply of 50x20mm civic reducing tee where in the compound should confirm to IS 15778 CPVC pipe IS 15225 CPVC compound with high range of pressure and high range of thickness in SDR 11 and SDR 13.5	Each	16.00
894	TBSP-J.III-217	Supply of 20x15mm civic brass tee where in the compound should confirm to IS 15778 CPVC pipe IS 15225 CPVC compound with high range of pressure and high range of thickness in SDR 11 and SDR 13.5	Each	6.00
895	TBSP-J.III-218	Supply of 50X32MM civic reducing tee where in the compound should confirm to IS 15778 CPVC pipe IS 15225 CPVC compound with high range of pressure and high range of thickness in SDR 11 and SDR 13.5	Each	17.00
NOTE	All the items to be used on work are of first quality & ISI and as approved by the Engineer In charge of the work.			
<b>1</b>	<b>RATES</b>			
<b>a</b>	All the prices of the material given in this section are excluding taxes but including cost of loading, cost of conveyance, unloading & stacking			
<b>b</b>	Supply Rates for all the materials are basic rates based on market rates/quoted rates/ derived rates, excluding Taxes.			
<b>c</b>	The applicable GST (works contract) shall be added at applicable rate in Part B of the estimates.			
<b>2</b>	Colored porcelain items: 50% extra may be allowed on basic cost of white porcelain items excluding fittings			
<b>3</b>	SSR Rates for Sanitary & water supply items are purely for guidance for the officers for preparation of estimates vide Para 113 of APPWD code. Authority who prepares the estimate is however responsible for proper rates as envisaged in Para 45 of APPWD code.			

Sl. No	SECTION	NAMES OF THE APPROVED BRAND/ MANUFACTURER/ SUPPLIER
<b>A</b>	<b>SECTION</b>	<b>S.W.G. PIPES &amp; FITTINGS</b>
		(Landing cost - including material VAT/ loading/ cost of conveyance/ unloading & stacking)
I	SUB-SECTION	SUPPLY & LAYING OF SWG PIPES - Any ISI Brand
II	SUB-SECTION	S.W.G. FITTINGS - Any ISI Brand
<b>C</b>	<b>SECTION</b>	<b>CENTRIFUGAL CI PIPES &amp; FITTINGS - IS : 1729</b>
I	SUB-SECTION	SUPPLY & LAYING OF CAST IRON PIPES - BIC/ NECO/ Jayaswal Neco
II	SUB-SECTION	SUPPLYING & LAYING OF C.I. FITTINGS - BIC/ NECO/ Jayaswal Neco
<b>D</b>	<b>SECTION</b>	<b>CENTRIFUGAL CI PIPES &amp; FITTINGS - IS : 3989</b>
I	SUB-SECTION	SUPPLY OF CENTRIFUGAL CI PIPES - BIC/ NECO/ Jayaswal Neco
II	SUB-SECTION	SUPPLY OF C.I. SPUN FITTINGS - BIC/ NECO/ Jayaswal Neco
<b>E</b>	<b>SECTION</b>	<b>VITREOUS CHINAWARE - SANITARY APPLIANCES</b>
I	SUB-SECTION	INDIAN WATER CLOSETS - Hindustan Sanitary ware/ Parryware/ Neycer/ CERA/Jaquar / Somany, Watertec, Kerovit by Kajaria
II	SUB-SECTION	FLOOR MOUNTED EWC - Hindustan Sanitary ware/ Parryware/ Neycer/ CERA/Jaquar / Somany, Watertec, Kerovit by Kajaria
III	SUB-SECTION	WALL MOUNTED EWC - Hindustan Sanitary ware/ Parryware/ Neycer/ CERA /Jaquar/ Somany, Watertec, Kerovit by Kajaria
IV	SUB-SECTION	CISTERNS FOR WATER CLOSETS - Hindustan Sanitary ware/ Parryware/ Neycer/ CERA /Jaquar / Somany, Watertec, Kerovit by Kajaria
V	SUB-SECTION	PLASTIC SEATS FOR WATER CLOSETS - Hindustan Sanitary ware/ Parryware/ Neycer/ CERA /Jaquar / Somany, Watertec, Kerovit by Kajaria
VI	SUB-SECTION	WASH HAND BASINS - Hindustan Sanitary ware/ Parryware/ Neycer/ CERA /Jaquar / Somany, Watertec, Kerovit by Kajaria/ DEC Industries PVT LTD
VII	SUB-SECTION	URINALS - Hindustan Sanitary ware/ Parryware/ Neycer/ CERA /Jaquar / Somany, Naturesani, Watertec, Kerovit by Kajaria
<b>F</b>	<b>SECTION</b>	<b>CP FITTINGS - TAPS/ FAUCETS &amp; ACCESSORIES</b>
I	SUB-SECTION	TAPS&FAUCETS - BIB TAPS - Seiko/ Senior/ Nice/ Senior/ Nice/ CERA/ Hindware - PREMIUM MAKE - Jaquar/ Hindware/ Plumber/ Parryware/ H & R Johnson, Karla / Essco / Somany/Kingston/Prayag Polymer/KUNCHAL ( Aluminium Udyog)/M/s Sumo Polyplast Pvt. Ltd ( Sumolex), Watertec, Ambani, Kerovit by Kajaria, Austro,/ ESS ESS/ BATHSENSE/ ROYALE
II	SUB-SECTION	TAPS&FAUCETS - PILLAR TAPS - Seiko/ Senior/ Nice/ Senior/ Nice/ CERA/ Hindware- PREMIUM MAKE - Jaquar/ Hindware/ Plumber/ Parryware/ H & R Johnson, Karla / Essco / Somany/ Kingston/Prayag Polymer/ KUNCHAL ( Aluminium Udyog)/ M/s Sumo Polyplast Pvt. Ltd ( Sumolex), Watertec, Ambani, Kerovit by Kajaria, Austro/ ESS ESS/ BATHSENSE/ ROYALE
III	SUB-SECTION	TAPS&FAUCETS - OTHER TAPS & SPOUTS - Seiko/ Senior/ Nice/ Senior/ Nice/CERA/ Hindware - PREMIUM MAKE - Jaquar/ Hindware/ Plumber/ Parryware/ H & R Johnson, Karla / Essco /Somany/ Kingston/Prayag Polymer/ KUNCHAL ( Aluminium Udyog)/ M/s Sumo Polyplast Pvt. Ltd ( Sumolex) Watertec, Ambani, Kerovit by Kajaria, Austro/ ESS ESS / BATHSENSE/ ROYALE
IV	SUB-SECTION	STOP & ANGLE VALVES - Seiko/ Senior/ Nice/ Senior/ Nice/ CERA/ Hindware - PREMIUM MAKE - Jaquar/ Hindware/ Plumber/ Parryware/ H & R Johnson, Karla / Essco / Somany/ Kingston/Prayag Polymer/ KUNCHAL ( Aluminium Udyog), Watertec, Ambani, Kerovit by Kajaria, Austro/ ESS ESS/ BATHSENSE/ ROYALE
V	SUB-SECTION	COMBINATION FAUCETS - Seiko/ Senior/ Nice/ Senior/ Nice/ CERA/ Hindware - PREMIUM MAKE - Jaquar/ Hindware/ Plumber/ Parryware/ H & R Johnson, Karla / Essco / Somany/ Kingston/Prayag Polymer/ KUNCHAL ( Aluminium Udyog) Watertec, Ambani, Kerovit by Kajaria, Austro / ESS ESS/ BATHSENSE/ ROYALE
VI	SUB-SECTION	SHOWERS & FITTINGS - Seiko/ Senior/ Nice/ Senior/ Nice/ CERA/ Hindware - PREMIUM MAKE - Jaquar/ Hindware/ Plumber/ Parryware/ H & R Johnson, Karla / Essco / Somany/ Kingston/Prayag Polymer/ KUNCHAL ( Aluminium Udyog), Watertec, Ambani, Kerovit by Kajaria, Austro / ESS ESS/ BATHSENSE/ ROYALE
VII	SUB-SECTION	MISCELLANEOUS CP FITTINGS - Seiko/ Senior/ Nice/ Senior/ Nice/ CERA/ Hindware- PREMIUM MAKE - Jaquar/ Hindware/ Plumber/ Parryware/ H & R Johnson, Karla / Essco / Somany/ Kingston/Prayag Polymer/ KUNCHAL ( Aluminium Udyog), Watertec, Ambani, Kerovit by Kajaria, Austro / ESS ESS/ BATHSENSE/ ROYALE



Sl. No	SECTION	NAMES OF THE APPROVED BRAND/ MANUFACTURER/ SUPPLIER
<b>G</b>	<b>SECTION</b>	<b>G.I. PIPES &amp; FITTINGS</b>
I	SUB-SECTION	G.I. PIPES - Tata/ JSW/ Oswal/ Zenith
II	SUB-SECTION	G.I. FITTINGS - HB / Kirti/ R-Brand
III	SUB-SECTION	BRONZE (COPPER ALLOY) VALVES - Zoloto/ R-Brand
<b>H</b>	<b>SECTION</b>	<b>PVC PIPES &amp; FITTINGS</b>
I	SUB-SECTION	PVC PIPES - Prince/Sudhakar/Kisan/Supreme/ Astral/ Finolex/ Ajay/ Ashirvad/Birla Aerocon/Trueflow by Hindware/Prayag Polymer, Watertec, Austro, Nandi/ APOLLO PIPES LTD / DEC Industries PVT LTD
II	SUB-SECTION	PVC FITTINGS- Prince/Sudhakar/Kisan/Supreme/ Astral/ Finolex/ Ajay/ Ashirvad/ Birla Aerocon/ Trueflow by Hindware/Prayag Polymer, Watertec, Austro, Nandi/ APOLLO PIPES LTD / DEC Industries PVT LTD
III	SUB-SECTION	PVC PLUMBING ACCESSORIES - Prince/Sudhakar/Kisan/Supreme/ Astral/ Finolex/ Ajay/ Ashirvad/ Birla Aerocon/ Trueflow by Hindware, Watertec, Austro, Nandi/ APOLLO PIPES LTD
		PVC Tanks - Sintex, Aquatech, Nandi
		PVC - LLC Cisterns - Parryware/ Slimlines/ CERA/ Hindware/Prayag Polymer/ APOLLO PIPES LTD
<b>J</b>	<b>SECTION</b>	<b>MISCELLANEOUS ITEMS</b>
I	SUB-SECTION	POLYETHYLENE-ALUMINIUM-POLYETHYLENE COMPOSITE PIPES - Kitec/ Kisan/ Uniflex/M/s Sumolex Polyplast Pvt. Ltd/ APOLLO PIPES LTD
II	SUB-SECTION	CPVC PIPES - Supreme/ Ashirvad/ Astral/ Prince / Kisan / Ajay/Birla Aerocon/ Hindware Trueflo/Sudhakar/Prayag Polymer/ M/s Sumolex Polyplast Pvt. Ltd, Watertec, Ambani, Austro, Nandi/ DEC Industries PVT LTD
III	SUB-SECTION	PPR PIPES - Supreme/ Ashirvad/ Astral/ Prince/ Kisan / SFMC / KPT/ M/s Sumolex Polyplast Pvt. Ltd



# **ELECTRICAL ITEMS**



**PREAMBLE****SYSTEM OF DISTRIBUTION OF WIRING**

1.	The wiring shall be done from a distribution system through main & Sub-distribution boards.
2.	The system design and location of DBs shall be carefully selected.
3.	Each main and sub-distribution boards shall be controlled by an incoming circuit breaker.
4.	For Non-residential buildings, as far as possible, DBs shall be separate for light and power.
5.	Only MCCB / MCBs shall be used.
6.	“Power” wiring shall be kept separate and distinct from light wiring from the level of circuits.
7.	Conduit for light and power wiring shall be separate
8	Essential / Non-essential/ UPS distribution : Each System will have a completely independent and separate distribution system starting from the main switch board up to final wiring point for each system.
9	No switch board will have more than one source.
10	Each main distribution board / Sub-distribution board will have spare outgoing MCBs for future expansion.
11	I) All switch boards shall be installed at 1.2 to 1.4 Mt height from Finished Floor level as per the disable standards.
	II) all 6A sockets, 16A / 6A sockets shall be installed at the following positions, unless other wire specified.
	a) 1. NRB - 30 cm above floor level. 2. RB - 30 cm above floor level until unless specified by Engineer -in charge.
	b) Kitchen - 30 Cm above platforms and away from sink / stove.
	c) Bathroom - No socket outlet is permitted for connecting a portable appliance there to.
	d) Power socket may be provided above 2Mts for fixed appliance and at least 1.0 m away from the shower.
1.	Sub Main Wiring :- Sub Main wiring shall mean the wiring from one main DB to other.
2.	Circuit Wiring :- Circuit wiring shall mean the wiring from the DB to the 1 <sup>st</sup> tapping point inside the switch board, from where point wiring starts.
3.	Service Mains:- Service Mains shall mean the wiring from the supply pole / feeder pillar of SPDCL / NPDCL to main panel / main distribution board.
4.	Point Wiring:- A point wiring shall include necessary wiring to the following outlets from the controlling switch. a) Ceiling rose (in case of ceiling / exhaust fan points, light fittings, and call bells) b) Ceiling rose (in case of ceiling fan) c) Lamp holders
5.	Point wiring for socket outlet points- a) 10A socket on common switch board i.e including required wire leads. b) 10A - Separate Socket point i.e socket on separate board including wiring is called 6A separate socket point. c) 16A / 10A socket point 16A point wiring will be measured on linear basis from respective tapping point to the 16A socket.
6.	Twin Control light Point:- A Light point controlled by two numbers of two-way switches. It is used in bedrooms, staircase points. The rates shall be 1.5 times normal light / fan point
7.	Multiple controlled call bell point wiring. In case of call bell points with a single call bell controlled from one outlet is same as light point. In case of call point with single call bell controlled from more than one place, the point shall be measured in parts i.e a) from call bell outlet to one of the nearest ceiling rose meant for connection to bell push treated as one point. b) Other bell pushes shall be measured the linear length as run of mains.
8.	<u>Wiring System:-</u> “ FRLS / HFFR multi strand flexible copper cable are permitted to be used”. a) Wiring shall be done only with minimum 1.5 sq.mm flexible copper wire for light, fan, exhaust fan , call bell, 6A socket etc. b) Phase neutral and earth shall be same in size (i.e sq.mm). c) In wiring, no joints in wiring will be permitted anywhere except in switch box or at point outlet
	<u>Colour Coding :</u>

	Phase / Live - Red / yellow / Blue
	Neutral - Black
	Earth - Green
	d) For light / bell wiring shall be two wire system.
	e) For ceiling fan / exhaust fan / Separate socket wiring shall be three wire system .
	<u>Circuit main for switch boards:-</u>
	Circuit main for switch board shall be 3 runs of 2.5sq.mm copper cable i.e for phase, neutral and earth. That is from DB to switch board.
	<u>Circuit Main for 16A socket :-</u>
	Circuit mains for 16A sockets shall be 3 runs 4.0sq.mm from DB to 16A socket. Phase, neutral and earth conductor are equal in size (i.e sq.mm).
	<u>Circuit Main for AC socket:-</u>
	Circuit mains for AC socket shall be 3 Runs of 6.0sq.mm from DB to AC socket. Phase, neutral and earth conductor are equal in size (i.e sq.mm).
	Note: Power circuit rated more than 1KW, size as per calculations.
	<u>Capacity of Circuits:</u>
I	Lighting circuits shall feed light / fan / call bell points. Each circuit shall not have more than 800W connected load or more than 10 points. In case of LED lights, where load per point may be less, number of points may be suitably increased.
II	Power circuit in NRB will have only one outlet per circuit.
III	Each power circuit in residential buildings can feed following outlets.
	a) Not more than 2 Nos 16A socket outlets.
	b) Not more than 4 Nos 6A/ 10A socket outlets.
	c) Not more than 1 No 16A & 2Nos 6A out lets.
IV.	Load more than 1 KW shall be controlled by suitable rated MCB, and cable size shall be decided as per the load calculations and length of circuit mains.
V.	Load shall be distributed equally among the three phases.

## GUIDELINES FOR ELECTRICAL WORKS

(For the Real Estate Development works coming under the purview of RERA)

### PREFACE

Electrical supply and installation are an important and essential part of Building Services. Right from initial planning, design, selection of material, installation / method of construction; to testing, commissioning and maintenance; every aspect is governed by statutory provisions referring various Standards and Codes. All such norms are oriented to minimize risk, provide safe use, operation, functionality, and convenience throughout service life.

Any lapse in any of the above aspect may lead to severe effects on human life and devastation of assets. Occasions of electrical fires are increasing with the increasing use and electrical gadgets. Unfortunately, still it is seen that Electrical Installation is given least importance. Qualities and safeties are compromised out of connivance or lack of technical knowledge. Many times, electrical work gets executed through non-qualified persons not having required knowledge and Permit in that regard. Such hired persons work on labour basis to whom non-standard material is supplied without any base of 'Design'. There is no person to supervise quality and safety aspects, most of which remains 'concealed' as the work gets completed.

In case of High-Rise buildings norms are more stringent. Fire hazard is more prominent risk factor as evacuation in high-rise building is a challenging task. Part 3 section 7 of NEC gives special guidelines in this regard.

The person who uses, operates electrical installation is not expected to know the real technical aspects of design, material used, quality of work, adherence to safety, compliance with statutory provisions. Under the circumstances it has become a need to set base line parameters. Plug the loopholes, get the work done adhering to norms and standards and make someone responsible so that in case of any lapse / mishap such person / agency can be made answerable.

The following guidelines / recommendations / mandates are basically given to execute work of Electrical Installation.

### **1. ARCHITECTURAL / CIVIL WORK PROVISIONS RELATED TO ELECTRICAL INSTALLATION**

#### **1.1 Architectural Planning requirements**

At planning stage Architect shall discuss and consider requirements of Electrical Consultant / Contractor in respect with site and location\*of construction and in respect with drawings of building requirement of spaces, clearances, approach ways, raceways, shafts, recommended wall thickness, required provisions for prevention from fire hazard likely to originate from electrical installation.

\*If proposed construction is within vicinity of existing over-headline, underground cable compliance with Regulation 63 of CEA Safety Regulations shall be checked prior to commencement of any work on site.

Architect shall incorporate following points in the drawings related to services as per the applicable requirements.

### 1.1.1 Site Plan

Site plan shall show existing overhead electrical lines / underground cables if any and proposed construction within the boundaries of the area to be developed.

### 1.1.2 Routes and service entry points

Architectural drawings shall clearly mark electrical service entry points, cable routes below ground, through the building structure, so that detailing in electrical shop drawings will restrict the work within specified route and no conflict shall occur with other building utility service. The drawings shall specify required horizontal and vertical clearance to be maintained between other utility services.

### 1.1.3 Locations of Electrical Panels

Locations and position for main and sub electrical panels shall be marked, and adequate space / room shall be allocated considering dimensions of panel, clearance in front, side and back. Consideration shall be given to space required for opening of the panel doors / racking out breakers, and approach boundaries (Refer NEC Part1 / section 24 Electrical Safety), and accessibility. Floor mounting panels shall preferably be located in separate Electrical Panel Rooms having outside door opening, required fire rating (two hours if not specified) and ventilation arrangement.

**NOTE** - Special consideration shall be given to this point in case of High-Rise buildings.

### 1.1.4 Electrical meter rooms

Meter rooms shall be separate. It shall be planned to have sufficient head room and clear space in front of meters, control switches (at least 1m). Space on wall shall be sufficient to accommodate required number of meters at suitable height so that readings can be taken without aid of any tackle. Also, the switchgears shall be at least 0.5 m above floor level and within such height to have an easy access for operation. The meter room shall be well ventilated, protected from external influences like sun, rain, water seepages, entry of rodents. Location of meter room shall be suitably adjacent or nearest to cable duct / shaft / vertical route of mains.

**NOTE** - Meter rooms shall not be located below staircases where above requirements could not be complied with.

### 1.1.5 Movement of heavy / bulky electrical equipment

For installation of electrical equipment within building which is likely to be heavy / bulky in size or removing it for maintenance, provision of adequate passages, stair ways or any alternate provision for its shifting / movement shall be considered.

### 1.1.6 Shafts /ducts

There shall be provision of shafts with required fire rating ( 2 hours if not mentioned specifically) for vertical electrical distribution which shall preferably be adjacent to electrical panels. Shafts shall be separate for electrical HT cables, LT



power cables / bus-bar trunking and cable work of Extra Low Voltage systems like telephones, security system, fire alarm, signalling, BMS or data networking etc. If independent shaft is not possible, there shall be an arrangement for segregation in between, which shall have required fire rating same as that of shaft. No other utility service shall run through these shafts. Shafts shall be accessible at all levels with doors having fire rating as that of shaft and shall not open in fire escape staircase. All shafts shall have fire prevention provision as per National Building Code and fire safety requirements of local statutory authorities.

**NOTE** - As per CEA Reg.36 provision in respect of independent electrical service shaft is mandatory for all buildings above 15m height (High-Rise buildings).

#### **1.1.7 Interior design and Electrical Layouts**

It is recommended to prepare interior layouts so as to plan electrical points, locations of switch boards to suite the aesthetics, functionality as well as for comfort and ease of operation.

#### **1.1.8 Aesthetics and Electrical Safety**

To avoid conflicts between Architect from perspective of aesthetic and person executing electrical installation work from the point of view of safety requirements of electrical work, convenience and ease of installation and further maintenance depending on type of wiring (concealed / surface / hybrid), location of distribution boxes, requirement of under-floor trunking / false flooring / false ceiling, wall partitions and openings to enter into / work within as per the need. These points shall be decided at planning stage.

#### **1.1.9 Illumination**

Within interior work number, type, size, and location of luminaries shall be decided and agreed upon mutually between Architect and Electrical Agency, considering technical parameters of lux level, CCT, heat dissipation, accessibility and maintainability.

#### **1.1.10 Ceiling Fans**

Location of ceiling fans shall suite recommended minimum clearance between ceiling / false ceiling and fan blade (225mm), floor level and fan blade(2400mm).Sweep of fan blades shall not obstruct light source. Location and size of fan shall also suite utility from the point of view of users and aesthetically match with false ceiling design.

**NOTE** : Sometimes due to afterthought provision of false ceiling, it creates problems affecting required clearances. Under some cases, replacement of down rod with suitable length may solve problem but in case of limited ceiling height It is not possible.

#### **1.1.11 Exhaust fans**

Wherever provision of exhaust fans is there, cross ventilation shall be considered to allow sufficient fresh air to enter into particular envelop, e.g. for toilets where

exhaust fans are proposed, door under cuts or louvers preferably at lower level for cross ventilation shall be provided.

**NOTE :** Non provision of entry for fresh air creates negative pressure within the envelope increasing load on exhaust fan resulting into heating and subsequent failure.

#### **1.1.12 Earthing**

Location of earthing pits shall be shown on drawings so that those shall always remain open and accessible for testing and maintenance throughout the service period.

#### **1.1.13 Restricted Access**

Areas requiring restricted access to designated person, authorized to carry out electrical work therein shall be provided with necessary arrangements.

#### **1.1.14 Sub stations / Generators / Battery rooms**

Location of required civil structure shall be considered in advance with required height of room, door openings, firefighting system, ventilation etc.

### **1.2 Civil Planning and Constructional Requirements**

It is important to plan activities of civil construction and electrical works in detail on bar chart or similar tools available in project planning. The bar chart shall be updated and coordination be monitored to avoid conflicts, breakages and reworking . Following points give general guidelines.

#### **1.2.1 Fire rating**

The electrical panel rooms, doors, segregation arrangement within shaft shall have fire rating of 2 hours or as per requirements mentioned under NBC, Central Electricity Authority (measures related to Safety and Electric Supply) Regulations, 2010 and further amendments.

#### **1.2.2 Shafts / Ducts /Chambers**

Design and location of cable ducts, shafts, chambers, their covers, and entry points, shall be as per shop drawings provided by electrical agency and shall be in consultation with, considering further aspects of maintenance / repairs / replacement . Size of chambers shall be in consideration with bending radii of cables. At every flooring level, there shall be a provision to seal these shafts, so that in case of fire, it shall not spread, or smoke shall not pass from one floor to other.

#### **1.2.3 Openings and covers**

Manholes / opening of chambers shall not be less than 650mm x 550mm or 650mm India., where opening is intended for entry of person. Covers of manholes, chambers shall bear sufficient strength to withstand loads likely to be imposed on the structure. Covers shall be marked with the name of the service.

Openings / covers of Junction boxes / draw-in boxes / accessories in conduit systems with inspection openings shall always be accessible.

#### **1.2.4 Enclosures for underground cables**

Pipes to be used for cable as enclosures shall be of required diameter so that cable can pass through or removed from easily and have sufficient mechanical strength and shall be erected at required depth to suite requirements of **IS 1255**.

#### **1.2.5 Wall thickness**

Walls shall be of sufficient thickness to accommodate concealed boxes / switchboards / distribution boxes. So that installation of boxes will not affect strength of wall. Additional strengthening shall be considered if necessary.

**NOTE** : Depth of box may be 60 mm or vary depending on manufacturer's design. Under circumstances in 4"/100 mm wall it is not possible to accommodate these boxes back-to-back. Staggering may solve problem to certain extent.

#### **1.2.6 Structural strength**

In Wiring Installation where Cable Ladder, Tray system is used for cable management, its structure along with the load of cables which it is going to support, is likely to impose load on the primary structure of building. This situation occurs when supports of this system are fixed on building structure. For this building structure shall have capacity to bare the load.

At some locations there are chances of conduits getting crowded endangering structural strength due to number of circuits entering / passing out from the particular DB / panel. This situation may occur in beam, slab, and wall. If such situation is unavoidable necessary measures may be required to be taken to retain structural strength.

#### **1.2.7 Sleeves / core cutting**

As far as possible sleeves shall be got erected for entry of wires / cables through wall, flooring, RCC structure during construction to avoid core cutting, damages and reworking at finishing stage. Sometimes core cuttings may be required which shall be done with the consent of structural engineer and under supervision of civil engineer.

#### **1.2.8 Water leakages / seepages**

Design shall take into consideration possible seepages, leakages, accumulation, and ground in-surge of water, which is hazardous to electrical installation. Required provisions shall be made at such locations to prevent and work shall be executed with due care.

#### **1.2.9 Bathrooms /washrooms**

Within bathrooms / washrooms, location of showers, faucets shall be such that during use, water shall not splash on switch boards / electrical outlets / fittings.

**1.2.10 Tandems in Flat Slab post tension structures**

For flat slab post tension structure's locations of tandems marking shall be made to avoid puncture of / damage to tandems during electrical construction activity.

**1.2.11 Earthing**

Any construction work, including excavation, subsequent to construction of earthing electrode/s ; it shall not disturb / damage any part of earthing system. Any civil work on construction site shall not cause cover-up / concealing of any portion of electrical earthing system without notice and consent of person In- Charge of electrical work.

**1.2.12 Sub stations / Generators / Batteries**

Trenches, ventilation, approach roads shall be provided as per necessity.

**2. ELECTRICAL PROVISIONS****2.1 Statutory Obligations - Appointment of Licensed Electrical Contractor**

Reg .29(1) shall be strictly followed by the Developer and work shall be got done through Licensed Electrical Contractor who shall submit Test Report of the work carried-out by him.

Developer may take undertaking from the Licensed Electrical Contractor, who shall be responsible to do the work through the qualified workmen having required permit in that regard. He shall also see that the material to be used, work and workmanship shall conform to respective norms, standards, and Regulations.

**NOTE**-All hidden work shall be checked for conformity with the standards prior to get it concealed, shall be certified by the contractor.

**2.2 Statutory Obligations-Approvals /Permissions / Licenses**

Required approvals shall be taken as per related Rules and Regulations mentioned below prior to the commissioning and handing over the installation for beneficial use.

- Central Electricity Authority (measures related to safety and electric supply) Regulations 2010 and amendments 2015, 2018
- Reg. 32 - Generator Inspection and approval for commissioning.
- Reg. 36 - Multi-storied building (height above 15m): inspection and NOC for commencement of supply
- Reg. 43 -Transformer sub-station or any installation above 660V : inspection and approval before commencement of supply

See Annexure C of above regulations for extract of Regulations.

**2.3 Material**

Material used for Electrical Installation shall conform to the respective Indian standards or International standards where relevant Indian Standards are not available.

Technical Specification of material shall strictly adhere to the design, based on load, use, external influences and safety.

#### **2.4 Wiring Installation**

Electrical Installation shall conform to provisions from related sections of National Electrical Code (NEC) and National Building Code (NBC). See **Annexure A** for minimum / basic requirements from the point of view of Safety and functionality.

#### **2.5 Transformer sub-station**

Transformer sub-station providing supply to the building if located within building shall either use dry type transformer or a transformer filled with Synthetic Ester. Transformer filled with Natural ester shall be used only if transformer is sealed (without breather). For Transformer installed in separate room detached from building structure 7.5m away Mineral oil may be allowed.

#### **2.6 Generator standby supply**

For every high-rise building there must be a provision of generator supply as a standby arrangement which shall be of adequate capacity to cater load of all emergency systems for required time. Location and system of supply shall be such that functioning, and purpose of Generator will not be affected due to emergency like fire in building. If fire authority requires standby supply arrangement for fire-fighting system also, provision of generators shall be made accordingly.

#### **2.7 Handing over Documents**

It shall be a part of obligation on the developer to handover the documents belonging to the prospective owner for his information and which he will need him for reference and maintain as a record.

#### **2.8 MCBs**

For lighting circuit 6A MCB and for power circuit of power point 16A MCB shall be used. For lighting circuits MCBs of B series may be used. For independent circuit of plug points C series MCB shall be provided. Circuits providing supply for appliances like Air-Conditioner / water-pump shall be provided MCBs of 'C' series. AC above 1.5 TR may be provided with MCB of 20 /25 A rating.

#### **2.9 RCDs**

Complete electrical installation must be protected against electrical shock by provision of Residual Current Device (also referred as ELCB/RCCB) having sensitivity of 30mA. RCDs may be provided more than one at suitable locations, to retain supply redundancy. In three phase DBs per phase protection may be provided. For installation having load 10kw and above, it is also recommended to provide RCD of 300mA sensitivity at the source / point of supply to provide protection against Fire due to leakage currents.

**2.10 Main switchgears**

Depending on load provision of MCCBs, Circuit breakers shall be made with precise rating of overload, short-circuit etc.

**3. Provision in respect of High-Rise building****3.1 Supply isolation during Emergency**

Sub Regulation (3) of CEA Regulation No.36 provides for arrangement to completely isolate the supply at the time of emergency. It shall be interpreted as below:

- 3.2** The provision of a device to isolate complete supply, also called Fireman's Switch, is aimed at restricting further danger of short circuits due to fire and spread of fire and shock hazard, restriction on use of Lifts and any other activity running on electrical supply which may aggravate the situation. However supply to emergency services like rescue operation, Fire- Fighting shall not get affected with the operation of this control.
- 3.3** Suitable arrangement shall be done at the point of supply to separate supply of emergency services make arrangements to identify and mark with instructions

**CEA (Measures related to Safety and Electric Supply) Regulations 2010 made under section 53 read with section 177 of Electrical Act2003 Regulation29(1):**

No electrical installation work, including additions, alterations, repairs and adjustments to existing installations, except such replacement of lamps fans, fuses, switches, domestic appliances of voltage not exceeding 250V and fittings as in no way alters its capacity or character, shall be carried out upon the premises of or on behalf of any consumer, supplier, owner or occupier for the purpose of supply to such consumer, supplier, owner or occupier except by an Electrical Contractor licensed in this behalf by the State Government and under the direct supervision of a person holding a certificate of competency and by a person holding a permit issued or recognised by the State Government.

**3.4 Regulation12(1):**

All electric supply lines and apparatus shall be of sufficient rating for power, insulation and estimated fault current and of sufficient mechanical strength, for the duty cycle which they may be required to perform under the environmental conditions of installation, and shall be constructed, installed, protected, worked, and maintained in such a manner as to ensure safety of human beings, animals and property.

**3.5 Regulation12(2):**

Save as otherwise provided in these regulations, the relevant code of practice of The Bureau of Indian Standards or National Electrical Code, if any, may be followed to carry out the purposes of this regulation and in the event of any inconsistency, the provisions of these regulations shall prevail.

**3.6 Regulation12(3):**

The material and apparatus used shall conform to the relevant specifications of the Bureau of Indian Standards or International Electro-Technical Commission where such specifications have already been laid down.

**3.7 Regulation12(4):**

All electrical equipment shall be installed above the Mean Sea level (MSL) as declared by local Municipal Authorities and where such equipment is to be installed in the basement, consumer shall ensure that the design of the basement should be such that there is no seepage or leakage or logging of water in the basement.

**3.8 Regulation 36 Provisions for supply and use of electricity in multistoried building more than15 meters in height: Regulation36 (3)**

The supplier or owner of the installation shall provide at the point of commencement of supply a suitable isolating device with cut-out or breaker to operate on all phases except neutral in the 3-phase,4-wire circuit and fixed in a conspicuous position at not more than1.70meters above the ground so as to completely isolate the supply to the building in case of emergency.





**INDEX FOR ELECTRICAL ITEMS OF TELANGANA BUILDINGS SoR 2021-22**

SL. NO.	INDEX	PAGE NOS	
		FROM	TO
	<b>SECTION - 1</b>		
1.1	M.S.CONDUIT PIPES		
1.2	PVC CONDUIT PIPES		
1.3	HOT DIP GALVANISED METAL BOXES		
1.4	T.W. BOARDS		
1.5	COPPER FLEXIBLE CABLES		
1.6	SERVICE MAINS AND FLAT CABLES OF ISI FOR SUBMERSIBLE MOTORS.		
1.7	FLUSH TYPE SWITCHES AND ACCESSORIES		
1.8	MINI MODULAR SWITCHES AND ACCESSORIES		
1.9	MODULAR SWITCHES AND ACCESSORIES		
	<b>SECTION - 2</b>		
2.1	PANEL MOUNTING SWITCH DISCONNECTOR FUSE UNITS		
2.2	ON LOAD CHANGE OVER SWITCHES. (OPEN EXECUTION)		
2.3	OFF LOAD CHANGE OVER SWITCHES IN SS ENCLOSURE		
2.4	REWIRABLE / DOUBLE BREAK SWITCHES IN SS ENCLOSURE		
2.5	HRC FUSE LINKS (BOLTED TYPE)		
2.6	PORCELAIN REWIRABLE FUSE UNITS.		
2.7	VOLTAGE SURGE PROTECTORS		
2.8	PANEL MOUNTING MCCBs		
2.9	RCCBs		
2.1	RCBOs		
2.11	ACBs		
2.12	RAISING MAINS		
2.13	SANDWITCH BUSDUCT		
2.14	MCBs		
2.15	ISOLATORS		
2.16	SPN DBs		
2.17	TPN DBs		
	<b>SECTION - 3</b>		
3.1	STREET LIGHT LUMINAIRES		
3.2	POST TOP LANTERN LUMINAIRES		
3.3	ACCESSORIES FOR MV / SV / MH LUMINAIRES		
3.4	LAMPS		
3.5	AUTOMATIC STREET LIGHT CONTROL SYSTEMS		
3.6	INTERNAL LUMINAIRES		
3.7	ACCESSORIES		
3.8	FLOURSCENT TUBES / CFL LAMPS		
3.9	LED LUMINAIRES INDOOR		
3.1	LED INDOOR LAMPS		
3.11	LED STREET LIGHTS		
3.12	LED DRIVERS		
	<b>SECTION - 4</b>		
4.1	U.G. CABLES, 11 KV H. T. XLPE CABLES		
4.2	11 KV H. T. XLPE CABLES		
4.3	CABLE GLANDS		
4.4	LUGS		
4.5	HEAT SHRINKABLE LT CABLE JOINTS		
4.6	11 KV 3 CORE HT CABLE STRAIGHT THROUGH JOINTS		
4.7	HT END TERMINATION KITS		
4.8	CABLE FAULT DETECTION		
4.9	DOUBLE WALLED CORRUGATED HDPE PIPE		
4.1	CABLE TRAYS		
	<b>SECTION - 5</b>		
5.1	CEILING AND EXHAUST FANS		
5.2	WATER HEATERS		
5.3	ACCESSORIES FOR WATER HEATERS		
5.4	STARTERS FOR MOTORS		
5.5	SINGLE PHASE SUBMERSIBLE MOTOR PUMP SETS		

5.6	THREE PHASE SUBMERSIBLE MOTOR PUMP SETS.		
5.7	SINGLE PHASE OPEN WELL SUBMERSIBLE MOTOR PUMP SETS.		
5.8	THREE PHASE OPEN WELL SUBMERSIBLE PUMP SETS.		
5.9	SINGLE PHASE MONO BLOCK MOTOR PUMP SETS.		
5.1	CONTROL PANEL BOARD FOR MOTORS		
5.11	UPVC PIPES AND FITTINGS		
5.12	REPAIRS TO MOTORS AND REWINDING, BEARINGS		
5.13	ACCESSORIES OF MOTORS		
	<b>SECTION - 6</b>		
6.1	AIR CONDITIONERS		
6.2	INVERTER SPLIT AC UNITS (COOLING ONLY)		
6.3	INVERTER CASSETTE TYPE AC UNITS		
6.4	TOWER MODEL TYPE AC UNITS		
6.5	REPAIRS TO AIR CONDITIONERS		
6.6	EVAPORATIVE AIR COOLING SYSTEM, THERMAL INSULATION		
6.7	STABILIZERS		
	<b>SECTION - 7</b>		
7.1	SWAGED POLES		
7.2	GARDEN POSTS		
7.3	OCTOGONAL POLES		
7.4	BRACKETS		
7.5	HIGH MAST POLES		
7.6	FEEDER PILLER BOX		
7.7	ERRECTION OF HIGH MAST POLES		
7.8	CONICAL POLES		
7.9	DECORATIVE DRAGON TYPE BRACKET WITH POLE		
7.1	THERMO PLASTIC POLE BOXES		
7.11	FOUNDATION AND ERRECTION CHARGES OF POLES		
7.12	G R P POLES		
7.13	CONTROL PANEL BOARD		
7.14	METERING EQUIPMENT		
7.15	SUB STATION EQUIPMENT		
7.16	TRANSFORMERS		
7.17	L.T. LINE MATERIALS AND LIGHTENING PROTECTIVE SYSTEM		
	<b>SECTION - 8</b>		
8.1	NET WORKING		
8.2	RACEWAYS AND JUNCTION BOXES		
8.3	EPABX SYSTEM		
	<b>SECTION - 9</b>		
9.1	MISCELLANIOUS ITEMS		
9.2	LEGEND PLATES		
9.3	COPPER / ALLUMINIUM / G.I. ITEMS (PER KG)		
9.4	SMC TYPE SUPPORTS FOR THE BUSBARS		
	<b>SECTION - 10</b>		
10.1	WIRELESS FIRE ALARAM SYSTEM		
10.2	ADDRESSABLE - FIRE ALARAM SYSTEM		
10.3	CONVENTIONAL - FIRE ALARAM SYSTEM		
10.4	POWDER BASED FIRE EXTINGUISHERS		
10.5	CLEAN AGENT FIRE EXTINGUISHERS		
10.6	WATER MIST FIRE EXTINGUISHERS		
10.7	FIRE HYDRANT AND SPRINKLER SYSTEM		
	<b>SECTION - 11</b>		
11.1	GENERATORS		
	<b>SECTION - 12</b>		
12.1	U P S SYSTEMS		
12.2	UPS BATTERY RACKS AND WIRE LEADS		
	<b>SECTION - 13</b>		
13.1	PUBLIC ADDRESSING SYSTEM		
	<b>SECTION - 14</b>		
14.1	OLD MATERIAL RATES		

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		<b>SECTION - 1</b>			
	<b>1.1</b>	<b>M.S. CONDUIT PIPES</b>			
	<b>ELEC-1.1.1</b>	Supply of ISI, ----- dia, 1.6mm thickness MS conduit pipe as per IS 9537 Part II / 1981. Makes : NAI / Bharath / GB / BEC / Super.			
1	a	20mm	1	Mtr	99.00
2	b	25mm	1	Mtr	127.00
3	c	32mm	1	Mtr	182.00
	<b>ELEC-1.1.2</b>	Supply of ISI, ----- dia, 2.0mm thickness MS conduit pipe as per IS 9537 Part II / 1981. Makes : NAI / Bharath / GB / BEC / Super.			
4	a	40mm	1	Mtr	303.00
5	b	50mm	1	Mtr	380.00
		<b>HOT DIP GALVANIZED CONDUIT PIPES</b>			
	<b>ELEC-1.1.3</b>	Supply of ISI, ----- dia, 1.6mm thickness hot dip galvanized conduit pipe as per IS 9537 Part II / 1981. Makes : NAI / Bharath / GB / BEC / Super.			
6	a	20mm	1	Mtr	160.00
7	b	25mm	1	Mtr	193.00
8	c	32mm	1	Mtr	297.00
	<b>ELEC-1.1.4</b>	Supply of ISI, ----- dia, 2.0mm thickness hot dip galvanized conduit pipe as per IS 9537 Part II / 1981. Makes : NAI / Bharath / GB / BEC / Super.			
9	a	40mm	1	Mtr	473.00
10	b	50mm	1	Mtr	550.00
	<b>ELEC-1.1.5</b>	Supply of ----- MS Junction box normal range big size long neck.			
11	a	19 / 20 mm	1	No	26.00
12	b	25 mm	1	No	30.00
13	c	32 mm	1	No	80.00
14	d	40 / 38 mm	1	No	116.00
15	e	50 mm	1	No	226.00
	<b>ELEC-1.1.6</b>	Supply of-----MS Junction deep box.			
16	a	20/25mm	1	No	72.00
17	b	32mm	1	No	127.00
18	c	40mm	1	No	154.00
19	d	50mm	1	No	187.00
	<b>ELEC-1.1.7</b>	Supply of-----MS Inspection Bends.			
20	a	19/20mm	1	No	24.00
21	b	25mm	1	No	26.00
22	c	32mm	1	No	58.00
23	d	40/38mm	1	No	90.00
24	e	50mm	1	No	193.00
	<b>ELEC-1.1.8</b>	Supply of-----MS Inspection Tee.			
25	a	19/20mm	1	No	26.00
26	b	25mm	1	No	29.00
27	c	32mm	1	No	79.00
28	d	40/38mm	1	No	96.00
29	e	50mm	1	No	198.00
	<b>ELEC-1.1.9</b>	Supply of-----MS Inspection Elbow.			
30	a	19/20mm	1	No	21.00
31	b	25mm	1	No	22.00
32	c	32mm	1	No	62.00
33	d	40/38mm	1	No	79.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
34	e	50mm	1	No	176.00
	<b>ELEC-1.1.10</b>	Supply of MS Inspection 10 Gauge G.I. checknut size			
35	a	19/20mm	100	Nos	220.00
36	b	25mm	100	Nos	275.00
37	c	32mm	100	Nos	561.00
38	d	40/38mm	100	Nos	847.00
39	e	50mm	100	Nos	1331.00
	<b>ELEC-1.1.11</b>	Supply of-----Saddles with Base.			
40	a	19/20mm	100	Nos	220.00
41	b	25mm	100	Nos	231.00
42	c	32mm	100	Nos	424.00
43	d	40/38mm	100	Nos	726.00
44	e	50mm	100	Nos	919.00
	<b>ELEC-1.1.12</b>	Supply of-----20 gauge Saddles.			
45	a	19/20mm	100	Nos	121.00
46	b	25mm	100	Nos	154.00
47	c	32mm	100	Nos	253.00
48	d	40/38mm	100	Nos	336.00
49	e	50mm	100	Nos	435.00
	<b>ELEC-1.1.13</b>	Supply of-----16 Gauge socket coupler.			
50	a	19/20mm	12	Nos	63.00
51	b	25mm	12	Nos	74.00
52	c	32mm	12	Nos	171.00
53	d	38mm	12	Nos	308.00
54	e	40mm	12	Nos	176.00
55	f	50mm	12	Nos	506.00
	<b>ELEC-1.1.14</b>	Supply of-----Ball Socket.			
56	a	19mm	12	Nos	264.00
57	b	25mm	12	Nos	391.00
	<b>1.2</b>	<b>PVC CONDUIT PIPES &amp; CASING AND CAPING</b>			
	<b>ELEC-1.2.1</b>	Supply of ISI -----outer dia heavy grade, FRLS with IS:9537 part 3 rigid PVC pipe. Makes : Sudhakar / Finolex / Modi / VIP / Precision / Universal / Million Plast / Gold / Polycab / DEC / Beljin / Champion / Austro			
58	a	20mm	1	Mtr	26.00
59	b	25mm	1	Mtr	35.00
	<b>ELEC-1.2.2</b>	Supply of ISI ----- outer dia medium grade, FRLS with IS:9537 part 3 rigid PVC pipe. Makes : Sudhakar / Finolex / Modi / VIP / Precision / Universal / Million Plast / Gold / Polycab / DEC / Beljin / Champion / Austro			
60	a	20mm	1	Mtr	19.00
61	b	25mm	1	Mtr	25.00
62	c	32mm	1	Mtr	41.00
63	d	40mm	1	Mtr	56.00
64	e	50mm	1	Mtr	79.00
65	f	38/40mm	1	Mtr	61.00
	<b>ELEC-1.2.3</b>	Supply of ----- FRPP Flexible Conduit Pipe. Make: Precision or its equivalent			
66	a	20mm	1	Mtr	13.00
67	b	25 mm	1	Mtr	16.00
68	c	32 mm	1	Mtr	25.00
69	d	40 mm	1	Mtr	35.00
70	e	50 mm	1	Mtr	57.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
	<b>ELEC-1.2.4</b>	Supply of ----- PVC Flexible Couplings. Make: Precision or its equivalent			
71	<b>a</b>	19/20mm	1	No	12.00
72	<b>b</b>	25mm	1	No	15.00
73	<b>c</b>	32mm	1	No	27.00
74	<b>d</b>	38/40mm	1	No	29.00
75	<b>e</b>	50mm	1	No	59.00
	<b>ELEC-1.2.4</b>	Supply of ----- width and 12.5mm height Casing and Caping. Makes : Modi with ISI or its equivalent make			
76	<b>a</b>	19/20mm	1	Mtr	25.00
77	<b>b</b>	25mm	1	Mtr	32.00
78	<b>c</b>	32mm	1	Mtr	36.00
79	<b>d</b>	38/40mm	1	Mtr	61.00
	<b>ELEC-1.2.5</b>	Supply of----- PVC Junction Boxes Normal. Makes : Sudhakar / Finolex / Modi / VIP / Precision DEC / Beljin / Champion / Austro			
80	<b>a</b>	19 / 20mm	1	No	20.00
81	<b>b</b>	25 mm	1	No	21.00
82	<b>c</b>	32 mm	1	No	37.00
83	<b>d</b>	40 mm	1	No	39.00
84	<b>e</b>	50 mm	1	No	55.00
	<b>ELEC-1.2.6</b>	Supply of PVC Junction Boxes Deep size Makes : Sudhakar / Finolex / Modi / VIP / Precision / DEC / Beljin / Champion / Austro			
85	<b>a</b>	19 / 20mm	1	No	24.00
86	<b>b</b>	25 mm	1	No	27.00
87	<b>c</b>	32 mm	1	No	43.00
88	<b>d</b>	40 mm	1	No	46.00
89	<b>e</b>	50 mm	1	No	67.00
	<b>ELEC-1.2.7</b>	Supply of ----- dia medium grade PVC Bends. Makes : Sudhakar / Finolex / Modi / VIP / Precision / DEC / Beljin / Champion / Austro			
90	<b>a</b>	19 / 20mm	1	No	6.00
91	<b>b</b>	25 mm	1	No	8.00
	<b>ELEC-1.2.8</b>	Supply of ----- dia Heavy Grade PVC Bends. Makes : Sudhakar / Finolex / Modi / VIP / Precision / DEC / Beljin / Champion / Austro			
92	<b>a</b>	32 mm	1	No	19.00
93	<b>b</b>	40 mm	1	No	21.00
94	<b>c</b>	50 mm	1	No	30.00
95	<b>ELEC-1.2.9</b>	Dummy Cover to PVC junction boxes	1	No	5.00
	<b>Note:</b>	If Non-ISI Pipes / Non-ISI Casing & capping are used during execution of work, for arriving the Non-ISI Pipe / Non-ISI casing & capping rates 15% may be deducted from the finished Cost data of ISI Pipe.			
	<b>1.3</b>				
		<b>HOT DIP GALVANIZED METAL BOXES (MODULAR)</b>			
	<b>ELEC-1.3.1</b>	Supply of ----- Module box Makes : Similar to Switches Make			
96	<b>a</b>	1 or 2	1	No	62.00
97	<b>b</b>	3	1	No	88.00
98	<b>c</b>	4	1	No	104.00
99	<b>d</b>	6	1	No	143.00
100	<b>e</b>	8 or 9 Module box Horizontal/Vertical.	1	No	185.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
101	f	12	1	No	224.00
		<b>MODULAR COVER FRAMES</b>			
	ELEC-1.3.2	Supply of ----- Modular Cover Frame. Makes : Legrand Arteor / Schneider Zen celo / Honeywell Blenge Plus / Crabtree Amare / Logus Platina / Gold Medal GIFA / GM-Zenova/ L&T-Englaze			
102	a	1 or 2	1	No	69.00
103	b	3	1	No	84.00
104	c	4	1	No	97.00
105	d	6	1	No	143.00
106	e	8 or 9 Modular Horizontal / Vertical Cover Frame.	1	No	185.00
107	f	12	1	No	229.00
	ELEC-1.3.3	Supply of ----- Modular Cover Frame. Makes : Legrand Myrius / Million Tap-Wood / Anchor Roma viola / Havells Fabio / C&S Prime / CPL Vysma / Benlo Vesta / Polycab Levana			
108	a	1 or 2	1	No	61.00
109	b	3	1	No	74.00
110	c	4	1	No	88.00
111	d	6	1	No	120.00
112	e	8 or 9 Modular Horizontal / Vertical Cover Frame.	1	No	148.00
113	f	12	1	No	180.00
		<b>METALLIC BOXES (MS)</b>			
	ELEC-1.3.4	Supply of ----- Metal Box			
114	a	4" x 4"	1	No	51.00
115	b	4" x 7"	1	No	60.00
116	c	6" x 6"	1	No	76.00
117	d	6" x 8"	1	No	101.00
118	e	8" x 10"	1	No	179.00
119	f	10" x 12"	1	No	226.00
	1.4	<b>WOODEN BOARDS</b>			
	ELEC-1.4.1	Supply of Wooden Deep Boards / Wooden Deep Boxes of following Size or its equivalent.			
120	a	4" x 4"	1	No	11.00
121	b	4" x 7"	1	No	19.00
122	c	6" x 6"	1	No	23.00
123	d	6" x 8"	1	No	32.00
124	e	8" x 10"	1	No	50.00
125	f	10" x 12"	1	No	77.00
126	g	12" x 15"	1	No	116.00
	ELEC-1.4.2	Supply of Decolam Board of Size or its equivalent.			
127	a	4" x 4"	1	No	15.00
128	b	4" x 7"	1	No	26.00
129	c	6" x 6"	1	No	35.00
130	d	6" x 8"	1	No	46.00
131	e	8" x 10"	1	No	77.00
132	f	10" x 12"	1	No	116.00
133	g	12" x 15"	1	No	173.00
	ELEC-1.4.3	Supply of Peeta Board of Size ----- or its equivalent.			
134	a	9" x 14"	1	No	57.00
135	b	12" x 10"	1	No	59.00
136	c	15" x 20"	1	No	200.00
137	d	18" x 24"	1	No	289.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
138	e	18" x 30"	1	No	362.00
		<b>SCREWS</b>			
	<b>ELEC-1.4.4</b>	Supply of No.8 Screws of size-----			
139	a	12mm.	100	Nos	71.00
140	b	25mm.	100	Nos	88.00
141	c	30mm.	100	Nos	108.00
142	d	35/38mm.	100	Nos	116.00
143	e	50mm.	100	Nos	133.00
144	f	63/75mm.	100	Nos	162.00
	<b>1.5</b>	<b>COPPER FLEXIBLE CABLES</b>			
		<b>(AS PER IS:694)</b>			
	<b>ELEC-1.5.1</b>	Supply of -----FRLSH / HFFR PVC insulated 1100V grade as per IS:694/1990, IS 17048 specifications for Copper cable. Makes : Finolex / RR kabel / Havells / Beljin(HFFR)/Ollivin(HFFR) / Finecab (HFFR) / GM(HFFR) / Gold Medal(HFFR) /Million(HFFR) / KEI (HFFR) / Polycab (HFFR) / V-Guard (HFFR). / DEC(HFFR) / Bonton (HFFR) and Avocab (HFFR) / Southking (HFFR) / Fortune Arrt (HFFR)			
145	a	1.5 Sq.mm	100	Mtrs	1885.00
146	b	2.5 Sq.mm	100	Mtrs	3047.00
147	c	4.0 Sq.mm	100	Mtrs	4652.00
148	a	6.0 Sq.mm	100	Mtrs	7116.00
149	b	10.0 Sq.mm	100	Mtrs	10987.00
150	c	16.0 Sq.mm	100	Mtrs	17354.00
	<b>ELEC-1.5.2</b>	Supply of -----FRLSH / HFFR PVC insulated 1100V grade as per IS:694/1990 specification for copper cable. Makes : HPL / RPG / Kundancab / Nakoda / Anchor / Power Flex / Fine Cab / Sun Cab / Fortune Arrt / Delton / Airson / Benlo / Gloster / Gemini / Uniflex / Sudhakar / Nandicab / Savera Champion / Rhino			
151	a	1.5 Sq.mm	100	Mtrs	1648.00
152	b	2.5 Sq.mm	100	Mtrs	2672.00
153	c	4.0 Sq.mm	100	Mtrs	4120.00
154	d	6.0 Sq.mm	100	Mtrs	6367.00
155	e	10.0 Sq.mm)	100	Mtrs	9676.00
156	f	16.0 Sq.mm	100	Mtrs	16105.00
	<b>ELEC-1.5.3</b>	Supply of -----FRLS / HFFR PVC insulated 1100V grade as per IS:694/1990 specification for copper cable. Makes : Khanthi / Vimal / Stanjo / Rajnigandha / Orbit			
157	a	1.5 Sq.mm	100	Mtrs	1344.00
158	b	2.5 Sq.mm	100	Mtrs	2160.00
159	c	4.0 Sq.mm	100	Mtrs	3240.00
160	d	6.0 Sq.mm	100	Mtrs	5040.00
161	e	10.0 Sq.mm	100	Mtrs	7980.00
162	f	16.0 Sq.mm	100	Mtrs	12240.00
163	<b>ELEC-1.5.5</b>	Supply of 23 / 0060 , 3 core (0.15 mm dia of each lead) twisted / flat heavy Copper wire. Makes : Finolex / RR Kabel / Havells / Polycab / GM / Million / V-Guard / Gold Medal / Kundancab / HPL / RPG / Nandicab / Nakoda / Payal / Finecab / Gemini / Vimal / Suncab	100	Mtrs	1176.00
		<b>NOTE : If FR Wires are used instead of FRLSH / HFFR during execution of work, for arriving the FR Flexible wires rates 20% may be deducted</b>			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		from the finished Cost data of Light / Fan / Separate Plug Points and Run of mains.			
		<b>SHEATHED FLEXIBLE COPPER CABLES</b>			
	<b>ELEC-1.5.6</b>	Supply of ..... PVC / XLPE Insulated Sheathed Multi Core Bright Annealed Bare Copper Conductor Heavy Duty Industrial Cables for Voltage Grade up to 1100 Volts as per IS: <b>694:1990</b> including all transportation charges etc complete. Makes : Finolex / RR kabel / Havells / Polycab / RPG / KEI / Gloster / V-Guard			
164	a	25 Sq.mm Single Core	1	RM	264.00
165	b	35 Sq.mm Single Core	1	RM	372.00
166	c	50 Sq.mm Single Core	1	RM	528.00
167	d	70 Sq.mm Single Core	1	RM	720.00
168	e	1.5 Sq.mm 2 core	1	RM	55.00
169	f	2.5 Sq.mm 2 Core	1	RM	86.00
170	g	4.0 Sq.mm 2 Core	1	RM	116.00
171	h	6.0 Sq.mm 2 Core	1	RM	180.00
172	i	10.0 Sq.mm 2 Core	1	RM	264.00
173	j	16.0 Sq.mm 2 Core	1	RM	324.00
174	k	1.5 Sq.mm 3 core	1	RM	74.00
175	l	2.5 Sq.mm 3 Core	1	RM	126.00
176	m	4.0 Sq.mm 3 Core	1	RM	168.00
177	n	6.0 Sq.mm 3 Core	1	RM	222.00
178	o	10.0 Sq.mm 3 Core	1	RM	288.00
179	p	16.0 Sq.mm 3 Core	1	RM	456.00
180	q	1.5 Sq.mm 4 Core	1	RM	97.00
181	r	2.5 Sq.mm 4 Core	1	RM	150.00
182	s	4.0 Sq.mm 4 Core	1	RM	228.00
183	t	6.0 Sq.mm 4 Core	1	RM	348.00
184	u	10.0 Sq.mm 4 Core	1	RM	528.00
185	v	16.0 Sq.mm 4 Core	1	RM	672.00
186	w	25.0 Sq.mm 4 Core	1	RM	1104.00
187	x	35.0 Sq.mm 4 Core	1	RM	1656.00
188	y	50.0 Sq.mm 4 Core	1	RM	2184.00
189	z	70.0 Sq.mm 4 Core	1	RM	3120.00
	<b>ELEC-1.5.7</b>	Supply of ..... PVC / XLPE Insulated Sheathed Multi Core Bright Annealed Bare Copper Conductor Heavy Duty Industrial Cables for Voltage Grade up to 1100 Volts as per IS: <b>694:1990</b> including all transportation charges etc complete. Makes : Nakoda / Sun cab / Sudhakar / Powerflex / Gemini / Ollvin / Delton / Airson / HPL / Beljin / Savera Champion / Rhino			
190	a	25 Sq.mm Single Core	1	RM	240.00
191	b	35 Sq.mm Single Core	1	RM	348.00
192	c	50 Sq.mm Single Core	1	RM	480.00
193	d	70 Sq.mm Single Core	1	RM	684.00
194	e	1.5 Sq.mm 2 core	1	RM	53.00
195	f	2.5 Sq.mm 2 Core	1	RM	78.00
196	g	4.0 Sq.mm 2 Core	1	RM	108.00
197	h	6.0 Sq.mm 2 Core	1	RM	168.00
198	i	10.0 Sq.mm 2 Core	1	RM	240.00
199	j	16.0 Sq.mm 2 Core	1	RM	300.00
200	k	1.5 Sq.mm 3 core	1	RM	72.00
201	l	2.5 Sq.mm 3 Core	1	RM	120.00
202	m	4.0 Sq.mm 3 Core	1	RM	156.00



Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
203	n	6.0 Sq.mm 3 Core	1	RM	210.00
204	o	10.0 Sq.mm 3 Core	1	RM	270.00
205	p	16.0 Sq.mm 3 Core	1	RM	420.00
206	q	1.5 Sq.mm 4 Core	1	RM	90.00
207	r	2.5 Sq.mm 4 Core	1	RM	132.00
208	s	4.0 Sq.mm 4 Core	1	RM	210.00
209	t	6.0 Sq.mm 4 Core	1	RM	330.00
210	u	10.0 Sq.mm 4 Core	1	RM	492.00
211	v	16.0 Sq.mm 4 Core	1	RM	636.00
212	w	25.0 Sq.mm 4 Core	1	RM	1044.00
213	x	35.0 Sq.mm 4 Core	1	RM	1560.00
214	y	50.0 Sq.mm 4 Core	1	RM	2040.00
215	z	70.0 Sq.mm 4 Core	1	RM	2880.00
	<b>ELEC-1.5.8</b>	Supply of ..... PVC / XLPE Insulated, Flexible Armouring Flexible Copper cable as per IS 7098 / Part-I / 1988 including all transportation charges etc complete. Makes : Finolex / RR kabel / Havells / Polycab / RPG / KEI / Gloster / V-Guard / Ollivin / Beljin / Bonton / Avocab			
216	a	1.5 Sq.mm 2 Core	1	RM	83.00
217	b	2.5 Sq.mm 2 Core	1	RM	102.00
218	c	4.0 Sq.mm 2 Core	1	RM	150.00
219	d	6.0 Sq.mm 2 Core	1	RM	210.00
220	e	10.0 Sq.mm 2 Core	1	RM	294.00
221	f	16.0 Sq.mm 2 Core	1	RM	402.00
222	g	1.5 Sq.mm 3 Core	1	RM	106.00
223	h	2.5 Sq.mm 3 Core	1	RM	138.00
224	i	4.0 Sq.mm 3 Core	1	RM	174.00
225	j	6.0 Sq.mm 3 Core	1	RM	246.00
226	k	10.0 Sq.mm 3 Core	1	RM	306.00
227	l	16.0 Sq.mm 3 Core	1	RM	432.00
228	m	1.5 Sq.mm 4 Core	1	RM	132.00
229	n	2.5 Sq.mm 4 Core	1	RM	168.00
230	o	4.0 Sq.mm 4 Core	1	RM	252.00
231	p	6.0 Sq.mm 4 Core	1	RM	354.00
232	q	10.0 Sq.mm 4 Core	1	RM	546.00
233	r	16.0 Sq.mm 4 Core	1	RM	924.00
234	s	25.0 Sq.mm 4 Core	1	RM	1428.00
235	t	35.0 Sq.mm 4 Core	1	RM	1956.00
236	u	50.0 Sq.mm 4 Core	1	RM	2772.00
237	v	70.0 Sq.mm 4 Core	1	RM	4260.00
238	w	2.5 Sq.mm 8 Core	1	RM	306.00
239	x	2.5 Sq.mm 16 Core	1	RM	408.00
240	y	1.5 Sq.mm 10 Core	1	RM	258.00
241	z	1.5 Sq.mm 16 Core	1	RM	378.00
	<b>ELEC-1.5.9</b>	Supply of ..... PVC / XLPE Insulated, Flexible Armouring Flexible Copper cable as per IS 7098 / Part-I / 1988 including all transportation charges etc complete. Makes : Nakoda / Gemini / HPL / Delton / Airson / Rhino			
242	a	1.5 Sq.mm 2 Core	1	RM	72.00
243	b	2.5 Sq.mm 2 Core	1	RM	96.00
244	c	4.0 Sq.mm 2 Core	1	RM	138.00
245	d	6.0 Sq.mm 2 Core	1	RM	192.00
246	e	10.0 Sq.mm 2 Core	1	RM	270.00
247	f	16.0 Sq.mm 2 Core	1	RM	378.00
248	g	1.5 Sq.mm 3 Core	1	RM	96.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
249	h	2.5 Sq.mm 3 Core	1	RM	126.00
250	i	4.0 Sq.mm 3 Core	1	RM	162.00
251	j	6.0 Sq.mm 3 Core	1	RM	222.00
252	k	10.0 Sq.mm 3 Core	1	RM	270.00
253	l	16.0 Sq.mm 3 Core	1	RM	390.00
254	m	1.5 Sq.mm 4 Core	1	RM	120.00
255	n	2.5 Sq.mm 4 Core	1	RM	156.00
256	o	4.0 Sq.mm 4 Core	1	RM	222.00
257	p	6.0 Sq.mm 4 Core	1	RM	330.00
258	q	10.0 Sq.mm 4 Core	1	RM	510.00
259	r	16.0 Sq.mm 4 Core	1	RM	840.00
260	s	25.0 Sq.mm 4 Core	1	RM	1140.00
261	t	35.0 Sq.mm 4 Core	1	RM	1680.00
262	u	50.0 Sq.mm 4 Core	1	RM	2400.00
263	v	70.0 Sq.mm 4 Core	1	RM	3600.00
264	w	2.5 Sq.mm 8 Core	1	RM	264.00
265	x	2.5 Sq.mm 16 Core	1	RM	360.00
266	y	1.5 Sq.mm 10 Core	1	RM	240.00
267	z	1.5 Sq.mm 16 Core	1	RM	360.00
	<b>1.6</b>	<b>SERVICE MAINS AND FLAT CABLE OF ISI FOR SUBMERSIBLE MOTORS.</b>			
	<b>ELEC-1.6.1</b>	Supply of ----- WPSC (Weatherproof Single Core) ISI mark Aluminum Wire. Makes : Polycab / GM / Million / V-Guard / Gold Medal / Kundancab / HPL / RPG / Nandicab / Nakoda / Payal / Finecab / Gemini / Vimal / Suncab / Stanjo / Rajnigandha / Orbit / Airson / Beljin / Savera Champion / Rhino			
268		a	2.5 Sq.mm	100	Mtrs
269	b	6.0 Sq.mm	100	Mtrs	1680.00
270	c	10.0 Sq.mm	100	Mtrs	1812.00
271	d	16 Sq.mm	100	Mtrs	3024.00
	<b>ELEC-1.6.2</b>	Supply of ----- WPTC (Weatherproof Twin Core) ISI mark Aluminum Wire. Makes : Polycab / GM / Million / V-Guard / Gold Medal / Kundancab / HPL / RPG / Nandicab / Nakoda / Payal / Finecab / Gemini / Vimal / Suncab / Stanjo / Rajnigandha / Orbit / Airson / Beljin / Savera Champion. / Rhino			
272		a	6 Sq.mm	100	Mtrs
273	b	10 Sq.mm	100	Mtrs	4080.00
	<b>ELEC-1.6.3</b>	Supply of 3 Core ----- Flat Copper cable of ISI for Submersible Motors. Makes : Finolex / RR Kabel / Havells / KEI / L&T			
274		a	1.5 Sq.mm	100	Mtrs
275	b	2.5 Sq.mm	100	Mtrs	10920.00
276	c	4.0 Sq.mm	100	Mtrs	16320.00
277	d	6.0 Sq.mm	100	Mtrs	24000.00
278	e	10.0 Sq.mm	100	Mtrs	38880.00
	<b>ELEC-1.6.4</b>	Supply of 3 Core ----- Flat Copper cable of ISI for Submersible Motors. Makes : Polycab / GM / Million / V-Guard / Gold Medal / Kundancab / HPL / RPG / Nandicab / Payal / Finecab / Gemini / Vimal / Suncab / Delton / Ollvin / Airson / Stanjo/ Nakoda / Beljin / Savera Champion / Rhino			
279		a	1.5 Sq.mm	100	Mtrs
280	b	2.5 Sq.mm	100	Mtrs	10320.00
281	c	4.0 Sq.mm	100	Mtrs	15480.00
282	d	6.0 Sq.mm	100	Mtrs	22800.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
283	e	10.0 Sq.mm	100	Mtrs	36960.00
	<b>1.7</b>	<b>FLUSH TYPE SWITCHES AND ACCESSORIES</b>			
	<b>ELEC-1.7.1</b>	Supply of -----			
		Makes : GM G Home / Gold Medal Olive / Million Zoom / Anchor Penta Cherry / Great white Omega / HPL / Vimal / CPL.			
284	a	6A 1 Way flush type Switch.	1	No	18.00
285	b	6A 2 Way flush type Switch.	1	No	21.00
286	c	6A 2 pin flush type Socket.	1	No	20.00
287	d	6A 3/2 pin flush type Socket with shutter.	1	No	26.00
288	e	6A flush type Neon Indicator.	1	No	20.00
289	f	6A Triangle Plug Top .	1	No	36.00
290	g	6A 1 Way flush type Bed Switch / Bell Push.	1	No	21.00
291	h	16A flush type Switch.	1	No	65.00
292	i	16A flush type Socket with shutter.	1	No	65.00
293	j	16A flush type Switch Socket combined (2 in one).	1	No	102.00
294	k	16A Triangle Plug Top.	1	No	51.00
295	l	Stepped type Electronic Regulator.	1	No	220.00
296	m	3 Plate Jumbo Ceiling Rose.	1	No	21.00
297	n	BH / SBH.	1	No	20.00
298	o	Pendent Holder / Adopter.	1	No	18.00
299	p	Telephone Jack with Connector	1	No	48.00
300	q	TV Antenna Outlet.	1	No	26.00
301	r	15A/10A Flush type Fuse.	1	No	33.00
302	s	32A DP Flush type	1	No	107.00
	<b>ELEC-1.7.2</b>	Supply of -----			
		Makes : GM / Million / Gold Medal / Anchor / Great white.			
303	a	Buzzer.	1	No	50.00
304	b	Ding Dong Bell.	1	No	105.00
305	c	Electronic Musical Bell.	1	No	242.00
306	d	Remote Bell.	1	No	583.00
307	e	MC Holder.	1	No	22.00
308	f	Spike Guard with 1 No Switch and 4 Nos Sockets.	1	No	495.00
309	g	Spike Guard with 4 No Switches and 4 Nos Sockets.	1	No	737.00
	<b>1.8</b>	<b>MINI MODULAR SWITCHES AND ACCESSORIES</b>			
	<b>ELEC-1.8.1</b>	Supply of -----			
		Makes : GM / Anchor / Million / Vimal / Gold Medal / CPL / Great White.			
310	a	6A 1 Way Mini Modular Switch with Cover Frame.	1	No	23.00
311	b	6A 2 Way Mini Modular Switch with Cover Frame.	1	No	26.00
312	c	6A 2 Pin Mini Modular Socket with Cover Frame.	1	No	24.00
313	d	6A 3/2 Pin Mini Modular Socket with Cover Frame.	1	No	35.00
314	e	6A Mini Modular Neon Indicator with Cover Frame.	1	No	28.00
315	f	6A Mini Modular Bed Switch / Bell Push with Cover Frame.	1	No	26.00
316	g	6A 1 Way Mini Modular Switch with Neon Indicator with Cover Frame.	1	No	28.00
317	h	6A Mini Modular Bell Push with Neon Indicator with Cover Frame.	1	No	39.00
318	i	16A Mini Modular Switch with Cover Frame.	1	No	79.00
319	j	16A (2 in one) Mini Modular Switch & Socket	1	No	108.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		combined with Cover Frame.			
320	k	16A Triangle Top with Cover Frame.	1	No	48.00
321	l	Mini Modular Stepped type Electronic Regulator with Cover Frame.	1	No	237.00
322	m	Mini Modular Telephone Jack with Connector with Cover Frame.	1	No	53.00
323	n	Mini Modular TV Antenna Outlet with Cover Frame.	1	No	35.00
324	o	16A/10A Mini Modular Flush Fuse with Cover Frame.	1	No	40.00
	<b>1.9</b>	<b>MODULAR SWITCHES AND ACCESSORIES</b>			
	<b>ELEC-1.9.1</b>	Supply of -----			
		Makes : Legrand Arteor / Schneider Zen celo / Honeywell Blenge Plus / Crabtree Amare / Logus Platina / Gold Medal GIFA / GM-Zenova/ L&T-Englaze			
325	a	10A 1 Way 1 Module Modular Switch	1	No	101.00
326	b	10A 2 Way 1 Module Modular Switch.	1	No	111.00
327	c	10A 2 Pin 2 Module Modular Socket.	1	No	102.00
328	d	10A 3/2 Pin 2 Module Modular Socket with shutter.	1	No	155.00
329	e	10A 1 Module Modular Switch with Neon Indicator.	1	No	125.00
330	f	10A Modular Bell Push with Neon Indicator.	1	No	150.00
331	g	16A / 10A Modular Flush Fuse with Neon Indicator.	1	No	136.00
332	h	16A / 20A 1 Way 1 Module Modular Switch.	1	No	136.00
333	i	16A / 20A 2 Way 1 Module Modular Switch.	1	No	152.00
334	j	20A 1 Way 1 Module Modular Switch with Indicator.	1	No	152.00
335	k	20A 2 Module Modular Socket with shutter.	1	No	207.00
336	l	16A / 6A 1 way 2 Module Combi Socket Modular Socket with shutter.	1	No	216.00
337	m	16A Triangle Top.	1	No	172.00
338	n	2 Module Modular type Electronic Fan Regulator.	1	No	515.00
339	o	Modular socket type Telephone jack with Connector.	1	No	109.00
340	p	Modular co-Axial socket type TV Antenna outlet.	1	No	109.00
341	q	25 to 32A Modular type Motor Starter Switch	1	No	550.00
342	r	Modular type buzzer	1	No	101.00
	<b>ELEC-1.9.2</b>	Supply of -----			
		Makes : Legrand Myrius / GM Four Five / Million mway / Goldmedal Curve / Anchor Roma viola / Havells Fabio / Panasonic Vision / Hager Insista / Benlo Vesta / C&S Primo / CPL Vysma / Polycab Levana.			
343	a	10A 1 Way 1 Module Modular Switch	1	No	69.00
344	b	10A 2 Way 1 Module Modular Switch.	1	No	81.00
345	c	10A 2 Pin 2 Module Modular Socket.	1	No	70.00
346	d	10A 3/2 Pin 2 Module Modular Socket with shutter.	1	No	103.00
347	e	10A 1 Module Modular Switch with Neon Indicator.	1	No	81.00
348	f	10A Modular Bell Push with Neon Indicator.	1	No	100.00
349	g	16A / 10A Modular Flush Fuse with Neon Indicator.	1	No	92.00
350	h	16A / 20A 1 Way 1 Module Modular Switch.	1	No	92.00
351	i	16A / 20A 2 Way 1 Module Modular Switch.	1	No	106.00
352	j	20A 1 Way 1 Module Modular Switch with Indicator.	1	No	101.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
353	k	20A 2 Module Modular Socket with shutter.	1	No	150.00
354	l	16A / 6A 1 way 2 Module Combi Socket Modular Socket with shutter.	1	No	150.00
355	m	16A Triangle Top.	1	No	72.00
356	n	2 Module Modular type Electronic Fan Regulator.	1	No	417.00
357	o	Modular socket type Telephone jack with Connector.	1	No	72.00
358	p	Modular co-Axial socket type TV Antenna outlet.	1	No	70.00
359	q	25 to 32A Modular type Motor Starter Switch	1	No	493.00
360	r	Modular type buzzer	1	No	99.00
		<b>SECTION - 2</b>			
	2.1	<b>PANEL MOUNTING SWITCH DISCONNECTOR FUSE UNITS (SDFU) AS PER IS: 13947</b>			
	ELEC-2.1.1	Supply of ----- TPN Switch Disconnecter Fuse Unit Cubical type without fuses. Makes : L&T / SCHNEIDER / C&S / ABB / SIEMENS			
361	a	32A	1	No	1300.00
362	b	63A	1	No	2220.00
363	c	125A	1	No	5310.00
364	d	200A	1	No	6950.00
365	e	250A	1	No	8320.00
366	f	400A	1	No	12800.00
367	g	630A	1	No	21700.00
	ELEC-2.1.2	Supply of ----- TPN Switch Disconnecter Fuse Unit Cubical type without fuses. Makes : Havells / HPL / Indo Asian / Standard / Vimal.			
368	a	32A	1	No	1100.00
369	b	63A	1	No	1600.00
370	c	125A	1	No	3700.00
371	d	200A	1	No	5510.00
372	e	250A	1	No	6210.00
373	f	400A	1	No	9490.00
374	g	630A	1	No	15750.00
	2.2	<b>ON LOAD CHANGEOVER SWITCHES (OPEN EXECUTION) AS PER IS:13947</b>			
	ELEC-2.2.1	Supply of-----4 Pole Change Over Switch on Load with open Execution. Makes : Socomec / L & T			
375	a	63A	1	No	4972.00
376	b	125A	1	No	9338.00
377	c	200A	1	No	12492.00
378	d	250A	1	No	17707.00
379	e	400A	1	No	27045.00
380	f	630A	1	No	32138.00
	ELEC-2.2.2	Supply of-----4 Pole Change Over Switch on Load with open Execution. Makes : ABB / Siemens / Havells / Indo Asian / HPL / Standard / C&S / Benlo.			
381	a	32A	1	No	1712.00
382	b	63A	1	No	4487.00
383	c	125A	1	No	8732.00
384	d	200A	1	No	11521.00
385	e	250A	1	No	16372.00
386	f	400A	1	No	25468.00
387	g	630A	1	No	30440.00
	2.3	<b>OFF LOAD CHANGE OVER SWITCHES IN SS</b>			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		<b>ENCLOSURE AS PER IS:13947</b>			
	<b>ELEC-2.3.1</b>	Supply of ----- Off load Changeover Switch in sheet steel enclosure. Makes : HPL / Havells / Indo Asian / Sputnik / C&S			
388	a	32A 240V DP	1	No	1302.00
389	b	63A 415V FP	1	No	4515.00
390	c	100A 415V FP	1	No	6930.00
	<b>ELEC-2.3.2</b>	Supply of ----- Off load Changeover Switch in sheet steel enclosure. Makes : Million / Benlo / Gold Medal / Star / Standard.			
391	a	32A 240V DP	1	No	746.00
392	b	63A 415V FP	1	No	2625.00
393	c	100A 415V FP	1	No	4935.00
	<b>2.4</b>	<b>REWIRABLE / DOUBLE BREAK SWITCHES IN SS ENCLOSURE AS PER IS:13947</b>			
	<b>ELEC-2.4.1</b>	Supply of ----- Rewireable Fuse Switch in SS enclosure. Makes : HPL / Havells / Indo Asian / C&S			
394	a	32A 240V SPN	1	No	924.00
395	b	32A 415V TPN	1	No	1430.00
396	c	63A 415V TPN	1	No	3245.00
397	d	100A 415V TPN	1	No	6050.00
	<b>ELEC-2.4.2</b>	Supply of ----- Double Break Switch in SS enclosure without fuses. Makes : HPL / Havells / Indo Asian / C&S			
398	a	100A 415V TPN	1	No	6050.00
399	b	200A 415V TPN	1	No	8910.00
	<b>ELEC-2.4.3</b>	Supply of ----- Rewireable Fuse Switch in SS enclosure. Makes : GM / Million / Sputnik / Sigma / Gold Medal / Benlo / Star.			
400	a	32A 240V SPN	1	No	616.00
401	b	32A 415V TPN	1	No	1012.00
402	c	63A 415V TPN	1	No	2310.00
403	d	100A 415V TPN	1	No	4510.00
	<b>ELEC-2.4.4</b>	Supply of ----- Double Break Switch in SS enclosure without fuses. Makes : GM / Million / Sputnik / Sigma / Gold Medal / Benlo / Star.			
404	a	100A 415V TPN	1	No	4631.00
405	b	200A 415V TPN	1	No	7590.00
	<b>2.5</b>	<b>HRC FUSE LINKS (BOLTED TYPE)</b>			
	<b>ELEC-2.5.1</b>	Supply of ----- HRC Fuse Links. Makes : L & T / C & S / Standard / HPL / Havells / Siemens / Indo Asian.			
406	a	Up to 32A	1	No	52.00
407	b	32A to 63A	1	No	79.00
408	c	125A to 200A	1	No	259.00
409	d	250A to 350A	1	No	374.00
410	e	400A	1	No	726.00
411	f	630A	1	No	1463.00
	<b>2.6</b>	<b>PORCELAIN REWIRABLE FUSE UNITS.</b>			
	<b>ELEC-2.6.1</b>	Supply of ----- Porcelain Rewireable Fuse Units. Makes : C&S / GM / Sputnik / Kundancab /			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		Million / Gold Medal / Vimal / Star / Benlo.			
412	a	32A 240V	1	No	101.00
413	b	32A 415V	1	No	132.00
414	c	63A 415V	1	No	270.00
415	d	100A 415V	1	No	506.00
	<b>ELEC-2.6.2</b>	Supply of ----- Porcelain Rewireable Fuse Units with extension strip. Makes : C&S / GM / Sputnik / Kundancab / Million / Gold Medal / Vimal / Star / Benlo.			
416	a	200A 415V	1	No	924.00
417	b	300A 415V	1	No	1221.00
	<b>2.7</b>	<b>VOLTAGE SURGE PROTECTORS</b>			
	<b>ELEC-2.7.1</b>	Supply of ----- Voltage Surge Protector. Make: Legrand / Siemens / Hager / L&T.			
418	a	2 Pole 2 Module 40 KA	1	No	8030.00
419	b	4 Pole 4 Module 40 KA	1	No	14960.00
420	c	2 Pole 2 Module 15/16 KA	1	No	6380.00
421	d	4 Pole 4 Module 15/16 KA	1	No	11990.00
	<b>2.8</b>	<b>PANEL MOUNTING MCCBs</b>			
	<b>ELEC-2.8.1</b>	Supply of ----- Adjustable, Confirms to IS/IEC 60947-2 having Breaking Capacity -----KA with thermal magnetic release Panel Mounted. Makes : L&T- D sine / Schneider-NS NSX/Legrand -DP X3/ Siemens-3VL / Hager-h3/C&S -Winbreak.			
422	a	63A 3 Pole MCCB, 16KA	1	No	7564.00
423	b	63A 4 Pole MCCB, 16KA	1	No	8505.00
424	c	125A 3 Pole MCCB, 25KA	1	No	8978.00
425	d	125A 4 Pole MCCB, 25KA	1	No	10857.00
426	e	160A 3 Pole MCCB, 25KA	1	No	11908.00
427	f	160A 4 Pole MCCB, 25KA	1	No	15549.00
428	g	250A 3 Pole MCCB, 35/36KA	1	No	20000.00
429	h	250A 4 Pole MCCB, 35/36KA	1	No	25981.00
430	i	400A 3 Pole MCCB, 35/36KA	1	No	27069.00
431	j	400A 4 Pole MCCB, 35/36KA	1	No	32705.00
432	k	630A 3 Pole MCCB, 50KA	1	No	38992.00
433	l	630A 4 Pole MCCB, 50KA	1	No	48263.00
434	m	800A 3 Pole MCCB, 50KA	1	No	69528.00
435	n	800A 4 Pole MCCB, 50KA	1	No	77040.00
	<b>ELEC-2.8.2</b>	Supply of ----- Adjustable, Confirms to IS/IEC 60947-2 having Breaking Capacity -----KA with thermal magnetic release Panel Mounted. Makes : Havells / HPL / Indo Asian / Benlo / Delton / Standard.			
436	a	63A 3 Pole MCCB, 16KA	1	No	5279.00
437	b	63A 4 Pole MCCB, 16KA	1	No	7076.00
438	c	125A 3 Pole MCCB, 25KA	1	No	6903.00
439	d	125A 4 Pole MCCB, 25KA	1	No	9073.00
440	e	160A 3 Pole MCCB, 25KA	1	No	9360.00
441	f	160A 4 Pole MCCB, 25KA	1	No	12607.00
442	g	250A 3 Pole MCCB, 35/36KA	1	No	18500.00
443	h	250A 4 Pole MCCB, 35/36KA	1	No	22477.00
444	i	400A 3 Pole MCCB, 35/36KA	1	No	23713.00
445	j	400A 4 Pole MCCB, 35/36KA	1	No	28567.00
446	k	630A 3 Pole MCCB, 50KA	1	No	32599.00
447	l	630A 4 Pole MCCB, 50KA	1	No	39476.00
448	m	800A 3 Pole MCCB, 50KA	1	No	57303.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
449	n	800A 4 Pole MCCB, 50KA	1	No	63925.00
	2.9	<b>RCCBs CONFIRMS TO IEC:61008 AND IS:12640</b>			
	ELEC-2.9.1	Supply of ----- Makes : Legrand-DX3 / Schneider-Acti9 / Siemens / L&T Exora.			
450	a	40A 2 Pole RCCB 30mA.	1	No	3428.00
451	b	40A 2 Pole RCCB 100mA.	1	No	3685.00
452	c	40A 4 Pole RCCB 30mA.	1	No	3775.00
453	d	40A 4 Pole RCCB 100mA.	1	No	3982.00
454	e	63A 2 Pole RCCB 30mA.	1	No	4192.00
455	f	63A 2 Pole RCCB 100mA.	1	No	4230.00
456	g	63A 4 Pole RCCB 30mA.	1	No	4465.00
457	h	63A 4 Pole RCCB 100mA.	1	No	5079.00
	ELEC-2.9.2	Supply of ----- Makes : ABB / Havells / HPL(Techno) / Hager / Indo Asian (Gold Plus) / C&S / Honeywell sentry / Delton / Benlo.			
458	a	40A 2 Pole RCCB 30mA.	1	No	2736.00
459	b	40A 2 Pole RCCB 100mA.	1	No	2692.00
460	c	40A 4 Pole RCCB 30mA.	1	No	3363.00
461	d	40A 4 Pole RCCB 100mA.	1	No	3251.00
462	e	63A 2 Pole RCCB 30mA.	1	No	3687.00
463	f	63A 2 Pole RCCB 100mA.	1	No	3532.00
464	g	63A 4 Pole RCCB 30mA.	1	No	3836.00
465	h	63A 4 Pole RCCB 100mA.	1	No	3743.00
	2.1	<b>RCBOs CONFIRMS TO IEC:61008 AND IS:12640</b>			
	ELEC-2.10.1	Supply of ----- Makes : Legrand-DX3 / Schneider-Acti9 / Siemens / L&T Exora / Crabtree.			
466	a	40A 2 Pole RCBO 30mA.	1	No	5519.00
467	b	40A 2 Pole RCBO 100mA.	1	No	6028.00
468	c	40A 4 Pole RCBO 30mA.	1	No	6271.00
469	d	40A 4 Pole RCBO 100mA.	1	No	6635.00
470	e	63A 2 Pole RCBO 30mA.	1	No	6598.00
471	f	63A 2 Pole RCBO 100mA.	1	No	6985.00
472	g	63A 4 Pole RCBO 30mA.	1	No	7398.00
473	h	63A 4 Pole RCBO 100mA.	1	No	7544.00
474	ELEC-2.10.2	Supply of MCB type Change Over Switch 20A Double Pole 2 way 400V AC suitable to fix on Din Channel.	1	No	2184.00
	2.11	<b>PANEL MOUNTING ACBs (Microprocessor Based)</b>			
	ELEC-2.11.1	Supply of ----- Air Circuit Breaker Confirms to IS 13947-2, IEC 60947-2 and BS-EN 60947 with Micro processor based having overload, shot circuit and earth fault Protection. Makes : Siemens (Sentron- 3WL) / L&T U Power / Schneider Master Pact / ABB Emax / C&S.Winmaster2 / Legrand DMX <sup>3</sup>			
475	a	630A 3 Pole, 50kA, electrically fixed	1	No	124307.00
476	b	630A 3 Pole, 50kA, electrically draw out	1	No	166147.00
477	c	630A 4 Pole, 50kA, electrically fixed	1	No	154626.00
478	d	630A 4 Pole, 50kA, electrically draw out	1	No	206168.00
479	e	800A 3 Pole, 50kA, electrically draw out	1	No	175849.00
480	f	800A 4 Pole, 50kA, electrically draw out	1	No	217083.00



Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
481	g	1000A 3 Pole, 50kA, electrically draw out	1	No	184338.00
482	h	1000A 4 Pole, 50kA, electrically draw out	1	No	231636.00
483	i	1250A 3 Pole, 50kA, electrically draw out	1	No	247401.00
484	j	1250A 4 Pole, 50kA, electrically draw out	1	No	303188.00
485	k	1600A 3 Pole, 50kA, electrically draw out	1	No	274082.00
486	l	1600A 4 Pole, 50kA, electrically draw out	1	No	327443.00
487	m	2000A 3 Pole, 50kA, electrically draw out	1	No	318954.00
488	n	2000A 4 Pole, 50kA, electrically draw out	1	No	388080.00
489	o	2500A 3 Pole, 50kA, electrically draw out	1	No	454782.00
490	p	2500A 4 Pole, 50kA, electrically draw out	1	No	557865.00
491	q	3200A 3 Pole, 50kA, electrically draw out	1	No	472973.00
492	r	3200A 4 Pole, 50kA, electrically draw out	1	No	594248.00
	<b>ELEC-2.11.2</b>	Supply of ----- Air Circuit Breaker Confirms to IS 13947-2, IEC 60947-2 and BS-EN 60947 with Micro processor based having overload, shot circuit and earth fault Protection Makes : HPL / Hager / Havells / Indo Asian.			
493	a	630A 3 Pole, 50kA, electrically fixed	1	No	112786.00
494	b	630A 3 Pole, 50kA, electrically draw out	1	No	150381.00
495	c	630A 4 Pole, 50kA, electrically fixed	1	No	139467.00
496	d	630A 4 Pole, 50kA, electrically draw out	1	No	185551.00
497	e	800A 3 Pole, 50kA, electrically draw out	1	No	157658.00
498	f	800A 4 Pole, 50kA, electrically draw out	1	No	196466.00
	<b>2.12</b>	<b>RAISING MAINS</b>			
	<b>ELEC-2.12.1</b>	Supply, installation, testing and commissioning of .....Amp, .....KA breaking capacity (100% Neutral busbar) air insulated compact Raising mains/Bus Duct system made of CRCA sheet/Hot Galvanized steel encloser of thickness not less than 0.8 mm having degree of protection of IP 55 as per IEC/EN 61439-6, PVC/Plastic insulated reinforced with glass fibre four strip ALUMINIUM busbar in convenient sections including necessary end cover units suitable for 415 volts 3 phase, 4 wire, 50 Hz A.C. System, etc., with necessary joints Fire barrier at each floor Provision of tapping at each floor/every meter, continuous earthing with 2 nos aluminum strip of suitable size (one on each side) including GI clamping brackets, angle iron brackets, steel fasteners, connecting to earth system as required. Makes: Legrand (Zucchini) / C&S			
499	a	400Amp, 50 - 53KA	1	RM	9261.00
500	b	630Amp, 50 - 63KA	1	RM	10920.00
501	c	800 Amp, 50 - 76KA	1	RM	12387.00
502	d	1000 Amp, 50 - 76KA	1	RM	13755.00
503	e	1250 Amp, 50 - 76KA	1	RM	14280.00
504	f	1600 Amp, 50 - 76KA	1	RM	17850.00
505	<b>ELEC-2.12.2</b>	Supply and Fixing of Spring Bracket with fixing kit for Air Insulated Busduct / Raising Mains. Makes: Legrand (Zucchini) / C&S	1	No	5250.00
	<b>ELEC-2.12.3</b>	Supply and Fixing of ..... Amps Horizontal / Vertical bends for Air Insulated Bus Duct .Makes: Legrand (Zucchini) / C&S			
506	a	400Amp,	1	No	10500.00
507	b	630Amp,	1	No	11970.00
508	c	800 Amp,	1	No	12495.00
509	d	1000 Amp,	1	No	14595.00
510	e	1250 Amp,	1	No	15761.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
511	f	1600 Amp,	1	No	17745.00
	ELEC-2.12.4	Supply and Fixing of .....Amps Tap off box for Air Insulated Busduct. Makes : Legrand (Zucchini) / C&S / Schneider			
512	a	125Amp,	1	No	12390.00
513	b	250Amp,	1	No	14438.00
514	c	400 Amp,	1	No	19950.00
515	d	630 Amp,	1	No	22050.00
	2.13	<b>SANDWITCH BUSDUCT</b>			
	ELEC-2.13.1	Supply, installation, testing and commissioning of .....Amp, .....KA breaking capacity (100% Neutral busbar) sandwich Busduct system made of CRCA sheet/Hot Galvanized steel encloser of thickness not less than 1.5mm having degree of protection of IP 55 as per IEC/EN 61439-6, PVC/Plastic insulated reinforced with glass fibre four strip ALUMINIUM busbar in convenient sections including end cover units suitable for 415 volts 3 phase, 4 wire, 50 Hz A.C. System, etc., with necessary joints Fire barrier at each floor Provision of tapping at each floor/every meter, continuous earthing with 2 nos aluminum strip of suitable size (one on each side) including GI clamping brackets, angle iron brackets, steel Fasteners, connecting to earth system as required . Makes: Legrand (Zucchini) / L&T / Schneider/C&S/siemens			
516	a	630A 36/40KA	1	RM	13464.00
517	b	800A 42/50KA	1	RM	14454.00
518	c	1000A 50KA	1	RM	16104.00
519	d	1250A 75KA	1	RM	17754.00
520	e	1600A 80KA	1	RM	23430.00
521	f	2000A 80KA	1	RM	24750.00
522	g	2500A 150KA	1	RM	34320.00
523	h	3200A 160KA	1	RM	39930.00
524	i	4000 A,160kA	1	RM	47300.00
	ELEC-2.13.2	Supply and Fixing of .....Amps Horizontal / Vertical bends for sandwich Bus Duct . Makes: Legrand (Zucchini) / L&T / Schneider / C&S /Siemens.			
525	a	630A	1	No	11990.00
526	b	800A	1	No	12650.00
527	c	1000A	1	No	13420.00
528	d	1250A	1	No	14520.00
529	e	1600A	1	No	16500.00
530	f	2000A	1	No	19250.00
531	g	2500A	1	No	24420.00
532	h	3200A	1	No	29480.00
533	i	4000 A	1	No	33990.00
	ELEC-2.13.3	Supply and Fixing of ..... Amps Copper Flexibles for three phases and neutral for Air Insulated / sandwich Busduct . Makes: Legrand (Zucchini) / L&T / Schneider /C&S/Siemens.			
534	a	400A	1	No	16500.00
535	b	630A	1	No	17600.00
536	c	800A	1	No	18700.00
537	d	1000A	1	No	20900.00
538	e	1250A	1	No	24200.00
539	f	1600A	1	No	28600.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
540	g	2000A	1	No	33000.00
541	h	2500A	1	No	38500.00
542	i	3200A	1	No	44000.00
543	j	4000 A	1	No	49500.00
	<b>ELEC-2.13.4</b>	Supply and fixing of Flange end for .....Amps for Air insulated Bus ducts . Makes: Legrand (Zucchini) / Schneider / C&S / Siemens.			
544	a	400Amp,	1	No	9900.00
545	b	630Amp,	1	No	13200.00
546	c	800 Amp,	1	No	15400.00
	<b>ELEC-2.13.5</b>	Supply and fixing of Flange end for .....Amps for Sandwich Bus ducts . Makes: Legrand (Zucchini) / L&T / Schneider / C&S / Siemens.			
547	a	400A	1	No	11550.00
548	b	630A	1	No	17050.00
549	c	800A	1	No	19800.00
550	d	1000A	1	No	20900.00
551	e	1250A	1	No	22880.00
552	f	1600A	1	No	24420.00
553	g	2000A	1	No	26400.00
554	h	2500A	1	No	29700.00
555	i	3200A	1	No	35200.00
556	j	4000 A	1	No	41800.00
	<b>ELEC-2.13.6</b>	Supply and Fixing of .....Amps Tap off box for Sandwich Busduct Makes: Legrand (Zucchini) / L&T / Schneider / C&S / Siemens.			
557	a	160A	1	No	10450.00
558	b	250A	1	No	17600.00
559	c	400A	1	No	19800.00
560	d	630A	1	No	24200.00
	<b>ELEC-2.13.7</b>	Supply and Fixing of .....Amps end cover for Sandwich Busduct Makes: Legrand (Zucchini) / L&T / Schneider / C&S / Siemens.			
561	a	400A -4000A	1	No	9460.00
	<b>ELEC-2.13.8</b>	Supply and Fixing of .....Amps expansion joint for Sandwich Busduct Makes: Legrand (Zucchini) / L&T / Schneider /C&S/siemens.			
562	a	400A	1	No	115500.00
563	b	630A	1	No	154000.00
564	c	800A	1	No	159500.00
565	d	1000A	1	No	160600.00
566	e	1250A	1	No	171600.00
567	f	1600A	1	No	178200.00
568	g	2000A	1	No	187000.00
569	h	2500A	1	No	193600.00
570	i	3200A	1	No	198000.00
571	j	4000 A	1	No	203500.00
	<b>ELEC-2.13.9</b>	Supply and Fixing of .....Amps rubber bellows for Sandwich Busduct Makes: Legrand (Zucchini) / L&T / Schneider / C&S / Siemens.			
572	a	400A -4000A	1	No	12650.00
	<b>2.14</b>	<b>MCBs (AS PER IS:60898-1:2002)</b>			
	<b>ELEC-2.14.1</b>	Supply of -----10KA, C/D Curve ISI Mark.			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		Makes : Legrand-DX3 / Schneider-Acti9 / Siemens / L&T Exora / Crabtree.			
573	a	6-32A SP MCB	1	No	256.00
574	b	40-63A SP MCB	1	No	539.00
575	c	6-32A DP MCB	1	No	758.00
576	d	40-63A DP MCB	1	No	1227.00
577	e	6-32A TP MCB	1	No	1158.00
578	f	40-63A TP MCB	1	No	1795.00
579	g	6-32A FP MCB	1	No	1552.00
580	h	40-63A FP MCB	1	No	2305.00
	<b>ELEC-2.14.2</b>	Supply of -----10KA, C/D Curve ISI Mark. Makes : ABB / Havells / HPL(Techno) / Hager / Indo Asian (Gold Plus) / C&S / Delton / Honeywell sentry / Benlo.			
581	a	6-32A SP MCB	1	No	199.00
582	b	40-63A SP MCB	1	No	437.00
583	c	6-32A DP MCB	1	No	619.00
584	d	40-63A DP MCB	1	No	849.00
585	e	6-32A TP MCB	1	No	994.00
586	f	40-63A TP MCB	1	No	1383.00
587	g	6-32A FP MCB	1	No	1286.00
588	h	40-63A FP MCB	1	No	1736.00
	<b>ELEC-2.14.3</b>	Supply of ----- 10KA, C/D Curve ISI Mark. Makes : Gold Medal / GM / Milltec / Sputnik / Stanjo Amron.			
589	a	6-32A SP MCB	1	No	138.00
590	b	40-63A SP MCB	1	No	242.00
591	c	6-32A DP MCB	1	No	369.00
592	d	40-63A DP MCB	1	No	550.00
593	e	6-32A TP MCB	1	No	671.00
594	f	40-63A TP MCB	1	No	1045.00
595	g	6-32A FP MCB	1	No	869.00
596	h	40-63A FP MCB	1	No	1221.00
	<b>2.15</b>	<b>ISOLATORS CONFIRMS TO I E C 60947 PART-III</b>			
	<b>ELEC-2.15.1</b>	Supply of -----Isolator. Makes : Legrand-DX3 / Schneider-Acti9 / Siemens / L&T Exora / Crabtree.			
597	a	32A DP	1	No	431.00
598	b	40A DP	1	No	466.00
599	c	63A DP	1	No	619.00
600	d	40A TP	1	No	795.00
601	e	63A TP	1	No	922.00
602	f	40A FP	1	No	1037.00
603	g	63A FP	1	No	1134.00
604	h	100A FP	1	No	1213.00
	<b>ELEC-2.15.2</b>	Supply of -----Isolator. Makes : ABB / Havells / HPL(Techno) / Hager / Indo Asian (Gold Plus) / C&S / Honeywell sentry.			
605	a	32A DP	1	No	388.00
606	b	40A DP	1	No	407.00
607	c	63A DP	1	No	504.00
608	d	40A TP	1	No	703.00
609	e	63A TP	1	No	717.00
610	f	40A FP	1	No	825.00
611	g	63A FP	1	No	887.00
612	h	100A FP	1	No	1115.00
	<b>ELEC-2.15.3</b>	Supply of -----Isolator. Makes : Gold Medal / GM / Milltec / Sputnik /			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		Benlo / Stanjo Amron.			
613	a	32A DP	1	No	267.00
614	b	40A DP	1	No	316.00
615	c	63A DP	1	No	426.00
616	d	40A TP	1	No	461.00
617	e	63A TP	1	No	523.00
618	f	40A FP	1	No	692.00
	<b>2.16</b>	<b>MCB DISTRIBUTION BOARDS (AS PER IS:13032)</b>			
		<b>SPN DB</b>			
	<b>2.16.1</b>	Supply of ----- Protection as per IS:13032 and suitable for----- ----S.P out goings and for 1 No Incomer etc complete. Makes : Legrand / Schneider / Siemens / L&T / Crabtree Xpro / ABB / C&S			
619	a	4 Way SPN DB with IP 20/30, 4 Nos	1	No	1013.00
620	b	4 Way SPN DB with IP 43, 4 Nos	1	No	1316.00
621	c	8 Way SPN DB with IP 20/30, 8 Nos	1	No	1169.00
622	d	8 Way SPN DB with IP 43, 8 Nos	1	No	1654.00
623	e	12 Way SPN DB with IP 20/30, 12 Nos	1	No	1388.00
624	f	12 Way SPN DB with IP 43, 12 Nos	1	No	2002.00
	<b>2.16.2</b>	Supply of ----- Protection as per IS:13032 and suitable for----- ----S.P out goings and for 1 No Incomer etc complete. Makes : Havells / HPL / Hager / Indo Asian (Gold Plus) / Delton / Honeywell sentry / Benlo / Panasonic.			
625	a	4 Way SPN DB with IP 20/30, 4 Nos	1	No	619.00
626	b	4 Way SPN DB with IP 43, 4 Nos	1	No	1080.00
627	c	8 Way SPN DB with IP 20/30, 8 Nos	1	No	814.00
628	d	8 Way SPN DB with IP 43, 8 Nos	1	No	1504.00
629	e	12 Way SPN DB with IP 20/30, 12 Nos	1	No	922.00
630	f	12 Way SPN DB with IP 43, 12 Nos	1	No	1795.00
	<b>2.16.3</b>	Supply of ----- Protection as per IS:13032 and suitable for----- ----S.P out goings and for 1 No Incomer etc complete. Makes : Gold Medal / GM / Milltec / Sputnik / Stanjo Amron.			
631	a	4 Way SPN DB with IP 20/30, 4 Nos	1	No	437.00
632	b	4 Way SPN DB with IP 43, 4 Nos	1	No	741.00
633	c	8 Way SPN DB with IP 20/30, 8 Nos	1	No	595.00
634	d	8 Way SPN DB with IP 43, 8 Nos	1	No	1008.00
635	e	12 Way SPN DB with IP 20/30, 12 Nos	1	No	728.00
636	f	12 Way SPN DB with IP 43, 12 Nos	1	No	1275.00
	<b>2.17</b>	<b>TPN DB</b>			
	<b>2.17.1</b>	Supply of ----- Protection as per IS:13032 and suitable for ----- S.P. out goings and for 1 No 4 pole Incomer (FP Isolator / MCB) etc complete Makes : Legrand / Schneider / Siemens / L&T / Hager / Crabtree Xpro / ABB / C&S			
637	a	(8+12) 4 Way TPN DB Horizontal with IP 20/30, 12 Nos	1	No	2086.00
638	b	(8+12) 4 Way TPN DB Horizontal with IP 43, 12 Nos	1	No	3468.00
639	c	(8+18) 6 Way TPN DB Horizontal with IP 43, 18 Nos	1	No	5094.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
640	d	(8+24) 8 Way TPN DB Horizontal with IP 43, 24 Nos	1	No	5689.00
	2.17.2	Supply of ----- Protection as per IS:13032 and suitable for T.P. / S.P. out goings and for 1 No 4 pole Isolator / MCB Incomer etc complete Makes : Legrand / Schneider / Siemens / L&T / Hager / Crabtree Xpro / ABB / C&S			
641	a	4 Way VTPN DB with IP 43	1	No	8793.00
642	b	8 Way VTPN DB with IP 43	1	No	11303.00
	2.17.3	Supply of ----- Protection as per IS:13032 and suitable for accommodating T.P. / S.P. as out goings and 125A / 160A 4 pole MCCB as Incomer etc complete Makes : Legrand / Schneider / Siemens / L&T / Hager / Crabtree Xpro.			
643	a	4 Way VTPN DB with IP 43	1	No	11400.00
644	b	8 Way VTPN DB with IP 43	1	No	14311.00
	2.17.4	Supply of ----- Protection as per IS:13032 and suitable for ----- S.P. out goings and for 1 No 4 pole Incomer (FP Isolator / MCB) etc complete Makes : GE / Havells / HPL / Benlo / Panasonic / Delton / Indo Asian (Gold Plus) / Honeywell sentry			
645	a	(8+12) 4 Way TPN DB Horizontal with IP 20/30, 12 Nos	1	No	1940.00
646	b	(8+12) 4 Way TPN DB Horizontal with IP 43, 12 Nos	1	No	3056.00
647	c	(8+18) 6 Way TPN DB Horizontal with IP 43, 18 Nos	1	No	4245.00
648	d	(8+24) 8 Way TPN DB Horizontal with IP 43, 24 Nos	1	No	4851.00
	2.17.5	Supply of ----- Protection as per IS:13032 and suitable for T.P. / S.P. out goings and for 1 No (FP Isolator / MCB) incomer etc complete Makes : GE / Havells / HPL / Hager / Indo Asian (Gold Plus) / Honeywell sentry / Benlo.			
649	a	4 Way VTPN DB with IP 43	1	No	7581.00
650	b	8 Way VTPN DB with IP 43	1	No	9217.00
	2.17.6	Supply of ----- Protection as per IS:13032 and suitable for ----- S.P. out goings and for 1 No 4 pole Incomer (FP Isolator / MCB) etc complete Makes : Gold Medal / GM / Miltec / Sputnik / Stanjo Amron.			
651	a	(8+12) 4 Way TPN DB Horizontal with IP 20/30, 12 Nos	1	No	1723.00
652	b	(8+12) 4 Way TPN DB Horizontal with IP 43, 12 Nos	1	No	2232.00
653	c	(8+18) 6 Way TPN DB Horizontal with IP 43, 18 Nos	1	No	2911.00
654	d	(8+24) 8 Way TPN DB Horizontal with IP 43, 24 Nos	1	No	3420.00
	2.17.7	Supply of ----- Protection as per IS:13032 and suitable for T.P. / S.P. out goings and for 1 No (FP Isolator / MCB) Incomer etc complete Makes : Gold Medal / GM / Miltec / Sputnik /			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		Stanjo Amron.			
655	a	4 Way VTPN DB with IP 43	1	No	4390.00
656	b	8 Way VTPN DB with IP 43	1	No	6998.00
	2.17.8	Supply of -----Plug and Socket with SS enclosure. Makes : Legrand / Schneider / Siemens / L&T / Hager / Crabtree Xpro / ABB / C&S			
657	a	20A SP	1	No	1256.00
658	b	20A TP	1	No	2366.00
659	c	32A TP	1	No	2784.00
	2.17.9	Supply of -----Plug and Socket with SS enclosure. Makes : Havells / HPL / Benlo / Panasonic / Delton / Indo Asian (Gold Plus) / Honeywell sentry			
660	a	20A SP	1	No	801.00
661	b	20A TP	1	No	1625.00
662	c	32A TP	1	No	2037.00
	2.17.10	Supply of -----Plug and Socket with SS enclosure. Makes : Gold Medal / GM / Milltec / Sputnik.			
663	a	20A SP	1	No	606.00
664	b	20A TP	1	No	1262.00
665	c	32A TP	1	No	1760.00
	2.17.11	Supply of ----- Metal Enclosure with IP 20/30 Protection. Makes : Legrand / Schneider / Siemens / L&T / Hager / Crabtree Xpro / ABB / C&S			
666	a	SP	1	No	377.00
667	b	DP/TP/FP	1	No	534.00
	2.17.12	Supply of ----- Metal Enclosure with IP 20/30 Protection. Makes : Havells / HPL / Benlo / Panasonic / Delton / Indo Asian (Gold Plus) / Honeywell sentry			
668	a	SP	1	No	340.00
669	b	DP/TP/FP	1	No	498.00
	2.17.13	Supply of ----- Metal Enclosure with IP 20/30 Protection. Makes : Gold Medal / GM / Milltec / Sputnik.			
670	a	SP	1	No	305.00
671	b	DP/TP/FP	1	No	426.00
		<b>SECTION - 3</b>			
	3.1	<b>STREET LIGHT LUMINAIRES</b>			
	ELEC-3.1.1	Supply of----- Flood light luminaire with integral weather proof diecast aluminum housing with IP66 protection with Control Gear Box without lamp Makes : Wipro / G.E. Venture / Phillips / Bajaj / Crompton / Surya / Halonix.			
672	a	1 x 250W MH	1	No	4200.00
673	b	1 x 400W MH	1	No	5500.00
	ELEC-3.1.2	Supply of----- Flood light luminaire with integral weatherproof diecast aluminum housing with IP66 protection with Control Gear Box without lamp Makes : Style Lamp / Mahita Electro / Capart / Akhil / RK / Pro-Lite.			
674	a	1 x 250W MH	1	No	3200.00
675	b	1 x 400W MH	1	No	4200.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
	<b>ELEC-3.1.3</b>	Supply of ----- Halogen Flood light luminaire with cast aluminum housing and tough end glass cover with all standard accessories. Makes : Style Lamp / Mahita Electro / Capart / Akhil / RK / GE Venture / Pro-Lite.			
676	<b>a</b>	500 W	1	No	390.00
677	<b>b</b>	1000 W	1	No	770.00
	<b>3.2</b>	<b>POST TOP LED LUMINAIRES</b>			
678	<b>ELEC-3.2.1</b>	Supply of 15-20W aesthetically designed LED post top lantern with die cast aluminum spigot, prismatic diffuser etc suitable for pole mounting complete with all accessories. Makes : Crompton / Bajaj / Surya / Havells / Phillips / Panasonic / Halonix / K Lite / Wipro / Polycab / FIEM / Jaquar .	1	No	5513.00
679	<b>ELEC-3.2.2</b>	Supply of 30-35W decorative LED post top lantern with die cast aluminum spigot, spun aluminum powder coated top cover, aluminum pressure die cast heat sink, Opel PC diffuser and clear acrylic etc suitable for pole mounting complete with all accessories. Makes : Crompton / Bajaj / Surya / Havells / Phillips / Panasonic / Halonix / K Lite / Wipro / Polycab / FIEM / Jaquar .	1	No	8820.00
680	<b>ELEC-3.2.3</b>	Supply of 40-45W decorative LED post top lantern with die cast aluminum spigot, spun aluminum powder coated top cover, aluminum pressure die cast heat sink, Opel PC diffuser and clear acrylic etc suitable for pole mounting complete with all accessories. Makes : Crompton / Bajaj / Surya / Havells / Phillips / Panasonic / Halonix / K Lite / Wipro / Polycab / FIEM / Jaquar .	1	No	10474.00
	<b>3.3</b>	<b>ACCESSORIES FOR MV / SV / MH LUMINAIRES</b>			
		<b>COPPER BALLASTS</b>			
	<b>ELEC-3.3.1</b>	Supply of -----copper ballast. Makes : G.E. / Phillips / Crompton / Bajaj / Surya / Havells.			
681	<b>a</b>	80W MV	1	No	570.00
682	<b>b</b>	125W MV	1	No	630.00
683	<b>c</b>	70 W SV / MH	1	No	520.00
684	<b>d</b>	150 W SV / MH	1	No	810.00
685	<b>e</b>	250 W SV / MH	1	No	1150.00
686	<b>f</b>	400 W SV / MH	1	No	1680.00
	<b>ELEC-3.3.2</b>	Supply of -----copper ballast. Makes : RK / Style Lamp / Mahitha Electro / GE Venture / Prolite.			
687	<b>a</b>	80W MV	1	No	517.00
688	<b>b</b>	125W MV	1	No	524.00
689	<b>c</b>	70 W SV / MH	1	No	494.00
690	<b>d</b>	150 W SV / MH	1	No	724.00
691	<b>e</b>	250 W SV / MH	1	No	981.00
692	<b>f</b>	400 W SV / MH	1	No	1361.00
		<b>HPF CAPACITORS</b>			
	<b>ELEC-3.3.3</b>	Supply of -----HPF Capacitor. Makes : TIBCON / Phillips / Crompton / Bajaj / Surya / Havells.			
693	<b>a</b>	4 mfd	1	No	77.00



Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
694	b	10 mfd	1	No	129.00
695	c	15 mfd	1	No	153.00
696	d	20 mfd	1	No	209.00
697	e	33 mfd	1	No	334.00
698	f	42 mfd	1	No	370.00
		<b>IGNITOR</b>			
699	ELEC-3.3.4	Supply of Ignitor for SV / MH Lamp Makes : Wipro / GE Venture / Phillips / Crompton / Bajaj / Surya / HPL / Havells / Capart / Prolite / Halonix.	1	No	144.00
		<b>ENERGY SAVING ELECTRONIC BALLAST FOR STREET LIGHT</b>			
	ELEC-3.3.5	Supply of ----- Electronic ballast having < 3W loss, PF > 0.90, THD < 15% with 3 years guarantee Makes : Phillips / Wipro / Trinic / GE.			
700	a	70W SV / MH	1	No	1862.00
701	b	150W SV / MH	1	No	2546.00
702	c	250W SV / MH	1	No	3192.00
	3.4	<b>LAMPS</b>			
	ELEC-3.4.1	Supply of ----- Lamp with ISI mark. Makes : Phillips / Osram / Crompton / Bajaj / Surya / HPL / Havells / Halonix.			
703	a	500W Halogen	1	No	90.00
704	b	1000W Halogen	1	No	110.00
705	c	70W SV	1	No	420.00
706	d	150W SV	1	No	600.00
707	e	250W SV	1	No	650.00
708	f	400W SV	1	No	710.00
709	g	70W double end MH	1	No	510.00
710	h	150W double end MH	1	No	760.00
711	i	70W MH	1	No	750.00
712	j	150W MH	1	No	840.00
713	k	250W MH	1	No	1140.00
714	l	400W MH	1	No	1300.00
	ELEC-3.4.2	Supply of ----- Lamp with ISI mark. Makes : Style Lamp / Mahita Electro			
715	a	500W Halogen	1	No	50.00
716	b	1000W Halogen	1	No	70.00
717	c	70W SV	1	No	340.00
718	d	150W SV	1	No	510.00
719	e	250W SV	1	No	575.00
720	f	400W SV	1	No	660.00
721	g	70W double end MH	1	No	450.00
722	h	150W double end MH	1	No	680.00
723	i	70W MH	1	No	720.00
724	j	150W MH	1	No	760.00
725	k	250W MH	1	No	930.00
726	l	400W MH	1	No	1190.00
	3.5	<b>AUTOMATIC STREET LIGHT CONTROL SYSTEMS</b>			
	ELEC-3.5.1	Supply and fixing of Automatic Street Light Control System with Optical Sensor, Low voltage / High voltage trip and reset, operating voltage 150 - 280V AC, 50 HZ with suitable SMC enclosure of IP 54 protection, MCBs of Legrand / Schneider / L&T / Siemens of 10KA C/D curve and Contactor suitable to control the load of ----			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		----- <b>Single phase</b> load with necessary clamping arrangements. Makes : Swadep Nature Switch / Light Mate / L&T / Siemens / Bajaj			
727	a	1 KW	1	No	9450.00
728	b	3 KW	1	No	11865.00
729	c	5 KW	1	No	12390.00
730	d	8 KW	1	No	14175.00
	<b>ELEC-3.5.2</b>	Supply and fixing of Automatic Street Light Control System with Optical Sensor, Low voltage / High voltage trip and reset, operating voltage 380 - 450 V AC, 50 HZ with suitable SMC enclosure of IP 54 protection, MCBs of Legrand / Schneider / L&T / Siemens of 10KA C/D curve and Contactor suitable to control the load of ---- ----- <b>Three phase</b> load with necessary clamping arrangements. Makes : Swadep Nature Switch / Light Mate / L&T / Siemens / Bajaj			
731	a	5 KW	1	No	15540.00
732	b	8 KW	1	No	16065.00
733	c	12 KW	1	No	19425.00
734	d	15 KW	1	No	23500.00
735	e	25 KW	1	No	30870.00
	<b>ELEC-3.5.3</b>	Supply and fixing of Automatic Street Light Controller with optical micro scanner low voltage/ High Voltage trip and reset operating voltage 150 - 280V AC, withstands up to 440V , 50 HZ with suitable ABS enclosure of IP 54 protection, suitable to control the load of 10A of single phase with necessary arrangements etc complete. Makes : Swadep /Super tech ( Light Mate ) / L&T / Siemens / Bajaj			
736	a	SLASM-01-10A /equivalent (Dusk to Dawn)			3500.00
737	b	SLASM-02-10A /equivalent ( Time setting after 4 hr)			4500.00
738	c	SLASM-03-10A /equivalent ( Time setting 4hr, 6Hr, 8Hr)			4200.00
	<b>3.6</b>	<b>INTERNAL LUMINAIRES</b>			
739	<b>ELEC-3.6.1</b>	Supply of 1 x 11W Mirror light with all standard accessories diffuser Makes : G.E. Venture / Phillips / Crompton / Bajaj.	1	No	544.00
740	<b>ELEC-3.6.2</b>	Supply of 1 x 11W Mirror light with all standard accessories diffuser Makes : Surya / Havells / HPL / Fortune Art	1	No	464.00
	<b>3.7</b>	<b>ACCESSORIES</b>			
		Makes For the Following Items : Phillips / Crompton / Bajaj / Surya / HPL / Havells.			
741	<b>ELEC-3.7.1</b>	Supply of 9/13W VPIT Ballast for CFL with ISI mark.	1	No	102.00
742	<b>ELEC-3.7.2</b>	Supply of 18W VPIT Ballast for CFL with ISI mark.	1	No	96.00
743	<b>ELEC-3.7.3</b>	Supply of 20W / 40W Copper Wound Ballast.	1	No	128.00
744	<b>ELEC-3.7.4</b>	Supply of 18/20W VPIT Ballast.	1	No	128.00
745	<b>ELEC-3.7.5</b>	Supply of 36/40W VPIT Ballast of makes Phillips / Crompton / Bajaj / Surya.	1	No	168.00
746	<b>ELEC-3.7.6</b>	Supply of 40W Starter of makes Phillips / Crompton / Bajaj / Surya.	1	No	9.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
747	ELEC-3.7.7	Supply of Rotor holder(FTL).	1	No	17.00
748	ELEC-3.7.8	Supply of HID Lamp holder.	1	No	43.00
749	ELEC-3.7.9	Supply of CFL holder of makes Phillips / Crompton / Bajaj / Surya.	1	No	26.00
750	ELEC-3.7.10	Supply of FTL Starter holder.	1	No	13.00
		Makes For the Following Items : Fortune Arrt / Style Lamp / Mahita Electro / Capart			
751	ELEC-3.7.11	Supply of 9/13W VPIT Ballast for CFL with ISI mark.	1	No	88.00
752	ELEC-3.7.12	Supply of 18W VPIT Ballast for CFL with ISI mark.	1	No	88.00
753	ELEC-3.7.13	Supply of 20W / 40W Copper Wound Ballast.	1	No	118.00
754	ELEC-3.7.14	Supply of 18/20W VPIT Ballast.	1	No	117.00
755	ELEC-3.7.15	Supply of 36/40W VPIT Ballast of makes Phillips / Crompton / Bajaj / Surya.	1	No	136.00
756	ELEC-3.7.16	Supply of 40W Starter of makes Phillips / Crompton / Bajaj / Surya.	1	No	8.00
757	ELEC-3.7.17	Supply of Rotor holder(FTL).	1	No	15.00
758	ELEC-3.7.18	Supply of HID Lamp holder.	1	No	34.00
759	ELEC-3.7.19	Supply of CFL holder of makes Phillips / Crompton / Bajaj / Surya.	1	No	21.00
760	ELEC-3.7.20	Supply of FTL Starter holder.	1	No	10.00
761	ELEC-3.7.21	Supply of 36W Electronic Ballast with total harmonic distortion is less than 10% for FTL. Makes : Phillips / Crompton / Bajaj / Surya / HPL / Havells.	1	No	492.00
762	ELEC-3.7.22	Supply of 36W Electronic ballast with power factor greater than 0.9 to 0.95 suitable for FTL. Make : Crompton / Bajaj / Havells or its equivalent.	1	No	221.00
763	ELEC-3.7.23	Supply of Bulkhead fitting with cast aluminium enamel painted body with water tight, clear glass with wire guard hinged with lock and key arrangements etc., complete. Makes : Bajaj / Crompton / Surya.	1	No	280.00
764	ELEC-3.7.24	Supply of single fancy bracket with glass shade best Indian make	1	No	173.00
765	ELEC-3.7.25	Supply of double fancy bracket with glass shade best Indian make	1	No	309.00
	<b>3.8</b>	<b>FLOURSCENT TUBES / CFL LAMPS</b>			
		Makes for the following items: Phillips / Crompton / Bajaj / Surya / Style Lamp / Mahita Electro / Capart.			
766	ELEC-3.8.1	Supply of 40W-60W Lamp.	1	No	11.00
767	ELEC-3.8.2	Supply of Night Lamp.	1	No	10.00
768	ELEC-3.8.3	Supply of 18/20W fluorescent tube. Makes : Phillips / Crompton / Bajaj / Surya.	1	No	37.00
769	ELEC-3.8.4	Supply of 36/40W fluorescent tube. Makes : Phillips / Crompton / Bajaj / Surya.	1	No	40.00
770	ELEC-3.8.5	Supply of 36/40W fluorescent tube. Makes : Fortune Arrt / Style lamp / Mahita Electro / Capart	1	No	34.00
771	ELEC-3.8.6	Supply of 28W T5 fluorescent tube. Makes : Crompton / Bajaj / Phillips / Surya / Havells.	1	No	107.00
	ELEC-3.8.7	Supply of ----- Pin type CFL Lamp. Makes : Phillips / Crompton / Bajaj / Surya / Havells / HPL / Halonix.			
772	a	9W	1	No	67.00
773	b	11W	1	No	72.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
774	c	13W	1	No	94.00
775	d	18W	1	No	103.00
776	e	26W	1	No	143.00
777	f	36W	1	No	120.00
	<b>ELEC-3.8.8</b>	Supply of ----- Retrofit tiny CFL. Makes : Phillips / Crompton / Bajaj / Surya / Havells / HPL / Halonix.			
778	a	Up to 5W	1	No	103.00
779	b	Up to 8W	1	No	112.00
780	c	Up to 10/11W	1	No	120.00
781	d	Up to 13/14W	1	No	98.00
782	e	15W	1	No	160.00
783	f	Up to 18/20W Retrofit CFL.	1	No	152.00
784	g	23W Retrofit CFL.	1	No	178.00
785	h	Up to 25/26W Retrofit CFL.	1	No	178.00
	<b>3.9</b>	<b>LED LUMINAIRES INDOOR</b>			
	<b>ELEC-3.9.1</b>	Supply and transportation of ----- LED Spotlight Recessed mounting with housing made of Powder coated Pressure die cast aluminium, IP20, with wide operating voltage range, Power factor > 0.9, Surge protection: > 2KV, System efficacy of >100 lumens/watt, CCT: 3000K - 6500K as desired by the department and as per IS, CRI >80, and THD is less than 15% etc., complete with 5 years warranty with BIS Certification. LUMINAIRE MAKE : Phillips / OSRAM / Wipro / Crompton / Bajaj / Havells / Jaquar / IB LED / Panasonic / Halonix / HPL / Syska / Eveready / Surya / Keselec/ FIEM / Arraystorm / GM / Goldmedal. LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
786	a	5 W / 6 W +/-10% (>= 600 Lumens)	1	No	570.00
787	b	7 W +/-10% (>= 700 Lumens)	1	No	1150.00
	<b>ELEC-3.9.2</b>	Supply and transportation of ----- LED Spotlight Recessed mounting with housing made of Powder coated Pressure die cast aluminium , IP20, with wide operating voltage range, Power factor > 0.9, Surge protection: > 2KV, System efficacy of >90 lumens/watt, CCT: 3000K - 6500K as desired by the department and as per IS, CRI >80, and THD is less than 15% etc., complete with 5 years warranty. LUMINAIRE MAKE : Fortune Arrt / Capart / Kashyap BLU / Million / Trinic / Sieger / Stanjo / Promptec / Lighting Technologies / Renesola / C&S / RR Electric / Rhino			
788	a	5 W / 6 W +/-10% (>= 550 Lumens)	1	No	400.00
789	b	7 W +/-10% (>= 650 Lumens)	1	No	880.00
	<b>ELEC-3.9.3</b>	Supply and transportation of ----- LED Spot Light Recessed mounting with housing made of Powder coated Pressure die cast aluminium , IP20, with wide operating voltage range, Power factor > 0.9, Surge protection: > 2KV, System efficacy of >80 lumens/watt, CCT: 3000K - 6500K as desired by the department and as per IS, CRI >80, and THD is less than 15% etc., complete with 5 years warranty.			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		LUMINAIRE MAKE : Cosmo / VRILISO / Pro-Lite / Scintilla / JSTC Solar / Vimal / Taiyolux / Link Well / RYON / Enrich / Kiran / Pharox / Mulex / Benlo / Maklites.			
790	a	5 W / 6 W +/-10% (>= 500 Lumens)	1	No	365.00
791	b	7 W +/-10% (>= 600 Lumens)	1	No	680.00
	ELEC-3.9.4	Supply and transportation of ----- -- back lit LED Down Light Recessed / Surface mounting round / square with housing made of Powder coated Pressure die cast aluminium housing with extended heat sink, with Protruded high efficiency diffuser, IP20, with wide operating voltage range, Power factor > 0.9, Surge protection: > 2KV, System efficacy of >100 lumens/watt, CCT: 3000K - 6500K as desired by the department and as per IS, CRI >80, and THD is less than 15% etc., complete with 5 years warranty with BIS Certification. LUMINAIRE MAKE : Phillips / OSRAM / Wipro / Crompton / Bajaj / Havells / Jaquar / IB LED / Panasonic / Halonix / HPL / Syska / Eveready / Surya / Keselec / FIEM / Arraystorm / GM / Goldmedal LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
792	a	12 W +/-10% (>= 1200 Lumens)	1	No	1590.00
793	b	15 W +/-10% (>= 1500 Lumens)	1	No	1700.00
794	c	18 W +/-10% (>= 1800 Lumens)	1	No	1960.00
795	d	24 W +/-10% (>= 2400 Lumens)	1	No	2200.00
	ELEC-3.9.5	Supply and transportation of ----- back lit LED Down Light Recessed / Surface mounting round/ square with housing made of Powder coated Pressure die cast aluminium housing with extended heat sink, with Protruded high efficiency diffuser, IP20, with wide operating voltage range, Power factor > 0.9, Surge protection: > 2KV, System efficacy of >90 lumens/watt, CCT: 3000K - 6500K as desired by the department and as per IS, CRI >80, and THD is less than 15% etc., complete with 5 years warranty. LUMINAIRE MAKE : Fortune Arrt / Capart / Kashyap BLU / Million / Trinic / Sieger / Stanjo / Promptec / Lighting Technologies / Renesola / C&S / Luker / RR Electric / Rhino			
796	a	12 W +/-10% (>= 1100 Lumens)	1	No	1200.00
797	b	18 W +/-10% (>= 1600 Lumens)	1	No	1400.00
	ELEC-3.9.6	Supply and transportation of ----- back lit LED Down Light Recessed / Surface mounting with housing made of Powder coated Pressure die cast aluminium housing with extended heat sink, with Protruded high efficiency diffuser, IP20, with wide operating voltage range, Power factor > 0.9, Surge protection: > 2KV, System efficacy of >80 lumens/watt, CCT: 3000K - 6500K as desired by the department and as per IS, CRI >80, and THD is less than 15% etc., complete with 5 years warranty. LUMINAIRE MAKE : Cosmo / VRILISO / Pro-Lite / Scintilla / JSTC Solar / Vimal / Taiyolux / Link Well / RYON / Enrich / Lumens (India) /			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		Kiran / Pharox / Mulex / Benlo / Savitha / Maklites.			
798	a	12 W +/-10% (>= 1000 Lumens)	1	No	800.00
799	b	18 W +/-10% (>= 1400 Lumens)	1	No	1100.00
	<b>ELEC-3.9.7</b>	Supply and transportation of ----- edge lit LED slimline panel light Housing made of Pressure die cast aluminium with Powder coated, round / Square with Protruded high efficiency diffuser, IP20, with wide operating voltage range, Power factor > 0.9, Surge protection: > 2KV, System efficacy of >100 lumens/watt, CCT: 3000K - 6500K as desired by the department and as per IS, CRI >80, and THD is less than 15% etc., complete with 5 years warranty with BIS Certification. LUMINAIRE MAKE : Phillips / OSRAM / Wipro / Crompton / Bajaj / Havells / Jaquar / IB LED / Panasonic / Halonix / HPL / Syska / Eveready / Surya / Keselec/ FIEM / Arraystorm / GM / Goldmedal LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
800	a	6W +/-10% (>= 600 Lumens)	1	No	660.00
801	b	12W +/-10% (>= 1200 Lumens)	1	No	900.00
802	c	15W +/-10% (>= 1500 Lumens)	1	No	1200.00
803	d	18W +/-10% (>= 1800 Lumens)	1	No	1300.00
	<b>ELEC-3.9.8</b>	Supply and transportation of ----- edge lit LED slimline panel Light Housing made of Pressure die cast aluminium with Powder coated, round / Square with Protruded high efficiency diffuser, IP20, with wide operating voltage range, Power factor > 0.9, Surge protection: > 2KV, System efficacy of >90 lumens/watt, CCT: 3000K - 6500K as desired by the department and as per IS, CRI >80, and THD is less than 15% etc., complete with 5 years warranty. LUMINAIRE MAKE : Fortune Arrt / Capart / Kashyap BLU / Million / Trinic / Sieger / Stanjo / Promptec / Lighting Technologies / Renesola / C&S / Luker / RR Electric / Rhino			
804	a	12W +/-10% (>= 1100 Lumens)	1	No	740.00
805	b	18W +/-10% (>= 1600 Lumens)	1	No	1050.00
	<b>ELEC-3.9.9</b>	Supply and transportation of ----- edge lit LED slimline panel Light Housing made of Pressure die cast aluminium with Powder coated, round / Square with Protruded high efficiency diffuser, IP20, with wide operating voltage range, Power factor > 0.9, Surge protection: > 2KV, System efficacy of >80 lumens/watt, CCT: 3000K - 6500K as desired by the department and as per IS, CRI >80, and THD is less than 15% etc., complete with 5 years warranty. LUMINAIRE MAKE : Cosmo / VRILISO / Pro-Lite / Scintilla / JSTC Solar / Vimal / Taiyolux / Link Well / RYON / Enrich / Kiran / Pharox / Mulex / Benlo / Savitha / Maklites.			
806	a	12W +/-10% (>= 1000 Lumens)	1	No	670.00
807	b	18W +/-10% (>= 1400 Lumens)	1	No	970.00
808	<b>ELEC-3.9.10</b>	Supply and transportation of 20W +/-10%, > 2000 lumens, 1200mm length LED retro tube light, housing made with aluminium	1	No	693.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		anodised body, wide operating voltage with double side connection, PF $\geq$ 0.9, Surge protection: > 2KV, THD<15%, with inbuilt driver and frosted cover CCT: 3000K - 6500K as desired by the department and as per IS specifications, minimum CRI $\geq$ 80,.etc complete with 5 years warranty with BIS Certification. LUMINAIRE MAKE: Phillips / OSRAM / Wipro / Crompton / Bajaj / Havells / Jaquar / IB LED / Panasonic / Halonix / HPL / Syska / Eveready / Surya / Keselec/ FIEM / Arraystorm / GM / Goldmedal LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
809	ELEC-3.9.11	Supply and transportation of 20W +/-10%, 1900 lumens, 1200mm length LED retro tube light, housing made with aluminum anodised body, wide operating voltage, double side connection, with PF $\geq$ 0.9, Surge protection: > 2KV, THD<10%, with inbuilt driver and frosted cover CCT: 3000K - 6500K as desired by the department and as per IS specifications, minimum CRI $\geq$ 80,.etc.complete with 5 years warranty. LUMINAIRE MAKE: Fortune Artt / Capart / Kashyap BLU / Million / Trinic / Sieger / Stanjo / Promptec / Lighting Technologies / Renesola / C&S / Luker / RR Electric / Rhino	1	No	570.00
810	ELEC-3.9.12	Supply and transportation of 20W +/-10%, 1800 lumens, 1200mm length LED retro tube light, housing made with aluminum anodised body, wide operating voltage, with double side connection, with PF $\geq$ 0.9, Surge protection: > 2KV, THD<15%, with inbuilt driver and frosted cover CCT: 3000K - 5700K, minimum CRI $\geq$ 70,.etc.,complete with 5 years warranty. LUMINAIRE MAKE : Cosmo / VRILISO / Pro-Lite / Scintilla / JSTC Solar / Vimal / Taiyolux / Link Well / RYON / Enrich / Lumens (India) / Kiran / Pharox / Mulex / Benlo / Savitha / Maklites.	1	No	522.00
811	ELEC-3.9.13	Supply and transportation of 20W +/-10%, >/ 2000 lumens, 1200mm length LED retro tube light, housing made with glass body, wide operating voltage with Single / double side connection, PF $\geq$ 0.9, Surge protection: > 2KV, THD<15%, with inbuilt driver and frosted cover CCT: 3000K - 6500K as desired by the department and as per IS specifications, minimum CRI $\geq$ 80,.etc complete with 5 years warranty with BIS Certification. LUMINAIRE MAKE: Phillips / OSRAM / GE Venture / Wipro / Crompton / Bajaj / Havells / Jaquar / IB LED / Panasonic / Halonix / HPL / Syska / Eveready / Surya / Keselec / Arraystorm / GM / Goldmedal LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.	1	No	404.00
812	ELEC-3.9.14	Supply and transportation of 20W +/-10%, >/ 2000 lumens, 1200mm length LED retro tube light, housing made with PC body,	1	No	499.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		<p>wide operating voltage with Single / double side connection, PF<math>\geq</math>0.9, Surge protection: &gt; 2KV, THD&lt;15%, with inbuilt driver and frosted cover CCT: 3000K - 6500K as desired by the department and as per IS specifications, minimum CRI<math>\geq</math>80,.etc complete with 5 years warranty with BIS Certification.</p> <p>LUMINAIRE MAKE: Phillips / OSRAM / GE Venture / Wipro / Crompton / Bajaj / Havells / Jaquar / IB LED / Panasonic / Halonix / HPL / Syska / Eveready / Surya / Keselec/ FIEM / Arraystorm / GM / Goldmedal</p> <p>LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.</p>			
813	ELEC-3.9.15	<p>Supply and transportation of 10W, 1000 lumens, 600mm length LED batten tube light, housing made with PC body, wide operating voltage with Single / double side connection, PF<math>\geq</math>0.9, Surge protection: &gt; 2KV, THD&lt;15%, with inbuilt driver and frosted cover CCT: 3000K - 6500K as desired by the department and as per IS specifications, minimum CRI<math>\geq</math>80,.etc complete with 5 years warranty with BIS Certification.</p> <p>LUMINAIRE MAKE: Phillips / OSRAM / GE Venture / Wipro / Crompton / Bajaj / Havells / Jaquar / IB LED / Panasonic / Halonix / HPL / Syska / Eveready / Surya / Keselec / Arraystorm / GM / Goldmedal</p> <p>LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.</p>	1	No	500.00
814	ELEC-3.9.16	<p>Supply and transportation of 22W +/- 10% , &gt;/ 2300 lumens, 1200mm length LED light housing made with aluminum anodised body, wide operating voltage with PF<math>\geq</math>0.9, Surge protection: &gt; 2KV, THD&lt;10%, with inbuilt driver and frosted cover CCT: 3000K - 6500K as desired by the department as per IS, minimum CRI<math>\geq</math>80 etc., complete with 5 years warranty with BIS Certification with BIS Certification.</p> <p>LUMINAIRE MAKE: Phillips / OSRAM / GE Venture / Wipro / Crompton / Bajaj / Havells / Jaquar / IB LED / Panasonic / Halonix / HPL / Syska / Eveready / Surya / Keselec/ FIEM / Arraystorm / GM / Goldmedal</p> <p>LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.</p>	1	No	800.00
	ELEC-3.9.17	<p>Supply and Transportation of .....Edge lit, 2' x2' (600mm x 600mm) slim panel LED luminaire Square Housing Made of Aluminum alloy with corrosion resistant powder coat, with high efficiency acrylic wide diffuser, with wide operating voltage range, Power factor &gt; 0.9, Surge protection &gt;2KV, System efficacy of &gt;100 lumens/watt, CCT: 3000K - 6500K as desired by the department, CRI &gt;80, and THD is less than 15% with non-integrated driver etc., complete with 5 years warranty with BIS Certification.</p> <p>LUMINAIRE MAKE : Phillips / OSRAM / GE Venture / Wipro / Crompton / Bajaj / Havells /</p>			



Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		Jaquar / IB LED / Panasonic / Halonix / HPL / Syska / Eveready / Surya / Keselec / FIEM / Arraystorm / GM / Goldmedal LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
815	a	32-36W (>=3600 Lumens)	1	No	3620.00
816	b	40-42W (>=4200 Lumens)			4000.00
817	c	45W (>=4500 Lumens)			4200.00
818	ELEC-3.9.18	Supply and Transportation of 36W Edge lit, 2' x2' (600mm x 600mm) slim panel LED luminaire Square Housing Made of Aluminum alloy with corrosion resistant powder coat, with high efficiency acrylic wide diffuser, with wide operating voltage range, Power factor > 0.9, Surge protection >2KV, System efficacy of >90 lumens/watt, CCT: 3000K - 6500K as desired by the department, CRI >80, and THD is less than 15% with non-integrated driver etc., complete with 5 years warranty. LUMINAIRE MAKE: Fortune Arrt / Capart / Kashyap BLU / Million / Trinic / Sieger / Stanjo / Promptec / Lighting Technologies / Renesola / C&S / Luker / RR Electric / Rhino	1	No	3220.00
819	ELEC-3.9.19	Supply and Transportation of 36W Edge lit 2' x2' (600mm x 600mm) Slim panel LED luminaire Square Housing Made of Aluminum alloy with corrosion resistant powder coat, with high efficiency acrylic wide diffuser, with wide operating voltage range, Power factor > 0.9, Surge protection >2KV, System efficacy of >80 lumens/watt, CCT: 3000K - 6500K as desired by the department, CRI >80, and THD is less than 15% with non-integrated driver etc., complete with 5 years warranty. LUMINAIRE MAKE : Cosmo / VRILISO / Pro-Lite / Scintilla / JSTC Solar / Vimal / Taiyolux / Link Well / RYON / Enrich / Lumens (India) / Kiran / Pharox / Mulex / Benlo / Savitha / Maklites.	1	No	2990.00
	ELEC-3.9.20	Supply and Transportation of ----- Back lit, 2' x2' (600mm x 600mm) Recessed / Surface mounted LED luminaire made of CRCA sheet housing with powder coated with high efficiency acrylic wide diffuser, with wide operating voltage range, Power factor > 0.9, Surge protection >2KV, System efficacy of >100 lumens/watt, CCT: 3000K - 6500K as desired by the department, CRI >80, and THD is less than 15% etc., complete with 5 years warranty with BIS Certification. LUMINAIRE MAKE : Phillips / OSRAM / GE Venture / Wipro / Crompton / Bajaj / Havells / Jaquar / IB LED / Panasonic / Halonix / HPL / Syska / Eveready / Surya / Keselec / FIEM / Arraystorm / GM / Goldmedal LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
820	a	30-36 W +/-10% (>=3600 Lumens)	1	No	3710.00
821	b	40-42 W +/-10% (>=4200 Lumens)	1	No	3900.00
822	c	45 W +/-10% (>=4500 Lumens)	1	No	4140.00
	ELEC-3.9.21	Supply and Transportation of ----- Back lit, 2' x2' (600mm x 600mm) Recessed / Surface			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		mounted LED luminaire made of CRCA sheet housing with powder coated with high efficiency acrylic wide diffuser, with wide operating voltage range, Power factor > 0.9, Surge protection >2KV, System efficacy of >90 lumens/watt, CCT: 3000K - 6500K as desired by the department, CRI >80, and THD is less than 15% etc., complete with 5 years warranty. LUMINAIRE MAKE: Fortune Arrt / Capart / Kashyap BLU / Million / Trinic / Sieger / Stanjo / Promptec / Lighting Technologies / Renesola / C&S / Luker / RR Electric / Rhino			
823	a	36 W +/-10% (>=3200 Lumens)	1	No	2990.00
824	b	45 W +/-10% (>=4000 Lumens)	1	No	3620.00
	<b>ELEC-3.9.22</b>	Supply and Transportation of ----- Back lit, 2' x2' (600mm x 600mm) Recessed / Surface mounted LED luminaire made of CRCA sheet housing with powder coated with high efficiency acrylic wide diffuser, with wide operating voltage range, Power factor > 0.9, Surge protection >2KV, System efficacy of >80 lumens/watt, CCT: 3000K - 6500K as desired by the department, CRI >80, and THD is less than 15% etc., complete with 5 years warranty. LUMINAIRE MAKE : Cosmo / VRILISO / Pro-Lite / Scintilla / JSTC Solar / Vimal / Taiyolux / Link Well / RYON / Enrich / Lumens (India) / Kiran / Pharox / Mulex / Benlo / Savitha / Maklites.			
825	a	36 W +/-10% (>=2900 Lumens)	1	No	2810.00
826	b	45 W +/-10% (>=3600 Lumens)	1	No	3100.00
827	<b>ELEC-3.9.23</b>	Supply and transportation of MS frame with powder coating suitable for 600mm x 600mm LED panel light.	1	No	504.00
828	<b>ELEC-3.9.24</b>	Supply & Fixing of prewired Patty type batten frame made with CRCA sheet powder coated suitable for LED tube light.	1	No	144.00
829	<b>ELEC-3.9.25</b>	Supply & Fixing of decorative prewired box type fixture made with CRCA sheet powder coated suitable for 4' LED tube light	1	No	280.00
	<b>3.1</b>	<b>LED INDOOR LAMPS</b>			
	<b>ELEC-3.10.1</b>	Supply of ----- with input voltage 90 to 300V, Colour temperature 3000k - 6500k, Beam angle 170 - 220 degrees, B22 base. Makes: Phillips / OSRAM / Crompton / Eveready / Bajaj / Havells / Pharox / Halonix / Greenlites / IB LED/ Jaquar / C&S / GM / / FIEM / Gold Medal / Million / Syska.			
830	a	0.5W LED Lamp	1	No	48.00
831	b	3.0W LED Lamp	1	No	110.00
832	c	5.0W LED Lamp	1	No	120.00
833	d	7.0W LED Lamp	1	No	128.00
834	e	9.0W LED Lamp	1	No	150.00
835	f	12.0W LED Lamp	1	No	225.00
836	g	15.0W LED Lamp	1	No	250.00
837	h	18.0W LED Lamp	1	No	325.00
838	i	30.0W LED Lamp	1	No	675.00
839	j	40.0W LED Lamp	1	No	875.00
840	k	50.0W LED Lamp	1	No	1150.00
841	<b>ELEC-3.10.2</b>	Supply of LED Candle Lamp for chandeliers. Makes: Phillips / OSRAM / Crompton / Eveready	1	No	272.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		/ Bajaj / Havells / Pharox / Halonix / Greenlites / IB LED/ Jaquar / C&S / GM / Gold Medal / Million / Syska.			
	<b>3.11</b>	<b>LED STREET LIGHTS</b>			
	<b>ELEC-3.11.1</b>	Supply and transportation of ..... LED Street light Body made of high grade pressure die - cast Aluminium alloy with corrosion resistant powder coat, having protective toughened glass cover, Less Glare, IP 66 (Silicon gasket ensures Optical & Electrical compartments are IP 66) protected, wide operating voltage range, P.F > 0.90, System having efficacy >100 lumens/watt, with Ingress protection IP66, Potted driver, Driver surge protection >10KV, THD<15%, CCT: 3000- 6500K as desired by the department and as per IS, CRI>70, Inbuilt Electrical protections like Over voltage, short circuit, Over load, Open Circuit, Miswiring, etc complete with BIS certification with 5 years warranty. The contractor must furnish the manufacturer warranty letter, LM 79 and LM 80 certificates. LUMINAIRE MAKE : PHILIPS / OSRAM / GE Venture / CROMPTON / BAJAJ / Wipro / Jaquar / Eveready / Halonix / Keselec / HAVELLS / POLYCAB / SURYA / SYSKA / Capart / Fortune Arrt / FIEM / Panasonic / Arraystorm / GM / Goldmedal LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
842	<b>a</b>	20 W +/-10% (>=2000 Lumens)	1	No	1900.00
843	<b>b</b>	30 W +/-10% (>=3000 Lumens)	1	No	2651.00
844	<b>c</b>	43 / 45 W +/-10% (>=4500 Lumens)	1	No	3807.00
845	<b>d</b>	60 / 65 W +/-10% (>=6500 Lumens)	1	No	5700.00
846	<b>e</b>	72 W +/-10% (>=7200 Lumens)	1	No	6200.00
847	<b>f</b>	90W +/-10% (>=9000 Lumens)	1	No	8450.00
848	<b>g</b>	100 W +/-10% (>=10000 Lumens)	1	No	9400.00
849	<b>h</b>	110 W +/-10% (>=11000 Lumens)	1	No	10400.00
850	<b>i</b>	120 W +/-10% (>=12000 Lumens)	1	No	11000.00
851	<b>j</b>	150 W +/-10% (>=15000 Lumens)	1	No	13500.00
852	<b>k</b>	180 W +/-10% (>=18000 Lumens)	1	No	14700.00
853	<b>l</b>	210 W +/-10% (>=21000 Lumens)	1	No	20000.00
	<b>ELEC-3.11.2</b>	Supply and transportation of ..... LED Street light Body made of high grade pressure die - cast Aluminium alloy with corrosion resistant powder coat, having protective toughened glass cover, Less Glare, IP 66 (Silicon gasket ensures Optical & Electrical compartments are IP 66) protected, wide operating voltage range, P.F > 0.90, System having efficacy >90 lumens/watt, with Ingress protection IP66, Driver surge protection >10KV, THD<15%, CCT: 3000- 6500K as desired by the department and as per IS, CRI>70, Inbuilt Electrical protections like Over voltage, short circuit, Over load, Open Circuit, Miswiring, etc complete with 5 years warranty. The contractor must furnish the manufacturer warranty letter, LM 79 and LM 80 certificates. LUMINAIRE MAKE : VIN / HPL / MILLION / C&S / RR Electric / IB LED / MIC / Promptec / Luker / Lumens (India) / Sieger / Renesola / TRINIC / STANJO / Rhino			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
854	a	20 W +/-10% (>=1800 Lumens)	1	No	1720.00
855	b	30 W +/-10% (>=2700 Lumens)	1	No	2500.00
856	c	43 / 45 W +/-10% (>=4050 Lumens)	1	No	3600.00
857	d	60 / 65 W +/-10% (>=5850 Lumens)	1	No	5100.00
858	e	72 W +/-10% (>=6480 Lumens)	1	No	5600.00
859	f	90W +/-10% (>=8100 Lumens)	1	No	7600.00
860	g	100 W +/-10% (>=9000 Lumens)	1	No	8500.00
861	h	110 W +/-10% (>=9900 Lumens)	1	No	9500.00
862	i	120 W +/-10% (>=10800 Lumens)	1	No	9900.00
	<b>ELEC-3.11.3</b>	Supply and transportation of ..... LED Street light Body made of high grade pressure die - cast Aluminium alloy with corrosion resistant powder coat, having protective toughened glass cover, Less Glare, IP 66 (Silicon gasket ensures Optical & Electrical compartments are IP 66) protected, wide operating voltage range, P.F > 0.90, System having efficacy >80 lumens/watt, with Ingress protection IP66, Driver surge protection >10KV, THD<15%, CCT: 3000- 6500K as desired by the department and as per IS, CRI>70, Inbuilt Electrical protections like Over voltage, short circuit, Over load, Open Circuit, Miswiring, etc complete with 5 years warranty. The contractor must furnish the manufacturer warranty letter, LM 79 and LM 80 certificates.  LUMINAIRE MAKE : COSMO / KASHYAP BLU / PRO-LITE / SCINTILLA / TAIYOLUX / LINK WELL / RYON / Mulex / Enrich / Kiran / Benlo / Savitha / Maklites.			
863	a	20 W +/-10% (>=1600 Lumens)	1	No	1650.00
864	b	30 W +/-10% (>=2400 Lumens)	1	No	2400.00
865	c	43 / 45 W +/-10% (>=3600 Lumens)	1	No	3400.00
866	d	60 / 65 W +/-10% (>=5200 Lumens)	1	No	4800.00
867	e	90W +/-10% (>=7200 Lumens)	1	No	7200.00
868	f	100 W +/-10% (>=8000 Lumens)	1	No	8000.00
869	g	110 W +/-10% (>=8800 Lumens)	1	No	9000.00
870	h	120 W +/-10% (>=9600 Lumens)	1	No	9300.00
		<b>LED FLOOD LIGHTS</b>			
	<b>ELEC-3.11.4</b>	Supply and transportation of ..... LED Flood light Luminaire made of pressure die cast aluminum housing with powder coated, having toughened glass cover, IP 66 (Silicon gasket ensures Optical & Electrical compartments are IP 66 )protected, wide operating voltage range , P.F > 0.90, System having efficacy >100 lumens/watt, with Ingress protection IP66, Driver surge protection >10KV, THD<15%, CCT: 3000- 6500K as desired by the department and as per IS, CRI>80, Inbuilt Electrical protections like Over voltage, short circuit, Over load, Open Circuit, Miswiring, etc complete with BIS certification with 5 years warranty. The contractor must furnish the manufacturer warranty letter, LM 79 and LM 80 certificates.  LUMINAIRE MAKE : PHILIPS / OSRAM / GE Venture / CROMPTON / BAJAJ / Wipro / Jaquar / Eveready / Halonix / Keselec / HAVELLS / POLYCAB / SURYA / SYSKA./ Capart / Fortune Arrt / FIEM / Arraystorm / GM / Goldmedal / Panasonic			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
871	a	60 W +/-10% (>=6000 Lumens)	1	No	6740.00
872	b	90 W +/-10% (>=9000 Lumens)	1	No	9438.00
873	c	120 W +/-10% (>=12000 Lumens)	1	No	12674.00
874	d	150 W +/-10% (>=15000 Lumens)	1	No	16248.00
875	e	200 W +/-10% (>=20000 Lumens)	1	No	19635.00
876	f	250 W +/-10% (>=25000 Lumens)	1	No	22984.00
	ELEC-3.11.5	Supply and transportation of ..... LED Flood light Luminaire made of pressure die cast aluminum housing with powder coated, having toughened glass cover, IP 66 (Silicon gasket ensures Optical & Electrical compartments are IP 66 )protected, wide operating voltage range , P.F > 0.90, System having efficacy >90 lumens/watt, with Ingress protection IP66, Driver surge protection >10KV, THD<15%, CCT: 3000- 6500K as desired by the department and as per IS, CRI>70, Inbuilt Electrical protections like Over voltage, short circuit, Over load, Open Circuit, Miswiring, etc complete with 5 years warranty. The contractor must furnish the manufacturer warranty letter, LM 79 and LM 80 certificates. LUMINAIRE MAKE : VIN / HPL / MILLION / C&S / RR Electric / IB LED / MIC / Promptec / Luker / Lumens (India) / Sieger / Renesola / TRINIC / STANJO / Rhino			
877	a	60 W +/-10% (>=5400 Lumens)	1	No	5680.00
878	b	90 W +/-10% (>=8100 Lumens)	1	No	8400.00
879	c	120 W +/-10% (>=10800 Lumens)	1	No	10550.00
880	d	150 W +/-10% (>=13500 Lumens)	1	No	12480.00
	ELEC-3.11.6	Supply and transportation of ..... LED Flood light Luminaire made of pressure die cast aluminum housing with powder coated, having toughened glass cover, IP 66 (Silicon gasket ensures Optical & Electrical compartments are IP 66 )protected, wide operating voltage range , P.F > 0.90, System having efficacy >80 lumens/watt, with Ingress protection IP66, Driver surge protection >10KV, THD<15%, CCT: 3000- 6500K as desired by the department and as per IS, CRI>70, Inbuilt Electrical protections like Over voltage, short circuit, Over load, Open Circuit, Miswiring, etc complete with 5 years warranty. The contractor has to furnish the manufacturer warranty letter, LM 79 and LM 80 certificates. LUMINAIRE MAKE : COSMO / KASHYAP BLU / PRO-LITE / SCINTILLA / TAIYOLUX / LINK WELL / RYON / Mulex / Enrich / Kiran / Benlo / Savitha / Maklites.			
881	a	60 W +/-10% (>=4800 Lumens)	1	No	4970.00
882	b	90 W +/-10% (>=7200 Lumens)	1	No	7340.00
883	c	120 W +/-10% (>=9600 Lumens)	1	No	9230.00
884	d	150 W +/-10% (>=12000 Lumens)	1	No	11230.00
		<b>NOTE :</b> The concerned Engineer must verify the following certificates and allow the product to use.			
		1. LM 79, LM 80 certificate			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		2. BIS Certificate			
		3. CRI / THD Certificate			
		4. Surge Protection > 2 KV for indoor & > 10 KV for outdoor			
		5. Manufacturer must produce NABL certified test reports			
		6. Guarantee letter from Manufacturer with project name			
		7. The Manufacturer Must have sufficient pick and paste machines.			
		8. The Manufacturer must of IP test facility.			
		9. The Manufacturer must use good lenses.			
		10. The field engineers must verify the rates and models propose in estimate.			
	<b>ELEC-3.11.7</b>	Supply and transportation of ..... LED High Bay Luminaire with high power COB LED made of pressure diecast aluminum housing with powder coated, Supply Input voltage 120 - 270 V AC, P.F > 0.90, high power LED's, System efficacy >100 lm / W and junction temperature < 70°C, with Ingress protection IP65, IK05, Driver surge protection 4KV, external Surge protection ≥ 5KV with wide/ Narrow beam optics, THD<10% at 110 Volts AC, driver efficiency >90%, CCT: 3000K - 5700K, minimum CRI>70, etc., complete with BIS certification with warranty 5 years warranty. The contractor must furnish the manufacturer warranty letter, LM 79 and LM 80 certificates. LUMINAIRE MAKE : PHILIPS / OSRAM / GE Venture / CROMPTON / BAJAJ / Wipro / Jaquar / Panasonic / Eveready / Halonix / Keselec / HAVELLS / SURYA / SYSKA / Arraystorm / GM / Goldmedal LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
885	<b>a</b>	60 W +/-10% (>6000 Lumens)	1	No	8550.00
886	<b>b</b>	90 W +/-10% (>9000 Lumens)	1	No	10450.00
887	<b>c</b>	120 W +/-10% (>12000 Lumens)	1	No	12350.00
888	<b>d</b>	150 W +/-10% (>15000 Lumens)	1	No	14250.00
889	<b>ELEC-3.11.8</b>	Supply and transportation of 10W LED Bulkhead fitting with milky diffuser heat sink integrated with housing with all accessories etc complete with 5 years warranty. LUMINAIRE MAKE : PHILIPS / OSRAM / GE / CROMPTON / BAJAJ / Keselec / Fortune Arrt / HALONIX / HAVELLS / HPL / SYSKA / SURYA / Arraystorm / GM / Goldmedal / Jaquar / Panasonic LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.	1	No	1071.00
	<b>ELEC-3.11.9</b>	Supply and transportation of ..... LED well glass fitting made-up of pressure die cast aluminum, integrated heat sink, dedicated mounting bracket, with all accessories etc complete with 5 years warranty. LUMINAIRE MAKE : PHILIPS / OSRAM / GE / CROMPTON / BAJAJ / Keselec / Fortune Arrt / HALONIX / HAVELLS / HPL / SYSKA / SURYA / Arraystorm / GM / Goldmedal / Jaquar / Panasonic			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		LED MAKE : PHILIPS LUMILEDS / CREE / NICHIA / OSRAM / SAMSUNG / LG LEDs.			
890	a	25 W +/-10% (>=2500 Lumens)	1	No	3000.00
891	b	35 W +/-10% (>=3500 Lumens)	1	No	3600.00
892	c	40 W +/-10% (>=4000 Lumens)	1	No	4300.00
893	d	45 W +/-10% (>=4500 Lumens)	1	No	4800.00
	<b>3.12</b>	<b>LED DRIVERS</b>			
	<b>ELEC-3.12.1</b>	Supply and transportation of LED Driver with input line voltage 120V-270V AC, 50Hz with surge protection more than 2.5 KV, IP20, suitable for----- LED down lighter. MAKES : PHILIPS / OSRAM / GE / CROMPTON / BAJAJ / Keselec / HALONIX / HAVELLS / HPL / SURYA / SYSKA / Jaquar / Arraystorm / GM / Goldmedal			
894	a	6 W / 9 W	1	No	279.00
895	b	12 W / 18 W / 20W / 22 W LED	1	No	411.00
896	c	36W	1	No	635.00
897	d	40 W / 45 W	1	No	767.00
	<b>ELEC-3.12.2</b>	Supply and transportation of LED Driver with input line voltage 120V-270V AC, 50Hz with surge protection more than 2.5 KV, IP20, suitable for----- LED down lighter. MAKES : PHAROX / AVNI / GOLDWYN / KRIPA LIGHTS / Fortune Arrt / STANJO / GREENLITES / TRINIC / PRO-LITE / SCINTILLA / JSTC - SOLAR / INSTA POWER / MILLION / PANASONIC / VIN.			
898	a	6 W / 9 W	1	No	237.00
899	b	12 W / 18 W / 20W / 22 W LED	1	No	351.00
900	c	36W	1	No	545.00
901	d	40 W / 45 W	1	No	661.00
	<b>ELEC-3.12.3</b>	Supply and transportation of LED Driver with input line voltage 120V-270V AC, 50Hz with surge protection of 4.0 KV, IP20, suitable for ----- LED streetlight fitting. Makes : PHILIPS / OSRAM / GE / CROMPTON / BAJAJ / Keselec / VIN / HALONIX / HAVELLS / HPL / SURYA / SYSKA / Jaquar / Arraystorm / GM / Goldmedal			
902	a	15-30W	1	No	464.00
903	b	45-80W	1	No	971.00
904	c	90-180W	1	No	1852.00
	<b>ELEC-3.12.4</b>	Supply and transportation of LED Driver with input line voltage 120V-270V AC, 50Hz with surge protection of 4.0 KV, IP20, suitable for ----- LED streetlight fitting. MAKES : PHAROX / AVNI / GOLDWYN / KRIPA LIGHTS / Fortune Arrt / STANJO / GREENLITES / TRINIC / PRO-LITE / SCINTILLA / JSTC - SOLAR / INSTA POWER / MILLION / PANASONIC.			
905	a	15-30W	1	No	430.00
906	b	45-80W	1	No	914.00
907	c	90-180W	1	No	1746.00
		<b>SECTION - 4</b>			
	<b>4.1</b>	<b>U.G. CABLES</b>			
	<b>ELEC-4.1.1</b>	Supply of ----- XLPE insulated, 1100V grade armored aluminum cable with ISI mark as per specification confirming to IS:7098 (Part - I) Makes : Torrent / Unicab / Universal / Polycab /			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		Havells / Gloster / KEI / Finolex / Paragon / RR kable / Beljin / Ollivin			
908	a	4 Sq.mm 2 Core	1	Mtr	122.00
909	b	6 Sq.mm 2 Core	1	Mtr	142.00
910	c	10 Sq.mm 2 Core	1	Mtr	173.00
911	d	6 Sq.mm 4 Core	1	Mtr	173.00
912	e	10 Sq.mm 4 Core	1	Mtr	193.00
913	f	16 Sq.mm 4 Core	1	Mtr	214.00
914	g	25 Sq.mm 3.5 Core	1	Mtr	272.00
915	h	35 Sq.mm 3.5 Core	1	Mtr	326.00
916	i	50 Sq.mm 3.5 Core	1	Mtr	431.00
917	j	70 Sq.mm 3.5 Core	1	Mtr	556.00
918	k	95 Sq.mm 3.5 Core	1	Mtr	722.00
919	l	120 Sq.mm 3.5 Core	1	Mtr	888.00
920	m	150 Sq.mm 3.5 Core	1	Mtr	1006.00
921	n	185 Sq.mm 3.5 Core	1	Mtr	1235.00
922	o	240 Sq.mm 3.5 Core	1	Mtr	1567.00
923	p	300 Sq.mm 3.5 Core	1	Mtr	1914.00
924	q	400 Sq.mm 3.5 Core	1	Mtr	2402.00
	<b>ELEC-4.1.2</b>	Supply of ----- XLPE insulated, 1100V grade armored aluminum cable with ISI mark as per specification confirming to IS:7098 (Part - I) Makes : RPG / V-Guard / Fortune Arrt / Suncab / Finecab / Gemscab / Payal / Orbit			
925	a	4 Sq.mm 2 Core	1	Mtr	106.00
926	b	6 Sq.mm 2 Core	1	Mtr	124.00
927	c	10 Sq.mm 2 Core	1	Mtr	149.00
928	d	6 Sq.mm 4 Core	1	Mtr	149.00
929	e	10 Sq.mm 4 Core	1	Mtr	168.00
930	f	16 Sq.mm 4 Core	1	Mtr	186.00
931	g	25 Sq.mm 3.5 Core	1	Mtr	238.00
932	h	35 Sq.mm 3.5 Core	1	Mtr	282.00
933	i	50 Sq.mm 3.5 Core	1	Mtr	370.00
934	j	70 Sq.mm 3.5 Core	1	Mtr	480.00
935	k	95 Sq.mm 3.5 Core	1	Mtr	624.00
936	l	120 Sq.mm 3.5 Core	1	Mtr	766.00
937	m	150 Sq.mm 3.5 Core	1	Mtr	870.00
938	n	185 Sq.mm 3.5 Core	1	Mtr	1064.00
939	o	240 Sq.mm 3.5 Core	1	Mtr	1356.00
940	p	300 Sq.mm 3.5 Core	1	Mtr	1655.00
941	q	400 Sq.mm 3.5 Core	1	Mtr	2078.00
	<b>4.2</b>	<b>11 KV H.T. XLPE CABLES</b>			
	<b>ELEC-4.2.1</b>	Supply of ----- HT XLPE (E) insulated 11000 V grade armored Cable, as per IS specification confirming to IS 7098/II/85 with latest amendments. Makes : Torrent / Unicab / Universal / Polycab / Havells / KEI / RPG / Gloster.			
942	a	35 Sq.mm 3 Core	1	Mtr	782.00
943	b	50 Sq.mm 3 Core	1	Mtr	888.00
944	c	70 Sq.mm 3 Core	1	Mtr	1058.00
945	d	95 Sq.mm 3 Core	1	Mtr	1258.00
946	e	120 Sq.mm 3 Core	1	Mtr	1429.00
947	f	150 Sq.mm 3 Core	1	Mtr	1620.00
948	g	185 Sq.mm 3 Core	1	Mtr	1920.00
949	h	240 Sq.mm 3 Core	1	Mtr	2184.00
950	i	300 Sq.mm 3 Core	1	Mtr	2461.00
	<b>ELEC-4.2.2</b>	Supply of ----- HT XLPE (E) insulated 33000 V grade armored Cable, as per IS			



Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		specification confirming to IS 7098/II/85 with latest amendments. Makes : Torrent / Unicab / Universal / Polycab / Havells / KEI / Gloster			
951	a	95 Sq.mm 3 Core	1	Mtr	1826.00
952	b	120 Sq.mm 3 Core	1	Mtr	2029.00
953	c	150 Sq.mm 3 Core	1	Mtr	2220.00
954	d	185 Sq.mm 3 Core	1	Mtr	2435.00
955	e	240 Sq.mm 3 Core	1	Mtr	2790.00
956	f	300 Sq.mm 3 Core	1	Mtr	3144.00
957	g	400 Sq.mm 3 Core	1	Mtr	3640.00
	4.3	<b>CABLE GLANDS</b>			
		<b>SINGLE COMPRESSION HEAVY DUTY GLANDS FOR ARMoured CABLES</b>			
	ELEC-4.3.1	Supply of heavy duty type single compression brass cable glands duly nickel plated complete with brass checknut, outer sheath sealing rubber ring and washers suitable for ----- -XLPE insulated armored cable etc complete. Makes: SMI / Commet / Dowels.			
958	a	Up to 16.0 Sq.mm 2 Core	1	No	94.00
959	b	Up to 16.0 Sq.mm 4 Core	1	No	120.00
960	c	25 Sq.mm to 50.0 Sq.mm 3.5 Core	1	No	173.00
961	d	70 Sq.mm to 95.0 Sq.mm 3.5 core	1	No	266.00
962	e	120 Sq.mm to 150.0 Sq.mm 3.5 core	1	No	447.00
963	f	185 Sq.mm 3.5 core	1	No	553.00
964	g	240 Sq.mm 3.5 core	1	No	639.00
965	h	300 Sq.mm 3.5 core	1	No	799.00
966	i	400 Sq.mm 3.5 core	1	No	932.00
		<b>DOUBLE COMPRESSION HEAVY DUTY GLANDS FOR ARMoured CABLES</b>			
	ELEC-4.3.2	Supply of heavy duty type double compression weatherproof type brass cable glands duly nickel plated as per BS 6121 and IP66 complete with brass checknut, outer sheath sealing gasket suitable for ----- XLPE insulated armored cable etc complete. Makes: SMI / Commet / Dowels.			
967	a	Up to 16.0 Sq.mm 2 Core	1	No	200.00
968	b	10 Sq.mm 4 Core	1	No	200.00
969	c	16 to 25 Sq.mm 4 Core	1	No	266.00
970	d	35 Sq mm 3.5 Core	1	No	328.00
971	e	50 Sq mm 3.5 Core	1	No	420.00
972	f	70 to 95 Sq.mm 4 Core	1	No	634.00
973	g	120 to 150 Sq.mm 4 Core	1	No	879.00
974	h	185 Sq mm 3.5 Core	1	No	1078.00
975	i	240 Sq mm 3.5 Core	1	No	1425.00
976	j	300 Sq mm 3.5 Core	1	No	1650.00
977	k	400 Sq mm 3.5 Core	1	No	1890.00
		<b>SHROUDS FOR DOUBLE COMPRESSION GLANDS</b>			
	ELEC-4.3.3	Supply and erecting of PVC shrouds for double compression brass cable glands suitable for ----- ----- XLPE insulated armored cable etc complete.			
978	a	Up to 16.0 Sq.mm 2 Core	1	No	9.00
979	b	10 Sq.mm 4 Core	1	No	14.00
980	c	16 to 25 Sq.mm 4 Core	1	No	14.00
981	d	35 Sq mm 3.5 Core	1	No	22.00
982	e	50 Sq mm 3.5 Core	1	No	25.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
983	f	70 to 95 Sq.mm 4 Core	1	No	35.00
984	g	120 to 150 Sq.mm 4 Core	1	No	35.00
985	h	185 Sq mm 3.5 Core	1	No	53.00
986	i	240 Sq mm 3.5 Core	1	No	53.00
987	j	300 Sq mm 3.5 Core	1	No	77.00
988	k	400 Sq mm 3.5 Core	1	No	77.00
		<b>EARTH TAGS FOR GLANDS</b>			
	<b>ELEC-4.3.4</b>	Supply and erecting of brass earth tag for cable glands suitable for ----- etc complete.			
989	a	up to 10.0 Sq.mm	1	No	14.00
990	b	16 to 35.0 Sq.mm	1	No	14.00
991	c	50.0 Sq.mm	1	No	20.00
992	d	70 to 95.0 Sq.mm	1	No	23.00
993	e	120 to 185.0 Sq.mm	1	No	31.00
994	f	240 to 300.0 Sq.mm	1	No	51.00
995	g	400.0 Sq.mm	1	No	70.00
	<b>4.4</b>	<b>LUGS</b>			
	<b>ELEC-4.4.1</b>	Supply of heavy duty long barrel copper lugs confirming to I.S specifications suitable for ----- cable etc complete with nuts, bolts, and washers. Makes: DMI / Jainson / Dowels or equivalent make as approved by the department			
996	a	Up to 16 Sq.mm	1	No	25.00
997	b	25 Sq.mm	1	No	34.00
998	c	35 Sq.mm	1	No	42.00
999	d	50 Sq.mm	1	No	58.00
1000	e	70 Sq.mm	1	No	102.00
1001	f	95 Sq.mm	1	No	125.00
1002	g	120 Sq.mm	1	No	169.00
1003	h	150 Sq.mm	1	No	199.00
1004	i	185 Sq.mm	1	No	286.00
1005	j	240 Sq.mm	1	No	413.00
1006	k	300 Sq.mm	1	No	547.00
1007	l	400 Sq.mm	1	No	801.00
	<b>ELEC-4.4.2</b>	Supply of heavy duty long barrel aluminum lugs confirming to I.S specifications suitable for ----- cable etc complete with nuts, bolts, and washers. Makes: DMI / Jainson / Dowels or equivalent make as approved by the department			
1008	a	Up to 16 Sq.mm	1	No	15.00
1009	b	25 Sq.mm	1	No	18.00
1010	c	35 Sq.mm	1	No	21.00
1011	d	50 Sq.mm	1	No	23.00
1012	e	70 Sq.mm	1	No	29.00
1013	f	95 Sq.mm	1	No	30.00
1014	g	120 Sq.mm	1	No	43.00
1015	h	150 Sq.mm	1	No	54.00
1016	i	185 Sq.mm	1	No	70.00
1017	j	240 Sq.mm	1	No	101.00
1018	k	300 Sq.mm	1	No	134.00
1019	l	400 Sq.mm	1	No	218.00
	<b>4.5</b>	<b>HEAT SHRINKABLE LT CABLE JOINTS</b>			
	<b>ELEC-4.5.1</b>	Supply and erecting of heat shrinkable straight through joint Indoor / Outdoor for L.T. XLPE Armored 1100V grade cable complete with necessary accessories and suitable clamps including cost and conveyance of materials			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		complete for ----- with outer tubing seamless type etc complete for finished item of work. Makes : Raychem / Transeal / M Seal			
1020	a	10 to 16 Sq.mm 4 Core	1	No	1771.00
1021	b	25 to 50 Sq.mm 3.5 Core	1	No	2099.00
1022	c	70 to 185 Sq.mm 3.5 Core	1	No	3032.00
1023	d	240 to 300 Sq.mm 3.5 Core	1	No	5433.00
1024	e	400 Sq.mm 3.5 Core	1	No	7398.00
	<b>4.6</b>	<b>11 KV 3 CORE HT CABLE STRAIGHT THROUGH JOINTS</b>			
	<b>ELEC-4.6.1</b>	Providing and erecting heat shrinkable straight through joint for outdoor / indoor for H.T, XLPE Insulated armored cable 11000V grade complete with necessary accessories and suitable clamps for ----- cable including cost and conveyance of materials and all labour charges etc., complete with outer tubing tubular type. Makes : Raychem / Transeal / M Seal			
1025	a	16 to 35Sq.mm	1	No	18192.00
1026	b	50 to 95Sq.mm	1	No	21830.00
1027	c	120 to 185Sq.mm	1	No	27894.00
	<b>4.7</b>	<b>HT END TERMINATION KITS</b>			
	<b>ELEC-4.7.1</b>	Providing and erecting heat shrinkable indoor termination kit for 11 KV HT XLPE insulated armored cable ----- with necessary materials etc., complete. Makes : Raychem / Transeal / M Seal			
1028	a	70-95 Sq.mm 3 core	1	No	10225.00
1029	b	120 Sq.mm 3 core	1	No	10370.00
1030	c	150-185 Sq.mm 3 core	1	No	11122.00
1031	d	240-300 Sq.mm 3 core	1	No	11886.00
	<b>ELEC-4.7.2</b>	Providing and erecting heat shrinkable outdoor termination kit for 11 KV HT XLPE insulated armored cable ----- with necessary materials etc., complete. Makes : Raychem / Transeal / M Seal			
1032	a	70-95 Sq.mm 3 core	1	No	15523.00
1033	b	120 Sq.mm 3 core	1	No	15766.00
1034	c	150-185 Sq.mm 3 core	1	No	17222.00
1035	d	240-300 Sq.mm 3 core	1	No	17707.00
	<b>4.8</b>	<b>CABLE FAULT DETECTION</b>			
1036	<b>ELEC-4.8.1</b>	Cable Fault Detection for all types of LT underground cables from 16 sq mm to 400 sq mm up to 250 Mtrs length of cable	1	Job	7000.00
1037	<b>ELEC-4.8.2</b>	Cable Fault Detection for all types of HT underground cables from 16 sq mm to 400 sq mm up to 250 Mtrs length of cable	1	Job	8000.00
	<b>4.9</b>	<b>DOUBLE WALLED CORRUGATED HDPE PIPE</b>			
	<b>ELEC-4.9.1</b>	Supply and Transportation of ----- double walled corrugated HDPE duct made as per specification BSEN - 500 86/IS 14930 Part-II with all accessories like couplers, bends, end caps, Ts etc., complete. Makes: DURA LINE (Dura Guard) / Bajaj / Gamson / Ultra Plus / CPE			
1038	a	Outer dia 50mm and Inner dia 38mm	1	Mtr	91.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
1039	b	Outer dia 63mm and Inner dia 51mm	1	Mtr	117.00
1040	c	Outer dia 78mm and Inner dia 63mm	1	Mtr	143.00
1041	d	Outer dia 90mm and Inner dia 76mm	1	Mtr	152.00
1042	e	Outer dia 120mm and Inner dia 103.50mm	1	Mtr	237.00
1043	f	Outer dia 160mm and Inner dia 136mm	1	Mtr	352.00
1044	g	Outer dia 180mm and Inner dia 152mm	1	Mtr	462.00
1045	h	Outer dia 200mm and Inner dia 170mm	1	Mtr	538.00
	<b>4.1</b>	<b>CABLE TRAYS</b>			
		<b>PERFORATED CABLE TRAYS</b>			
	<b>ELEC-4.10.1</b>	Supply, Transportation, and Installation of ----- --- hot dip GI perforated cable tray without cover along with coupler plates, T's, Bends, Reducers, Anchor bolts, nuts, washers and slotted channels / Angle Iron Channels etc complete and the tray should be fitted on the wall / Ceiling etc. complete for finished item of work. (Makes: DEC/MNR/ H FAB or equivalent)			
		<b>Note:</b> Add 30% Extra for Perforated cable tray with cover on below rates.			
1046	a	600mm x 75mm x 2mm thick	1	Mtr	1546.00
1047	b	600mm x 50mm x 2mm thick	1	Mtr	1148.00
1048	c	450mm x 50mm x 2mm thick	1	Mtr	1008.00
1049	d	300mm x 50mm x 2mm thick	1	Mtr	852.00
1050	e	150mm x 50mm x 2mm thick	1	Mtr	476.00
1051	f	100mm x 25mm x 2mm thick	1	Mtr	278.00
1052	g	75mm x 25mm x 2mm thick	1	Mtr	245.00
1053	h	600mm x 75mm x 1.6mm thick	1	Mtr	1240.00
1054	i	600mm x 50mm x 1.6mm thick	1	Mtr	916.00
1055	j	450mm x 50mm x 1.6mm thick	1	Mtr	805.00
1056	k	300mm x 50mm x 1.6mm thick	1	Mtr	695.00
1057	l	150mm x 50mm x 1.6mm thick	1	Mtr	376.00
1058	m	100mm x 25mm x 1.6mm thick	1	Mtr	222.00
1059	n	75mm x 25mm x 1.6mm thick	1	Mtr	197.00
		<b>LADDER TYPE CABLE TRAYS</b>			
	<b>ELEC-4.10.2</b>	Supply, Transportation, and Installation of ----- ----- GI Ladder type cable tray along with required coupler plates, T's, Bends, Reducers, Anchor bolts, nuts, washers and slotted channels / Angle Iron Channels etc complete and the tray should be fitted on the wall / Ceiling etc. complete for finished item of work. (Makes: DEC/MNR/ H FAB or equivalent)			
1060	a	1000mm x 75mm x 2mm thick	1	Mtr	1227.00
1061	b	750mm x 75mm x 2mm thick	1	Mtr	1106.00
1062	c	600mm x 75mm x 2mm thick	1	Mtr	972.00
1063	d	300mm x 50mm x 2mm thick	1	Mtr	607.00
1064	e	150mm x 50mm x 2mm thick	1	Mtr	486.00
		<b>SECTION - 5</b>			
	<b>5.1</b>	<b>FANS</b>			
1065	<b>ELEC- 5.1.1</b>	Supply, Transportation of energy efficient fan, 1200 mm sweep, aluminium body, consuming 28 W, BEE 5 star rated, ceiling fan with Brush Less Direct Current(BLDC) motor, class of insulation: B, 3 no's blades, 30 cm long down rod, 2 no's canopies, shackle' kit, safety rope, copper winding, Power Factor greater than 0.90, Service Value (CMMAV) greater than 8.5, Air delivery minimum 235 CMM, 350 RPM( tolerance as per IS:374-2019), THD less than 10%. with remote or	1	No	2825.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		compatible to electronic step type regulator unit for speed control and all remaining accessories including safety pin, nut bolts, washers, temperature rise=75 degree C(max), insulation resistance more than 2 mega ohm, suitable for 230V, 50 HZ, single phase AC supply, earthing etc., including all standard accessories etc., complete. Makes : Atomberg (Efficio ) / Havells / Orient			
1066	ELEC- 5.1.2	Supply, Transportation of energy efficient fan, 1400 mm sweep, aluminium body, consuming 32 W, BEE 5 star rated, ceiling fan with Brush Less Direct Current(BLDC)motor, class of insulation: B, 3 no's blades, 30 cm long down rod, 2 no's canopies, shackle' kit, safety rope, copper winding, Power Factor greater than 0.90, Service Value (CMMAV) greater than 7.85, Air delivery minimum 270 CMM, 275 RPM( tolerance as per IS:374-2019), THD less than 10%. with remote or compatible to electronic step type regulator unit for speed control and all remaining accessories including safety pin, nut bolts, washers, temperature rise = 75 degree C(max), insulation resistance more than 2 mega ohm, suitable for 230V, 50 HZ, single phase AC supply, earthing etc., including all standard accessories etc., complete. Makes : Atomberg (Efficio ) / Havells / Orient	1	No	2960.00
1067	ELEC- 5.1.3	Supply, Transportation of energy efficient decorative fan, 1200 mm sweep, aluminium body, consuming 28 W, BEE 5 star rated, ceiling fan with Brush Less Direct Current(BLDC)motor, class of insulation: B, 3 no's blades, 30 cm long down rod, 2 no's canopies, shackle kit, safety rope, copper winding, Power Factor greater than 0.90, Service Value (CMM/W) greater than 8.5, Air delivery minimum 235 CMM, 350 RPM (tolerance as per IS:374-2019), THD less than 10%, remote or compatible to electronic step type regulator unit for speed control and all remaining accessories including safety pin, nut bolts, washers, temperature rise = 75 degree C (max), insulation resistance more than 2 mega ohm, suitable for 230V, 50 HZ, single phase AC supply, earthing etc., complete. Makes : Atomberg (Efficio + ) / Havells / Orient / RR / Halonix	1	No	3000.00
1068	ELEC- 5.1.4	Supply, Transportation of energy efficient decorative fan, 1400 mm sweep, aluminium body, consuming 35 W, BEE 5 star rated, ceiling fan with Brush Less Direct Current(BLDC)motor, class of insulation: B, 3 no's blades, 30 cm long down rod, 2 no's canopies, shackle kit, safety rope, copper winding, Power Factor greater than 0.90, Service Value (CMM/W) greater than 7.8, Air delivery minimum 270 CMM, 275 RPM (tolerance as per IS:374-2019), THD less than 10%, remote or compatible to electronic step type regulator unit for speed control and all remaining accessories including safety pin, nut bolts, washers, temperature rise = 75 degree C	1	No	3300.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		(max), insulation resistance more than 2 mega ohm, suitable for 230V, 50 HZ, single phase AC supply, earthing etc., complete. Makes : Atomberg (Efficio + ) / Havells / Orient / RR / Halonix			
1069	ELEC-5.1.5	Supply of 12" (300mm) Cabin fan. Makes : Crompton / Havells Ciera / Orient AP12 / Panasonic / Halonix / RR.	1	No	1896.00
1070	ELEC-5.1.6	Supply of 16" (400 mm) BLDC 32 W Pedestal Fan with service value 2.7 CMM / Watt and with remote controller and with all accessories etc., Makes : Atomberg / Crompton / Orient / Havells / Halonix .	1	No	2960.00
1071	ELEC-5.1.7	Supply of 16" (400mm) BLDC 30 W Wall mounted Fan with service value 2.7 CMM / Watt with all accessories etc., Makes : Atomberg / Crompton / Orient / Havells / Halonix .	1	No	2750.00
	ELEC-5.1.8	Supply of -----Wall mounting / Pedestal Air Circulators Makes : Crompton / Havells Turbo Force / Orient / Almonard / Panasonic / Halonix / RR.			
1072	a	18" (450mm)	1	No	5976.00
1073	b	24" (600mm)	1	No	7299.00
	ELEC-5.1.9	Supply of ----- Light duty exhaust fan with metal blades etc complete Makes : Crompton / Havells Ventilair-DB / Orient hill air.			
1074	a	9" (225mm)	1	No	1423.00
1075	b	12" (300mm)	1	No	1583.00
	ELEC-5.1.10	Supply of ----- Ventilating exhaust fan with shutters etc complete Makes : Crompton / Havells Ventilair / Orient / Panasonic / Halonix / RR.			
1076	a	6" (150mm)	1	No	1433.00
1077	b	8" (200mm)	1	No	1654.00
	ELEC-5.1.11	Supply of -----, 900 RPM Heavy duty exhaust fans with metallic blades. Makes : Crompton / Almonard / Havells Turbo Force SP.			
1078	a	12" (300mm)	1	No	3121.00
1079	b	15" (375mm)	1	No	3682.00
1080	c	18" (450mm)	1	No	4807.00
	ELEC-5.1.12	Supply and fixing of GI louver shutter including GI mesh to avoid birds entry with necessary materials suitable for -----Exhaust fan.			
1081	a	9"	1	No	154.00
1082	b	12"	1	No	166.00
1083	c	15" / 16"	1	No	181.00
1084	d	18"	1	No	198.00
	ELEC-5.1.13	Providing recessing -----thickness brick wall suitable for erecting of exhaust fan up to 450mm sweep completed with grouting, nuts, bolts, plastering and colour wash to match the colour of wall .			
1085	a	9"	1	No	255.00
1086	b	12"	1	No	441.00
1087	c	15" / 18"	1	No	551.00
1088	ELEC-5.1.14	Supply of 8" (200 mm) 20 W / 1500 RPM BLDC exhaust fan with necessary accessories etc.,	1	No	1560.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		complete Makes : Atomberg / Crompton / Havells / Orient.			
	<b>5.2</b>	<b>WATER HEATERS</b>			
	<b>ELEC-5.2.1</b>	Supply, Transportation, Installation, Testing and commissioning of storage / Pressure type Vertical / Horizontal 230/250V single phase 2000watts ISI mark 5 Star rated water heater with ABS plastic body of ----- capacity to withstand up to 8.0 bar of water pressure including all standard accessories and dead weight pressure reducing valve on out let side, including cost of 2 Nos SS flexible braided hose pipe, testing and all labour charges etc., complete. Makes : Crompton Solarium BLX / Jaquar Elena / Venus Lyra / Racold Eterno Swift / Racold Andris Lux Plus / AO Smith HSE SDS / AO Smith HSE SES / Havells Puro Turbo or equivalent as approved by the Dept.			
1089	<b>a</b>	15 Ltrs	1	No	10364.00
1090	<b>b</b>	25 Ltrs	1	No	12128.00
	<b>5.3</b>	<b>ACCESSORIES FOR WATER HEATERS</b>			
1091	<b>ELEC-5.3.1</b>	Supply and Installation of Heating element of 1.5 / 2.0 / 3.0 KW.	1	No	484.00
1092	<b>ELEC-5.3.2</b>	Supply, Installation, Testing and Commissioning of thermostat with range 30 <sup>0</sup> to 90 <sup>0</sup> C adjustable and suitable for 25 to 50 Ltrs capacity.	1	No	327.00
1093	<b>ELEC-5.3.3</b>	Supply , Installation, Testing and Commissioning of pressure release valve for water heater of 15 to 50 Ltrs. Capacity.	1	No	327.00
1094	<b>ELEC-5.3.4</b>	Supply, , Installation, Testing and Commissioning of Metallic / SS Flexible braided hose pipe	1	No	218.00
		<b>NOTE</b> : If it is only supplying the material (without installation) reduce the prices by 5%			
	<b>5.4</b>	<b>STARTERS FOR MOTORS</b>			
	<b>ELEC-5.4.1</b>	Supply & Fixing of D.O.L Starter 250V, Single phase, 50Hz. With SS enclosure comprising of contactor with bi-metallic relay with necessary push buttons, etc., complete suitable ----- Makes: Siemens / Crompton / L&T / BCH / ABB			
1095	<b>a</b>	Up to 3.0 HP.	1	No	900.00
1096	<b>b</b>	Up to 7.5.HP.	1	No	2100.00
1097	<b>c</b>	Up to 10.0.HP.	1	No	3500.00
	<b>ELEC-5.4.2</b>	Supply & Fixing of Star Delta Starter 415V, Three phase, 50Hz. With SS enclosure comprising of contactor with bi-metallic relay with necessary push buttons, etc., complete suitable from ----- ----- Makes: Siemens / Crompton / L&T / BCH.			
1098	<b>a</b>	12.5 HP to 15.0 HP.	1	No	6800.00
1099	<b>b</b>	Above 15.0 HP up to 25.0 HP.	1	No	12450.00
1100	<b>c</b>	Above 25.0 HP up to 35.0 HP.	1	No	25789.00
1101	<b>ELEC-5.4.3</b>	Supply and erecting water level controller 230 / 415V AC, 2 way per underground tank operation only.	1	No	1719.00
1102	<b>ELEC-5.4.4</b>	Supply and erecting water level controller 230 / 415V AC, 2 way per overhead tank operation only.	1	No	1984.00
1103	<b>ELEC-5.4.5</b>	Supply and erecting Float sensor switch for	1	No	661.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		water level controller working on 250V and rated current 8 A, with 2Mtr High quality wire.			
1104	ELEC-5.4.6	Supply and erecting directly operated single phasing preventer complete erected and connected to power supply to operate in case of single phasing.	1	No	1058.00
1105	ELEC-5.4.7	Supply and erecting pump protection relay comprising current sensing phase failure and UV+OV relay with dry run and overload protection suitable for 3 phase pumps.	1	No	3306.00
	<b>5.5</b>	<b>SINGLE PHASE SUBMERSIBLE MOTOR PUMP SETS</b>			
	<b>ELEC-5.5.1</b>	Supply and Transportation of ----- single phase ISI submersible motor pump set suitable for 4" Bore well. Makes: Texmo / CRI / KSB / Aryan Varsha / Lubi			
1106	<b>a</b>	0.75HP 8 Stage	1	No	14910.00
1107	<b>b</b>	1.00HP 10 Stage	1	No	17010.00
1108	<b>c</b>	1.00HP 15 Stage	1	No	17535.00
1109	<b>d</b>	1.50HP 21 Stage	1	No	21210.00
1110	<b>e</b>	2.00HP 25 Stage	1	No	25725.00
	<b>ELEC-5.5.2</b>	Supply and Transportation of ----- single phase ISI submersible motor pump set suitable for 4" Bore well. Makes: Flowell / Waterman / Falcon / Ellen/Kirloskar .			
1111	<b>a</b>	0.75 HP 8 Stage	1	No	14175.00
1112	<b>b</b>	1.00 HP 10 Stage	1	No	16170.00
1113	<b>c</b>	1.00 HP 15 Stage	1	No	16695.00
1114	<b>d</b>	1.50 HP 21 Stage	1	No	20265.00
1115	<b>e</b>	2.00 HP 25 Stage	1	No	24255.00
	<b>5.6</b>	<b>THREE PHASE SUBMERSIBLE MOTOR PUMP SETS.</b>			
	<b>ELEC-5.6.1</b>	Supply and Transportation of star rated -----Three phase ISI submersible motor pump set suitable for 6" Bore well. Makes: Texmo / CRI / KSB / Aryan Varsha / Lubi			
1116	<b>a</b>	3.00 HP 5-10 Stage	1	No	27608.00
1117	<b>b</b>	5.00 HP 5-10 Stage	1	No	31059.00
1118	<b>c</b>	5.00 HP 12-16 Stage	1	No	34873.00
1119	<b>d</b>	7.50 HP 5-10 Stage	1	No	34419.00
1120	<b>e</b>	7.50 HP 12-16 Stage	1	No	38051.00
1121	<b>f</b>	7.50 HP 20-25 Stage	1	No	39051.00
1122	<b>g</b>	10.00 HP 12-18 Stage	1	No	40231.00
1123	<b>h</b>	10.00 HP 20-30 Stage	1	No	50495.00
1124	<b>i</b>	10.00 HP 35-40 Stage	1	No	57330.00
1125	<b>j</b>	12.50 HP 12-20 Stage	1	No	48841.00
1126	<b>k</b>	12.50 HP 24-40 Stage	1	No	59535.00
1127	<b>l</b>	15.00 HP 10-20 Stage	1	No	63945.00
1128	<b>m</b>	15.00 HP 24-40 Stage	1	No	66150.00
	<b>ELEC-5.6.2</b>	Supply and Transportation of star rated -----Three phase ISI submersible motor pump set suitable for 6" Bore well. Makes: Flowell / Waterman / Falcon / Ellen / Kirloskar.			
1129	<b>a</b>	3.00 HP 5-10 Stage	1	No	25935.00
1130	<b>b</b>	5.00 HP 5-10 Stage	1	No	28785.00
1131	<b>c</b>	5.00 HP 12-16 Stage	1	No	32870.00
1132	<b>d</b>	7.50 HP 5-10 Stage	1	No	32395.00



Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
1133	e	7.50 HP 12-16 Stage	1	No	35815.00
1134	f	7.50 HP 20-25 Stage	1	No	37050.00
1135	g	10.00 HP 12-16 Stage	1	No	38000.00
1136	h	10.00 HP 20-30 Stage	1	No	39140.00
1137	i	10.00 HP 35-40 Stage	1	No	46800.00
1138	j	12.50 HP 12-20 Stage	1	No	44000.00
1139	k	12.50 HP 24-40Stage	1	No	48500.00
1140	l	15.00 HP 10-20 Stage	1	No	53040.00
1141	m	15.00 HP 24-40 Stage	1	No	54000.00
	<b>5.7</b>	<b>SINGLE PHASE OPEN WELL SUBMERSIBLE MOTOR PUMP SETS.</b>			
	<b>ELEC-5.7.1</b>	Supply and Transportation of-----Single phase open well ISI submersible motor pump set. Makes: Texmo / CRI / KSB / Aryan Varsha / Lubi			
1142	a	1.00 HP	1	No	11760.00
1143	b	1.50 HP	1	No	13335.00
1144	c	3.00 HP	1	No	18060.00
	<b>ELEC-5.7.2</b>	Supply and Transportation of-----Single phase open well ISI submersible motor pump set. Makes: Flowell / Waterman / Falcon / Ellen .			
1145	a	1.00 HP	1	No	11130.00
1146	b	1.50 HP	1	No	12705.00
1147	c	3.00 HP	1	No	17220.00
	<b>5.8</b>	<b>THREE PHASE OPEN WELL SUBMERSIBLE PUMP SETS.</b>			
	<b>ELEC-5.8.1</b>	Supply and Transportation of ----- Three phase open well ISI submersible motor pump set----- Makes: Texmo / CRI / KSB / Aryan Varsha / Lubi			
1148	a	3.00 HP (65x50).	1	No	18920.00
1149	b	5.00 HP (75x65).	1	No	23430.00
1150	c	7.50 HP (100x75).	1	No	27830.00
1151	d	10.00 HP (100x75).	1	No	35640.00
	<b>ELEC-5.8.2</b>	Supply and Transportation of ----- Three phase open well ISI submersible motor pump set----- Makes: Varuna / Flowell / Waterman / Techno / Mahavir / unitek / Fitwell / Falcon / Ellen / Karvel / LPS / Duke / Varsha / Ajantha.			
1152	a	3.00 HP (65x50).	1	No	17860.00
1153	b	5.00 HP (75x65).	1	No	22107.00
1154	c	7.50 HP (100x75).	1	No	26245.00
1155	d	10.00 HP (100x75).	1	No	33541.00
	<b>5.9</b>	<b>SINGLE PHASE MONO BLOCK MOTOR PUMP SETS.</b>			
1156	<b>ELEC-5.9.1</b>	Supply and Transportation of 0.5HP Single phase, 2880 RPM 50 Hz ISI Mono block CI body motor pump set (25x25mm). Makes: Texmo / CRI / KSB / Aryan Varsha / Lubi	1	No	6050.00
1157	<b>ELEC-5.9.2</b>	Supply and Transportation of 0.5HP Single phase, 2880 RPM 50 Hz ISI Mono block CI body motor pump set (25x25mm). Makes: Flowell / Waterman /Falcon / Ellen	1	No	5808.00
	<b>ELEC-5.9.3</b>	Supply and Transportation of-----Single phase ISI Mono block CI body motor pump set----- Makes: Texmo / CRI / KSB / Aryan Varsha / Lubi			
1158	a	1.00 HP (25x25mm).	1	No	10368.00
1159	b	1.50 HP (32x25mm).	1	No	13824.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
	<b>ELEC-5.9.4</b>	Supply and Transportation of----- Single phase ISI Mono block CI body motor pump set. Makes: Varuna / Flowell / Waterman / Techno / Mahavir / unitek / Fitwell / Falcon / Ellen / Karvel / LPS / Varsha.			
1160	<b>a</b>	1.00 HP (25x25mm).	1	No	8349.00
1161	<b>b</b>	1.50 HP (32x25mm).	1	No	11132.00
	<b>ELEC-5.9.5</b>	Supply and Transportation of ----- -----ISI self-priming Mono block IP44 motor pump set----- Makes: Texmo / CRI / KSB / Aryan Varsha / Lubi			
1162	<b>a</b>	1.02 HP Single phase (40x40mm).	1	No	14762.00
1163	<b>b</b>	2.00 HP Three phase (40x40mm).	1	No	17182.00
1164	<b>c</b>	3.00 HP Three phase (50x50mm).	1	No	24200.00
1165	<b>d</b>	5.00 HP Three phase (80x80mm).	1	No	28193.00
	<b>ELEC-5.9.6</b>	Supply and Transportation of ----- -----ISI self-priming Mono block IP44 motor pump set----- Makes: Flowell / Waterman/ Falcon / Ellen.			
1166	<b>a</b>	1.02 HP Single phase (40x40mm).	1	No	11600.00
1167	<b>b</b>	2.00 HP Three phase (40x40mm).	1	No	13500.00
1168	<b>c</b>	3.00 HP Three phase (50x50mm).	1	No	18300.00
1169	<b>d</b>	5.00 HP Three phase (80x80mm).	1	No	22200.00
	<b>5.1</b>	<b>CONTROL PANEL BOARD FOR MOTORS</b>			
1170	<b>ELEC-5.10.1</b>	Supply and Transportation of control panel for single phase submersible motors up to 3 HP @ 220V 50Hz operating range between 80 to 240V including supply and fixing of Direct - on - Line LTLK / SIEMENS / CROMPTON make Voltmeter and Ammeter with starting and running capacitors assembled with ISI mark contactors and fitted with Legrand make ISI mark MCB etc., complete.	1	No	7031.00
1171	<b>ELEC-5.10.2</b>	Supply and Transportation of control panel for three phase submersible motors up to 5 HP @ 415V 50Hz operating fitted with supply and fixing of Direct - on - Line LTLK /BCH/ SIEMENS / CROMPTON make, 0-500V Volt meter and 0-30A Ammeter, Indication lamps, selector switches, CTS, 32A TP MCB, Single phase preventor, suitable contactor to with stand low voltage pick up and high voltage resistant, with ISI marked capacitors assembled with ISI mark contactors and fitted with Legrand make ISI mark MCB etc., complete.	1	No	10938.00
1172	<b>ELEC-5.10.3</b>	Supply and Transportation of control panel for three phase submersible motors above 5 HP up to 7.5 HP @ 415V 50Hz operating fitted with supply and fixing of Direct - on - Line LTLK /BCH/ SIEMENS / CROMPTON make, 0-500V Volt meter and 0-30A Ammeter, Indication lamps, selector switches, CTS, 32A TP MCB, Single phase preventor, suitable contactor to with stand low voltage pick up and high voltage resistant, with ISI marked capacitors assembled with ISI mark contactors and fitted with Legrand make ISI mark MCB etc., complete.	1	No	13125.00
1173	<b>ELEC-5.10.4</b>	Supply and Transportation of control panel for	1	No	15000.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		three phase submersible motors above 7.5 HP to 12.5 HP @ 415V 50Hz operating fitted with supply and fixing of Direct - on - Line LTLK /BCH/ SIEMENS / CROMPTON make, 0-500V Volt meter and 0-30A Ammeter, Indication lamps, selector switches, CTS, 32A TP MCB, Single phase preventor, suitable contactor to with stand low voltage pick up and high voltage resistant, with ISI marked capacitors assembled with ISI mark contactors and fitted with Legrand make ISI mark MCB etc., complete.			
		<b>Note:</b> If it is Outdoor panel add 10% extra on above.			
	<b>5.11</b>	<b>UPVC PIPES AND FITTINGS</b>			
	<b>ELEC-5.11.1</b>	Supply and delivery of UPVC Raising Column Pipes for submersible motors with both ends square threaded, with rubber 'O' rings with smooth inner surface which can take the minimum load of 2100 to 4000 Kgs weights. Makes : Ashirvad / Finolex / Waterflo / Apollo / Falcon / Hindware			
1174	<b>a</b>	Nominal diameter of Standard 42 / 32mm UPVC pipe withstanding up to 20 Kgs / CM2 up to 200 Mts	1	Mtr	164.00
1175	<b>b</b>	Nominal diameter of Standard 48 / 40mm UPVC pipe withstanding up to 20 Kgs / CM2 up to 200 Mts	1	Mtr	194.00
1176	<b>c</b>	Nominal diameter of Standard 60 / 50 mm UPVC pipe withstanding up to 20 Kgs / CM2 up to 200 Mts	1	Mtr	285.00
1177	<b>d</b>	Nominal diameter of Standard 75 / 65 mm UPVC pipe withstanding up to 20 Kgs / CM2 up to 200 Mts	1	Mtr	382.00
1178	<b>e</b>	Nominal diameter of Standard 88 / 80 mm UPVC pipe withstanding up to 20 Kgs / CM2 up to 200 Mts	1	Mtr	540.00
	<b>ELEC-5.11.2</b>	<b>SUITABLE HEAVY DUTY COUPLINGS FOR STANDARD PIPES</b>			
1179	<b>a</b>	Nominal diameter of heavy duty couplings 42/32 mm UPVC pipe (27 Kgs / CM 2 ) capable of withstanding up to 27 Kgs / CM2 above 200 mts and up to 300 mts	1	Mtr	51.00
1180	<b>b</b>	Nominal diameter of heavy duty couplings 48/40 mm UPVC pipe (27 Kgs / CM 2 ) capable of withstanding up to 27 Kgs / CM2 above 200 mts and up to 300 mts	1	Mtr	78.00
1181	<b>c</b>	Nominal diameter of heavy duty couplings 60/50 mm UPVC pipe (27 Kgs / CM 2 ) capable of withstanding up to 27 Kgs / CM2 above 200 mts and up to 300 mts	1	Mtr	84.00
1182	<b>d</b>	Nominal diameter of heavy duty couplings 75/65 mm UPVC pipe (27 Kgs / CM 2 ) capable of withstanding up to 27 Kgs / CM2 above 200 mts and up to 300 mts	1	Mtr	96.00
1183	<b>e</b>	Nominal diameter of heavy duty couplings 88/80 mm UPVC pipe (27 Kgs / CM 2 ) capable of withstanding up to 27 Kgs / CM2 above 200 mts and up to 300 mts	1	Mtr	115.00
	<b>ELEC-5.11.3</b>	Supply and Delivery of CI Adopter Assembly Makes : Ashirvad / Finolex / Waterflo / Apollo.			
1184	<b>a</b>	1 1/2" (48/40mm)	1	No	835.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
1185	b	2" (60/50mm)	1	No	1094.00
1186	c	2 1/2" (75/65 mm)	1	No	1411.00
	<b>ELEC-5.11.4</b>	Supply and Delivery of pump guard assembly with 2Nos SS Powder coated flange and 2Nos SS Rods with nut and colter pin. Makes : Ashirvad / Finolex / Waterflo / Apollo.			
1187	a	1 1/2" (48/40mm)	1	No	518.00
1188	b	2" (60/50mm)	1	No	576.00
1189	c	2 1/2" (75/65 mm)	1	No	778.00
1190	d	(88/80 mm)	1	No	1152.00
	<b>5.12</b>	<b>REPAIRS TO MOTORS</b>			
1191	<b>ELEC-5.12.1</b>	Rewinding of motor of table fan / wall bracket fan / Cabin Fan including minor repairs, lubrication of ball bearings, bush bearings and replacing condenser, screws etc testing of fan for original speed.	1	No	545.00
1192	<b>ELEC-5.12.2</b>	Rewinding of motor of 900mm ceiling Fan including minor repairs, lubrication of ball bearings, bush bearings and replacing condenser, screws etc testing of fan for original speed.	1	No	569.00
1193	<b>ELEC-5.12.3</b>	Rewinding of motor of 1200mm / 1400mm ceiling Fan including minor repairs, lubrication of ball bearings, bush bearings and replacing condenser, screws etc testing of fan for original speed.	1	No	581.00
1194	<b>ELEC-5.12.4</b>	Rewinding of motor of 900 / 1400 RPM 300mm Exhaust Fan including minor repairs, lubrication of ball bearings, bush bearings and replacing condenser, screws etc testing of fan for original speed.	1	No	581.00
1195	<b>ELEC-5.12.5</b>	Rewinding of motor of 900 / 1400 RPM 375mm Exhaust Fan including minor repairs, lubrication of ball bearings, bush bearings and replacing condenser, screws etc testing of fan for original speed.	1	No	690.00
1196	<b>ELEC-5.12.6</b>	Rewinding of motor of 900 / 1400 RPM 450mm Exhaust Fan including minor repairs, lubrication of ball bearings, bush bearings and replacing condenser, screws etc testing of fan for original speed.	1	No	968.00
	<b>ELEC-5.12.7</b>	Rewinding of Electric motor up to and including.....HP, 3 Phase up to 1400 RPM of all types and makes with copper wire including minor repairs, lubrication of ball bearings, bush bearings and replacing condenser, screws etc testing of motor for original speed.			
1197	a	Up to 1.00 HP	1	No	1783.00
1198	b	Above 1.00 HP up to 2.00 HP	1	No	1997.00
1199	c	Above 2.00 HP up to 3.00 HP	1	No	2396.00
1200	d	Above 3.00 HP up to 5.00 HP	1	No	3993.00
1201	e	Above 5.00 HP up to 7.50 HP	1	No	4792.00
1202	f	Above 7.50 HP up to 10.00 HP	1	No	5723.00
1203	g	12.50 HP up to 15.00 HP	1	No	6655.00
	<b>ELEC-5.12.8</b>	Rewinding of Submersible pumps motor up to and including.....HP, 3 Phase up to 1400 RPM of all types and makes with copper wire including minor repairs, lubrication of ball bearings, bush bearings and replacing condenser, screws etc testing of motor for original speed.			
1204	a	Up to 5.00 HP	1	HP	1650.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
1205	b	Above 5.00 HP up to 25.00 HP	1	HP	2263.00
		<b>Note:</b> If it is in open well submersible rate shall be decreased by 40%			
	<b>ELEC-5.12.9</b>	Bearing of approved make for electric motor single phase / 3 phase AC ----- of all types.			
1206	a	Up to 1 HP	1	No	209.00
1207	b	Up to 2 to 3 HP	1	No	270.00
1208	c	Up to 5 to 7.5 HP	1	No	352.00
1209	d	Up to 10 to 12.5 HP	1	No	369.00
1210	e	Up to 15 to 20 HP	1	No	561.00
	<b>ELEC-5.12.10</b>	Supply of -----for table / cabin / pedestal / ceiling / exhaust fan complete with alignment of shaft and tested.			
1211	a	Bearing	1	No	160.00
1212	b	Bush / rubber / ring washers	1	No	85.00
1213	c	Capacitor	1	No	50.00
1214	<b>ELEC-5.12.11</b>	EICHER model 11:10 with 100 H.P. direct injection 4 stroke engine with one spare wheel 3800 mm cabin high deck with jangla (full body) (4 wheeler) for generator	1	No	600000.00
	<b>5.13</b>	<b>ACCESSORIES OF MOTORS</b>			
	<b>ELEC-5.13.1</b>	Supply, Transportation and fixing of suitable pump guard set (2Nos SS), Flanges set (2 Nos) to protect and safeguard the pump and Motor from vibrations while starting and switching of the pump set.			
1215	a	OD 42mm	1	No	380.00
1216	b	OD 48mm	1	No	450.00
1217	c	OD 60mm	1	No	645.00
1218	d	OD 75mm	1	No	775.00
1219	e	OD 80mm	1	No	1000.00
	<b>ELEC-5.13.2</b>	Supply, Transportation and fixing of seamless cast iron adopter assembly (Two Nos at bottom of the pipe to coupling to the pump set and the other at top end of the pipes) for installing the pump set with pipes including cost and conveyance of all materials, taxes etc., complete.			
1220	a	OD 42mm	1	No	555.00
1221	b	OD 48mm	1	No	645.00
1222	c	OD 60mm	1	No	845.00
1223	d	OD 75mm	1	No	1090.00
1224	e	OD 80mm	1	No	1300.00
	<b>ELEC-5.13.3</b>	Supply, Transportation and fixing of ----- -----90 degree bend with length of 20cm (Center to face) galvanised GI bends heavy duty with threaded at both ends for installing the pump set including cost and conveyance of all materials, taxes etc., complete.			
1225	a	50mm dia	1	No	225.00
1226	b	65mm dia	1	No	303.00
1227	c	80mm dia	1	No	382.00
	<b>ELEC-5.13.4</b>	Supply, Transportation and fixing of following MS threaded Flanges 2 Nos with nuts and bolts including cost and conveyance of all materials, taxes etc., complete.			
1228	a	50mm dia MS flanges set (2 Nos) 150mm dia OD, 12mm thick each flange with required dia bolts and nuts.	1	No	290.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
1229	b	65mm dia MS flanges set (2 Nos) 165mm dia OD, 12mm thick each flange with required dia bolts and nuts.	1	No	411.00
1230	c	80mm dia MS flanges set (2 Nos) 175mm dia OD, 12mm thick each flange with required dia bolts and nuts.	1	No	436.00
	<b>ELEC-5.13.5</b>	Supply and erecting cast iron foot wall ball type / Flat type of size .....dia with strainer for negative suction etc complete.			
1231	a	80mm	1	No	4500.00
1232	b	100mm	1	No	6500.00
1233	c	150mm	1	No	16000.00
1234	d	200mm	1	No	27000.00
	<b>ELEC-5.13.6</b>	Supply, Transportation and fixing of ----- -----with required nuts and bolts.			
1235	a	40mm dia, 450mm length, 12mm thickness and 75mm wide MS Clamp set	1	No	325.00
1236	b	50mm dia, 450mm length, 12mm thickness and 75mm wide MS Clamp set	1	No	381.00
1237	c	65mm dia, 450mm length, 12mm thickness and 75mm wide MS Clamp set	1	No	401.00
1238	d	80mm dia, 450mm length, 12mm thickness and 75mm wide MS Clamp set	1	No	533.00
1239	e	150mm dia galvanised bore cover	1	No	204.00
1240	f	150mm dia stainless steel bore cover	1	No	401.00
		<b>SECTION - 6</b>			
		<b>AIR CONDITIONERS</b>			
	<b>6.1</b>	<b>SPLIT AC's</b>			
	<b>ELEC-6.1.1</b>	Supply and Transportation of split AC unit with high wall mounted 100% copper indoor unit and outdoor condensing unit Hermetically sealed compressor suitable for operation on 230V, 50Hz, 1Phase AC supply capable of performing cooling dehumidifying air circulating and filtering with cooling and condensing units with 3.0 mts of copper piping, insulation kit and 4 mts of 3 core copper flexible chord (Voltage range 160- 264 volts) and cordless remote control with 5 years warranty compressor for 5 years including servicing.			
1241	a	1.5 TR 3 Star capable of delivering 18000 BTU/hr Carrier / Daikin / Blue Star / Hitachi or equivalent	1	No	39847.00
1242	b	2.0 / 1.8 TR 2-3 Star capable of delivering 21600 BTU/hr and above of makes Daikin / Thoshiba / O General / Carrier / Blue Star / Hitachi or equivalent	1	No	48510.00
	<b>6.2</b>	<b>INVERTER SPLIT AC UNITS (COOLING ONLY)</b>			
	<b>ELEC-6.2.1</b>	Supply and Transportation of INVERTER Model Cool type split AC unit with high wall mounted Single Split 100% copper indoor and outdoor condensing unit Hermetically sealed compressor suitable for operation on 230V, 50Hz, 1Phase AC supply capable of performing Heat cool dehumidifying air circulating and filtering with cooling and condensing units with 3.0 mts of copper piping, insulation kit and 4 mts of 4 core copper flexible chord (Voltage range 160- 264 volts) and cordless remote control with warranty of compressor for 5 years including			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		servicing.			
1243	a	1.5 TR 3 Star capable of delivering 18000 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes : Daikin / Blue Star / Toshiba / Carrier / Hitachi or equivalent	1	No	44100.00
1244	b	1.5 TR 5 Star capable of delivering 18000 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes : Daikin / Toshiba / Carrier / Blue Star / Hitachi or equivalent	1	No	50715.00
1245	c	2.0 / 1.8 TR 3 Star capable of delivering 21600 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes : Daikin / Toshiba / Carrier / Blue Star / Hitachi or equivalent	1	No	59535.00
1246	d	2.0 / 1.8 TR 5 Star capable of delivering 21600 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes : Daikin / Toshiba / Carrier / Blue Star / Hitachi or equivalent	1	No	65048.00
	<b>6.3</b>	<b>INVERTER CASSETTE TYPE AC UNITS</b>			
	<b>ELEC-6.3.1</b>	Supply and Transportation of Inverter Cassette type AC unit with ceiling mounted indoor unit and outdoor condensing unit Hermetically sealed compressor suitable for operation on AC supply capable of performing cooling dehumidifying air circulating and filtering with cooling and condensing units etc complete with Wireless remote controller, but without refrigerant piping and cable. With 2 years warranty and annual maintenance contract.			
1247	a	1.5 TR 4 Star capable of delivering 18000 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes : Daikin / Toshiba or equivalent	1	No	85000.00
1248	b	1.5 TR 5 Star capable of delivering 18000 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes : Daikin / Toshiba or equivalent	1	No	92000.00
1249	c	2.0 TR 4 Star capable of delivering 24000 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes : Daikin / Toshiba or equivalent	1	No	95000.00
1250	d	2.0 TR 5 Star capable of delivering 24000 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes : Daikin / Toshiba or equivalent	1	No	101500.00
1251	e	2.5 TR 4 Star capable of delivering 30000 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes : Daikin / Toshiba or equivalent	1	No	126000.00
1252	f	2.5 TR 5 Star capable of delivering 30000 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes : Daikin / Toshiba or equivalent	1	No	138000.00
1253	g	3.5 TR 4 Star Three Phase capable of delivering 42000 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes : Daikin / Toshiba or equivalent	1	No	162000.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
1254	h	3.5 TR 5 Star Three Phase capable of delivering 42000 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes : Daikin / Toshiba or equivalent	1	No	180000.00
1255	i	4.0 TR 4 Star Three Phase capable of delivering 48000 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes : Daikin / Toshiba or equivalent	1	No	165000.00
1256	j	4.0 TR 5 Star Three Phase capable of delivering 48000 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes : Daikin / Toshiba or equivalent	1	No	183000.00
		<b>NON - INVERTER CASSETTE TYPE AC UNITS</b>			
	<b>ELEC-6.3.2</b>	Supply and Transportation of Non - Inverter Cassette type AC unit with ceiling mounted indoor unit and outdoor condensing unit Hermetically sealed compressor suitable for operation on AC supply capable of performing cooling dehumidifying air circulating and filtering with cooling and condensing units etc complete with Wireless remote controller, but without refrigerant piping and cable with 2 years warranty and annual maintenance contract.			
1257	a	1.5 TR 4 Star capable of delivering 18000 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes : Blue Star / Carrier / Hitachi or equivalent	1	No	77760.00
1258	b	1.9/2.0 TR 4 Star capable of delivering 24000 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes : Blue Star / Carrier / Hitachi or equivalent	1	No	90720.00
1259	c	3.0 TR 4 Star capable of delivering 30000 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes : Blue Star / Carrier / Hitachi or equivalent	1	No	122400.00
		<b>CHILLED WATER CASSETTE UNITS</b>			
	<b>ELEC-6.3.3</b>	Supply, Transportation, Installation, Testing and Commissioning of ----- Chilled water Cassette unit complete with 3 speeds having coil section, blower section, filter section, condensate drain pump, insulated extended drain tray, Supports, Copper piping connections, unions, incoming cable from MCB / Isolator to unit, 12 - 24 V step down Transformer for PIBC valve , Spring Return Actuators etc.,. Extended tray should be accommodated with Ball valves, PIBC motorized valves etc.,			
		Digital thermostat with remote sensing element with Cassette Unit Switch ON / OFF control compatible to the PIBC valve to control the room temperature to be included BMS etc., complete for finished item of work. Makes : Carry Air / Bhutoria or equivalent			
1260	a	1 TR (400CFM) 1Way	1	No	35000.00
1261	b	1 TR (400CFM) 2Way	1	No	37000.00
1262	c	1 TR (400CFM) 4Way	1	No	39000.00



Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
1263	d	1.5 TR (600CFM) 1Way	1	No	43000.00
1264	e	1.5 TR (600CFM) 2Way	1	No	45000.00
1265	f	1.5 TR (600CFM) 4Way	1	No	48000.00
1266	g	2 TR (800CFM) 1Way	1	No	45000.00
1267	i	2 TR (800CFM) 4Way	1	No	51000.00
1268	j	2.5TR (1000CFM) 4Way	1	No	56000.00
1269	k	3.0 TR (1200CFM) 4Way	1	No	58000.00
1270	l	3.75 TR (1500CFM) 4Way	1	No	60000.00
	<b>ELEC-6.3.4</b>	Supply, installation, testing and commissioning of modulating 2 way valve with package assembly with on / off actuator, required control cabling between valve and actuator etc complete for finished item of work.			
1271	a	Valve Package Assembly 2 way 20mm / PIBC valve (DN 20) with Modulating actuator.	1	No	13000.00
1272	b	Valve Package Assembly 2 way 25mm / PIBC valve (DN 25) with Modulating actuator.	1	No	14000.00
	<b>6.4</b>	<b>TOWER MODEL TYPE AC UNITS</b>			
	<b>ELEC-6.4.1</b>	Supply and Transportation of Slim line / Tower Model/Verticool type split AC unit with 100% copper indoor unit and floor mounted outdoor condensing unit Hermetically sealed Scroll compressor suitable for operation on AC supply capable of performing cooling dehumidifying air circulating and filtering with cooling and condensing units etc complete with cordless remote control with 2 years warranty and annual maintenance contract.			
1273	a	2.4 TR Three Phase capable of delivering 39600 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes: Daikin / Blue Star / Carrier or equivalent	1	No	98200.00
1274	b	3.0 / 3.3 TR Three Phase capable of delivering 39600 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes: Daikin / Blue Star / Carrier or equivalent	1	No	105270.00
1275	c	4.0 / 3.8 TR Three Phase capable of delivering 45600 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes: Daikin / Blue Star / Carrier or equivalent	1	No	111320.00
1276	d	4.5 / 4.6 TR Three Phase capable of delivering 55200 BTU/hr and above with operating on refrigerant R-32 / R-410 Makes: Daikin / Blue Star / Carrier or equivalent	1	No	117370.00
	<b>6.5</b>	<b>REPAIRS TO AIR CONDITIONERS</b>			
1277	<b>ELEC-6.5.1</b>	Supply, Fabrication of 1set MS bracket suitable for fixing outdoor unit of split AC unit.	1	Set	870.00
	<b>ELEC-6.5.2</b>	Providing 2 runs of Copper tubes for suction and liquid between indoor and outdoor unit for split/Cassette Air-Conditioner including foaming etc., complete.			
1278	a	1. 3/4" x 3/8" 2. 5/8" x 1/4" 3. 1/2" x 1/4" or equivalent sizes	1	Mtr	820.00
1279	b	7/8" x 1/2"	1	Mtr	1360.00
1280	c	1 1/8" x 5/8"	1	Mtr	1590.00
1281	<b>ELEC-6.5.3</b>	Supply of 1.0 / 1.5 Ton brand new Rotary type	1	No	7400.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		sealed compressor.			
1282	ELEC-6.5.4	Supply of 2.0 Ton brand new Rotary type sealed compressor.	1	No	8400.00
1283	ELEC-6.5.5	Multi speed Fan Motor suitable for 1.0 / 1.5 / 2.0 Ton Window A.C. Unit of makes Crompton / AU.	1	No	1450.00
1284	ELEC-6.5.6	Fan motor capacitor 6 mfd by new capacitor for A.C machine of 1.0 1.5 / Ton Capacity.	1	No	145.00
1285	ELEC-6.5.7	Thermostat switch suitable for 1.0 / 1.5 / 2.0 Ton A.C. Unit.	1	No	375.00
1286	ELEC-6.5.8	Starting capacitor of 80 to 120 mfd. by new approved make capacitor suitable for compressor motor of 1.0 / 1.5 Ton A.C. Unit.	1	No	185.00
1287	ELEC-6.5.9	Running capacitor of 36 mfd by new approved make capacitor suitable for compressor motor of 1.0 / 1.5 Ton A.C. Unit.	1	No	220.00
1288	ELEC-6.5.10	Relay by approved make having pickup voltage 220 Volts and dropout voltage 120 Volts suitable for 1.0 / 1.50 Ton A.C. Unit.	1	No	205.00
1289	ELEC-6.5.11	Filter and capillary tube including welding etc., complete for 1.0 / 1.5 / 2.0 Ton A.C. Unit.	1	No	445.00
1290	ELEC-6.5.12	Air filter suitable for 1.50 Ton Window A.C. Unit P.V.C. / NYLON.	1	No	205.00
1291	ELEC-6.5.13	Air filter suitable for 1.50 Ton Split A.C. Unit P.V.C. / NYLON.	1	No	435.00
1292	ELEC-6.5.14	Rewiring the entire Window type 1.50 Ton A.C. Unit with 2.5 Sq.mm Flexible copper cable and putting the same in working conditions.	1	No	295.00
1293	ELEC-6.5.15	Complete servicing of 1.0 - 2.0 TR AC unit with cleaning the condenser cooling Coil etc., by blower and oiling the Fan Motor and Cleaning all parts and putting the machine in working condition.	1	No	500.00
1294	ELEC-6.5.16	Fan blade for 1.0 / 1.5 Ton A.C. Machine.	1	No	510.00
1295	ELEC-6.5.17	Grill of 1.0 / 1.5 ton A.C. Machine (for assembled Units).	1	No	890.00
1296	ELEC-6.5.18	Grill of 1.0 / 1.5 ton A.C. Machine of branded units.	1	No	1540.00
1297	ELEC-6.5.19	Rotary / Selector switch for window AC.	1	No	105.00
1298	ELEC-6.5.20	Flushing the line, leak testing, leak stopping, vacuuming, dehydrating and charging the gas in the refrigeration system for 1.0 / 1.5 / 2.0 Ton Window A.C. Unit.	1	No	1530.00
1299	ELEC-6.5.21	Flushing the line, leak testing, leak stopping, vacuuming, dehydrating and charging the gas in the refrigeration system for 1.5 / 2.0 Ton Split A.C. Unit.	1	No	2140.00
1300	ELEC-6.5.22	Spray painting of Refrigerator using good quality paint after scraping the surface etc.	1	No	735.00
1301	ELEC-6.5.23	Sealed compressor of 1/8 HP suitable for 165 to 185 Ltrs. Capacity Refrigerator.	1	No	2810.00
1302	ELEC-6.5.24	Sealed compressor of 1/6 HP suitable for 285 / 310 Ltrs. Capacity Refrigerator.	1	No	3400.00
1303	ELEC-6.5.25	Supply of fan motor by new 1/10 to 1/12 H.P 1250 RPM fan motor for Water Cooler of 80-150 Ltrs.	1	No	1450.00
1304	ELEC-6.5.26	Gun metal Bush for fan motor.	1	No	115.00
1305	ELEC-6.5.27	Resistance type regulator for ceiling fans 900/1200/1400mm sweep complete erected on existing board.	1	No	40.00
1306	ELEC-6.5.28	Installation of Split Air Conditioners.	1	No	1600.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
1307	ELEC-6.5.29	Removing of existing Split Air Conditioners without damaging to copper pipe.	1	No	430.00
1308	ELEC-6.5.30	Installation of Cassette type Split Air Conditioners.	1	No	3200.00
1309	ELEC-6.5.31	Installation of Tower type Split Air Conditioners.	1	No	2650.00
1310	ELEC-6.5.32	Supply, Fabrication of 1set MS bracket suitable for fixing outdoor unit of ductable AC unit.	1	Set	1700.00
	<b>6.6</b>	<b>EVAPORATIVE AIR COOLING SYSTEM</b>			
1311	ELEC-6.6.1	Supply ,Transportation, Installation, testing and commissioning of single phase evaporative air cooling unit with a capacity of 8000 CFM consisting of cabinet and water tank made of polypropylene material, blower water pump of 40W, single phase 1.20 KW motor axial type fan with variable speed, 20 micron filtration, noise level less than 78 dBA with auto cleaning and water lack protection etc complete. Makes: Cool Breeze / Breeze Air or equivalent	1	No	97800.00
1312	ELEC-6.6.2	Supply ,Transportation, Installation, testing and commissioning of single phase evaporative air cooling unit with a capacity of 11000 - 12000 CFM consisting cabinet and water tank made of polypropylene material, blower water pump of 40W, single phase 1.20 KW / 1.5 KW motor axial type fan with variable speed, 20 micron filtration, noise level less than 78 dBA with auto cleaning and water lack protection etc complete. Makes: Cool Breeze / Breeze Air	1	No	115550.00
1313	ELEC-6.6.3	Supply ,Transportation, Installation, testing and commissioning of three phase evaporative air cooling unit with a capacity of 17000 CFM consisting cabinet and water tank made of polypropylene material, blower water pump of 60W, three phase, 3.0 KW motor, axial type fan with 2 speed, 20 micron filtration, noise level less than 78 dBA with auto cleaning and water lack protection etc complete. Makes: Cool Breeze / Breeze Air or equivalent	1	No	160000.00
	ELEC-6.6.4	Supply, Factory fabrication, Transportation and erecting of ..... gauge GI sheet Rectangular ducting with minimum 120 GSM as per SMACNA complete with neoprene rubber gaskets, Elbows, sheet metal / Angle iron / C-cleats / TPF Flanges as required, G.I. fasteners, bolts, nuts and washers, guide vanes as required, supports shall be galvanised threaded rods etc complete. Makes : Tata / Zindal			
1314	a	18 Gauge (1.2 mm)	1	Sqft	126.00
1315	a	20 Gauge (1.0 mm)	1	Sqft	116.00
1316	b	22 Gauge (0.8 mm)	1	Sqft	105.00
1317	c	24 Gauge ( 0.6 mm)	1	Sqft	87.00
	ELEC-6.6.5	Supply, Factory fabrication, Transportation and erecting of ..... gauge GI sheet Spiral / Round ducting with minimum 120 GSM as per SMACNA complete with neoprene rubber gaskets, Elbows, sheet metal / Angle iron / C-cleats as required, G.I. fasteners, bolts, nuts and washers, guide vanes as required, supports shall be galvanised threaded rods etc complete. 9 /12 mm thick			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		self-adhesive class 'O' nitrile rubber insulation shall be done inside the ducting. Makes : Tata / Zindal			
1318	a	18 Gauge (1.2 mm)	1	Sqft	140.00
1319	b	20 Gauge (1.0 mm)	1	Sqft	128.00
1320	c	22 Gauge (0.8 mm)	1	Sqft	116.00
1321	d	24 Gauge ( 0.6 mm)	1	Sqft	92.00
		<b>THERMAL INSULATION</b>			
	<b>ELEC-6.6.6</b>	Supply and fixing of .....mm thickness closed cell nitrile rubber (Class O) insulation on existing duct after applying 2 coats of cold setting adhesive (CPRX Compound). The joints shall be sealed with 50mm wide and 3mm thick self-adhesive nitrile rubber tape insulation complete as per specifications. Thermal conductivity should not exceed 0.037W/mk,			
1322	a	6 mm	1	Sqmt	381.00
1323	b	9 mm	1	Sqmt	537.00
1324	c	12 mm / 13 mm	1	Sqmt	715.00
1325	d	19 mm	1	Sqmt	857.00
1326	e	25 mm	1	Sqmt	1238.00
	<b>ELEC-6.6.7</b>	Supply and fixing of .....mm thickness closed cell nitrile rubber (Class O) insulation on existing duct after applying 2 coats of cold setting adhesive (CPRX Compound). The joints shall be sealed with 50mm wide and 3mm thick self-adhesive nitrile rubber tape insulation complete with star bond coating , thermal conductivity should not exceed 0.037W/mk, and covered with 24 gauge aluminum cladding as per specifications for outdoor applications.			
1327	a	6 mm	1	Sqmt	468.00
1328	b	9 mm	1	Sqmt	634.00
1329	c	12 mm / 13 mm	1	Sqmt	852.00
1330	d	19 mm	1	Sqmt	1040.00
1331	e	25 mm	1	Sqmt	1457.00
1332	<b>ELEC-6.6.8</b>	Supply and fixing of 40mm thick Thermocol insulation of 16 kg density with GI mesh and 12mm thick cement mortar plastering for outdoor unit.	1	Sqft	70.00
1333	<b>ELEC-6.6.9</b>	Supply and fixing of 40mm thick glass wool of 24 kg density with aluminum foil insulation for indoor duct.	1	Sqft	57.00
1334	<b>ELEC-6.6.10</b>	Supply, installation, testing and commissioning of GI volume control duct damper complete with neoprene rubber gaskets, nuts, bolts, flanges etc as per specifications. The thickness of the damper frame shall be 16 gauge and damper plate shall be 18 / 16 gauge.	1	Sqft	832.00
1335	<b>ELEC-6.6.11</b>	Supply and fixing of aluminum powder coated supply air grill with volume control dampers.	1	Sqft	639.00
1336	<b>ELEC-6.6.12</b>	Supply and fixing of aluminum powder coated supply air grill without volume control dampers. (Architect shall approve the shade of epoxy power coating for the grills for supply and return air)	1	Sqft	550.00
1337	<b>ELEC-6.6.13</b>	Supply and fixing of aluminum powder coated supply air diffuser with volume control dampers.	1	Sqft	728.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		(Architect shall approve the shade of epoxy power coating for the grills for supply and return air)			
1338	ELEC-6.6.14	Supply and fixing of aluminum powder coated supply air diffuser without volume control dampers. (Architect shall approve the shade of epoxy power coating for the diffuser for supply and return air)	1	Sqft	624.00
1339	ELEC-6.6.15	Supply and fixing of angular iron frame with 2 coats of zincromat red oxide for installation of air cooling unit.	1	No	4536.00
1340	ELEC-6.6.16	Installation and commissioning charges for air cooling unit.	1	No	3777.00
	ELEC-6.6.17	Supply, installation, testing and commissioning of the drainpipe with CPVC pipes with all accessories and insulation with 6mm thick closed cell nitrile rubber of the following sizes, with all required accessories Makes : Astral / Ashirvad or equivalent approved by the department			
1341	a	25 mm	1	RM	208.00
1342	b	32 mm	1	RM	263.00
1343	c	40 mm	1	RM	341.00
1344	d	50 mm	1	RM	398.00
	<b>6.7</b>	<b>LOW SIDE WORK</b>			
	ELEC-6.7.1	Lifting, shifting of unit to terrace, installation, testing & commissioning of VRV / VRF outdoor units of the following capacities with required supports with necessary bolts, screws, and nut etc complete up to 7th floor Note: Actual cooling capacity to be designed at operating conditions			
1345	a	12HP	1	Nos	5180.00
1346	b	14HP	1	Nos	6050.00
1347	c	16HP	1	Nos	6900.00
1348	d	18HP	1	Nos	7775.00
1349	e	20HP	1	Nos	8650.00
1350	f	24 HP	1	Nos	10370.00
	ELEC-6.7.2	Shifting of Unit to room , Installation, Testing & Commissioning of VRV / VRF indoor units (4way-Cassette) of the following capacities required supports with necessary bolts, screws, and nut etc complete .			
1351	a	4-way Cassette type Indoor A.C units	1	Nos	2500.00
1352	b	Concealed type ducted type Indoor A.C units	1	Nos	4000.00
1353	ELEC-6.7.3	Supply, installation, testing and commissioning of 2 runs of following sizes of all refrigerant liquid and gas piping using eddy current free hard copper pipes and fittings like elbows, couplers, T - joints, Brass fittings "U" loops, expansion loops, refnet joints etc, for VRV / VRF System.	1	Mtrs	1425.00
		Insulation of pipes using 19mm for supply and 13mm returns thick elastomeric closed cell nitrile rubber insulation materials having class "O" for fire properties structural clamps with hard PVC pipes sleeves under the clamp to protect insulation at supports tagging to enable			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		tracing connectivity to respective units as per drawings to be generated by the agency submission of test reports in approved format forms a part of this item scope, making up of any leakages including supply, labour, consumables, refrigerant top up and incidental expenses. Makes : Mandev / or Equivalent as approved by the department			
		a)12.7 X 28.6mm b)15.9 X 28.6mm c)19.1 X 34.9mm d)19.1 X 41.3mm e)22.2 X 41.3mm			
	<b>ELEC-6.7.4</b>	Supply, transportation, and installation of Hot-Dip GI floor mounting support stands for VRF outdoor units (positioned on Terrace or floor level), as per the standards with all necessary components, etc (Big Foot System)			
1354	<b>a</b>	Up to and below12 HP	1	Nos	6000.00
1355	<b>b</b>	12 to 20HP	1	Nos	10370.00
1356	<b>c</b>	22HP to 40HP	1	Nos	20730.00
1357	<b>ELEC-6.7.5</b>	Supply and installation of 2 core 1.5 sq.mm core copper control cabling between ductable split IDU & ODU in 25mm medium grade pvc pipe with all supports etc complete (AR) Makes : Finolex / RR/ Havells or Equivalent as approved by the department	1	Mtrs	105.00
1358	<b>ELEC-6.7.6</b>	Pressure testing and commissioning of total VRV System with required Gas charging etc complete	1	HP	730.00
1359	<b>ELEC-6.7.7</b>	Supply, transportation, and installation of Copper piping outdoor insulation covered with fibre glass cloth, coated with UV paint	1	Mtrs	195.00
1360	<b>ELEC-6.7.8</b>	Supply, installation ,testing and commissioning of fire damper with fuse link UL-555 certified	1	Sqft	580.00
1361	<b>ELEC-6.7.9</b>	Supply, installation ,testing and commissioning of Acoustic insulation 10 mm thick open cell nitrile rubber	1	Sqft	71.00
1362	<b>ELEC-6.7.10</b>	Supply, installation, testing & commissioning of underdeck insulation 25mm thickness, density to be 32kg/cum the material should be Class O chemically cross linked closed cell polyethylene sheet covered with Alupet foil. Insulation to be provided complete for fittings, adhesive etc all as per specifications. The insulation shall be stuck directly to the roof using proper fixing.	1	Sqft	48.00
	<b>6.8</b>	<b>STABILIZERS</b>			
	<b>ELEC-6.8.1</b>	Supply of ----- Stabilizer Makes : V-Guard / Real Guard / Uni Stab / ITL.			
1363	<b>a</b>	0.5 KVA	1	No	920.00
1364	<b>b</b>	1.0 KVA .	1	No	1500.00
1365	<b>c</b>	3.0 KVA	1	No	1900.00
1366	<b>d</b>	4.0 KVA	1	No	2500.00
1367	<b>e</b>	5.0 KVA	1	No	3000.00
	<b>ELEC-6.8.2</b>	Supply of ----- Stabilizer Makes :Keeline / Soft Line / Capri.			
1368	<b>a</b>	0.5 KVA	1	No	720.00
1369	<b>b</b>	1.0 KVA .	1		1290.00
1370	<b>c</b>	3.0 KVA	1	No	1660.00
1371	<b>d</b>	4.0 KVA	1	No	2280.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
1372	e 6.9	5.0 KVA <b>ACCESS CONTROL SYSTEM</b> <b>BOOM BARRIER</b>	1	No	2740.00
1373	ELEC-6.9.1	<b>Boom Barrier 6Mtr (IP 54)</b> Supply, Installation, Testing and Commissioning of Electromechanical motorized Automatic Boom Barrier of Boom length 6 Mtr with 100% duty cycle, Boom rest, Microprocessor controlled control panel, push buttons, 24VDC motor with all accessories required such as Optical Sensor, integration with smart cards, proximity based access control systems and VFD Drive etc., This shall be with safety features like Induction and safety loop, remote operating facility with remote control unit. Make : Godrej / Vigi Guard / Gunnebo / Magnetic / Automatic Systems or equivalent as approved by the intelligence department	1	No	153000.00
1374	ELEC-6.9.2	<b>Boom Barrier 4Mtr (IP 54)</b> Supply, Installation, Testing and Commissioning of Electromechanical motorized Automatic Boom Barrier of Boom length 4 Mtr with 100% duty cycle, Boom rest, Microprocessor controlled control panel, push buttons, 24VDC motor with all accessories required such as Optical Sensor, integration with smart cards, proximity based access control systems and VFD Drive etc., This shall be with safety features like Induction and safety loop, remote operating facility with remote control unit. Make : Godrej / Vigi Guard / Gunnebo / Magnetic / Automatic Systems or equivalent as approved by the intelligence department	1	No	142000.00
1375	ELEC-6.9.3	<b>Boom Barrier 3Mtr (IP 54)</b> Supply, Installation, Testing and Commissioning of Electromechanical motorized Automatic Boom Barrier of Boom length 3 Mtr with 100% duty cycle, Boom rest, Microprocessor controlled control panel, push buttons, 24VDC motor with all accessories required such as Optical Sensor, integration with smart cards, proximity based access control systems and VFD Drive etc., This shall be with safety features like Induction and safety loop, remote operating facility with remote control unit. Make : Godrej / Vigi Guard / Gunnebo / Magnetic / Automatic Systems or equivalent as approved by the intelligence department	1	No	132000.00
1376	ELEC-6.9.4	<b>Boom Barrier 1.5 Mtr (Two wheeler) (IP 54)</b> Supply, Installation, Testing and Commissioning of Electromechanical motorized Automatic Boom Barrier of Boom length 1.5 Mtr with 100% duty cycle, Boom rest, with Microprocessor controlled control panel, push buttons, 24VDC motor, with all accessories required such as Optical Sensor, integration with smart cards, proximity based access control systems and VFD Drive etc. This shall be with safety features like Induction and safety loop, remote operating facility with remote control unit. Make : Godrej / Vigi Guard / Gunnebo /	1	No	101000.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		Magnetic / Automatic Systems or equivalent as approved by the intelligence department approved by the intelligence department.			
1377	ELEC-6.9.5	Supply, Installation, Testing and Commissioning of Long range Card Readers having 3/6 Meter high SS Pole for Mounting Long Range Vehicle Tag Reader(>10Mtrs) and Smart Card Reader along with Outdoor Enclosure for Smart Card Reader with necessary accessories. -IP 66 Rated having smart card reader with 14 Inch Read Range for Two Wheeler's and Visitor Cars, -Long range Vehicle Tag Reader IP 66 Rated having Read range of >10 Meters for reading vehicle tags.	1	No	89000.00
1378	ELEC-6.9.6	Supply, Installation, Testing, Commissioning of UHF Gen 2 Passive Vehicle Tags capable of application on Car windshields(which will be programmed for operation of the boom barriers). Make: Matrix/HID/Honeywell/or equivalent as approved by the intelligence department	1	No	352.00
1379	ELEC-6.9.7	Traffic Bollard (K-4 rated) : Supply, Installation, Testing and Commissioning of ultra-high resistance to impact and weather Bollard unit consisting of Single blocking bollards with hydraulic drive unit installation on concrete plinth & speed control, Shall be reliable in operation even after power failure, weld free bollard cylinder, auto wiping arrangement, low maintenance and can be operated with remote control switch, Control panel with push buttons accessories enclosed in an outdoor cabinet. Make: FAAC/ Gunnebo / TESCON / ATG Access or equivalent as approved by the intelligence department (approved by NABL )	1	No	750000.00
		Note :			
		1. CE Certification of Bollards			
		2. 2000 Hr Salt Spray Certificate by NABL Lab.			
		3. Tested Life of 10 Million Operations			
		4. HPU must be IP 68 Certified from NABL accredited Lab			
		5. Number of Blocks on Bollards - 3 / 4 5 / 6 Nos			
		<b>Under Vehicle Scanning System (UVSS)</b>			
1380	ELEC-6.9.8	Supply, Installation, Testing and Commissioning of Weatherproof and outdoor type (IP 68) UVSS. It should be able to capture very high resolution and complete composite under body usage of any vehicle passing over it, without the vehicle being stopped and also it should be able to capture complete image of the vehicle on accidentally stoppage on the UVSS system with same clarity by using a high quality line/ area scan CCD camera, with fish eye lens of high resolution & Loop based sensors, able to handle the vehicle speeds ranging from 5-30 Km/hr, automatically and dynamically adjusting the brightness and contrast of the system to ensure good quality images, irrespective of different light condition, automated number plate reading System (ANPRS) and recording.	1	No	2800000.00



Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		There should be 3 or more additional cameras for capturing motion video images etc, It shall also include i7 based computer system with 8GB RAM, HDD 1TB Linux operated, Min 3 PCI slots or as required by the system for operation along with cables. The system shall have 1 KVA ONLINE UPS with backup of 01 hour and network port for connectivity along with all cables and fixing accessories. including all required civil works along with water draining system in case of water egress into the pit as specifications available in department. Make: Kritikal (Model of Zenscan/ NUVOSCAN )/or equivalent as approved by the intelligence department.			
		<b>Multi Zone Door Frame Metal Detection (MDFMDS)</b>			
1381	ELEC-6.9.9	Supply, Installation, Testing and Commissioning of Multi Zone (8 zone) Door frame metal detector ,should detect ferrous, Non Ferrous and Ferrite metals, rechargeable internal battery, traffic counter and capacity 30 person/ minute, etc as per the technical specification available in department. Make : RAPISCAN / or equivalent as approved by the intelligence department.	1	No	225000.00
		<b>Handheld metal detector (HHMD)</b>			
1382	ELEC-6.9.10	Supply, Installation, Testing and handheld metal detector of High sensitivity, detect large, medium and small and Very small objects, metals of ferrous, Non Ferrous and Ferrite, should give a visible audible alarm, Visual indications for On, metal, charge, low battery etc. with inbuilt charger , rechargeable batteries etc., complete as per the specifications available in department. Make : RAPISCAN/ or equivalent as approved by the intelligence department.	1	No	13200.00
		<b>X-Ray Baggage scanner</b>			
1383	ELEC-6.9.11	Supply, Installation, Testing and Commissioning of X-Ray Baggage scanner have inspection tunnel dimension 600 x 400 + 10%, conveyer height 694 mm + 10 mm approximately, 100 Kg or more capacity conveyor, speed of conveyor belt 0.18 & 3 m /s, movement of conveyor bidirectional, suitable to operate 170 - 230 V AC, 50 Hz, video display unit of 19" 2 CD/LED monitor high resolution, low radiation, flicker free, resolution at least 1280 x 1024 mm.	1	No	1760000.00
		Machine should have the feature of warning the operator by stopping of the belt in case of presence of high absorbing material in a baggage, recalling of images, archiving of more images, control desk with security provisions, locking provision, online recording facility, images can be recorded in CD R/W and a USB drive, suitable software as per the technical specification available in department. Make : RAPISCAN/ or equivalent as approved by the intelligence department.			
		<b>SECTION - 7</b>			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		<b>SWAGED POLES / OCTOGONAL POLES, GARDEN POSTS AND ACCESSORIES</b>			
	<b>7.1</b>	<b>SWAGED POLES</b>			
1384	<b>ELEC-7.1.1</b>	Fabrication, supply, and transportation of all sizes swaged poles up to site conforming to IS 2713 / 1980 specifications. The pole should be painted with primary coat of red oxide and black bituminous paint up to ground level with base plate, including cost of all materials etc., complete.(Rate per K. G)	1	Kg	77.00
	<b>7.2</b>	<b>M S POLES FOR GARDEN POSTS</b>			
1385	<b>ELEC-7.2.1</b>	Fabrication and Supply of M.S. Poles for garden posts with 'B' class 60.25mm outer dia with base plate and suitable pole cap including cost and conveyance of all material including fixing of luminaire and labour charges etc., complete. (Rate per K. G)	1	Kg	67.00
1386	<b>ELEC-7.2.2</b>	Supply of different sizes of M. S. Pipe brackets (Rate per K.G)	1	Kg	67.00
	<b>7.3</b>	<b>OCTOGONAL POLES</b>			
	<b>ELEC-7.3.1</b>	Fabrication, Transportation, and supply of hot-dip galvanized Octagonal Pole with BSEN - 10025 grade S 355 JO steel plate for shaft, IS 2062 for base plate with door opening arrangement, including chain for anti-theft mechanism, supply of suitable boards with Bakelite sheet, din channel for MCB's as per IS specification suitable to withstand the wind speed of 180 KMPH for ..... Makes: BAJAJ / VALMONT / TRANSRAIL / SKIPPER / UTKARSH / LAASMA / CONSOUL			
1387	<b>a</b>	7.00 Mtrs height Pole having dimensions Bottom 130mm, Top 70mm with 3mm thick, base plate 220 x 220 x 12mm and 4 Nos of M20 x 700mm long 'J' bolts along with template or equivalent.			11760.00
1388	<b>b</b>	7.50 Mtrs height Pole having dimensions Bottom 130mm, Top 70mm with 3mm thick, base plate 220 x 220 x 12mm and 4 Nos of M20 x 700mm long 'J' bolts along with template or equivalent.	1	No	12600.00
1389	<b>c</b>	8.00 Mtrs height Pole having dimensions of Bottom 135mm, Top 70mm with 3mm thick, base plate 225 x 225 x 16mm and 4 Nos of M20 x 750 mm long 'J' bolts along with template or equivalent.			13860.00
1390	<b>d</b>	9 Mtrs height Pole having dimensions Bottom 155mm, Top 70mm with 3mm thick, base plate 260 x 260 x 16mm and 4 Nos of M24 x 750mm long 'J' bolts along with template or equivalent.	1	No	17745.00
1391	<b>e</b>	10 Mtrs height Pole having dimensions Bottom 175mm, Top 70mm with 3mm thick, base plate 275 x 275 x16mm and 4 Nos of M24 x 750mm long 'J' bolts along with template or equivalent.	1	No	20160.00
1392	<b>f</b>	12 Mtrs height Pole having dimensions Bottom 240mm, Top 90mm with 4mm thick, base plate 320 x320 x20mm and 4 Nos of M24 x 850mm long 'J' bolts along with template or equivalent.	1	No	28350.00
	<b>7.4</b>	<b>BRACKETS</b>			
	<b>ELEC-7.4.1</b>	Fabrication, Transportation, and supply of ----- ----- standard Bracket made			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		with MS galvanized 50mm dia Pipe. Makes: BAJAJ / VALMONT / TRANSRAIL / SKIPPER / UTKARSH / LAASMA / CONSOUL			
1393	a	1.0 Mtr Length Single Arm	1	No	1365.00
1394	b	1.0 Mtr length Double Arm	1	No	1691.00
1395	c	1.50 Mtr Length Single Arm	1	No	1806.00
1396	d	1.50 Mtr length Double Arm	1	No	3045.00
	<b>ELEC-7.4.2</b>	Fabrication, Transportation, and supply of ----- -----complete with all accessories with MS galvanized 50mm dia Pipe. Makes: BAJAJ / VALMONT / TRANSRAIL / SKIPPER / UTKARSH / LAASMA / CONSOUL			
1397	a	1.0 Mtr sword type or any decorative Single arm bracket with dooms	1	No	3833.00
1398	b	1.0 Mtr sword type or any decorative double arm bracket with dooms.	1	No	4515.00
1399	c	1.5 Mtr sword type or any decorative Single arm bracket with dooms	1	No	4305.00
1400	d	1.5 Mtr sword type or any decorative double arm bracket with dooms.	1	No	5618.00
	<b>ELEC-7.4.3</b>	Fabrication, Transportation, and supply of ----- -----bracket with PU paint complete with all accessories with MS galvanized 50mm dia Pipe. Makes: BAJAJ / VALMONT / TRANSRAIL / SKIPPER / UTKARSH / LAASMA / CONSOUL			
1401	a	1.5 Mtr decorative galvanized Single arm	1	No	5072.00
1402	b	1.5 Mtr decorative galvanized double arm	1	No	9576.00
	<b>7.5</b>	<b>HIGH MAST POLES</b>			
1403	<b>ELEC-7.5.1</b>	Fabrication, transportation, and supply of 12 Mtrs Polygon High Mast with single section of 3mm thick of Bottom 360mm and Top 150mm dia with BSEN - 10025 grade S 355 JO steel plate for shaft, IS 2062 for base plate, having a base plate of size 520mm dia 16mm thick with its accessories. Mast shall be in single section for 12 Mtrs . Mast shall be hot dip galvanized and suitable for wind velocity of 180 KMPH as per IS 875 part 3 including head frame, 2 point suspension system with steel rope 6mm dia (7/19) construction double drum winch / power tool , and necessary cable trailer connections and single speed motor with M 24 x 800 mm foundation bolts of required quantity, suitable for 6 luminaires with GLS type aviation twin lamp. Makes: BAJAJ / VALMONT / TRANSRAIL / SKIPPER / UTKARSH / LAASMA / CONSOUL	1	No	111300.00
1404	<b>ELEC-7.5.2</b>	Fabrication, transportation, and supply of 16 Mtrs Polygon High Mast with two sections of Bottom 4mm thick and Top section with 3mm thick with GLS type aviation lamp of Bottom 360mm and Top 150mm dia with BSEN - 10025 grade S 355 JO steel plate for shaft, IS 2062 for base plate, having a base plate of size 560mm dia 25mm thick with its accessories. Mast shall be in 2 sections and should be hot dip galvanized and suitable for wind velocity of 180 KMPH as per IS 875 part 3 including head frame, 2 point	1	No	144900.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		suspension system with steel rope 6mm dia (7/19) construction double drum winch / power tool, and necessary cable trailer connections and single speed motor with M 24 x 800 mm foundation bolts of required quantity, suitable for 6 Flood lights, with GLS type aviation twin lamp Makes: BAJAJ / VALMONT / TRANSRAIL / SKIPPER / UTKARSH / LAASMA / CONSOL			
1405	ELEC-7.5.3	Fabrication, transportation, and supply of 20 Mtrs Polygon High Mast with two sections of Bottom 4mm thick and Top section with 3mm thick of Bottom 410mm and Top 150mm dia with BSEN - 10025 grade S 355 JO steel plate for shaft, IS 2062 for base plate, having a base plate of size 570mm dia 25mm thick with its accessories. Mast shall be in 2 sections and should be hot dip galvanized and suitable for wind velocity of 180 KMPH as per IS 875 part 3 including head frame, 2 point suspension system with steel rope 6mm dia (7/19) construction double drum winch / power tool, and necessary cable trailer connections and single speed motor with M 24 x 800 mm foundation bolts of required quantity, suitable for 12 flood lights, with GLS type aviation twin lamp. Makes: BAJAJ / VALMONT / TRANSRAIL / SKIPPER / UTKARSH / LAASMA / CONSOL	1	No	180600.00
	<b>7.6</b>	<b>FEEDER PILLER BOX</b>			
	ELEC-7.6.1	Supply and fixing of suitable out door feeder pillar box of size made with 14 SWG CRCA sheet with double door arrangement, making powder coating after processing of 7 Tank process, lock and key, hinges, rubber gasket, danger board, suitable angle iron stand for mounting the feeder pillar with cement concrete, including Supply and fixing of Legrand / Schneider make ----- ----- as out goings, indication lamps, din channel, 6 Sq.mm 3 core copper cable for individual light control, connectors, bus bars, shroudings, gland plates and provision for 3 phase energy meter etc., complete for finished item of work and suitable wiring provision for connecting the nature switch with following.			
1406	a	40A 4 Pole Isolator as incomer, 6 Nos 6-32A SP MCBs	1	No	22436.00
1407	b	63A, 4 Pole isolator as incomer, 6 Nos 6-32A SP MCBs	1	No	22558.00
1408	c	63A, 4 Pole isolator as incomer, 9 Nos 6-32A SP MCBs	1	No	23406.00
	ELEC-7.6.2	Supply and fixing of suitable out door feeder pillar box of size made with 14 SWG CRCA sheet with double door arrangement, making powder coating after processing of 7 Tank process, lock and key, hinges, rubber gasket, danger board, suitable angle iron stand for mounting the feeder pillar with cement concrete, including Supply and fixing of Legrand / Schneider make ----- ----- as out goings,			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		indication lamps, din channel, 6 Sq.mm 3 core copper cable for individual light control, connectors, bus bars, shroudings, gland plates and provision for 3 phase energy meter etc., complete for finished item of work and suitable wiring provision for connecting the nature switch with following.			
1409	a	40A-63A, 4 Pole MCB as incomer, 6 Nos 6-32A SP MCBs	1	No	23891.00
1410	b	63A, 4 Pole MCB as incomer, 9 Nos 6-32A SP MCBs	1	No	24619.00
	<b>7.7</b>	<b>ERRECTION OF HIGH MAST POLES</b>			
1411	ELEC-7.7.1	Earth work excavation with an approximate quantity of 4.0 Cum for erecting of 12 Mtrs high mast and refilling with a quantity of 0.53 Cum of PCC 1:4:8, 1.50 Cum M 20 grade concrete and (80 Kgs) reinforced steel of 12mm / 10mm / 8mm, Soil bearing capacity of 10 T/Sqm, Anchor plate with cost and conveyance of all above materials including labour charges for erecting of High Mast and Carriage etc complete including soil testing.	1	No	29505.00
1412	ELEC-7.7.2	Earth work excavation with an approximate quantity of 6.0 Cum for erecting of 16 Mtrs high mast and refilling with a quantity of 0.65 Cum of PCC 1:4:8, 2.60 Cum M 20 grade concrete and (110 Kgs) reinforced steel of 12mm / 10mm / 8mm, Soil bearing capacity of 10 T/Sqm, Anchor plate with cost and conveyance of all above materials including labour charges for erecting of High Mast and Carriage etc complete including soil testing.	1	No	37590.00
1413	ELEC-7.7.3	Earth work excavation with an approximate quantity of 7.0 Cum for erecting of 20 Mtrs high mast and refilling with a quantity of 0.75 Cum of PCC 1:4:8, 3.60 Cum M 20 grade concrete and (140 Kgs) reinforced steel of 12mm / 10mm / 8mm, Soil bearing capacity of 10 T/Sqm, Anchor plate with cost and conveyance of all above materials including labour charges for erecting of High Mast and Carriage etc complete including soil testing.	1	No	47880.00
	<b>7.8</b>	<b>CONICAL POLES</b>			
1414	ELEC-7.8.1	Fabrication, transportation and supply of MS hot dip galvanized 9.0 Mtrs long Conical poles with 3mm thick HT steel plate with a bottom 173mm dia and top 75mm dia, base plate of size 275mmx275mmx16mm thick welded to bottom of pole, terminal box with door size of 500mm x 100mm with all accessories connector and fuse base and a fixing arrangement for advertisements holdings, foundation bolts with washers and nuts 4 sets. including S&F of 1.0 Mtrs C type decorative single arm with painted bracket with dooms either side complete with all accessories as per the requirements at site and as per the directions of field engineers during execution for finished item of work. Makes: BAJAJ / VALMONT / TRANSRAIL / SKIPPER / UTKARSH / LAASMA / CONSOL	1	No	18055.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
1415	ELEC-7.8.2	Fabrication, transportation and supply of MS hot dip galvanized 10.0 Mtrs long Conical poles with 3mm thick HT steel plate with a bottom 184mm dia and top 75mm dia, base plate of size 275mmx275mmx16mm thick welded to bottom of pole, terminal box with door size of 500mm x 100mm with all accessories connector and fuse base and a fixing arrangement for advertisements holdings, foundation bolts with washers and nuts 4 sets. including S&F of 1.5 Mtrs C type decorative Double arm with painted bracket with dooms either side complete with all accessories as per the requirements at site and as per the directions of field engineers during execution for finished item of work. Makes: BAJAJ / VALMONT / TRANSRAIL / SKIPPER / UTKARSH / LAASMA / CONSOL	1	No	22822.00
	7.9	<b>DECORATIVE DRAGON TYPE BRACKET WITH POLE</b>			
	ELEC-7.9.1	Fabrication, Transportation, and supply of hot-dip galvanized Octagonal Pole with BSEN - 10025 grade S 355 JO steel plate for shaft, IS 2062 for base plate with door opening arrangement, including the supply of suitable boards with Bakelite sheet and MCB's as per IS specification suitable to withstand the wind speed of 180 KMPH for <b>9 Mtrs Mounting height Pole</b> having dimensions Bottom 185 mm,. Top 70mm with 3mm thick, base plate 275 x 275 x 20mm and 4 Nos of M24 x 1000 long 'J' bolts along with templates Including Supply of 1.5M Dragon type decorative ----- Makes: VALMONT / BAJAJ / TRANSRAIL			
1416	a	galvanised Double Arm with PU Painted bracket.	1	No	26600.00
1417	b	galvanised Single Arm with PU Painted bracket.	1	No	22800.00
1418	c	Double arm Galvanised finish bracket.	1	No	22800.00
1419	d	Single arm Galvanised finish bracket.	1	No	20400.00
	ELEC-7.9.2	Fabrication, Transportation and supply of hot-dip ----- Curved Octagonal Pole with BSEN - 10025 grade S 355 JO steel plate for shaft Including Supply of 0.2M long Single arm bracket, IS 2062 for base plate with door opening arrangement, including the supply of suitable boards with Bakelite sheet and MCB's as per IS specification suitable to withstand the wind speed of 180 KMPH for <b>9 Mtrs Mounting height Curved Pole</b> having dimensions Bottom 180mm,. Top 85mm with 3mm thick, base plate 400 x 400 x 20mm and 4 Nos of M24 x 750 long 'J' bolts along with templates. Makes: VALMONT / BAJAJ / TRANSRAIL			
1420	a	galvanized	1	No	22300.00
1421	b	galvanized PU Paint finish	1	No	30200.00
	7.1	<b>THERMO PLASTIC POLE BOXES</b>			
	ELEC-7.10.1	Supply of following sizes thermo plastic pole boxes IP 65 protection. Make : Hensel / Sintex / Sadhrish or equivalent			
1422	a	200X150X100			720.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
1423	b	250X200X120			890.00
1424	c	300X150X170			1040.00
1425	d	300X200X125			1120.00
1426	e	300X300X170			1480.00
1427	f	400X300X200			1600.00
1428	g	300X450X170			2020.00
1429	h	490X390X250			2230.00
1430	i	300X600X170			2400.00
	<b>7.11</b>	<b>FOUNDATION AND ERRECTION CHARGES OF POLES</b>			
1431	<b>ELEC-7.11.1</b>	Erection charges for 7.50 Mts long Octagonal pole on bridge kerb portion (R.C.C). duly provided 4 Nos 8" Anchor bolts/ M20xsuitable "J" type bolts etc duly drilling holes to RCC slab and with V.C.C. M.15 concrete for base concreting up to a height of 8" with necessary Reinforcement work etc. including cost and conveyance of all material and all labour charges etc. complete as directed by the department officers.	1	No	3528.00
1432	<b>ELEC-7.11.2</b>	Foundation and erection charges with special T&P, for 7.50 Mtrs long Octagonal / Conical pole duly erecting on base plate duly provided 4 Nos foundation bolts with nuts with providing of 0.45Mtrx0.45Mtrsx1.20 Mtr size M20 cc work vibrated concreting mixing with necessary steel (10kgs) reinforcement as directed by the field engineers during execution including centering, decentering, water curing as required, soil excavation, back filling, muffing removal and coil earthing including all labour charges and cost and conveyance of materials etc. complete.	1	No	4967.00
1433	<b>ELEC-7.11.3</b>	Foundation and erection charges with special T&P, for 9.00Mtrs / 10Mtrs long Octagonal / Conical pole duly erecting on base plate duly providing 4 Nos foundation bolts with nuts with providing of 0.60Mtrx0.60Mtrsx1.40 Mtr size M20 cc work vibrated concreting mixing with necessary steel (15kgs) reinforcement as directed by the field engineers during execution including centering, decentering, water curing as required, soil excavation, back filling, muffing removal and coil earthing including all labour charges and cost and conveyance of materials etc. complete.	1	No	6615.00
1434	<b>ELEC-7.11.4</b>	Foundation and erection charges with special T&P, for 12Mtrs long Octagonal / Conical pole duly erecting on base plate duly provided 4 Nos foundation bolts with nuts with providing of 0.67Mtrx0.67Mtrsx1.50 Mtr size M20 cc work vibrated concreting mixing with necessary steel (20kgs) reinforcement as directed by the field engineers during execution including centering, decentering, water curing as required, soil excavation, back filling, muffing removal and coil earthing including all labour charges and cost and conveyance of materials etc. complete.	1	No	8295.00
	<b>7.12</b>	<b>G R P POLES</b>			
	<b>ELEC-7.12.1</b>	Supply and transportation of following glass			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		reinforced polymer (GRP) composite type Conical pole with single arm bracket of length 1Mtr and internal junction box including labour charges etc., complete. Makes: Bajaj / Valmont / Kemrock / Sumip.			
1435	a	3.00 Mtrs height, Bottom dia 130-143mm, Top 76-89mm, AV thickness 6mm and to withstand maximum wind velocity 155Km/Hr	1	No	9660.00
1436	b	4.00 Mtrs height, Bottom dia 140-145mm, Top 76-89mm, AV thickness 6mm and to withstand maximum wind velocity 155Km/Hr	1	No	12075.00
1437	c	6.00 Mtrs height, Bottom dia 150-170mm, Top 76-89mm, AV thickness 6mm and to withstand maximum wind velocity 155Km/Hr	1	No	15330.00
1438	d	8.00 Mtrs height, Bottom dia 150-193mm, Top 76-89mm, AV thickness 6mm and to withstand maximum wind velocity 155Km/Hr	1	No	20265.00
1439	e	10.00 Mtrs height, Bottom dia 207-227mm, Top 76-89mm, AV thickness 6mm and to withstand maximum wind velocity 155Km/Hr	1	No	29295.00
	<b>ELEC-7.12.2</b>	Supply and transportation of base bracket suitable for glass reinforced polymer (GRP) composite type pole including labour charges etc., complete. Makes : Bajaj / Kemrock / Sumip.			
1440	a	For 3.00 Mtrs Pole	1	No	1617.00
1441	b	For 4.00 Mtrs Pole	1	No	1617.00
1442	c	For 6.00 Mtrs Pole	1	No	1943.00
1443	d	For 8.00 Mtrs Pole	1	No	2268.00
1444	e	For 10.00 Mtrs Pole	1	No	3900.00
	<b>7.13</b>	<b>CONTROL PANEL BOARD</b>			
	<b>ELEC-7.13.1</b>	Fabrication and erection of ----- sheet steel enclosure for power control cubicle panel / boxes etc., including cutting, bending drilling, welding and riveting etc., complete with cleaning with 7 tank process and painting with powder coating including cost and conveyance of all materials and labour charges.			
1445	a	14SWG CRCA (2mm)	1	Sq Inch	3.00
1446	b	16 SWG CRCA(1.6mm)	1	Sq Inch	2.80
1447	c	18SWG CRCA(1.25mm)	1	Sq Inch	2.50
		<b>NOTE</b> : For Panels fabrication as per IEC 61439 (TTA Panels), the rate should be considered 1.25 times of above price			
	<b>7.14</b>	<b>METERING EQUIPMENT</b>			
	<b>ELEC-7.14.1</b>	Supply and erection of 0-500V ----- on existing panel board including connections etc., complete. MAKES : CONZERVE / ELMEASURE / L&T / SEIMENS.			
1448	a	Digital Volt meter	1	No	2000.00
1449	b	Analog Volt meter	1	No	400.00
	<b>ELEC-7.14.2</b>	Supply and erection of 0-100 / 200 / 400 / 600 /1000 -----of size 96x96mm on existing panel board including connections etc., complete.			



Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		MAKES : CONZERVE / ELMEASURE / L&T / SEIMENS.			
1450	a	Digital Ammeter	1	No	2000.00
1451	b	Analog Ammeter	1	No	400.00
1452	ELEC-7.14.3	Supply and erection of Digital frequency meter on existing panel board including connections etc., complete. MAKES : CONZERVE / ELMEASURE / L&T / SEIMENS.	1	No	2500.00
1453	ELEC-7.14.4	Supply and erection of Digital power factor meter, 3 phase, 4 wire balanced or unbalanced load 5A, 415V of size 96 x 96mm on existing panel board including connections etc., complete. MAKES : CONZERVE / ELMEASURE / L&T / SEIMENS.	1	No	2500.00
	ELEC-7.14.5	Supply and erection of L.T. 3phase Digital multifunction -----for measuring all the parameters (Voltage, Current, Frequency, Power factor, KW, KVA, KWH, KVA, KVAH, KVAR and THD Events) on existing box panel board including connections etc., complete. MAKES : CONZERVE / ELMEASURE / L&T / SEIMENS.			
1454	a	energy meter Class I with LED display	1	No	6500.00
1455	b	energy meter Class I RS 485 with LED display	1	No	7500.00
1456	c	energy meter Class 0.5 RS 485 with LED display	1	No	8800.00
1457	d	energy meter Class I with LCD display	1	No	7500.00
1458	e	energy meter Class I RS 485 with LCD display	1	No	8400.00
1459	f	energy meter Class 0.5 RS 485 with LCD display	1	No	9800.00
1460	g	bidirectional import / export energy meter Class I with LED display	1	No	14350.00
1461	h	bidirectional import / export energy meter Class I RS 485 with LED display	1	No	15280.00
1462	i	bidirectional import / export energy meter Class I with LCD display	1	No	15280.00
1463	j	bidirectional import / export energy meter Class I RS 485 with LCD display	1	No	16200.00
	ELEC-7.14.6	Supply and erection of ----- Makes : L&T / C&S / SALZAR / HPL MAKE.			
1464	a	Selector switch for Voltmeter / Ammeter on the existing panel including connections etc., complete.	1	No	175.00
1465	b	LED indication lamps on the existing panel board.	1	No	135.00
1466	c	Push buttons on the existing panel board.	1	No	75.00
1467	ELEC-7.14.7	Supply and erection of LT current transformer with bar primary 100/5A to 1000 / 5A ratio in the existing panel including connections etc., complete. MAKE : KAPPA	1	No	440.00
	ELEC-7.14.8	Supply and fixing of----- Electronic energy Meter, 240V AC, 50 HZ as per IS13010 up to 40A range with 200% overload capacity complete with connections etc., complete on the existing board. Makes : CONZERVE / ELMEASURE / MECO / HPL / HAVELLS.			
1468	a	Single phase	1	No	985.00
1469	b	Three phase	1	No	2840.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
	<b>ELEC-7.14.9</b>	Supply and fixing of ----- APFC Relay with connection etc complete. Makes : L&T / Siemens / EPCOS / Schneider / Elmeasure			
1470	<b>a</b>	8 Stage	1	No	13020.00
1471	<b>b</b>	12 Stage	1	No	14700.00
1472	<b>c</b>	14 Stage	1	No	17430.00
	<b>ELEC-7.14.10</b>	Supply and fixing of ----- Rating capacitor duty contactor Makes : L&T / Siemens / Meher			
1473	<b>a</b>	3.0 KVAR	1	No	1617.00
1474	<b>b</b>	5.0 KVAR	1	No	1691.00
1475	<b>c</b>	8.5 KVAR	1	No	1953.00
1476	<b>d</b>	10.0 KVAR	1	No	2121.00
1477	<b>e</b>	12.5 KVAR	1	No	2268.00
1478	<b>f</b>	15.0 KVAR	1	No	3150.00
1479	<b>g</b>	20.0 KVAR	1	No	3654.00
1480	<b>h</b>	25.0 KVAR	1	No	4095.00
1481	<b>i</b>	50.0 KVAR	1	No	11319.00
	<b>ELEC-7.14.11</b>	Supply and fixing of detuned reactor 7% 3 phase 440V range ----- Makes : L&T / Siemens / Meher			
1482	<b>a</b>	5.0 KVAR	1	No	8190.00
1483	<b>b</b>	10.0 KVAR	1	No	12915.00
1484	<b>c</b>	12.5 KVAR	1	No	14333.00
1485	<b>d</b>	15.0 KVAR	1	No	16065.00
1486	<b>e</b>	20.0 KVAR	1	No	18743.00
1487	<b>f</b>	25.0 KVAR	1	No	19845.00
1488	<b>g</b>	50.0 KVAR	1	No	31500.00
1489	<b>h</b>	75.0 KVAR	1	No	46935.00
1490	<b>i</b>	100.0 KVAR	1	No	63945.00
	<b>ELEC-7.14.12</b>	Supply of MPP type heavy duty capacitor of operating voltage Makes: L&T/Siemens/Schneider/Epcos.			
1491	<b>a</b>	not less than 440V of cylindrical type of 1 KVAR to 2 KVAR	1	KVAR	340.00
1492	<b>b</b>	not less than 480V of cylindrical type more than 2 KVAR	1	KVAR	330.00
1493	<b>c</b>	not less than 440V of box type of 1 KVAR to 4 KVAR	1	KVAR	440.00
1494	<b>d</b>	not less than 480V of box type of 5 KVAR to 50 KVAR	1	KVAR	400.00
	<b>7.15</b>	<b>SUB STATION EQUIPMENT / SERVICING</b>			
1495	<b>ELEC-7.15.1</b>	Carryout routine maintenance, servicing, and testing of 630A to 1000A L.T.ACB by cleaning fixed contacts, moving contacts and arc chutes including servicing and putting the ACB in perfect working condition after getting all relay and ON, OFF mechanism etc done with only manufacturing companies	1	No	5775.00
1496	<b>ELEC-7.15.2</b>	Carryout routine maintenance and servicing of LT. Cubical panel board having approximately 15 to 22 Nos of switches cleaning with power brower and servicing the contacts, tightening the connection of incoming and outgoing cables, and clicking the operating mechanism for smooth functioning of switches and putting them in smooth working condition.	1	No	2756.00
1497	<b>ELEC-7.15.3</b>	Routine maintenance of transformer in operation	1	No	4725.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		covering insulation resistance oil, break down strength. Reconditioning / replacement of silica gel, cleaning of transformer and topping up to oil level if required (extra cost will be paid for oil).			
1498	ELEC-7.15.4	Testing of Transformer oil for dielectric breakdown strength.	1	No	648.00
1499	ELEC-7.15.5	Testing of Insulation Resistance H.T. / LT copper / aluminium coils for Transformers.	1	No	326.00
	ELEC-7.15.6	Removing the existing transformer from the plinth / Pole and refixing the standby transformer of following capacity including connections etc., complete----- -----			
1500	a	Up to 315 KVA	1	No	5100.00
1501	b	500 / 1000 KVA	1	No	7140.00
	ELEC-7.15.7	Replacing old and unserviceable gasket of top cover plate of transformer having following capacity -----			
1502	a	Up to 315 KVA	1	No	809.00
1503	b	500 / 1000 KVA	1	No	1134.00
	ELEC-7.15.8	Replacing old and unserviceable gasket of bushing for the following Transformer capacity.			
1504	a	Up to 315 KVA H.T.	1	No	326.00
1505	b	Up to 500 / 1000 KVA H.T.	1	No	599.00
1506	c	Up to 315 KVA L.T.	1	No	756.00
1507	d	Up to 500 / 1000 KVA L.T.	1	No	1554.00
	ELEC-7.15.9	Replacement the H.T. / L.T. burnt-out winding coils of distribution transformer including rewinding, varnishing and vacuuming etc., duly retaining the removed burnt winding coils by the Contractor / Firm -----			
1508	a	For copper coils	1	Kg	671.00
1509	b	For aluminium coils	1	Kg	440.00
	ELEC-7.15.10	Painting with 2 coats Zinchromate red oxide duly scraping existing paint followed by 2 coats of hammerton grey paint etc., complete.-----			
1510	a	Up to 500 KVA	1	No	3060.00
1511	b	630 / 1000 KVA	1	No	4080.00
	ELEC-7.15.11	Replacing ----- for distribution Transformer by new one.			
1512	a	H.T bushing	1	No	360.00
1513	b	H.T bushing metal parts	1	No	390.00
1514	c	L.T bushing Up to 315 KVA	1	No	170.00
1515	d	L.T bushing for 500 / 1000 KVA	1	No	180.00
1516	e	L.T bushing metal parts 100 KVA	1	No	310.00
1517	f	L.T bushing metal parts 250 / 315 KVA	1	No	510.00
1518	g	L.T bushing metal parts 500 KVA	1	No	1330.00
1519	h	L.T bushing metal parts 1000 KVA	1	No	2040.00
	ELEC-7.15.12	Drying the repaired transformer with appropriate heat / air -----			
1520	a	Up to 315 KVA	1	No	3060.00
1521	b	500 / 1000KVA	1	No	4290.00
	ELEC-7.15.13	Loading and Unloading of transformer from site to Workshop or vice versa-----			
1522	a	Up to 500 KVA	1	No	4590.00
1523	b	630 / 1000 KVA	1	No	6940.00
	ELEC-7.15.14	Filtration of transformer oil as per ISS specifications filters to die electric strength above 40 KV-----			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
1524	a	At site	1	Ltr	10.00
1525	b	At workshop	1	Ltr	7.00
1526	ELEC-7.15.15	Transformer oil tested as per IS-335 - 1972 ( per Ltr)	1	Ltr	122.00
		<b>Servicing of DBs</b>			
	ELEC-7.15.16	Servicing of DBs duly opening the top cover checking the circuits, tightening the screws, applying tape wherever required and making proper dressing etc complete.			
1527	a	4 Way SPN DB	1	No	44.00
1528	b	8 Way SPN DB	1	No	88.00
1529	c	12 Way SPN DB	1	No	132.00
1530	d	4 Way TPN DB	1	No	132.00
1531	e	8 Way TPN DB	1	No	264.00
1532	f	12 Way TPN DB	1	No	396.00
1533	g	4 Way VTPN DB with MCCBs / MCB Circuits	1	No	220.00
1534	h	8 Way VTPN DB with MCCBs / MCB Circuits	1	No	330.00
1535	i	12 Way VTPN DB with MCCBs / MCB Circuits	1	No	440.00
		<b>Servicing of HT VCBs</b>			
1536	ELEC-7.15.17	Carryout routine maintenance, servicing, and testing of 630A to 3000A HT VCB by cleaning fixed contacts, moving contacts and arc chutes including servicing and putting the VCB in perfect working condition after getting all relay and ON, OFF mechanism etc done with only manufacturing companies / Authorized dealers of respective switch gears	1	No	9000.00
		<b>POWER QUALITY ANALYSIS</b>			
1537	ELEC-7.15.18	Carrying out power quality analysis of the existing load at point of supply/ or as directed with the use of necessary equipment ( At 10 points) and recording voltage, current, frequency, KW, KVA, KVAR,PF,THDV, THDI, Load imbalance, preparation, and submission of detailed analysis report with remedial measure.	1	day	26000.00
		<b>Note 1:</b> Above job is carried out irrespective of measurements at various electrical panels/ load centers (Up to 10 pts) <b>Note 2:</b> For estimating, one day shall be considered number of hours of one normal working day and it should be actual time required for measurement at site.			
		<b>THERMOGRAPHY</b>			
1538	7.15.19	Service Charges towards Thermography at site with FLIR make E5 thermal Imaging Camera with CRIP Resolution of 10,800-pixel detector and 2% accuracy including all required jobs	1	Job	35000.00
	7.16	<b>TRANSFORMERS</b>			
	ELEC-7.16.1	Supply, Transportation, Installation, Testing and Commissioning of ----- KVA TRANSFORMER with all test reports. The Transformer shall be designed and manufactured as per IS:1180 OCTC with level-II with initial filling of oil as per IS 335-1993. The basic details of the Transformer are as under. Makes: Kirloskar / PETE / Esennar / Voltamp / Crompton / ABB / Schneider. 1. Quantity : 1			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit	Scheduled Rate for 2021-22
		2. Rated KVA : .....KVA		
		3. Service & Location: Continuous Outdoor Distribution Transformer		
		4. Mounting : Plinth.		
		5. Wound : Copper Double wound		
		6. Type : Core type oil immersed		
		7. Cooling : ONAN		
		8. Temp Rise : 40°C in oil, 45°C by resistance		
		9. Vector Group: Dyn 11		
		10. Primary Connection : Delta		
		11. Nominal Voltage / Current : _____		
		12. Highest system Voltage: 12000V		
		13. Primary Frequency :50 HZ +/- 3%		
		14. Number of Phases : 3		
		15. Primary wires: 3		
		16. Secondary connection : Star		
		17. Secondary Volts / Current : 433V		
		18. Secondary phases : 3		
		19. Secondary wires: 4		
		20. Taps on primary winding for primary voltage variation : +5% to - 10% in steps of 2.5% of 7 position (6 Steps)		
		21. Terminal arrangement.		
		a.HV: HT terminal box as per the site condition.		
		b. LV: Cable box suitable to receive ----- --Sq.mm XLPE cable		
		22. LV:One separate terminal for earthing.		
		23. Total Losses at 50% Loading [Watts] [Max] --- as per IS		
		24. Total Losses at 100% Loading [Watts] [Max]--- as per IS		
		25. Percentage Impedance at 75 deg. C at ---- as per IS		
		26. No Load current: Less than 2% of full load current.		
		<u>27. Standard Fittings &amp; Accessories.</u>		
		a. Rating and terminal marking plate: One		
		b. Lifting Lugs: Two		
		c. Off-circuit tap switch :One		
		d. Earthing Terminals :Two		
		e. Radiators ( Attachable) :Adequate		
		f. Explosion vent with Diaphragm :One		
		g. Conservator with Drain plug: one		
		h. Oil filling hole with cap :One		
		i. Oil level indicator : One		
		j. Dehydrating Silica gel Breather : One		
		k. Terminal Arrangement: HV With Terminal Box		
		l. Terminal Arrangement : LV Cable Box		
		m. Separate Neutral Bushing : One		
		n. Filter valve with blanking plate : One		
		o. Drain cum filter valve with blanking plate : One		
		p. Air release device : One		
		q. Thermometer Pocket : One		
		r. Four :Unidirectional flat rollers		
		s. One :10Cm dial thermometer(Rigid stem type)		

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
1539	a	160 KVA Copper Wound Transformer	1	No	606375.00
1540	b	200 KVA Copper Wound Transformer	1	No	667013.00
1541	c	250 KVA Copper Wound Transformer	1	No	727650.00
1542	d	315 KVA Copper Wound Transformer	1	No	970200.00
1543	e	400 KVA Copper Wound Transformer	1	No	1152113.00
1544	f	500 KVA Copper Wound Transformer	1	No	1273388.00
1545	g	630 KVA Copper Wound Transformer	1	No	1370408.00
1546	h	1000 KVA Copper Wound Transformer	1	No	1794870.00
1547	i	1250 KVA Copper Wound Transformer	1	No	2250000.00
1548	j	1600 KVA Copper Wound Transformer	1	No	2750000.00
1549	k	2000 KVA Copper Wound Transformer	1	No	3398000.00
	<b>ELEC-7.16.2</b>	Supply, Transportation, Installation, Testing and Commissioning of 3 Phase, 50 Hz, Dry type, Indoor type copper wound Transformer designed and manufactured as per IS 2026-1977 and IS 11171-1985, connected delta on primary side and Star on secondary side with additional neutral brought out on load side, 11000V / (433V / 415V) with HV off load tap changing + 5% to -5% in steps of 2.5%, temperature rise by the resistance 90°C complete with test reports with the following standard mountings. Makes: Kirloskar / PETE / Esennar / Voltamp / Crompton / ABB / Schneider.			
		1. Rated KVA : .....KVA (Cast Resin)			
		2. Service: Indoor			
		3. Mounting : Floor.			
		4. Copper wound : Double.			
		5. Type of cooling : ANAN.			
		6. Insulation Class : Class F			
		7. Temperature rise by resistance : 90°C			
		8. Vector Group: Dyn 11			
		9. Primary Connection : Delta			
		10. Primary Volts : 11000			
		11. Primary Frequency : 50			
		12. Primary Phases : 3			
		13. Primary wires: 3			
		14. Secondary connection : Star			
		15. Secondary Volts : 433V / 415V			
		16. Secondary phases : 3			
		17. Secondary wires: 4			
		18. Taps on primary winding for primary voltage variation : +5.0% to - 10.0% in steps of 2.5% through links.			
		19. Terminal arrangement.			
		a. HV: Cable end box b. LV : Cable end box			
		20. No load losses (Watts): ..... As per IS specifications			
		21. Load losses (Watts): .....As per IS specifications			
		22. Impedance(Z%) : .....As per IS specifications			
		23. Fittings & Accessories.			
		a. Rating and terminal marking plate b. Earthing terminals			
		c. Lifting Lugs			
		d. Winding temperature Indicator			
		e. Separate neutral bushing			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		f. Uni directional flat rollers.			
1550	a	250 KVA Copper Wound Cast Resin Transformer	1	No	812543.00
1551	b	315 KVA Copper Wound Cast Resin Transformer	1	No	933818.00
1552	c	400 KVA Copper Wound Cast Resin Transformer	1	No	1055093.00
1553	d	500 KVA Copper Wound Cast Resin Transformer	1	No	1273388.00
1554	e	630 KVA Copper Wound Cast Resin Transformer	1	No	1394663.00
1555	f	750 KVA Copper Wound Cast Resin Transformer	1	No	1637213.00
1556	g	1000 KVA Copper Wound Cast Resin Transformer	1	No	2061675.00
1557	h	1250 KVA Copper Wound Cast Resin Transformer	1	No	2350000.00
1558	i	1600 KVA Copper Wound Cast Resin Transformer	1	No	2599000.00
1559	j	2000 KVA Copper Wound Cast Resin Transformer	1	No	3071700.00
1560	ELEC-7.16.3	Supply, Installation, Testing and Commissioning of OLTC for transformers with RTCC etc., complete.	1	No	544000.00
		<b>NOTE 1</b> : All Test reports to be submitted			
		<b>NOTE 2</b> . If only transformer is to be supplied then 2% may be deducted from the above price towards Installation, Testing and Commissioning			
		<b>NOTE 3</b> : If level 3 transformer is to be supplied then increase the price by 10%			
1561	ELEC-7.16.3	Supply , Fabrication, Transportation and fixing of Box type RS Joist pole made with 2 Nos 175X85 mm ( ISMB Modified ) or equivalent about 30'-0 length / 9.1 Mtrs length poles welded together including excavation of pit, coil earthing, Special T&P, painting of Pole with 1 coat of Red oxide and 2 coats of aluminum paint, CC 1:3:6 up to ground and 1:2:4 for Coping work, 200A AB Switch, HG fuse sets, required angle iron channels, clamps, nuts and bolts, 11KV pin insulators, 2Nos GI pipe earthing as per the IS with brick masonry chamber including labour and transportation charges etc., complete.	1	No	79860.00
1562	ELEC-7.16.4	Supply, Fabrication, Transportation and erection of DP structure made with 2 Nos 175mm x 85mm ( ISMB Modified ) or equivalent about 30'-0 length / 9.1 Mtrs length RS joist pole erection of the same Including excavation of pit in all kinds of soil including breaking stones, concreting with (1:3:6) mixture base plate, coil earthing back filling, 1:2:4 for coping including red oxide primary painting and two coats of aluminium painting etc., complete as required with following as per CEIG norms.	1	No	139755.00
		a). 400A AB Switch-1No			
		b) HG Fuse sets-1No			
		c). LAS-1set.			
		d) Required Number of 11KV pin and disc insulators.			
		e) Required length of 100X50mm and 75X40 mm ISMC channel iron including two coats of red oxide and two coats of enamel paint etc for finished item of work.			
		f) 11KV pin insulators and disc insulators.			
		g) AB switch operating pipe with handle and lock and key arrangements.			
		h). "0" SWG or 8.25 mm dia hard drawn bare copper wire including copper binding wire etc., complete as required including connections.			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		i) 40X6mm GI strip for the DP structure earthing.			
		j) 25X6mm copper strip for lightning arrestors earthing.			
		k) 600X600mmX3,15mm thick copperplate earthing as per NEC with brick masonry chambers - 2 Nos			
		l) GI pipe earthing for the Double pole structure with brick masonry chambers as per IS - 2 Nos			
1563	ELEC-7.16.5	Providing independent earthing for Important equipment with 40mm dia 'B' class 2.5m long G.I pipe and 19mm dia 'B' class G.I pipe of 0.3mtr. long connected with reducer providing G.I funnel with mesh enclosed in C.C/ brick masonry chamber of 450m x 450m x 400mm with R.C.C. Slab cover duly providing staggered holes filling with 20Kg Salt and 40Kg Charcoal or 40Kg bentonite powder from the bottom of the pipe giving earth connection from electrode through G.I strip of 40 x 6mm x 200mm length with all accessories and labour charges complete, as per IS specifications 732/1982 (Part II)	1	No	4863.00
		<b>NOTE :</b> Whenever providing full length of electrode is not possible due to the obstruction of water tube / rock, the length of electrode may be reduced, and additional earthing may be done to meet earth resistance.			
1564	7.16.6	Providing independent earthing by excavating a pit to a depth of 2.25Mtr in all soils as per size specified in the data for Sophisticated Electronic equipment with 600mm x 600mm x 3.15mm thick copper plate rigidly fixed to 19mm dia 'B' Class G.I Pipe of 2.5Mtr length with funnel as per National Electric Code and earth connection from electrode GI strip of 40mm x 5mm x 200mm length to be bolted with nut bolts to G.I. pipe including 25mm x 3mm copper strip of 6Mtrs length connected from plate to GI strip including filling with 20Kg Salt and 40Kg Charcoal or 40Kg bentonite powder from the bottom of the pipe and providing CC / Brick masonry chamber 450mmX450mmX400mm and covered with R.C.C. Slab including all accessories and labour charges etc complete as per IS specification 732/1982 (Part II).	1	No	13892.00
		<b>NOTE:</b> In location where the full length of electrode is not possible due to meeting a water table /rock. The electrode may be reduced length and two earths may be done to meet earth resistance.			
1565	ELEC-7.16.7	Providing transformer plinth 1.2 x 1.2 x 1.5 Mtr in size with necessary excavation in ground at the bottom with 150mm thick 1:2:4 cement concrete raft at the bottom and top and 225mm thick wall constructed in stone masonry and remaking hallow portion shall be filled with stone chips duly plastered 20mm thick outsides including watering etc., complete.	1	No	11576.00
1566	ELEC-7.16.8	Providing CTPT plinth 600mm x 600mm x 2.1 Mtr in size with necessary excavation in ground at the bottom with 150mm thick 1:2:4 cement concrete raft at the bottom and top duly	1	No	6946.00



Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		plastered 20mm thick outsides including watering etc., complete.			
1567	ELEC-7.16.9	Providing independent earthing for Important equipment with 100mm dia Heavy gauge C.I ( Cast iron ) pipe with Flange 2.5m long enclosed in C.C/ brick masonry chamber of 450m x 450m x 400mm with R.C.C. Slab cover duly providing staggered holes filling with salt and charcoal from the bottom of the pipe giving earth connection from electrode through flange with all accessories and labour charges complete, as per IS specifications 732/1982 (Part II)	1	No	8682.00
1568	ELEC-7.16.10	Supply, Transportation, Installation and Commissioning of 11 KV, 630A, 25 KA Outdoor type Load Break Switch as detailed below with suitable CC foundation and 2 Nos GI pipe earthing with brick masonry chambers etc complete for finished item of work. a) Load break switch: 11KV,630A, 25 KA with fuse trip, earth switch, manually operated spring charged mechanism with 2 no + 2 NC. b) HT HRC fuse up to 63A - 3 nos. c) Bus bar connection. d) Indication lamps. e) Manual trip Push button. Make : Megawin / Pentagon / Venkateshwara / Jyothi.	1	No	133127.00
1569	ELEC-7.16.11	Supply, Installation, Testing and commissioning of indoor type floor mounted metal clad VCB panel with 3 Nos VCBs, totally enclosed and fully inter locked horizontal draw out , horizontal isolated type breaker as per IS 13118 Specifications and as amended up to date and additional specifications, having capacities mentioned below, single break, trip free mechanism, motorised operated spring / manually charged and auto/manually closed breaker suitable for use on 11KV, 3 Phase, 50 HZ AC supply with short circuit fault level of 350 / 500 MVA, complete with self-contained, fully inter locked rack in and rack out mechanism, air insulated but encapsulated copper bus bars of 630A capacity, breaker featured with mechanical ON/OFF indicator with hand trip device, spring charging motor, 110V DC closing and tripping coil, safety shutter assembly, shunt trip coil and auxiliary switch of 4 NO + 4 NC and equipped with the following switchgears and accessories including connections suitable for XLPE 11 KV cable, cable entry from bottom, end termination with heat shrinkable jointing material etc as required including construction of suitable CC works for VCB's etc complete. Makes: Kirloskar / Schneider / Siemens / ABB			1397550.00
		<b>INCOMER - 1 No</b>			
		Vacuum circuit breaker electrical draw out type TP 11 KV 630 A not less than ---- KA rated short circuit rating current -1No			
		POTENTIAL TRANSFORMER:1 No. 11000 / 110 Volts PT, Class 1 accuracy, 100 VA burden with HT/LT fuses.			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit	Scheduled Rate for 2021-22
		CURRENT TRANSFORMER: 3 Nos epoxy resin cast CTs of ratio 1-----/5A, 15VA burden and accuracy class 1.0 for metering and class 5P10 for protection		
		<b>METERING</b>		
		1No Digital type Ammeter and selector switch of makes CONZERV/EQVT		
		1 No digital type Voltmeter with 0-15KV range, selector switch for Voltmeter of makes CONZERV/EQVT		
		1No Digital Multifunction meter of makes CONZERV/EQVT		
		Heater ON/OFF switch with space heater and thermostat, single phase switch with socket cubical lamp for panel illumination with door limit switch ,MCB's for AC & DC control.		
		LED indication lamps for breaker on, breaker off, spring charge indication, trip circuit healthy with push button, Auto trip indication meter, Auxiliary contact for service test position (4No + 4 NC) service and test positions and R/Y/B indication lamps.		
		PROTECTION: 1 Nos. Microprocessor based IDMTL 3 over current and 1 earth fault relay with Over current, earth fault and short circuit protection.		
		High speed tripping relay		
		ANNUNCIATION: 8 Window annunciation panel with push buttons and hooters.		
		POWER PACK: Supply, Installation, testing and commissioning of Power pack with 230V input and 110V DC continuous output suitable for closing / tripping / indication of 3 Nos VCBs with 2.5sq.mm FRLS copper cable etc as required.		
		<b>OUTGOINGS - 2 Nos</b>		
		630A VCBs draw out type TP 11 KV 630 A not less than 16 KA rated short circuit rating current.		
		Each breaker shall consist the following.		
		CURRENT TRANSFORMER: Epoxy resin cast CTs of ratio -----/5A, 15VA burden and accuracy class 1.0 for metering and class 5P10 for protection - 3 Nos		
		Digital type Ammeter and selector switch - 1 No Makes : CONZERV / EQVT		
		Digital Multifunction meter - 1 No Makes: CONZERV / EQVT		
		PROTECTION : Microprocessor based IDMTL 3 over current and 1 earth fault relay with Over current, earth fault and short circuit protection - 1 No		
		High speed tripping relay		
		Auxiliary relay for bucholz A/T,OTI A/T, WTI A/T		
		Heater ON/OFF switch with space heater and thermostat, single phase switch with socket cubical lamp for panel illumination with door limit switch ,MCB's for AC & DC control.		
		<b>INDICATION LAMPS:</b> LED indication lamps for breaker on, breaker off, spring charge indication, trip circuit healthy with push button, Auto trip indication meter, Auxiliary contact for		

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit	Scheduled Rate for 2021-22
		service test position ( 4No+ 4 NC) service and test positions and R/Y/B indication lamps.		
		<b>ANNUNCIATION:</b> 8 Window annunciation panel with push buttons and hooters.		
		1 No. rear entry cable box suitable to receive 11 KV, 1 run of 3CX 120 sq.mm cable(XLPE) .		
		1 set of misc. items like control fuses , control wiring , inter connections, nuts, bolts, bus trunking including all connected accessories etc.		
		1 Set of 11 KV, 630A, 350 / 500 MVA aluminum Bus Bar.		
		Note : If outgoing breaker quantity is increased, Rs.3.75 Lakhs per each breaker to be added to the above.		
1570	ELEC-7.16.12	Supply, transportation, installation, testing and commissioning of HT INDOOR type single panel switchgear with VCB of floor mounted, metal clad 11KV, 630A, not less than -----KA (350 / 500 MVA) VCB Panel, with 1No VCBs totally enclosed and horizontal draw out type, horizontal isolation type breaker as per IS 13118 as amended up to date and additional specifications having capacities as mentioned below , single break trip free mechanism, motorised/manually charged and auto manually closing breaker suitable for use on 12KV,3phase,50HZ AC supply with self-contained fully interlocked rack in and rack out mechanism air insulated aluminum Busbars of 630A capacity, Breaker featured with ON/OFF indicator with hand trip device, spring relief coil, shunt trip coil and auxiliary switch of 6NO + 6NC and equipped with following switchgears and accessories incoming connections suitable for 3x95Sq.mm XLPE 11KV Cable as required etc complete with adaptor box for outgoing termination. Makes: Kirloskar / Schneider / Siemens / Crompton Greaves / ABB		532400.00
		<b>INCOMING :</b> 11KV, 630A,not less than ----- KA VCB - 1No.		
		POTENTIAL TRANSFORMER : 11000 / 110 Volts PT, Class 1 accuracy, 100 VA burden with HT/LT fuses. Makes: ECS / SILKANS / PRAGATHI / NARAYAN POWER TECH or EQVT - 1 No		
		Digital Voltmeter 0-15KV along with Selector switch and protection fuses/MCB for HT metering up to 15KV on incoming side -1No Makes: CONZERV / ELMEASURE or EQVT		
		Dual core dual ratio Current transformers with ---/5 amp, 15VA burden and accuracy class 1 for metering & class 5P10 for protection of makes ECS / SILKANS / PRAGATHI / NARAYAN POWER TECH -3Nos		
		0-300A Digital Type Ammeter with selector switch -1No Makes : CONZERV / ELMEASURE or EQVT		
		Microprocessor based non directional combined 2 over current & one earth fault relay -1No Makes: EASUN REYROLLE or equivalent		

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit	Scheduled Rate for 2021-22
		POWER PACK: Supply, Installation, testing and commissioning of Power pack with 230V input and 110V DC continuous output suitable for closing / tripping / indication of VCB with 2.5sq.mm FRLS copper cable etc as required.		
		Master trip relay-1No		
		Makes: EASUN REYROLLE or equivalent (Makes)		
		Three element transformer fault auxiliary relay - 2 Nos		
		Makes: EASUN REYROLLE or equivalent		
		Breaker control switch-1No		
		Makes: Switron or equivalent		
		Local / Remote switch-1No		
		Makes: Switron or equivalent		
		Indicating lamps-1set		
		Makes: Vaishnov or equivalent Reputed brand		
		Space heater & thermostat -2Nos		
		Makes: Eltek or equivalent		
		MCB's of suitable current rating - 3 Nos		
		Anti-pumping relay -1No		
		Makes: Reputed brand with ISI mark		
		Electronic Audio alarm system with hooter -1No		
		Makes : Reputed brand		
		Auxiliary plug & socket of 230VAC/10A -1No		
		Makes: Reputed brand with ISI mark		
		Panel illumination lamp 230V/40W -1No		
		Makes: Reputed brand with ISI mark		
1571	ELEC-7.16.13	Supply, transportation, installation, testing and commissioning of HT OUTDOOR type single panel switchgear with VCB of floor mounted, metal clad 11KV, 630A, not less than -----KA (350 / 500 MVA) VCB Panel, with 1No VCBs totally enclosed and horizontal draw out type, horizontal isolation type breaker as per IS 13118 as amended up to date and additional specifications having capacities as mentioned below , single break trip free mechanism, motorised/manually charged and auto manually closing breaker suitable for use on 12KV,3phase,50HZ AC supply with self-contained fully interlocked rack in and rack out mechanism air insulated aluminum Busbars of 630A capacity, Breaker featured with ON/OFF indicator with hand trip device, spring relief coil, shunt trip coil and auxiliary switch of 6NO + 6NC and equipped with following switchgears and accessories incoming connections suitable for 3x95Sq.mm XLPE 11KV Cable as required etc complete with adaptor box for outgoing termination.		598950.00
		Makes: Kirloskar / Schneider / Siemens / Crompton Greaves / ABB		
		INCOMING- 11KV, 630A,not less than ----- KA VCB - 1No.		
		POTENTIAL TRANSFORMER : 11000 / 110 Volts PT, Class 1 accuracy, 100 VA burden with HT/LT fuses.		
		Makes: ECS / SILKANS / PRAGATHI / NARAYAN POWER TECH or EQVT - 1 No		
		Digital Voltmeter 0-15KV along with Selector		

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		switch and protection fuses/MCB for HT metering up to 15KV on incoming side - 1No Makes: CONZERV / ELMEASURE or EQVT			
		Dual core dual ratio Current transformers with ---- /5 amp, 15VA burden and accuracy class 1 for metering & class 5P10 for protection - 3 Nos Makes : ECS / SILKANS / PRAGATHI / NARAYAN POWER TECH			
		0-300A Digital Type Ammeter with selector switch - 1No Makes : CONZERV / ELMEASURE or EQVT			
		Microprocessor based non directional combined 2 over current & one earth fault relay - 1No Makes: EASUN REYROLLE or equivalent			
		POWER PACK: Supply, Installation, testing and commissioning of Power pack with 230V input and 110V DC continuous output suitable for closing / tripping / indication of VCB with 2.5sq.mm FRLS copper cable etc as required. Master trip relay-1No Makes: EASUN REYROLLE or equivalent (Makes)			
		Three element transformer fault auxiliary relay - 2 Nos Makes: EASUN REYROLLE or equivalent			
		Breaker control switch-1No Makes: Switron or equivalent			
		Local/Remote switch-1No Makes: Switron or equivalent			
		Indicating lamps-1set Makes: Vaishnov or equivalent Reputed brand			
		Space heater & thermostat -2Nos Makes: Eltek or equivalent			
		MCB's of suitable current rating- 3 Nos			
		Anti-pumping relay -1No Makes: Reputed brand with ISI mark			
		Electronic Audio alarm system with hooter -1No Makes : Reputed brand			
		Auxiliary plug & socket of 230VAC/10A -1No Makes: Reputed brand with ISI mark			
		Panel illumination lamp 230V/40W -1No Makes: Reputed brand with ISI mark			
	<b>7.17</b>	<b>L.T. LINE MATERIALS AND LIGHTENING PROTECTION SYSTEM</b>			
1572	<b>ELEC-7.17.1</b>	Supply and erecting approved make 11KV, 5KA metal oxide lightning arrestors suitable for 11 KV supply with necessary materials on existing cross arm.	1	No	1779.00
	<b>ELEC-7.17.2</b>	Supply and erecting porcelain ----- insulator suitable for 11KV line with suitable hardware on existing cross arms.			
1573	<b>a</b>	Disc type	1	No	557.00
1574	<b>b</b>	Pin type	1	No	284.00
1575	<b>c</b>	Post type	1	No	630.00
1576	<b>ELEC-7.17.3</b>	Supply and erecting porcelain pin/shackle type insulator suitable for L. T.	1	No	102.00
1577	<b>ELEC-7.17.4</b>	Supply and erection of approved make 11 KV outdoor type gang operated Air Brake switch of 200 A capacity with 3 post pin type insulator per phase, mounted in Horizontal / Vertical position with necessary channels on cross arms with	1	No	7321.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		adequate length of 'C' class GI pipe for operating handle provided with Lock & Key at suitable height from ground level with necessary clamps.			
1578	ELEC-7.17.5	Supply and erection of approved make 11 KV outdoor type gang operated Air Break switch of 400 A capacity with 3 post pin type insulator per phase, mounted in Horizontal / Vertical position with necessary channels on cross arms with adequate length of 'C' class GI pipe for operating handle provided with Lock & Key at suitable height from ground level with necessary clamps.	1	No	8652.00
1579	ELEC-7.17.6	Supply and erection of approved make 11KV, H.G fuse set with insulation complete with Fuse holders, Fuse barrel with metal fittings, fuse element mounted on M.S. channel with working current 15A capacity complete with cost and conveyance of all materials.	1	No	4792.00
1580	ELEC-7.17.7	Supply and erection of approved make 33 KV, H.G fuse set with insulation complete with Fuse holders, Fuse barrel with metal fittings, fuse element mounted on M.S. channel with working current 15A capacity complete with cost and conveyance of all materials.	1	No	4792.00
1581	ELEC-7.17.8	Supply of 7/3.15 AAA C all Aluminum annealed conductor Rabbit.	1	Km	32610.00
1582	ELEC-7.17.9	Supply of 7/2.50 AAA C all Aluminum annealed conductor Weasel.	1	Km	19965.00
1583	ELEC-7.17.10	Supply of 9.1 Mtr PSCC Pole 280 Kg Working load.	1	No	4659.00
1584	ELEC-7.17.11	Supply of 8.0 Mtr PSCC Pole 140 Kg Working load.	1	No	2529.00
1585	ELEC-7.17.12	Supply of 175 x 85 mm / 150 x 75 mm RS Joist.	1	Kg	88.00
1586	ELEC-7.17.13	Supply and installation of advanced lighting protection with 205 -580mm height and 4.60 - 4.940 kgs, and having Rod length 760mm, weight 1.795 kgs with stainless steel rod, working on the principle of (ESE) Early Streamer Emission technology, having a coverage radius of 79 Mts under level 1 protection and 107 Mtrs radius under level 4 protection when mounted on 5 - 15 mts height of existing lattice tower giving level 1 protection and anticipation emission time of 60 - 72 microseconds. The ESE should be manufactured according to standard NFC 17-102 : 2011 and CE certified including functional integrity etc Complete. Make : EARTHPLUS (THUNDER GUARD) / NIMBUS / KALRE / FOREND./Equivalent approved make.	1	No	114000.00
1587	ELEC-7.17.14	Installation and commissioning of advanced lighting protection systems which includes 1. 50mm dia C class GI mast with base plate of length 5.0 Mtrs with FRP collar (Insulating bush). 2. Laying of CC Bed 3. Installation of Lighting Rod 4. Laying of Down conductor 5. Installation of Counter 6. Installation of Earth Electrodes 7. Interconnection between the Electrodes 8. Specialised supporting guy wire and all fitting accessories. 9. Termination of down conductor to earth bus etc complete	1	No	29200.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
1588	ELEC-7.17.15	Supply of electro-Mechanical counter Makes: EARTHPLUS (THUNDER GUARD) / NIMBUS / KALRE / FOREND.	1	Pt	15000.00
1589	ELEC-7.17.16	Providing earth electrode of low carbon steel rod, UL listed of 25 mm dia, 3 Mtr long, coated with copper of 254 microns thickness, CPRI tested for short time current withstand test of 25 kA, coating thickness, environmental test (Salt Mist Test), Bend test, Tensile strength, Yield / tensile ratio, Electrical Resistivity test, complete with clamps and 2 bags of Earthplus ULTRA high grade earthing compound IEC 62561-7 complaint Eco-friendly, Maintenance free, anti-corrosive, lead-free, super conductive, mineral based high-grade earthing compound, to enhance soil conductivity. With resistance <0.20 ohms-meter, should be leach proof & sulfur free complete with earth inspection chamber of dimensions : Width : 320 mm x 320 mm, Height : 192 mm, Weight : 30 Kgs, Load bearing capacity : 5000 Kgs including drilling of bore in any kind of soil.	1	Pt	16315.00
<b>SECTION - 8</b>					
<b>8.1 NET WORKING</b>					
	ELEC-8.1.1	Supply of ----- telephone copper cable. Makes : Finolex / Delton / Surabi / Polycab			
1590	a	2 Pair, 0.5mm	100	Mtrs	910.00
1591	b	5 Pair	100	Mtrs	2540.00
1592	c	10 Pair	1	Mtr	36.00
1593	d	20 Pair	1	Mtr	70.00
1594	e	50 Pair	1	Mtr	175.00
	ELEC-8.1.2	Supply of ----- Telephone distribution box with back mount frame, krone connector, powder coated metal body with lock and key arrangement.			
1595	a	10 pair	1	No	639.00
1596	b	20 pair	1	No	970.00
1597	c	50 pair	1	No	2041.00
1598		100 pair	1	No	3638.00
1599	d	200 pair	1	No	7000.00
	ELEC-8.1.3	Supply of LAN Cable cat - Makes : D Link / AMP / Molex / Legrand / Krone.			
1600	a	6 UTP cable.	100	Mtrs	2100.00
1601	b	6 STP cable.	100	Mtrs	4000.00
	ELEC-8.1.4	Supply of Cat 6 RJ-45 information outlets including ----- plate. Makes : D Link / AMP / Molex / Legrand / Krone.			
1602	a	Duel face plate.	1	No	305.00
1603	b	Single face plate.	1	No	230.00
	ELEC-8.1.5	Supply of ----- manageable switches Makes : CISCO / Net Gear / HP / D link.			
1604	a	48 Port	1	No	13870.00
1605	b	24 Port	1	No	6000.00
1606	c	8 Port	1	No	1100.00
1607	ELEC-8.1.6	Supply of access point. Makes : CISCO-WAP321 or its equivalent in Net Gear / HP / D link.	1	No	11100.00
	ELEC-8.1.7	Supply of ----- length moulded patch cord. Makes : D Link / AMP / Molex / Legrand / Krone.			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
1608	a	7 feet	1	No	200.00
1609	b	3 feet	1	No	180.00
1610	ELEC-8.1.8	Supply of 24 port patch panels Makes : D Link / AMP / Molex / Legrand / Krone.	1	No	5800.00
1611	ELEC-8.1.9	Supply of 100 pair MDF loaded with 2/10 Modular Makes : Krone make or its equivalent.	1	No	3300.00
1612	ELEC-8.1.10	Supply of 100 Pair raiser cable for telephone Makes : Finolex / Delton / Surabi / Polycab.	1	Mtr	350.00
	ELEC-8.1.11	<b>HDMI &amp; VGA CABLES</b>			
1613	a	Supply and erecting VGA cable to be laid in provided conduits and terminating as per specifications having 15mtr cord length with male/ female VGA connectors as per requirement complete.			2600.00
1614	b	Supply and installing HDMI cable low voltage grade as per standard specifications having 3 Mtr cord length with male and female 19 pin HDMI connectors as per requirement at site.			1200.00
1615	c	Supply and installing HDMI cable low voltage grade as per standard specifications having 5 Mtr cord length with male and female 19 pin HDMI connectors as per requirement at site.			2100.00
1616	d	Supply and installing HDMI cable low voltage grade as per standard specifications having 10 Mtr cord length with male and female 19 pin HDMI connectors as per requirement at site.			4200.00
1617	e	Supply and installing HDMI cable low voltage grade as per standard specifications having 15 Mtr cord length with male and female 19 pin HDMI connectors as per requirement at site.			5300.00
1618	f	Supply and installing HDMI cable low voltage grade as per standard specifications having 20 Mtr cord length with male and female 19 pin HDMI connectors as per requirement at site.			6600.00
1619	g	Supply and installing HDMI cable low voltage grade as per standard specifications having 25 Mtr cord length with male and female 19 pin HDMI connectors as per requirement at site.			9800.00
1620	h	Supply and installing Audio Video cable low voltage grade as per standard specifications having 15 Mtr cord length with required connectors 3RCA X 3RCA cable complete.			5800.00
1621	i	Supply ,installation, testing and commissioning of DVI to high speed category 2 HDMI convertors supporting full HD 1080p, 2K and 4K video up to 30ft lengths, 3D having 24K gold plated 19 pin type A connectors with high flex CL3 -rated jacket. The convertor should be ROHS complaint. Audio Video cable low voltage grade as per standard specifications having 15 Mtr cord length with required connectors 3RCA X 3RCA cable complete.			7500.00
		<b>RACKS - WALL MOUNT</b>			
	ELEC-8.1.12	Supply and installation of ..... wall mounting network rack with power spike including all accessories.			
1622	a	6U Wall	1	No	5555.00
1623	b	9U wall	1	No	6613.00
1624	c	12U wall	1	No	7671.00



Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
1625	d	15U wall	1	No	8729.00
		<b>RACKS - FLOOR STAND</b>			
	ELEC-8.1.13	Supply and installation of IP 20, IK 08 ----- 600mm Width x 800mm Deep Floor mounting network rack with all accessories like front and rear doors, fans, castors, cable manager, shelf, power distribution unit, hardware packet. <u>Mod cap floor stand</u> : Modular construction of the rack made of 4 vertical , 4 Horizontal and 4 depth alloy extruded multi folded hallow profiles bolted and joined together with links and corner blocks. 3 Pairs of support channels to equate the load evenly and castor provision at bottom side. <u>Painting shade</u> : Combination of RAL 7035 / 7037 fine texture - 60 to 80 microns. or RAL 9005 fine texture - 60 to 80 microns complies with standards : UL 2416, Din 41494, IEC EN 60529, IEC EN 62262, IEC EN 60068-2-11, ISO 9001-2008. Makes : HCL / VAL / Rittal / APW.			
1626	a	17U floor	1	No	31680.00
1627	b	24U floor	1	No	38880.00
1628	c	27U floor	1	No	43200.00
1629	d	32U floor	1	No	51840.00
1630	e	36U floor	1	No	57600.00
1631	f	42U floor	1	No	63360.00
	ELEC-8.1.14	Supply of ----- (Indoor / Outdoor), Single mode armored, Optic fibre cable. Makes : D Link / AMP / Molex / Legrand / Krone.			
1632	a	6 Core	1	Mtr	78.00
1633	b	12 Core	1	Mtr	105.00
1634		24 Core	1	Mtr	154.00
	ELEC-8.1.15	Supply of ----- fibre distribution unit. (FDU / LIU) loaded with couplers etc complete. Makes : D Link / AMP / Molex / Legrand / Krone.			
1635	a	6 port	1	No	6700.00
1636	b	12 port	1	No	8500.00
1637	ELEC-8.1.16	Supply of Subscriber connector (SC) to SC / LC patch card of 1 Mtr length. Makes : D Link / AMP / Molex / Legrand / Krone.	1	No	1800.00
1638	ELEC-8.1.17	Supply of single mode SC / LC to SC / LC patch card of 1 Mtr length. Makes : D Link / AMP / Molex / Legrand / Krone.	1	No	2000.00
1639	ELEC-8.1.18	Supply of single mode SC / LC to SC / LC patch card of 2 Mtr length. Makes : D Link / AMP / Molex / Legrand / Krone.	1	No	2500.00
1640	ELEC-8.1.19	Supply of Pigtails for fibre core connectivity. Makes : D Link / AMP / Molex / Legrand / Krone.	1	No	120.00
1641	ELEC-8.1.20	Suppy of 6 Core single mode fibre optic cable armored.	1	Mtr	75.00
1642	ELEC-8.1.21	Suppy of 12 Core single mode fibre optic cable armored.	1	Mtr	90.00
1643	ELEC-8.1.22	Suppy of 24 Core single mode fibre optic cable armored.	1	Mtr	140.00
	8.2	<b>RACEWAYS AND JUNCTION BOXES</b>			
	ELEC-8.2.1	Supply of ----- G I Raceways of 2mm thick with top cover and required hardware etc complete. Makes : Legrand / MK / OBO or equivalent as approved by the department			
1644	a	100mm x 38mm	1	Mtr	495.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
1645	b	150mm x 38mm	1	Mtr	655.00
1646	c	300mm x 38mm	1	Mtr	1122.00
1647	d	100mm x 25mm	1	Mtr	473.00
1648	e	150mm x 25mm	1	Mtr	605.00
1649	f	300mm x 25mm	1	Mtr	1089.00
	<b>ELEC-8.2.2</b>	Supply of ..... G.I. Junction box of 2mm thick for direct access to cables at the inter section of Raceways.			
1650	a	172mm x 52mm	1	No	374.00
1651	b	222mm x 52mm	1	No	468.00
1652	c	372mm x 52mm	1	No	902.00
		<b>EPABX SYSTEM</b>			
	<b>8.3</b>	<b>SMALL SYSTEM</b>			
1653	<b>ELEC-8.3.1</b>	IP Based digital Telephone (EPABX) system ----- complied with following specifications: > IP @ Core, PCM/TDM, Non-blocking, > Must Support PRI, E1, Analog Junctions > Must Support PC Console, > Must support Mobile SIP (Android and I O.S) > Must support Voice Mail > Must support Card based GSM > Inbuilt 8 Channel Auto Attendant > Inbuilt Call Details Software with search engine software > 4 Analog Trunks > 6 Digital Extensions > 32 Analog Extensions > 1 Digital Key Phone with minimum 16 Keys (Must work only on 2 wires) > Expandable to 64 Analog Extensions or more <b>Approved Brands: NEC/ Alcatel/ Karel/ Unify</b>	1	No	86814.00
1654	<b>ELEC-8.3.2</b>	IP Based digital Telephone (EPABX) system ----- complied with following specifications: > IP @ Core, PCM/TDM, Non-blocking, > Must Support PRI, E1, Analog Junctions > Must Support PC Console, > Must support Mobile SIP (Android and I O.S) > Must support Voice Mail > Must support Card based GSM > Inbuilt 8 Channel Auto Attendant > Inbuilt Call Details Software with search engine software > 4 Analog Trunks > 6 Digital Extensions > 48 Analog Extensions > 1 Digital Key Phone with minimum 16 Keys (Must work only on 2 wires) > Expandable to 64 Analog Extensions or more <b>Approved Brands: NEC/ Alcatel/ Karel/ Unify</b>	1	No	95340.00
1655	<b>ELEC-8.3.3</b>	IP Based digital Telephone (EPABX) system ----- complied with following specifications: > IP @ Core, PCM/TDM, Non-blocking, > Must Support PRI, E1, Analog Junctions > Must Support PC Console, > Must support Mobile SIP (Android and I O.S) > Must support Voice Mail > Must support Card based GSM > Inbuilt 8 Channel Auto Attendant	1	No	105840.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		> Inbuilt Call Details Software with search engine software			
		> 4 Analog Trunks			
		> 1 ISDN PRI Module			
		> 6 Digital Extensions			
		> 48 Analog Extensions			
		> 1 Digital Key Phone with minimum 16 Keys (Must work only on 2 wires)			
		> Expandable to 64 Analog Extensions or more			
		<b>Approved Brands: NEC/ Alcatel/ Karel/ Unify</b>			
1656	ELEC-8.3.4	IP Based digital Telephone (EPABX) system ----- complied with following specifications: > IP @ Core, PCM/TDM, Non-blocking, > Must Support PRI, E1, Analog Junctions > Must Support PC Console, > Must support Mobile SIP (Android and I O.S) > Must support Voice Mail > Must support Card based GSM > Inbuilt 8 Channel Auto Attendant > Inbuilt Call Details Software with search engine software > 4 Analog Trunks > 6 Digital Extensions > 64 Analog Extensions > 1 Digital Key Phone with minimum 16 Keys (Must work only on 2 wires) > Expandable to 64 Analog Extensions or more <b>Approved Brands: NEC/ Alcatel/ Karel/ Unify</b>	1	No	109200.00
1657	ELEC-8.3.5	IP Based digital Telephone (EPABX) system ----- complied with following specifications: > IP @ Core, PCM/TDM, Non-blocking, > Must Support PRI, E1, Analog Junctions > Must Support PC Console, > Must support Mobile SIP (Android and I O.S) > Must support Voice Mail > Must support Card based GSM > Inbuilt 8 Channel Auto Attendant > Inbuilt Call Details Software with search engine software > 4 Analog Trunks > 1 ISDN PRI Module > 6 Digital Extensions > 64 Analog Extensions > 1 Digital Key Phone with minimum 16 Keys (Must work only on 2 wires) > Expandable to 64 Analog Extensions or more <b>Approved Brands: NEC/ Alcatel / Karel / Unify</b>	1	No	119595.00
1658	ELEC-8.3.6	Analog Extension Card (with Caller ID) 8 extensions.	1	No	14595.00
1659	ELEC-8.3.7	Analog Extension Card (with Caller ID) 16 extensions.	1	No	19005.00
1660	ELEC-8.3.8	Analog Trunk Card (with Caller ID) 4 trunks.	1	No	16170.00
1661	ELEC-8.3.9	Analog Trunk Card (with Caller ID) 8 trunks.	1	No	20160.00
1662	ELEC-8.3.10	Digital Extension Card for 8 digital extensions:	1	No	18795.00
1663	ELEC-8.3.11	Digital Extension Card for 16 digital extensions:	1	No	31500.00
1664	ELEC-8.3.12	E1 Trunk Card or PRI Card 30 ISDN PRI or R2 trunk channels.	1	No	47250.00
	<b>8.4</b>	<b>LARGE SYSTEM</b>			
1665	ELEC-8.4.1	Supply, Installation, Testing and Commissioning	1	No	238665.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		<p>of IP Based digital Telephone (EPABX) system-- complied with following specifications:</p> <ul style="list-style-type: none"> <li>&gt; IP @ Core, PCM/TDM switching, Non-blocking,</li> <li>&gt; Must Support PRI, E1, Analog Junctions</li> <li>&gt; Must Support PC Console,</li> <li>&gt; Must support Mobile SIP (Android and I O.S)</li> <li>&gt; Must support Voice Mail</li> <li>&gt; Must support Card based GSM</li> <li>&gt; Inbuilt Call Details Software with search engine software</li> <li>&gt; 8 Analog Trunks</li> <li>&gt; 8 Digital Extensions</li> <li>&gt; 96 Analog Extensions</li> <li>&gt; 1 Digital Key Phone with minimum 16 Keys (Must work only on 2 wires)</li> <li>&gt; Expandable to 220 Ports wired or more at extra cost</li> </ul> <p><b>Approved Brands: NEC/ Alcatel/ Karel/ Unify</b></p>			
1666	ELEC-8.4.2	<p>Supply, Installation, Testing and Commissioning of IP Based digital Telephone (EPABX) system-- complied with following specifications:</p> <ul style="list-style-type: none"> <li>&gt; IP @ Core, PCM/TDM switching, Non-blocking,</li> <li>&gt; Must Support PRI, E1, Analog Junctions</li> <li>&gt; Must Support PC Console,</li> <li>&gt; Must support Mobile SIP (Android and I O.S)</li> <li>&gt; Must support Voice Mail</li> <li>&gt; Must support Card based GSM</li> <li>&gt; Inbuilt Call Details Software with search engine software</li> <li>&gt; 8 Analog Trunks</li> <li>&gt; 1 PRI Trunk module</li> <li>&gt; 8 Digital Extensions</li> <li>&gt; 128 Analog Extensions</li> <li>&gt; 1 Digital Key Phone with minimum 16 Keys (Must work only on 2 wires)</li> <li>&gt; Expandable to 220 Ports wired or more at extra cost</li> </ul> <p><b>Approved Brands: NEC/ Alcatel/ Karel/ Unify</b></p>	1	No	361935.00
1667	ELEC-8.4.3	<p>Supply, Installation, Testing and Commissioning of IP Based digital Telephone (EPABX) system-- complied with following specifications:</p> <ul style="list-style-type: none"> <li>&gt; IP @ Core, PCM/TDM switching, Non-blocking,</li> <li>&gt; Must Support PRI, E1, Analog Junctions</li> <li>&gt; Must Support PC Console,</li> <li>&gt; Must support Mobile SIP (Android and I O.S)</li> <li>&gt; Must support Voice Mail</li> <li>&gt; Must support Card based GSM</li> <li>&gt; Inbuilt Call Details Software with search engine software</li> <li>&gt; 8 Analog Trunks</li> <li>&gt; 1 PRI Trunk module</li> <li>&gt; 8 Digital Extensions</li> <li>&gt; 160 Analog Extensions</li> <li>&gt; 1 Digital Key Phone with minimum 16 Keys (Must work only on 2 wires)</li> <li>&gt; Inbuilt hot standby for CPU and PSU.</li> <li>&gt; Compatibility to run on DC -48v source.</li> <li>&gt; Expandable to 220 Ports wired or more at extra cost</li> </ul> <p><b>Approved Brands: NEC/ Alcatel/ Karel/ Unify</b></p>	1	No	435225.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
1668	ELEC-8.4.4	Supply, Installation, Testing and Commissioning of IP Based digital Telephone (EPABX) system--complied with following specifications: > IP @ Core, PCM/TDM switching, Non-blocking, > Must Support PRI, E1, Analog Junctions > Must Support PC Console, > Must support Mobile SIP (Android and I O.S) > Must support Voice Mail > Must support Card based GSM > Inbuilt Call Details Software with search engine software > 8 Analog Trunks > 1 PRI Trunk module > 16 Digital Extensions > 224 Analog Extensions > 1 Digital Key Phone with minimum 16 Keys (Must work only on 2 wires) > Inbuilt hot standby for CPU and PSU. > Compatibility to run on DC -48v source. > Expandable to 400 Ports wired or more at extra cost <b>Approved Brands: NEC/ Alcatel/ Karel/ Unify</b>	1	No	606008.00
1669	ELEC-8.4.5	Supply, Installation, Testing and Commissioning of IP Based digital Telephone (EPABX) system--complied with following specifications: > IP @ Core, PCM/TDM switching, Non-blocking, > Must Support PRI, E1, Analog Junctions > Must Support PC Console, > Must support Mobile SIP (Android and I O.S) > Must support Voice Mail > Must support Card based GSM > Inbuilt Call Details Software with search engine software > 8 Analog Trunks > 1 PRI Trunk module > 16 Digital Extensions > 304 Analog Extensions > 1 Digital Key Phone with minimum 16 Keys (Must work only on 2 wires) > Inbuilt hot standby for CPU and PSU. > Compatibility to run on DC -48v source. > Expandable to 400 Ports wired or more at extra cost <b>Approved Brands: NEC/ Alcatel/ Karel/ Unify</b>	1	No	702450.00
1670	ELEC-8.4.6	Analog Extension Card (with Caller ID) 16 extensions.	1	No	20895.00
1671	ELEC-8.4.7	Analog Trunk Card (with Caller ID) 8 trunks.	1	No	20895.00
1672	ELEC-8.4.8	Digital Extension Card for 8 digital extensions:	1	No	20895.00
1673	ELEC-8.4.9	Digital Extension Card for 16 digital extensions:	1	No	34335.00
1674	ELEC-8.4.10	E1 Trunk Card or PRI Card 30 ISDN PRI or R2 trunk channels.	1	No	51555.00
1675	ELEC-8.4.11	IP CPU card for redundancy purpose	1	No	37590.00
1676	ELEC-8.4.12	PSU card for redundancy purpose	1	No	22890.00
1677	ELEC-8.4.13	Digital Key Telephone with 2 line display, 10 programmable keys, handsfree dialing.	1	No	8820.00
1678	ELEC-8.4.14	Digital Key Telephone with 2 line display, 16 programmable keys, fully handsfree talk back.	1	No	15435.00
1679	ELEC-8.4.15	IP Gateway card for 8 channels	1	No	43575.00
1680	ELEC-8.4.16	IP Gateway card for 16 channels	1	No	63000.00
1681	ELEC-8.4.17	SIP extensions licenses pack (5 SIP extensions)	1	No	4463.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
1682	ELEC-8.4.18	SIP extensions licenses pack (10 SIP extensions)	1	No	7823.00
1683	ELEC-8.4.19	IP phone with POE.	1	No	17640.00
1684	ELEC-8.4.20	4 port GSM card	1	No	45990.00
1685	ELEC-8.4.21	Expansion cabinet for 220 more extensions	1	No	87150.00
1686	ELEC-8.4.22	100 Pair MDF along with IPM	1	No	14070.00
		<b>SECTION - 9</b>			
	<b>9.1</b>	<b>MISSILLANEOUS ITEMS</b>			
1687	ELEC-9.1.1	TW Separators / Gutties	100	Nos	222.00
1688	ELEC-9.1.2	Rawl Plugs	100	Nos	39.00
1689	ELEC-9.1.3	PVC Grips	100	Nos	38.00
1690	ELEC-9.1.4	U Nails	100	Nos	38.00
1691	ELEC-9.1.5	Aluminum Link Clips	144	Nos	38.00
1692	ELEC-9.1.6	50 mm G.I. Nut and Bolts.	1	Set	19.00
1693	ELEC-9.1.7	63 to 100 mm G.I. Nut and Bolts.	1	Set	29.00
1694	ELEC-9.1.8	50 mm 0 Gauge Nails	1	Doz	53.00
1695	ELEC-9.1.9	63 to 100 mm 0 Gauge Nails	1	Doz	88.00
1696	ELEC-9.1.10	Hard Coke	1	Kg	24.00
1697	ELEC-9.1.11	Salt	1	Kg	19.00
1698	ELEC-9.1.12	PVC Cleats 2 Way	100	Nos	394.00
1699	ELEC-9.1.13	PVC Cleats 4 Way	100	Nos	527.00
1700	ELEC-9.1.14	Binding Wire	1	Kg	74.00
1701	ELEC-9.1.15	PVC / Cotton Insulation tape Role ( 10 Mtrs)	1	No	23.00
1702	ELEC-9.1.16	C.I. Knob	1	No	29.00
1703	ELEC-9.1.17	Stay tight set (Jum bracket 300 mm)	1	Pair	360.00
1704	ELEC-9.1.18	Stay clamp with bolts and Nuts)	1	Set	237.00
1705	ELEC-9.1.19	L.T. Guy insulator	1	No	92.00
1706	ELEC-9.1.20	12 / 15 MS plain rod fan hook	1	No	38.00
1707	ELEC-9.1.21	19 / 20 mm Steel tube fan down rod	1	Mtr	100.00
1708	ELEC-9.1.22	Concealed box PVC / MS with hook for fan	1	No	119.00
1709	ELEC-9.1.23	Supply and fixing of Anchor fastener with fan hook / Providing MS Fan hook with grouting and cement plastering.	1	No	97.00
1710	ELEC-9.1.24	Coil Earthing	1	No	90.00
1711	ELEC-9.1.25	Cable route Indicators of size 152mm round / 102mm x 102mm / 152mm x 152mm	1	No	107.00
1712	ELEC-9.1.26	40 mm x 40 mm x 6 mm angle iron with I bolt.	1	Set	301.00
1713	ELEC-9.1.27	Mild Steel Items	1	Kg	74.00
1714	ELEC-9.1.28	Acrylic Cover of size 4" x 7" for night lamps.	1	No	24.00
1715	ELEC-9.1.29	TW / PVC Round Blocks	1	No	8.00
1716	ELEC-9.1.30	G.I. Funnel with Mesh 1/2" x 4"	1	No	98.00
1717	ELEC-9.1.31	Asbestos Sheet	1	Sqft	29.00
1718	ELEC-9.1.32	First Aid box 18" x 12" x 8"	1	No	1309.00
1719	ELEC-9.1.33	11 KV/22 KV Hand gloves	1	No	245.00
	<b>9.2</b>	<b>LEGEND PLATES</b>			
	ELEC-9.2.1	Danger Notice Plates of size -----, shall comply with IS:2551-1982.			
1720	a	250x200mm,	1	No	247.00
1721	b	200x150mm,	1	No	221.00
1722	c	150x100mm,	1	No	110.00
1723	ELEC-9.2.2	Bus bar chamber 100mm x 40mm	1	No	53.00
1724	ELEC-9.2.3	Cable Alley 100mm x 40mm	1	No	53.00
1725	ELEC-9.2.4	Earth 40mm x 20mm	1	No	53.00
1726	ELEC-9.2.5	Auto / Manual	1	No	53.00
1727	ELEC-9.2.6	Semi oval type aluminum anodized legend plates ON / OFF / Forward / Reverse / Start / Stop / UP / DOWN / R Phase / Y Phase / B Phase / Trip / Open / Close / Left / Right / Motor on / Motor	1	No	26.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		off / Accept / Retract / Reset / Emergency / Running / Pump off / Emergency Stop / Emergency on / Slow.			
1728	ELEC-9.2.7	Shock instruction chart in English / Hindi / Telugu duly framed with front glass.	1	No	499.00
	ELEC-9.2.8	Supply of 1.0 Sq.mm FRLS / HFFR PVC insulated 1100V grade as per IS:694/1990 specification for Copper cable.			
1729	a	Makes : Finolex / RR kabel / Havells / APAR EBXL / KEI / L&T / V-Guard.	100	Mtrs	1103.00
1730	b	Makes : Polycab / HPL / RPG / Kundancab / Nakoda / Anchor / GM / Million / Gold Medal / Power Flex / Fine Cab / Sun Cab / Fortune Arrt / Bonton / Gloster / Gemini / Uniflex / Sudhakar / Nandicab.	100	Mtrs	971.00
1731	c	Makes : Benlo / Khanthi / Vimal / Stanjo / Airson / Rajnigandha / Orbit	100	Mtrs	840.00
	<b>9.3</b>	<b>COPPER / ALLUMINIUM / G.I. ITEMS (PER KG)</b>			
1732	ELEC-9.3.1	Copper Plate / Strip / SWG wire No.8 / 10 / 14	1	Kg	857.00
1733	ELEC-9.3.2	Copper winding wire	1	Kg	988.00
1734	ELEC-9.3.3	Copper winding wire with PVC Insulated of fine quality	1	Kg	1016.00
1735	ELEC-9.3.4	Aluminum Bus bars / Strips / Accessories	1	Kg	334.00
1736	ELEC-9.3.5	Aluminum winding wire	1	Kg	436.00
1737	ELEC-9.3.6	G.I. Strip / Plate / Wire	1	Kg	80.00
	<b>9.4</b>	<b>DMC/ SMC TYPE SUPPORTS FOR THE BUSBARS</b>			
	ELEC-9.4.1	Supply of SMC type supports for the bus bars----- -----			
1738	a	50 x 70 x 14 mm	1	No	32.00
1739	b	60 x 70 x 14 mm	1	No	37.00
1740	c	70 x 70 x 14 mm	1	No	68.00
1741	d	300 x 50 x 10 mm	1	No	126.00
1742	e	350 x 52 x 10 mm	1	No	168.00
1743	f	420 x 60 x 12 mm	1	No	242.00
1744	ELEC-9.4.2	DMC Earth Flat Supports 20 x3 mm / 20x 6mm / 25 x 6mm / 25 x 3mm / 32 x 3 mm / 32 x 6mm / 40 x 3 mm / 40 x 6mm	1	No	53.00
1745	ELEC-9.4.3	Heat shrinkable sleeves for the Bus bars up to 70 Sq.mm	1	Mtr	16.00
1746	ELEC-9.4.4	Heat shrinkable sleeves for the Bus bars above 70 Sq.mm	1	Mtr	26.00
1747	ELEC-9.4.5	3 to 6.2 Volt series bulb LEDs/Normal bulbs	1000	Nos	1050.00
1748	ELEC-9.4.6	3 to 6.2 Volt series bulb with navar plate LEDs/normal bulbs.	1000	Nos	1365.00
1749	ELEC-9.4.7	Supply of Rotating machine	1	No	1260.00
1750	ELEC-9.4.8	Supply of 6mm thick MS Chequered plate.	1	Kg	84.00
1751	ELEC-9.4.9	Supply of fixing of 6mm thick Aluminum Chequered plate.	1	Kg	289.00
1752	ELEC-9.4.11	Cement	1	Kg	8.00
1753	ELEC-9.4.12	Cost of Sand	1	Cum	630.00
1754	ELEC-9.4.13	Cost of Bricks	1000	Nos	4200.00
1755	ELEC-9.4.14	Hylam Sheet	1	Sq.in	1.00
1756	ELEC-9.4.16	80mm Nominal Bore C.I. Earth Pipe of 3 Mtrs Length	1	No	3570.00
1757	ELEC-9.4.17	Earth work excavation including all soils for trench	1	Cum	263.00
1758	ELEC-9.4.18	Earth work excavation for all soils for Pole Pit for	1	No	840.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		3 to 6 Mtrs Pole			
1759	ELEC-9.4.19	Earth work excavation for all soils for Pole Pit for 7 to 11 Mtrs Pole	1	No	1260.00
1760	ELEC-9.4.20	Drilling of 16 Nos through holes of 12mm dia to G.I pipe	1	No	6.00
1761	ELEC-9.4.21	G.I Nuts, Bolts and Washers each set	1	Set	13.00
1762	ELEC-9.4.22	18" dia 2" thick hume pipe ring	1	No	263.00
1763	ELEC-9.4.23	18" dia 3" hume pipe ring	1	No	315.00
1764	ELEC-9.4.24	2" thick CC cover for hume pipe ring with handle.	1	No	137.00
	ELEC-9.4.25	Supply of Saddle / Clamps suitable for fixing -----			
1765	a	4 to 10 Sq.mm 2 Core Cable.	100	Nos	242.00
1766	b	4 & 6 Sq.mm 4 Core Cable.	100	Nos	242.00
1767	c	10 & 16 Sq.mm 4 Core Cable.	100	Nos	315.00
1768	d	25 & 35 Sq.mm 3.5 Core Cable.	100	Nos	368.00
1769	e	50 Sq.mm 3.5 Core Cable.	100	Nos	525.00
1770	f	70 & 95 Sq.mm 3.5 Core Cable.	100	Nos	578.00
1771	g	120 to 185 Sq.mm 3.5 Core Cable.	100	Nos	735.00
1772	h	240 & 300 Sq.mm 3.5 Core Cable.	100	Nos	893.00
1773	i	400 Sq.mm 3.5 Core Cable.	100	Nos	1155.00
	ELEC-9.4.26	Supply and fixing of PVC synthetic elastomer electrically insulated mat conforming to IS: 15652-2006 with-----			
1774	a	Class A insulation having 2mm thickness up to 3.3KV	1	Sq Mtr	3990.00
1775	b	Class B insulation having 2.5mm thickness up to 11KV	1	Sq Mtr	4095.00
1776	c	Class C insulation having 3mm thickness up to 33KV	1	Sq Mtr	4200.00
1777	ELEC-9.4.27	Supply of round bottom G.I sheet bucket of 9 Ltrs. Capacity as per IS:2546 made out of 24 gauge GI sheet with extra handle at bottom duly painted inside and red outside with printed with FIRE Mark for stand and hook and filled with sand and arranged to existing stand or hook.	1	No	284.00
1778	ELEC-9.4.28	Providing floor mounting stand for keeping 4No of fire bucket 1500mm length, 900mm height made out of 40x40x6mm angle iron welded with 4 hooks and duly painted with one coat of red lead and two coats of enamel paint.	1	No	1155.00
1779	ELEC-9.4.29	Supply and erection of conventional spike type air termination suitable to carry lightning stroke, made up of heavy grade 40 mm dia copper pipe of standard length of 5 Nos copper spikes fixed on copper ball as air terminals duly threaded in copper pipe erected in provided foundation in an approved manner	1	No	5040.00
		<b>SECTION - 10</b>			
	10.1	<b>WIRELESS FIRE ALARAM SYSTEM</b>			
1780	ELEC-10.1.1	Supply and fixing of Wireless Repeater. The wireless repeater extends the communication range of detection by relaying data between receiver and remote wireless transmitter including transportation, all taxes, and all labour charges etc complete. Makes : Cease Fire / Visonic / Honeywell / Seara	1	No	8400.00
1781	ELEC-10.1.2	Supply and fixing of Wireless Siren Strobe external wireless siren - a fully supervised power code outdoor (IP55) wireless Siren and strobe	1	No	11800.00



Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		light. Designed for external installation. Wire - Free connection between control panel and siren. Convenient rapid no- mess installation. Separate fire alarm signals, 98db Piezo siren and high power strobe light. Weather resistant, IP55, 2-way communication for local and remote diagnostics. Plug-in power supply, NIMH rechargeable back-up power battery, transmits status, tamper, low- battery, supervisory and AC loss messages to the control panel, Tri- State tamper switch identifies screw manipulation removal of cover or playing from the wall Including transportation, all taxes and all labour charges etc complete. Makes : Cease Fire / Visonic / Honeywell /Seara			
1782	ELEC-10.1.3	Supply and fixing of wireless Fully Supervised Smoke Detector, Photoelectric detection technology for superior detection sensitivity , sound and transmitted for smoke, tamper and low battery, works on power code protocol, easy programming and enrolling to the control panel, long life 9 volt alkaline or lithium battery Including transportation, all taxes and all labour charges etc complete. Makes : Cease Fire / Visonic / Honeywell / Seara	1	No	5800.00
	<b>10.2</b>	<b>ADDRESSABLE - FIRE ALARM SYSTEM</b>			
	ELEC-10.2.1	Supply, Installation, testing and commissioning of EN54-2 Listed and UL approved based analog addressable ----- fire control panel expandable by minimum 2 additional loops with minimum 640 character LCD display. Each loop of panel shall have maximum capacity 250 analogue addressable devices, and shall have 20% of spare capacity, 240 volts A C Power supply, automatic battery charger, 24V SLA batteries suitable for operating the entire system including tack back units and the hooters/strobes for a minimum of 4 hours in battery condition the panel shall have suitable power amplifiers for hooter / strobes the panel shall be capable being integrated with the BMS system and shall include cost of supply, installation of any additional modules or interfaces required for the same. Makes: Siemens / Notifier / Edwards / Honeywell / Morley IAS / Bosch / Cooper			
1783	<b>a</b>	10 loop micro processor	1	No	552000.00
1784	<b>b</b>	8 loop micro processor	1	No	400000.00
1785	<b>c</b>	6 loop micro processor	1	No	370000.00
1786	<b>d</b>	4 loop micro processor	1	No	250000.00
1787	<b>e</b>	2 loop micro processor	1	No	210000.00
1788	<b>f</b>	1 loop micro processor	1	No	180000.00
	ELEC-10.2.2	Supply, Installation, testing and commissioning of EN54-2 Listed and LPCB approved----- based analog addressable fire control panel expandable by minimum 2 additional loops with minimum 80 character LCD display 4 access levels 1000 events, historical logging, flash E-PROM, 240 volts A C Power supply, automatic battery charger, 24V SLA			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		batteries suitable for operating the entire system including tack back units and the hooters/strobes for a minimum of 4 hours in battery condition the panel shall have suitable power amplifiers for hooter / strobes the panel shall be capable being integrated with the BMS system and shall include cost of supply, installation of any additional modules or interfaces required for the same. The panel shall be completed as per the specification and as required for fixing of above Microprocessor based Fire Alarm control panel with zonal indications and battery backup as per detailed specifications. Makes: Siemens / Morley IAS / Bosch / Ravel / Honeywell/Cooper			
1789	a	10 loop micro processor	1	No	516000.00
1790	b	8 loop micro processor	1	No	365000.00
1791	c	6 loop micro processor	1	No	329000.00
1792	d	4 loop micro processor	1	No	223000.00
1793	e	2 loop micro processor	1	No	187000.00
1794	f	1 loop micro processor	1	No	170000.00
1795	ELEC-10.2.3	Supply, Installation, testing and commissioning of intelligent analogue addressable Repeater panel including the cost of mounting accessories complete as per specification as required. Makes: Notifier / Edwards / Honeywell / Morley IAS / Bosch / Cooper	1	No	106000.00
1796	ELEC-10.2.4	Supply and fixing of addressable wall mounting strobes cum hooters including the cost of mounting accessories complete as per specifications and as required including testing and commissioning. Makes: Notifier / Edwards / Honeywell / Morley IAS / Bosch / Cooper	1	No	3766.00
1797	ELEC-10.2.5	Supply and installation of addressable analogue manual call point with resettable flexible element to initiate alarm including the cost of mounting accessories etc. complete. Makes: Notifier / Edwards / Honeywell / Morley IAS / Bosch / Cooper	1	No	3613.00
1798	ELEC-10.2.6	Supply and installation of intelligent analogue addressable photo electric smoke detector including cost of base plate etc., complete as per specification with required fittings and accessories. Makes: Notifier / Edwards / Honeywell / Morley IAS / Bosch/cooper	1	No	2924.00
1799	ELEC-10.2.7	Supply and installation of UL approved intelligent analogue addressable rate of rise cum fixed temperature heat detectors including the cost of base plate. 75mm dia MS outlet box for fixing of the detector base, mounting accessories etc., complete as per specifications and as required. Makes: Notifier / Edwards / Honeywell / Morley IAS / Bosch/Cooper	1	No	2738.00
1800	ELEC-10.2.8	Supply and installation of UL approved intelligent analogue addressable multi criterion detectors below false ceiling/on ceiling including the cost of base plate. 75mm dia MS outlet box	1	No	2892.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		for fixing of the detector base, mounting accessories etc., complete as per specifications and as required. Makes: Notifier / Edwards / Honeywell / Morley IAS / Bosch			
1801	ELEC-10.2.9	Supply and Installation of UL approved intelligent analogue addressable Control Modules including the cost of mounting accessories complete as per specifications and as required. Makes: Notifier / Edwards / Honeywell / Morley IAS / Bosch/cooper	1	No	3199.00
1802	ELEC-10.2.10	Supply and Installation of UL approved intelligent analogue addressable monitor modules including the cost of mounting accessories complete as per specifications and as required. Makes: Notifier / Edwards / Honeywell / Morley IAS / Bosch/cooper	1	No	3199.00
1803	ELEC-10.2.11	Supply and Installation of UL approved intelligent analogue addressable fault isolator modules including the cost of mounting accessories complete as per specifications and complete as required. Makes: Notifier / Edwards / Honeywell / Morley IAS / Bosch/cooper	1	No	3078.00
1804	ELEC-10.2.12	Supply, Installation, testing and commissioning of UL approved intelligent analogue addressable Repeater panel including the cost of mounting accessories complete as per specification as required. Makes: Siemens / Morley IAS / Bosch / Ravel / Honeywell/cooper	1	No	72009.00
1805	ELEC-10.2.13	Supply and fixing of addressable wall mounting strobes cum hooters including the cost of mounting accessories complete as per specifications and as required including testing and commissioning. Makes: Siemens / Morley IAS / Bosch / Ravel / Honeywell/cooper	1	No	3240.00
1806	ELEC-10.2.14	Supply and installation of addressable analogue manual call point with resettable flexible element to initiate alarm including the cost of mounting accessories etc. complete. Makes: Siemens / Morley IAS / Bosch / Ravel / Honeywell/cooper	1	No	3483.00
1807	ELEC-10.2.15	Supply and installation of UL approved intelligent analogue addressable photo electric smoke detector including cost of base plate etc., complete as per specification with required fittings and accessories. Makes: Siemens / Morley IAS / Bosch / Ravel / Honeywell/cooper	1	No	2754.00
1808	ELEC-10.2.16	Supply and installation of UL approved intelligent analogue addressable rate of rise cum fixed temperature heat detectors including the cost of base plate. 75mm dia MS outlet box for fixing of the detector base, mounting accessories etc., complete as per specifications and as required. Makes: Siemens / Morley IAS / Bosch / Ravel / Honeywell/Cooper	1	No	2835.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
1809	ELEC-10.2.17	Supply and installation of UL approved intelligent analogue addressable multi criterion detectors below false ceiling/on ceiling including the cost of base plate. 75mm dia MS outlet box for fixing of the detector base, mounting accessories etc., complete as per specifications and as required. Makes: Siemens / Morley IAS / Bosch / Ravel / Honeywell/Cooper	1	No	3005.00
1810	ELEC-10.2.18	Supply and Installation of UL approved intelligent analogue addressable Control Modules including the cost of mounting accessories complete as per specifications and as required. Makes: Siemens / Morley IAS / Bosch / Ravel / Honeywell/cooper	1	No	3021.00
1811	ELEC-10.2.19	Supply and Installation of UL approved intelligent analogue addressable monitor modules including the cost of mounting accessories complete as per specifications and as required. Makes: Siemens / Morley IAS / Bosch / Ravel / Honeywell/cooper	1	No	2851.00
1812	ELEC-10.2.20	Supply and Installation of UL approved intelligent analogue addressable fault isolator modules including the cost of mounting accessories complete as per specifications and complete as required. Makes: Siemens / Morley IAS / Bosch / Ravel / Honeywell/Cooper	1	No	2754.00
	<b>10.3</b>	<b>CONVENTIONAL - FIRE ALARM SYSTEM (Approved by LPCB / UL Listed)</b>			
	ELEC-10.3.1	Supply, Installation, testing and commissioning of conventional Microprocessor based Fire Alarm panel with ----- 12V SMF batteries etc., complete with all standard accessories. Makes: System Censor / Ravel / Vertex / Seara			
1813	<b>a</b>	2 zone	1	No	14000.00
1814	<b>b</b>	4 zone	1	No	14600.00
1815	<b>c</b>	6 zone	1	No	14800.00
1816	<b>d</b>	8 zone	1	No	15100.00
1817	<b>e</b>	10 zone	1	No	19750.00
1818	<b>f</b>	12 zone	1	No	22000.00
1819	<b>g</b>	14 zone	1	No	24000.00
1820	ELEC-10.3.2	Supply and installation of Repeater panel including the cost of mounting accessories complete as per specifications and as required. Makes: System Censor / Ravel / Vertex / Seara	1	No	12000.00
1821	ELEC-10.3.3	Supply and installation of duel tone electronic hooter of 85dB including the cost of mounting accessories complete as per specifications and as required. Makes: System Censor / Ravel / Vertex / Seara	1	No	700.00
1822	ELEC-10.3.4	Supply and installation of dust and vermin proof manual call point to initiate audio visual alarm including the cost of mounting accessories complete as per specifications and as required. Makes: System Censor / Ravel / Vertex / Seara	1	No	580.00
1823	ELEC-10.3.5	Supply and installation of response indicators for above false ceiling detectors. Makes: System Censor / Ravel / Vertex / Seara	1	No	130.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
1824	ELEC-10.3.6	Supply and installation of plug - in type multi criterion detectors including the cost of base plate. 75mm dia M.S. outlet box for fixing of the detector base. Mounting accessories etc., complete as per specifications as required. Makes: System Censor / Ravel / Vertex / Seara	1	No	1500.00
1825	ELEC-10.3.7	Supply and installation of plug - in type photo electric smoke detectors including the cost of base plate. 75mm dia MS outlet box for fixing of the detector base. Mounting accessories etc complete and as per specifications and as required. Makes: System Censor / Ravel / Vertex / Seara	1	No	1300.00
1826	ELEC-10.3.8	Supply and installation of plug - in type rate of rise cum fixed temperature heat detectors including the cost of base plate. 75mm dia MS outlet box for fixing of the detector base, mounting accessories etc., complete as per specifications and as required. Makes: System Censor / Ravel / Vertex / Seara	1	No	1200.00
		<b>BEAM DETECTORS</b>			
1827	ELEC-10.3.9	Supply, Installation, Testing and Commissioning of 4 wire conventionally single ended reflected type smoke detector with 8" receiver. The range of smoke detection is maximum 164 ft			33000.00
1828	ELEC-10.3.10	Supply, Installation, Testing and Commissioning of 4 wire conventionally single ended reflected smoke detector with 8" receiver. The range of smoke detection is maximum 325 ft			55000.00
	<b>10.4</b>	<b>POWDER BASED FIRE EXTINGUISHERS</b>			
	ELEC-10.4.1	Supply and fixing of ABC stored pressure squeeze grip type fire extinguishers, <b>9 kg capacity</b> , IS:15683 : 2006, filled with ABC Mono Ammonium Phosphate base powder-90 complete with discharge hose and wall mounting bracket, 2mm Mild Steel, EPDM Rubbers, Pressure Gauge, which work effectively on all class of fires (A, B, C & Electrical fires) with 5 years warranty Including transportation, all taxes and all labour charges etc complete.			
1829	<b>a</b>	Makes : Cease Fire / Minimax	1	No	8160.00
1830	<b>b</b>	Makes : Safex / Kenex / Bharat / Reliance	1	No	5245.00
	ELEC-10.4.2	Supply and fixing of ABC Powder <b>MAP 4 Kg Fire</b> extinguisher Mono ammonium phosphate power 90, stored pressure type, IS 15683 : 2006, pressure gauge <b>gross wt. 6.9 kg, empty wt. 2.9 kg, can Ht.440mm, Diameter 140mm, Discharge time less than 13 sec</b> , controllable discharge mechanism, range min. 4 mts applicable on classes A,B, C & electrically started fires, A- rating 3A, B-rating 34B, can construction: Deep drawn Co2 mig welding, wall construction: Forging & Machining, internal coating of can: Epoxy power coating, External coating of Can: Epoxy polyester powder coating, sheet metal thickness:1.60mm, Helium leakage detection tested, ISI & CE approved with 5 years warranty Including transportation, all taxes and all labour charges etc complete.			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
1831	a	Makes : Cease Fire / Minimax	1	No	5700.00
1832	b	Makes : Safex / Kenex / Bharat / Reliance	1	No	3700.00
	<b>ELEC-10.4.3</b>	Supply and fixing of ABC Powder MAP 2 Kg Fire extinguisher Mono ammonium phosphate power 90, stored pressure type, IS 15683 : 2006, pressure gauge gross wt. 3.6 kg, empty wt. 1.6 kg, can Ht.344mm, Diameter 108mm, Discharge time less than 8 sec, controllable discharge mechanism, range min. 2 mts applicable on classes A,B, C electrically started fires, A- rating 2A, B-rating 21B, can construction: Deep drawn Co2 mig welding, wall construction: Forging & Machining, internal coating of can: Epoxy power coating, External coating of Can: Epoxy polyester powder coating, sheet metal thickness:1.60mm, Helium leakage detection tested, insta - alert, ISI & CE approved with 5 years warranty Including transportation, all taxes and all labour charges etc complete.			
1833	a	Makes : Cease Fire / Minimax	1	No	4000.00
1834	b	Makes : Safex / Kenex / Bharat / Reliance	1	No	2600.00
	<b>ELEC-10.4.4</b>	Supply and fixing of Ceiling Mounted ABC MAP 90, 5 Kg stored pressure type, pressure gauge, Gross Wt. 7.7 kg, Empty Wt. 2.7 kg, Can Ht264mm , Dia 240mm, Discharge time : less than 8 sec, IS 15683 : 2006 Auto discharge mechanism on temperature rise, Applicable on A,B,C, & Electrically - started fires, Can Construction: Forging & Machining, Internal coating of Can: Epoxy Power coating, External Coating of Can: Epoxy Polyester powder coating, sheet metal thickness:1.60mm , Helium leakage detection tested, ISI approved with 5 years warranty (Cease Fire / Minimax make) Including transportation, all taxes and all labour charges etc complete.			
1835	a	Makes : Cease Fire / Minimax	1	No	6400.00
1836	b	Makes : Safex / Kenex / Bharat / Reliance	1	No	5000.00
		<b>AEROSOL GENERATION SYSTEM (AGS) AND FIRE EXTINGUISHERS</b>			
1837	<b>ELEC-10.4.5</b>	Supply, installation, testing and commissioning of Addressable Control panel for AGS system with monitoring system and provision of interactive TFT color Graphic Display with touch Screen Control and shall have built in feature of Mimic software which works on an Android based technology and a facility to show the layout location of the installation area and prescribed location of the devices during the fire accident. shall have minimum two level password protection. Shall have alert indication for missing device, contaminated device. The control panel shall have real-time clock (RTC) indicate time, date, month & year and along with a provision of Ethernet based circuit as if required. Makes : SALAMANDRA / SEAARA / AGS	1	No	41378.00
1838	<b>ELEC-10.4.6</b>	Supply, installation, testing and commissioning of Addressable Multi sensor with integrated smoke sensing chamber and heat sensing	1	No	2112.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		<p>element. Addressable smoke detector shall operate on light scatter principle. The build-up of dirt or similar contamination on the sensing chamber shall be continually monitored by control panel, when it exceeds predetermined level; the panel has to indicate that the detector is in need of servicing. The detector shall have an integral microprocessor capable of making alarm decision based on alarm level set. The Obs/ft should be 0.5 obs/ft. The detector shall blink when the detector is addressed and glow steady on alarm. The detector shall have provision to alter the sensitivity from the panel. The detector shall have electronic free base. The detector and base construction shall be made of polycarbonate plastic. The detector shall be capable of reading from the control panel, i.e. health of the detector, alarm level setting. Latching the detector, isolating the detector from the control panel shall be possible. The detector shall preferably have twin LED's for 360 viewing angle.</p> <p>Makes : SALAMANDRA / SEAARA / AGS</p>			
1839	ELEC-10.4.7	<p>Supply, installation, testing and commissioning of addressable Loop Powered Sounder with integral beacon within horn using high intensity LED technology. The sounder beacon shall work with loop power. No separate power supply with cable shall be used. The sounder beacon shall be addressable type. It shall have electronic addressing. No DIP/DIL switches are permitted for address setting in order to avoid unauthorized setting. The construction of the sounder beacon shall be made of polycarbonate plastic. The sounder beacon sound pressure level shall be 85 dB at 10ft.</p> <p>Makes : SALAMANDRA / SEAARA / AGS</p>	1	No	2449.00
1840	ELEC-10.4.8	<p>Supply, installation, testing and commissioning of addressable Control Module with built-in LED. The LED shall blink when it is addressed and it shall glow steady when it is actuated and it should have principle of working with NC/NO relay circuit. It should have a cross zoning facility with an inbuilt sounder. The control module shall have electronic addressing. The control contact rating shall be a minimum of 2 amps @ 24V DC (Resistive). The control module shall operate from SLC loop power. No external power/cable shall be used.</p> <p>Makes : SALAMANDRA / SEAARA / AGS</p>	1	No	2787.00
1841	ELEC-10.4.9	<p>Supply and installation of manually operated suppression system using Aerosol Generator System for all classes of fire with active substance of 3.3. Kg and does cooling effect with no re-ignition. The product with minimum life of 15 years and no maintenance. The discharge time should be 25 sec and has net weight of 4.6 kg and has a capacity to cover 60 m<sup>3</sup> and shall be confirmed to NFPA 2010 and has other national and international certificates.</p>	1	No	62912.00
1842	ELEC-10.4.10	Supply of Auto Detection and Suppression	1	No	101334.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		System using Aerosol Generator System with required fittings as per standard composition for all classes of fire, With a provision to connect to detect smoke and heat with an obt/ft of 0.5 and flexibility of adjusting it for a temperature of 57/68/93/141 degree centigrade as per the site environment. The product Min Life shall be 15 years and no Maintenance. The Discharge time should be 78 sec. The Generator with a net weight of 10 kg Active Substance of 3.25 kg. and has diameter 220mm and height 220mm The Generator is suitable for Server Room, Electrical Storage and technical appliances, important documents area & etc. Makes : SALAMANDRA / SEAARA / AGS			
1843	ELEC-10.4.11	Supply of Auto Detection and Suppression System using Dry Sprinkler Generator as per standard composition for all classes of fire, with a provision to connect to detect smoke and heat with an obt/ft of 0.5 and flexibility of adjusting it for a temperature of 57/68/93/141 degree centigrade as per the site environment. The product Min Life shall be 15 years and no Maintenance. The Discharge time should be 21 sec. The Generator has a net weight of 1.2 kg. Active Substance of 0.3 kg and has diameter 20mm and height 135mm. The Generator is suitable for Server Room, Electrical Storage and technical appliances, important documents area & etc. Makes : SALAMANDRA / SEAARA / AGS	1	No	33778.00
1844	ELEC-10.4.12	Supply of Auto Detection and Suppression System using Aerosol Generator System as per standard composition with required fittings for all classes of fire, with a provision to connect to detect smoke and heat with an obt/ft of 0.5 and flexibility of adjusting it for a temperature of 57/68/93/141 degree centigrade as per the site environment. The product Min Life shall be 15 years and no Maintenance. The Discharge time should be 50 sec. The Generator has a net weight of 4.5 kg. Active Substance of 1.4 kg and has diameter 40mm and height 187mm. The Generator is suitable for Server Room, Electrical Storage and technical appliances, important documents area & etc. Makes : SALAMANDRA / SEAARA / AGS			59533.33
1845	ELEC-10.4.13	Supply of Aerosol Heat Starter Sprinkler used for Auto Detection and Suppression System for Aerosol Generator System for all Class of Fire. The heat Starter Sprinkler has various starter capacity, which ranges from +50c to +163c. The starter can cover up to 18 m2. The product Min Life shall be 15 years. The output power from the Starter is 3v and current 0.6A and operates at a temperature range of - 50c to +80c. The Starter Sprinkler is suitable for Server Room, Electrical Storage and technical appliances, Important documents area etc. Makes : SALAMANDRA / SEAARA / AGS	1	No	7178.00



Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
	<b>10.5</b>	<b>CLEAN AGENT FIRE EXTINGUISHERS</b>			
	<b>ELEC-10.5.1</b>	Supply and fixing of <b>2 Kg Fire</b> extinguisher Clean Agent HCFC 123, Stored pressure type, IS 15683 : 2006 pressure gauge, <b>gross weight 3.7 Kg empty weight 1.7 Kg, can height 344mm, Diameter 108mm, discharge time minimum 8 secs</b> , controllable discharge mechanism, range minimum 2 meters, applicable on class A,B,C and electrically started Fire, A rating 1A, B rating 21B, can construction: Deep drawn & CO2 mig welded, Valve construction: Forging & Machining, Internal coating of Can: Epoxy powder coating, External coating of can: Epoxy polyester powder coating, sheet metal thickness: 1.60 mm, Helium leak detection tested, ISI & CE approved, 5 Years warranty.			
1846	<b>a</b>	Makes : Cease Fire / Minimax	1	No	11520.00
1847	<b>b</b>	Makes : Safex / Kenex / Bharat.	1	No	9800.00
	<b>ELEC-10.5.2</b>	Supply and fixing of <b>4 Kg Fire</b> extinguisher Clean Agent HCFC 123, Stored pressure type, IS 15683 : 2006, pressure gauge, <b>gross weight 6.9Kg empty weight 2.9 Kg, can height 440mm, Diameter 140mm, discharge time minimum 8 secs</b> , controllable discharge mechanism, range minimum 2 meters, applicable on class A,B,C and electrically started Fire, A rating 1A, B rating 21B, can construction: Deep drawn & CO2 mig welded, Valve construction: Forging & Machining, Internal coating of Can: Epoxy powder coating, External coating of can: Epoxy polyester powder coating, sheet metal thickness: 1.60 mm, Helium leak detection tested, ISI & CE approved 5 Years warranty.			
1848	<b>a</b>	Makes : Cease Fire / Minimax	1	No	20900.00
1849	<b>b</b>	Makes : Safex / Kenex / Bharat.	1	No	18700.00
	<b>ELEC-10.5.3</b>	Supply & Fixing of <b>4.5Kg, CO2 Type Fire</b> Extinguisher, Trolley Mounted, Easy Weight Management, Used Unused Mechanism, Squeeze Grip, <b>Gross Weight 19.1 Kg, Empty Weight 14.6 Kg, Can Height 860MM, Diameter 140MM, Discharge time minimum 13 Secs</b> , Controllable discharge mechanism, Range minimum 2 Meters, Applicable on Class B,C & electrically started Fire, B Rating 13B, Can Construction : Hot Spinning / Forging, Valve Construction : Forging & Machining, Internal Coating of Can : Not Applicable, External Coating of Can : Spray Painting, Sheet metal thickness : 4.5MM, ISI & CE Approved, 2 Year Warranty Including transportation, all taxes and all labour charges etc complete.			
1850	<b>a</b>	Makes : Cease Fire / Minimax	1	No	9700.00
1851	<b>b</b>	Makes : Safex / Kenex / Bharat / Reliance	1	No	7300.00
1852	<b>ELEC-10.5.4</b>	Supply and fixing of Escape signage boards in Rigid Photo luminescent based glow in Dark rigid sheet with high intensity luminous properties with specification of Cease Fire or its equivalent make Model-1ES01	1	No	1160.00
1853	<b>ELEC-10.5.5</b>	Supply and fixing of Cease fire or its equivalent Escape gear Mild Steel box size <b>425mmx360mmx140mm</b> Epoxy powder coated	1	No	13400.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		to protect it from Weathering , smoke hood tested to European Standard EN 403 1993-S known to reduce Carbon Monoxide, propend(acrolein), hydrogen chloride, hydrogen Cyanide and Solid and liquid toxic particles to manageable level for at least 15 minutes shall with stand temperatures up to 80 degrees single use only Fire Blanket size 1.2m x1.8m used to cover any vessel containing used to Extinguish a clothing fire wrap blanket around the victim.			
	<b>10.6</b>	<b>WATER MIST FIRE EXTINGUISHERS</b>			
1854	<b>ELEC-10.6.1</b>	Supply & Fixing of Water Mist 9 Ltr. Fire Extinguisher : Gross Weight - 23.9 kg., Weight of the empty firefighting system without compressed air bottle and bottle valve - 14.9 kg., Can Height - 560 MM, Diameter - 204MM, Weight of the gun- 1.9kg, Nominal charge - 9 Ltr., Recoil - approx. 10N, Extinguishing Media Flow - 0.23 L/ sec, Water Discharge Hose - 13 MM, Discharge time minimum 25 Secs, Range minimum 10 Meters, Compressed Air to Gun - 10 MM, Applicable on Class A, B, C & Electrically started Fires, ARating-27A, BRating-233B, Compressed air bottle (volume/pressure) - 2L / 300bar, Operating pressure(dynamic)-approx. 5.0 bar, Lancing distance of the extinguishing agent-in spray Approx. 7.0 m, in jet mode Approx., 12.0 m. Operation time- approx. 40 sec, Extinguishing enhancement agent- Foam Additive, CE and ERDA approved, Sheet Metal Thickness - 1.5MM, 1 Year Warranty. Makes: Cease Fire or Equivalent	1	No	163000.00
1855	<b>ELEC-10.6.2</b>	Refilling of Fire extinguisher of DCP type by dismantling from site to workshop for refilling includes removing of existing powder and cleaning the cylinder, delivery pipe, nozzle internally and refilling new powder complete with reinstalling properly at site with necessary certificate including transportation and labour charges.	1	Kg	200.00
1856	<b>ELEC-10.6.3</b>	Refilling of Fire extinguisher of ABC type by dismantling from site to workshop for refilling includes removing of existing powder and cleaning the cylinder, delivery pipe, nozzle internally and refilling new powder complete with reinstalling properly at site with necessary certificate including transportation and labour charges.	1	Kg	225.00
1857	<b>ELEC-10.6.4</b>	Refilling of Fire extinguisher of CO2 type by dismantling from site to workshop for refilling includes removing of existing powder and cleaning the cylinder, delivery pipe, nozzle internally and refilling new powder complete with reinstalling properly at site with necessary certificate including transportation and labour charges.	1	Kg	175.00
1858	<b>ELEC-10.6.5</b>	Fixed Clean Agent Type Cylinder less gas based Automatic Fire Suppression and Detection System, Consists of a heat sensitive tube made of special plastic which is closed by stainless steel fittings. The tube has both storage and			18000.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit	Scheduled Rate for 2021-22
		detection function which means the extinguishing agent stored directly in the tube and no additional storage devise such as cylinder is needed. The tube ruptures at 90 to 100 degree temp. for panels & Server Racks. Clean Agent should have FM Approval and UL listed. Shelf life 5 years. System is operational 24/7 without power supply. Aska Model no. TD100EA (100 cm) (contains 250 gms ± 5 “clean gas agent HFC-227ea)		
1859	ELEC-10.6.6	Fixed Clean Agent Type Cylinder less gas based Automatic Fire Suppression and Detection System, Consists of a heat sensitive tube made of special plastic which is closed by stainless steel fittings. The tube has both storage and detection function which means the extinguishing agent stored directly in the tube and no additional storage devise such as cylinder is needed. The tube ruptures at 90 to 100 degree temp. for panels & Server Racks. Clean Agent should have FM Approval and UL listed. Shelf life 5 years. System is operational 24/7 without power supply. Aska Model no. TD200EA (200 cm) (contains 500 gms ± 5 “clean gas agent HFC-227ea)		22000.00
1860	ELEC-10.6.7	Fixed Clean Agent Type Cylinder less gas based Automatic Fire Suppression and Detection System, Consists of a heat sensitive tube made of special plastic which is closed by stainless steel fittings. The tube has both storage and detection function which means the extinguishing agent stored directly in the tube and no additional storage devise such as cylinder is needed. The tube ruptures at 90 to 100 degree temp. for panels & Server Racks. Clean Agent should have FM Approval and UL listed. Shelf life 5 years. System is operational 24/7 without power supply. Aska Model no. TD300EA (300 cm) (contains 750 gms ± 5 “clean gas agent HFC-227ea)		26000.00
1861	ELEC-10.6.8	Fixed Clean Agent Type Cylinder less gas based Automatic Fire Suppression and Detection System, Consists of a heat sensitive tube made of special plastic which is closed by stainless steel fittings. The tube has both storage and detection function which means the extinguishing agent stored directly in the tube and no additional storage devise such as cylinder is needed. The tube ruptures at 90 to 100 degree temp. for panels & Server Racks. Clean Agent should have FM Approval and UL listed. Shelf life 5 years. System is operational 24/7 without power supply. Aska Model no. TD400EA (400 cm) (contains 1000 gms ± 5 “clean gas agent HFC-227ea)		30000.00
		<b>MAINTENANCE AND CORROSION FREE FIRE EXTINGUISHER-AFFF FOAM</b>		
1862	ELEC-10.6.9	Composite Body (HDPE with Aramid Winding) FIRE EXTINGUISHER (Maintenance Free Corrosion Free) with Magnet, 2 LTR AFFF FOAM (Fire Rating 8A / 55B / E1000V as per EN3-7), Type Stored		10000.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit	Scheduled Rate for 2021-22
		Pressure, Operating Pressure 12 BAR, Filled Weight 2.8 KGS, Control Discharge, Discharge duration 18 Seconds, Two Pressure Gauges, UV Resistant Outer Casing, Self-Life 20 Years, 10 Years Corrosion Guarantee for Body. Test Reports should be from NABL Accredited Laboratory (Nationally / Internationally) Product Code : ASKA MFCF10 - F2,		
1863	ELEC-10.6.10	Composite Body (HDPE with Aramid Winding) FIRE EXTINGUISHER (Maintenance Free Corrosion Free) with Magnet (For Inspection), 6 LTR AFFF FOAM (Fire Rating 27A / 183B / E1000V as per EN3-7) , Type Stored Pressure, Operating pressure 12 bar Filled Weight 8.5KGS, Control Discharge, Discharge duration 40 Seconds, Two Pressure Gauges, UV Resistant Outer Casing, Self-Life 20 Years, 10 Years Corrosion Guarantee for Body. Test Reports should be from NABL Accredited Laboratory (Nationally / Internationally) Product Code: ASKA MFCF10-F6		39000.00
1864	ELEC-10.6.11	Composite Body (HDPE with Aramid Winding) FIRE EXTINGUISHER (Maintenance Free Corrosion Free) with Magnet (For Inspection), Type Stored Pressure, Operating pressure 12 bar, 9 LTR AFFF FOAM (Fire Rating 34A / 233B / E1000 V as per EN3-7), Filled Weight 11.7 KGS, Control Discharge, Discharge duration 49 Seconds, Two Pressure Gauges, UV Resistant Outer Casing, Self-Life 20 Years, 10 Years Corrosion Guarantee for Body. Test Reports should be from NABL Accredited Laboratory (Nationally / Internationally) Product Code: ASKA MFCF10-F9		49000.00
		<b>MAINTENANCE AND CORROSION FREE FIRE EXTINGUISHER - ABC POWDER</b>		
1865	ELEC-10.6.12	Composite Body (HDPE with Aramid Winding) FIRE EXTINGUISHER (Maintenance Free Corrosion Free) with Magnet (For Inspection) 2 KG ABC Powder (Fire Rating 13A / 55B, C Flammable Gas and can be used on Live Current). Control Type Stored Pressure, Operating pressure 12 bar, Filled Weight 2.74 KGS, Control Discharge, Discharge duration 22 Seconds, Two Pressure Gauges, UV Resistant Outer Casing, Self-Life 20 Years, 10 Years Corrosion Guarantee for Body. Test Reports should be from NABL Accredited Laboratory (Nationally / Internationally) Product Code: ASKA MFCF10-P2		10000.00
1866	ELEC-10.6.13	Composite Body (HDPE with Aramid Winding) FIRE EXTINGUISHER (Maintenance Free Corrosion Free) with Magnet (For Inspection) 6 KG ABC Powder (Fire Rating 43A / 233B, C Flammable Gas and Electrical Current) Type Stored Pressure, Operating pressure 12 bar, Filled Weight 8.5KGS, Control Discharge, Discharge duration 20 Seconds, Two Pressure Gauges, UV Resistant Outer Casing, Self-Life 20 Years, 10 Years Corrosion Guarantee for Body. Test Reports should be from NABL Accredited Laboratory (Nationally / Internationally)		39000.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		Product Code: ASKA MFCF10-P6			
1867	ELEC-10.6.14	Composite Body (HDPE with Aramid Winding) FIRE EXTINGUISHER (Maintenance Free Corrosion Free) with Magnet (For Inspection) 9 KG ABC Powder (Fire Rating 55A / 233B, C Flammable Gas and Electrical Current) Type Stored Pressure, Operating pressure 12 bar, Filled Weight 11.7KGS, Control Discharge, Discharge duration 20 Seconds, Two Pressure Gauges, UV Resistant Outer Casing, Self-Life 20 Years, 10 Years Corrosion Guarantee for Body. Test Reports should be from NABL Accredited Laboratory (Nationally / Internationally)			53000.00
		Product Code: ASKA MFCF10-P9			
	10.7	<b>FIRE HYDRANT AND SPRINKLER SYSTEM</b>			
	ELEC-10.7.1	Supply, Transportation, installation, testing and commissioning of electric driven main fire pump suitable for automatic operation and consisting of following complete in all respect as required			
		a) Horizontal type, multistage, centrifugal, split casing pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal to ensure a minimum pressure of 3.5 Kg / sq.cm. at highest and farthest outlet at specified flow of ----- lpm at ----- Mtr. head conforming to IS 1520			
		b) Suitable HP SQ cage induction motor, TEFC, synchronous speed 1500 RPM, suitable for operation on 415Volts, 3 phase 50 Hz. AC with IP 55 protection for enclosure, horizontal foot mounted type with Class-'F' insulation, conforming to IS-325			
		c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.			
		d) Suitable cement concrete foundation duly plastered with anti-vibration pads.			
		Makes of Pumps: Kirloskar / Mather&Platt.			
		Makes of Motors: Siemens/ ABB/ Kirloskar			
1868	a	1620 LPM, 56 Mtr Head	1	Set	315000.00
1869	b	1620 LPM, 70 Mtr Head	1	Set	354500.00
1870	c	1620 LPM, 88 Mtr Head	1	Set	385000.00
	ELEC-10.7.2	Supply, Transportation, installation , testing and commissioning of electric driven main fire pump suitable for automatic operation and consisting of following : complete in all respect as required			
		a) Horizontal type, multistage, centrifugal, split casing pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal to ensure a minimum pressure of 3.5 Kg / sq.cm. at highest and farthest outlet at specified flow of ----- lpm at ----- Mtr. head conforming to IS 1520			
		b) Suitable HP SQ cage induction motor, TEFC, synchronous speed 1500 RPM, suitable for operation on 415Volts, 3 phase 50 Hz. AC with IP 55 protection for enclosure, horizontal foot mounted type with Class-'F' insulation, conforming to IS-325			
		c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.			
		d) Suitable cement concrete foundation duly plastered with anti-vibration pads.			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		Makes of Pumps: Kirloskar / Mather&Platt.			
		Makes of Motors: Siemens/ ABB/ Kirloskar			
1871	a	2280 LPM, 56 Mtr Head	1	Set	326000.00
1872	b	2280 LPM, 70 Mtr Head	1	Set	367000.00
1873	c	2280 LPM, 88 Mtr Head	1	Set	405000.00
	<b>ELEC-10.7.3</b>	Supply, Transportation, installation , testing and commissioning of electric driven main fire pump suitable for automatic operation and consisting of following : complete in all respect as required.			
		a) Horizontal type, multistage, centrifugal, split casing pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal to ensure a minimum pressure of 3.5 Kg / sq.cm. at highest and farthest outlet at specified flow of --- lpm at----- Mtr. head conforming to IS 1520			
		b) Suitable HP SQ cage induction motor, TEFC, synchronous speed 1500 RPM, suitable for operation on 415Volts, 3 phase 50 Hz. AC with IP 55 protection for enclosure, horizontal foot mounted type with Class-'F' insulation, conforming to IS-325			
		c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.			
		d) Suitable cement concrete foundation duly plastered with anti-vibration pads.			
		Makes of Pumps: Kirloskar / Mather&Platt.			
		Makes of Motors: Siemens/ ABB/ Kirloskar			
1874	a	2850 LPM, 56 Mtr Head	1	Set	356000.00
1875	b	2850 LPM, 70 Mtr Head	1	Set	397000.00
1876	c	2850 LPM, 88 Mtr Head	1	Set	426000.00
	<b>ELEC-10.7.4</b>	Supply, Transportation, installation, Testing and commissioning of diesel engine driven main fire pump suitable for automatic operation and consisting of following : complete in all respect as required			
		a) Horizontal type, multistage, centrifugal pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal to ensure a minimum pressure of 3.5 Kg / sq.cm. at highest and farthest outlet at specified flow of ----- lpm at ---Mtr head conforming to IS 1520			
		b) Suitable HP, 1500 RPM water cooled with radiator, diesel engine conforming to relevant BS & IS standard complete with auto starting mechanism, 12 Volts / 24 Volts electric starting equipment, Diesel Tank, exhaust pipe extended up to 1 m. outside pump house duly insulated with 50mm thick glass wool with 1.0mm thick aluminum sheet cladding, residential silencer, instruments and protection as per specification, stop solenoid for auto stop in the event of fault with audio indications, painted with post office red colour etc as required.			
		c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.			
		d) Suitable cement concrete foundation duly plastered with anti-vibration pads.			
		Makes of Engines : Kirloskar / Cummins.			
		Makes of Pumps : Kirloskar / Mather&Platt			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
1877	a	1620 LPM, 56 Mtr Head	1	Set	416000.00
1878	b	1620 LPM, 70 Mtr Head	1	Set	456000.00
1879	c	1620 LPM, 88 Mtr Head	1	Set	486000.00
	<b>ELEC-10.7.5</b>	Supply, Transportation, installation, Testing and commissioning of diesel engine driven main fire pump suitable for automatic operation and consisting of following : complete in all respect as required			
		a) Horizontal type, multistage, centrifugal pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal to ensure a minimum pressure of 3.5 Kg / sq.cm. at highest and farthest outlet at specified flow of ----- lpm at---- Mtr head conforming to IS 1520			
		b) Suitable HP, 1500 RPM water cooled with radiator, diesel engine conforming to relevant BS & IS standard complete with auto starting mechanism, 12 Volts / 24 Volts electric starting equipment, Diesel Tank, exhaust pipe extended up to 1 m. outside pump house duly insulated with 50mm thick glass wool with 1.0mm thick aluminum sheet cladding, residential silencer, instruments and protection as per specification, stop solenoid for auto stop in the event of fault with audio indications, painted with post office red colour etc as required.			
		c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.			
		d) Suitable cement concrete foundation duly plastered with anti-vibration pads.			
		Makes of Engines : Kirloskar / Cummins.			
		Makes of Pumps : Kirloskar / Mather&Platt			
1880	a	2280 LPM, 56 Mtr Head	1	Set	562000.00
1881	b	2280 LPM, 70 Mtr Head	1	Set	603000.00
1882	c	2280 LPM, 88 Mtr Head	1	Set	632000.00
	<b>ELEC-10.7.6</b>	Supply, Transportation, installation, Testing and commissioning of diesel engine driven main fire pump suitable for automatic operation and consisting of following : complete in all respect as required			
		a) Horizontal type, multistage, centrifugal pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal to ensure a minimum pressure of 3.5 Kg / sq.cm. at highest and farthest outlet at specified flow of ----- lpm at---- Mtr head conforming to IS 1520			
		b) Suitable HP, 1500 RPM water cooled with radiator, diesel engine conforming to relevant BS & IS standard complete with auto starting mechanism, 12 Volts / 24 Volts electric starting equipment, Diesel Tank, exhaust pipe extended up to 1 m. outside pump house duly insulated with 50mm thick glass wool with 1.0mm thick aluminum sheet cladding, residential silencer, instruments and protection as per specification, stop solenoid for auto stop in the event of fault with audio indications, painted with post office red colour etc as required.			
		c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		d) Suitable cement concrete foundation duly plastered with anti-vibration pads.			
		Makes of Engines : Kirloskar / Cummins.			
		Makes of Pumps : Kirloskar / Mather&Platt			
1883	a	2850 LPM, 56 Mtr Head	1	Set	637000.00
1884	b	2850 LPM, 70 Mtr Head	1	Set	678000.00
1885	c	2850 LPM, 88 Mtr Head	1	Set	707000.00
	<b>ELEC-10.7.7</b>	Supply, Transportation, installation , testing and commissioning of electric driven pressurization / Jockey pump suitable for automatic operation and consisting of following : complete in all respect as required			
		a) Horizontal type, multistage, centrifugal pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal and flow of ----- lpm at ----- Mtr head conforming to IS 1520			
		b) Suitable HP SQ cage induction motor TEFC type suitable for operation on 415Volts, 3 phase 50 Hz. AC with IP 55 class of protection for enclosure, horizontal foot mounted type with Class-'F' insulation, conforming to IS-325			
		c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.			
		d) Suitable cement concrete foundation duly plastered with anti-vibration pads.			
		Makes of Pumps : Kirloskar / Mather&Platt.			
		Makes of Motors : Siemens/ ABB/ Kirloskar			
1886	a	180 LPM, 56 Mtr Head	1	Set	53800.00
1887	b	180 LPM, 70 Mtr Head	1	Set	76100.00
1888	c	180 LPM, 88 Mtr Head	1	Set	96000.00
	<b>ELEC-10.7.8</b>	Supply, Transportation, installation , testing and commissioning of electric driven Terrace / Booster pump suitable for automatic operation and consisting of following : complete in all respect as required.			
		a) Horizontal type, multistage, centrifugal pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal and flow of ..... lpm at ..... Mtr head conforming to IS 1520			
		b) Suitable HP SQ cage induction motor TEFC type suitable for operation on 415Volts, 3 phase 50 Hz. AC with IP 55 class of protection for enclosure, horizontal foot mounted type with Class-'F' insulation, conforming to IS-325			
		c) M.S. Fabricated common base plate, coupling, coupling guard, foundation bolts etc as required.			
		d) Suitable cement concrete foundation duly plastered with anti-vibration pads.			
		Makes of Pumps : Kirloskar / Mather&Platt.			
		Makes of Motors : Siemens / ABB / Kirloskar			
1889	a	900 LPM, 45 Mtr Head	1	Set	61000.00
1890	b	750 LPM, 35 Mtr Head	1	Set	55000.00
1891	c	450 LPM, 35 Mtr Head	1	Set	45000.00
		<b>CONTROL PANELS</b>			
1892	<b>ELEC-10.7.9</b>	Fabrication, supply, Transportation, Installation testing & commissioning of Electrical control panel of cubical construction, floor mounted	1	No	215600.00



Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		type, fabricated out of 2mm thick CRCA sheet, compartmentalised with hinged lockable doors, dust and vermin proof, powder coated of approved shade after 7 tank treatment process, cable alley, interconnection with suitable size copper conductor cable/solid copper strip, having switchgears and accessories, mountings and internal wiring, earth terminals, numbering etc. complete in all respect, suitable for main fire pump, pressurization pump & diesel pump set complete with following in coming and Outgoings, suitable for operation on 415V, 3 phase, 50Hz Ac Supply. Makes of MCCBs : L&T / Siemens / Legrand / Schneider / ABB / Hager Makes of Meters : Schneider (Conzerve) / L&T / Elmeasure / Siemens			
		<u>INCOMING :</u>			
		250A, 50kA 4 Pole MCCB, Ics=100% Icu rating			
		Digital Voltmeter 0-500V with selector switch			
		Digital Ammeter (0-250 A) with selector switch & CTs etc.			
		LED type RYB phase indicating lamps, ON, OFF, trip indicating lamps			
		Set of Copper Bus Bar 300A			
		<u>OUTGOING :</u>			
		( Note : All outgoing feeders for pumps should have digital Ammeter with selector switches, and LED type ON, OFF, trip indicating lamps)			
		<u>MAIN FIRE PUMP</u>			
		125 A, 50kA TPN MCCB, Ics=100% Icu, with fully automatic Star/Delta starter suitable for 60 HP pump with overload protection, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation selector switch for local/remote, auto/manual/OFF operation.			
		<u>JOCKEY PUMP</u>			
		63 A, 50kA TPN MCCB, Ics=100% Icu, with suitable protection, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation, selector switch for ocal/remote, auto/manual/OFF operation.			
		<u>DIESEL ENGINE CONTROL</u>			
		Control for diesel engine comprising - Automatic/Manual selector switch & 3 attempts starting device, timers and relays as required, push buttons, start/stop in manual mode Indicating lamp for high/ Low Lub. Oil pressure, High Water Temp and Engine on indication Water Temp and Engine on indication. Battery charger suitable for 12V/24 V DC with boost and trickle selector switch, 0-30 V DC voltmeter, and 0- 20 A DC Ammeter All standard relays and accessories for automatic operation of diesel engine System Controller.			
1893	ELEC-10.7.10	Designing, Supply, Transportation, Installation, Testing and commissioning of system controller to control operation of main electric fire pump,	1	No	253000.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		diesel pump, Pressurization pump, Terrace pump in sequence as per specification consisting of relays, timers. Sensors, annunciation window for fault indication, complete as per specification			
		Makes of MCCBs : L&T / Siemens / Legrand / Schneider / ABB / Hager			
		Makes of Meters : Schneider (Conzerve) / L&T / Elmeasure / Siemens			
		<u>INCOMING :</u>			
		400A, 50kA 4 Pole MCCB, Ics=100% Icu rating			
		Digital Voltmeter 0-500V with selector switch			
		Ammeter (0-400 A) with selector switch & CTs etc.			
		LED type RYB phase indicating lamps, ON, OFF, trip			
		indicating lamps			
		Set of Copper Bus Bar 500A			
		<u>OUTGOING :</u>			
		( Note : All outgoing feeders for pumps should have			
		digital Ammeter with selector switches, and LED type			
		ON, OFF, trip indicating lamps)			
		MAIN FIRE PUMP			
		200 A, 50kA TPN MCCB, Ics=100% Icu, with fully automatic Star/Delta starter suitable for 75 hp pump with overload protection, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation, selector switch for local/remote, auto/manual/OFF operation.			
		JOCKEY PUMP			
		100 A, 50kA TPN MCCB, Ics=100% Icu, with suitable HP fully automatic Star/Delta starter with overload protection, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation, selector switch for local/remote, auto/manual/OFF operation.			
		DIESEL ENGINE CONTROL			
		Control for diesel engine comprising - Automatic/Manual selector switch & 3 attempt starting device, timers and relays as required, push buttons, start/stop in manual mode Indicating lamp for high/ Low Lub. Oil pressure, High Water Temp and Engine on indication Battery charger suitable for 12V/24 V DC with boost and trickle selector switch, 0-30 V DC volt meter, and 0-20 A DC Ammeter All standard relays and accessories for automatic operation of diesel engine System Controller			
1894	ELEC-10.7.11	Designing, Supply, Transportation, Installation, Testing and commissioning of system controller to control operation of main electric fire pump, diesel pump, Pressurization pump, Terrace pump in sequence as per specification consisting of relays, timers. Sensors, annunciation window for fault indication, complete as per specifications.	1	No	284000.00
		Makes of MCCBs : L&T / Siemens / Legrand /			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		Schneider / ABB / Hager			
		Makes of Meters : Schneider (Conzerve) / L&T / Elmeasure / Siemens			
		<u>INCOMING :</u>			
		630A, 50kA 4 Pole MCCB, Ics=100% Icu rating			
		Digital Voltmeter 0-500V with selector switch			
		Ammeter (0-630 A) with selector switch & CTs etc.			
		LED type RYB phase indicating lamps, ON, OFF, trip			
		indicating lamps			
		Set of Copper Bus Bar 800Amps			
		<u>OUTGOING :</u>			
		( Note : All outgoing feeders for pumps should have			
		digital Ammeter with selector switches, and LED type			
		ON, OFF, trip indicating lamps)			
		<u>MAIN FIRE PUMP</u>			
		250 A, 50kA TPN MCCB, Ics=100% Icu, with fully automatic Star/Delta starter suitable for 100 hp pump with overload protection, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation, selector switch for local/remote, auto/manual/OFF operation.			
		<u>JOCKEY PUMP</u>			
		125 A, 50kA TPN MCCB, Ics=100% Icu, with Suitable HP fully automatic Star/Delta starter with over load protection, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation, selector switch for local/remote, auto/manual/OFF operation.			
		<u>DIESEL ENGINE CONTROL</u>			
		Control for diesel engine comprising - Automatic/Manual selector switch & 3 attempts starting device, timers and relays as required, push buttons, start/stop in manual mode Indicating lamp for high/ Low Lub. Oil pressure, High Water Temp and Engine on indication Battery charger suitable for 12V/24 V DC with boost and trickle selector switch, 0-30 V DC volt meter, and 0-20 A DC Ammeter All standard relays and accessories for automatic operation of diesel engine System Controller.			
1895	ELEC-10.7.12	Designing, Supply, Transportation, Installation, Testing and commissioning of system controller to control operation of main electric fire pump, diesel pump, Pressurization pump, Terrace pump in sequence as per specification consisting of relays, timers. Sensors, annunciation window for fault indication, complete as per specification	1	No	328000.00
		Makes of MCCBs : L&T / Siemens / Legrand / Schneider / ABB / Hager			
		Makes of Meters : Schneider (Conzerve) / L&T / Elmeasure / Siemens			
		<u>INCOMING :</u>			
		400A, 50kA 4 Pole MCCB, Ics=100% Icu Rating			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		Digital Voltmeter 0-500V with selector switch			
		Ammeter (0-400 A) with selector switch & CTs etc.			
		LED type RYB phase indicating lamps, ON, OFF, trip			
		indicating lamps			
		Set of Copper Bus Bar 500Amps			
		<u>OUTGOING :</u>			
		( Note : All outgoing feeders for pumps should have			
		digital Ammeter with selector switches, and LED type			
		ON, OFF, trip indicating lamps)			
		<u>MAIN FIRE PUMPS</u>			
		125 Amp, 50kA TPN MCCB, Ics=100% Icu, with fully automatic Star/Delta starter suitable for 60 hp pump with overload protection, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation, selector switch for local/remote, auto/manual/OFF operation. - 2 sets			
		<u>JOCKEY PUMP</u>			
		63 Amp, 50kA TPN MCCB, Ics=100% Icu, with Suitable HP fully automatic Star/Delta starter with overload protection, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation, selector switch for local/remote, auto/manual/OFF operation. - 2 sets			
		<u>DIESEL ENGINE CONTROL</u>			
		Control for diesel engine comprising - Automatic/Manual selector switch & 3 attempts starting device, timers and relays as required, push buttons, start/stop in manual mode Indicating lamp for high/ Low Lub. Oil pressure, High Water Temp and Engine on indi Battery charger suitable for 12V/24 V DC with boost and trickle selector switch, 0-30 V DC volt meter, and 0-20 A DC Ammeter All standard relays and accessories for automatic operation of diesel engine System Controller			
1896	ELEC-10.7.13	Designing, Supply, Transportation, Installation, Testing and commissioning of system controller to control operation of main electric fire pump, diesel pump, Pressurization pump, Terrace pump in sequence as per specification consisting of relays, timers. Sensors, annunciation window for fault indication, complete as per specification Makes of MCCBs : L&T / Siemens / Legrand / Schneider / ABB / Hager Makes of Meters : Schneider (Conzerve) / L&T / Elmeasure / Siemens	1	No	392000.00
		<u>INCOMING :</u>			
		630A, 50kA 4 Pole MCCB, Ics=100% Icu Rating			
		Digital Voltmeter 0-500V with selector switch			
		Ammeter (0-630 A) with selector switch & CTs etc.			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		LED type RYB phase indicating lamps, ON, OFF, trip			
		indicating lamps			
		Set of Copper Bus Bar 800Amps			
		<u>OUTGOING :</u>			
		(Note : All outgoing feeders for pumps should have			
		digital Ammeter with selector switches, and LED type			
		ON, OFF, trip indicating lamps)			
		<b>MAIN FIRE PUMP</b>			
		200 Amp, 50kA TPN MCCB, Ics=100% Icu, with fully automatic Star/Delta starter suitable for 75 hp pump with overload protection, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation, selector switch for local/remote, auto/manual/OFF operation. - 2 sets			
		<b>JOCKEY PUMP</b>			
		100 Amp, 50kA TPN MCCB, Ics=100% Icu, with Suitable HP fully automatic Star/Delta starter with overload protection, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation, selector switch for local/remote, auto/manual/OFF operation. - 2 sets			
		<b>DIESEL ENGINE CONTROL</b>			
		Control for diesel engine comprising - Automatic/Manual selector switch & 3 attempts starting device, timers and relays as required, push buttons, start/stop in manual mode Indicating lamp for high/ Low Lub. Oil pressure, High Water Temp and Engine on indication Battery charger suitable for 12V/24 V DC with boost and trickle selector switch, 0-30 V DC volt meter, and 0-20 A DC Ammeter All standard relays and accessories for automatic operation of diesel engine System Controller.			
1897	ELEC-10.7.14	Designing, Supply, Transportation, Installation, Testing and commissioning of system controller to control operation of main electric fire pump, diesel pump, Pressurization pump, Terrace pump in sequence as per specification consisting of relays, timers. Sensors, annunciation window for fault indication, complete as per specification Makes of MCCBs : L&T / Siemens / Legrand / Schneider / ABB / Hager Makes of Meters : Schneider (Conzerve) / L&T / Elmeasure / Siemens	1	No	506000.00
		<u>INCOMING :</u>			
		800A, 50kA 4 Pole MCCB, Ics=100% Icu Rating			
		Digital Voltmeter 0-500V with selector switch			
		Ammeter (0-800 A) with selector switch & CTs etc.			
		LED type RYB phase indicating lamps, ON, OFF, trip			
		indicating lamps			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		Set of Copper Bus Bar 1000Amps			
		<u>OUTGOING :</u>			
		( Note : All outgoing feeders for pumps should have			
		digital Ammeter with selector switches, and LED type			
		ON, OFF, trip indicating lamps)			
		Main Fire Pump			
		250 Amp, 50kA TPN MCCB, Ics=100% Icu, with fully automatic Star/Delta starter suitable for 100 hp pump with overload protection, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation, selector switch for local/remote, auto/manual/OFF operation. - 2 sets			
		JOCKEY PUMP			
		125 Amp, 50kA TPN MCCB, Ics=100% Icu, with Suitable HP fully automatic Star/Delta starter with overload protection, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation, selector switch for local/remote, auto/manual/OFF operation. - 2 sets			
		DIESEL ENGINE CONTROL			
		Control for diesel engine comprising - Automatic/Manual selector switch & 3 attempts starting device, timers and relays as required, push buttons, start/stop in manual mode Indicating lamp for high/ Low Lub. Oil pressure, High Water Temp and Engine on indication Battery charger suitable for 12V/24 V DC with boost and trickle selector switch, 0-30 V DC volt meter, and 0-20 A DC Ammeter All standard relays and accessories for automatic operation of diesel engine System Controller			
		<b>MS PIPES</b>			
	<b>ELEC-10.7.15</b>	Supply, Transportation, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589/IS 1239 including Welding, fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with two or more coats of synthetic enamel paint of required shade complete as required Makes : Jindal Hissar / Tata pipes			
		<b>C' CLASS</b>			
1898	<b>a</b>	250 mm dia 'C' Class	1	Mtr	4079.00
1899	<b>b</b>	200 mm dia 'C' Class	1	Mtr	3474.00
1900	<b>c</b>	150 mm dia 'C' Class	1	Mtr	2592.00
1901	<b>d</b>	100 mm dia 'C' Class	1	Mtr	1654.00
1902	<b>e</b>	80 mm dia 'C' Class	1	Mtr	1080.00
1903	<b>f</b>	65 mm dia 'C' Class	1	Mtr	811.00
1904	<b>g</b>	50 mm dia 'C' Class	1	Mtr	652.00
1905	<b>h</b>	40 mm dia 'C' Class	1	Mtr	551.00
1906	<b>i</b>	32 mm dia 'C' Class	1	Mtr	431.00
1907	<b>j</b>	25 mm dia 'C' Class	1	Mtr	331.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		<b>B' CLASS</b>			
	<b>ELEC-10.7.16</b>	Supply, Transportation, laying, testing & commissioning of 'B' class heavy duty MS pipe conforming to IS 3589/IS 1239 including Welding, fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with two or more coats of synthetic enamel paint of required shade complete as required Makes : Jindal Hissar / Tata pipes			
1908	<b>a</b>	250 mm dia 'B' Class	1	Mtr	3506.00
1909	<b>b</b>	200 mm dia 'B' Class	1	Mtr	3033.00
1910	<b>c</b>	150 mm dia 'B' Class	1	Mtr	2095.00
1911	<b>d</b>	100 mm dia 'B' Class	1	Mtr	1379.00
1912	<b>e</b>	80 mm dia 'B' Class	1	Mtr	970.00
1913	<b>f</b>	65 mm dia 'B' Class	1	Mtr	728.00
1914	<b>g</b>	50 mm dia 'B' Class	1	Mtr	573.00
1915	<b>h</b>	40 mm dia 'B' Class	1	Mtr	431.00
1916	<b>i</b>	32 mm dia 'B' Class	1	Mtr	358.00
1917	<b>j</b>	25 mm dia 'B' Class	1	Mtr	292.00
		<b>HYDRANAT VALVES</b>			
	<b>ELEC-10.7.17</b>	Supply and fixing single headed internal / External hydrant valve with instantaneous Gunmetal/Stainless Steel coupling of 63 mm dia with cast iron wheel ISI marked conforming to IS 5290 (Type -A) with blank Gunmetal/Stainless Steel cap and chain as required : Make: Mini Max / Safex / Newage / Winco / Newtech / Padmini.			
1918	<b>a</b>	Single headed Gunmetal	1	No	7300.00
1919	<b>b</b>	Single headed Stainless Steel	1	No	6000.00
		<b>BUTTER FLY VALVES</b>			
	<b>ELEC-10.7.18</b>	Supply, testing and commissioning of butterfly valve PN 1.6, with Bronze / Gun metal seat duly ISI marked complete with Nuts, Bolts, Washers, gaskets, conforming to IS 13095 of following sizes as required. Makes: Audco / Kirloskar / BDK / H-Shankar / Leader/ Zolotto / Intervolve / Honeywell.			
1920	<b>a</b>	250 mm . dia	1	No	16400.00
1921	<b>b</b>	200 mm . dia	1	No	6900.00
1922	<b>c</b>	150 mm dia	1	No	5700.00
1923	<b>d</b>	100 mm dia	1	No	4450.00
1924	<b>e</b>	80 mm dia	1	No	4050.00
		<b>NON RETURN VALVES(NRVS)</b>			
	<b>ELEC-10.7.19</b>	Supply, installation, testing and commissioning of dual plate non - return valve of following sizes conforming to IS: 5312 complete with rubber gasket, GI bolts, nuts, washers etc as required Makes: Audco / Kirloskar / BDK / H-Shankar / Leader/ Zolotto / Intervolve / Honeywell.			
1925	<b>a</b>	200 mm dia	1	No	11200.00
1926	<b>b</b>	150 mm dia	1	No	8960.00
1927	<b>c</b>	100 mm dia	1	No	8350.00
1928	<b>d</b>	80 mm dia	1	No	6200.00
1929	<b>e</b>	50 mm dia	1	No	3050.00
		<b>WAFFER LUG TYPE BUTTER FLY VALVES</b>			
	<b>ELEC-10.7.20</b>	Supply and delivery of CI Wafer Lug type			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		Butterfly Valves conforming to IS 13095/1991 (Reaffirmed 1998) including transportation etc., complete. Makes: Audco / Kirloskar / BDK / H-Shankar / Leader/ Zolotto / Intervolve / Honeywell.			
1930	a	250 mm . dia	1	No	15900.00
1931	b	200 mm . dia	1	No	11100.00
1932	c	150 mm dia	1	No	7200.00
1933	d	100 mm dia	1	No	4800.00
1934	e	80 mm dia	1	No	3600.00
1935	f	50 mm dia	1	No	2900.00
		<b>Y-STAINER</b>			
	<b>ELEC-10.7.21</b>	Supply, installation, testing and commissioning of stainless steel Y-strainer fabricated out of 1.6 mm thick stainless steel, Grade 304, sheet with 3 mm dia holes with stainless steel flange.			
1936	a	250 mm . dia	1	No	23800.00
1937	b	200 mm . dia	1	No	19400.00
1938	c	150 mm dia	1	No	12000.00
1939	d	100 mm dia	1	No	5700.00
1940	e	80 mm dia	1	No	4000.00
1941	f	50 mm dia	1	No	2700.00
		<b>GUN METAL VALVES</b>			
	<b>ELEC-10.7.22</b>	Supply, installation, testing and commissioning of gun metal valves of following sizes as required. Make: Newage / Winco / Padmini / Safex.			
1942	a	50 mm dia	1	No	1720.00
1943	b	40 mm dia	1	No	1380.00
1944	c	32 mm dia	1	No	1230.00
		<b>RRL HOSE PIPE</b>			
	<b>ELEC-10.7.23</b>	Supply and fixing 63mm dia, 15 Mtr long RRL hose pipe with 63mm dia Male and Female Gun metal / SS couplings duly binded with GI wire, rivets etc conforming to IS 636 (Type -A) as required. Make: Mini Max / Safex / Newage / Winco / Newtech / Padmini.			
1945	a	Gun metal	1	No	5630.00
1946	b	SS couplings			4200.00
		<b>CP HOSE PIPES</b>			
	<b>ELEC-10.7.24</b>	Supply and fixing 63mm dia, 15 Mtr long CP hose pipe with 63mm dia Male and Female Gun metal / SS couplings duly binded with GI wire, rivets etc conforming to IS 636 (Type -A) as required. Make: Mini Max / Safex / Newage / Winco / Newtech / Padmini.			
1947	a	Gun metal	1	No	4800.00
1948	b	SS couplings			4000.00
		<b>HOSE REEL</b>			
1949	<b>ELEC-10.7.25</b>	Supply and fixing First -Aid Hose Reel with MS construction spray painted in Post office Red, Conforming to IS 884 with up to date amendments, complete with the following as required.	1	No	6700.00
		a) 36.6 Mtr Long 20mm (Nominal internal) dia water hose Thermoplastic / Textile reinforced / Rubber braided / Polypropylene Type - 2 as per IS:12585			



Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		Make: Eversafe / Newage / Newtech / SRI			
		b) 20mm (Nominal internal) dia gun metal globe valve and nozzle.			
		Make: Newage / Winco / Padmini / Newtech / Safex.			
		c) Drum and brackets for fixing the equipments on wall.			
		d) Connections from riser with 25mm dia stop valve (gun metal) & MS pipe.			
		<b>CRCA HOSE BOX</b>			
1950	ELEC-10.7.26	Supply and fixing of hose cabinet of size 750mm X 600mm x 250mm made of No 16 gauge SWG CRCA sheet with 6mm thick glazed glass door including necessary locking arrangement suitable to accommodate 2 Nos 15 Mtr long Hose pipe, 1 No branch pipe, mounted on wall OR raised brick platform and duly painted with Post office red externally and white internally with synthetic enamel paint complete in all respect, for external hydrant as required.	1	No	2850.00
		Make: Mini Max / Safex / Newage / Winco / Newtech / Padmini.			
		<b>NOZZLES</b>			
	ELEC-10.7.27	Supply and fixing 63mm dia Gun metal branch pipe with 20mm (Nominal internal diameter) size Gun metal / SS nozzle conforming to IS 903, suitable for instantaneous connection to interconnect hose pipe coupling as required.			
		Make : Mini Max / Safex / Newage / Winco / Newtech / Padmini.			
1951	a	Gun metal	1	No	2200.00
1952	b	SS couplings			1600.00
		<b>FIRE BRIGADE CONNECTION</b>			
	ELEC-10.7.28	Supply and fixing ---- way fire brigade connection of cast iron body with --- Nos Gun metal Male instantaneous inlet couplings complete with cap and chain as required for 150mm dia MS pipe connection, conforming to IS 904 as required.			
		Make: Mini Max / Safex / Newage / Winco / Newtech / Padmini.			
1953	a	4Way Fire brigade connection cast iron body with 4 Nos Gun metal male instantaneous	1	No	8000.00
1954	b	3Way Fire brigade connection cast iron body with 3 Nos Gun metal male instantaneous	1	No	7000.00
1955	c	2Way Fire brigade connection cast iron body with 2 Nos Gun metal male instantaneous	1	No	6000.00
		<b>AIRCUSION TANK (AIR VESSEL)</b>			
1956	ELEC-10.7.29	Supply and fixing air vessel made of 250 mm dia, 8 mm thick MS sheet, 1200mm in height with air release valve on top and flanged connection to riser, drain arrangement with 25mm dia Gun metal wheel valve, with required accessories, pressure gauge and painting with synthetic enamel paint of approved shade as required.	1	No	15000.00
		<b>SPRINKLERS</b>			
1957	ELEC-10.7.30	Supply, fixing, testing and commissioning of 15mm size quartzoid bulb type sprinklers of rating 68°C. pendent / side wall with required accessories.	1	No	480.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		Makes: SAFEX / HD / TYCO / VIKING / NEWAGE / Newtech / SHARP			
1958	ELEC-10.7.31	Supply, fixing, testing and commissioning of 15mm size Concealed sprinkler of rating 68°C. with required accessories. Makes: SAFEX / HD / TYCO / VIKING / NEWAGE / SHARP	1	No	1200.00
		<b>FLEXIBLE SPRINKLER HOSE PIPE</b>			
	ELEC-10.7.32	Supply, installation, testing & commissioning of sprinkler flexible pipe (UL Listed) of stainless steel complete with 15 NPT on reducer thread with maximum working pressure of 175 PSI test pressure of 875 PSI (Burst) with branch line (Inlet) 25mm NPT male thread to sprinkler head (Outlet) 15mm NPT female thread with reducer, nipple, 2 side brackets, center bracket, stockbar of following sizes complete as required. Makes: SAFEX / HD / TYCO / VIKING / NEWAGE / SHARP			
1959	a	1500mm	1	No	1250.00
1960	b	1000-1200mm	1	No	1070.00
1961	c	700-800mm	1	No	890.00
		<b>PRESSURE SWITCHES AND FLOW SWITCHES</b>			
1962	ELEC-10.7.33	Supply and fixing of Pressure Switch in the MS pipe Line including connection etc as required. Make : Danfoss / Indfoss	1	No	2500.00
1963	ELEC-10.7.34	Supply and fixing of Flow Switches in 100mm dia MS pipe. Makes : System Sensor / Switzer	1	No	5000.00
1964	ELEC-10.7.35	Supply and fixing Flow Switches in 150 mm dia MS pipe. Makes : System Sensor / Switzer	1	No	7000.00
		<b>PRESSURE GAUGES</b>			
1965	ELEC-10.7.36	Supply, installation, testing and commissioning of Bourden type, stainless steel dial type pressure gauge with isolation valve and pipe having calibration of 0-16 kg/cm <sup>2</sup> . Makes : HGURU / FIEBIG	1	No	630.00
1966	ELEC-10.7.37	Supply, installation, testing and commissioning of 25mm dia Gate valve Makes : Zoloto / Leader / Honeywell	1	No	1100.00
1967	ELEC-10.7.38	Supply, installation, testing and commissioning of 25mm dia Ball valve Makes : Zoloto / Leader / Honeywell	1	No	610.00
		<b>AIR RELEASE VALVE</b>			
1968	ELEC-10.7.39	Supply, installation, testing and commissioning of 25 / 20mm dia Air Release Valve	1	No	1170.00
		<b>FIRE SAFTEY AUDIT</b>			
1969	ELEC-10.7.40	Providing / Conducting complete fire audit including submission of fire audit report for the whole premises.	1	Sq Mtr	5.00
		<b>ANTI CORROSIVE BITUMINOUS PAINT</b>			
	ELEC-10.7.42	Supply and wrapping the anti-corrosive material for buried pipes with coating of Primer and wrapping with 4 mm thick polymer corrosion resistant tape as per IS : 10221 with 15 mm overlap as per standard specifications.			
1970	a	80mm nominal dia	1	Mtr	280.00
1971	b	100mm nominal dia	1	Mtr	370.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
1972	c	150mm nominal dia	1	Mtr	420.00
1973	d	200mm nominal dia	1	Mtr	590.00
		<b>VANE TYPE WATER FLOW DETECTOR</b>			
	<b>ELEC-10.7.43</b>	Providing, fixing, testing & commissioning of installation control valve of cast iron body, brass/bronze working parts comprising of water motor alarm, bronze seat clapper, clapper arm and hydraulically driven mechanical gong bell to sound continuous alarm when the wet riser/sprinkler system activates, pressure gauges, emergency releases, strainer, pressure switch, cock valve complete with drain valve and bypass, test control box, ball valves, MS pipe of required size, flanges, orifice plate, gasket etc of following sizes as required : Makes : HD / TYCO / NEWAGE			
1974	a	80mm dia	1	No	36960.00
1975	b	100mm dia	1	No	38600.00
1976	c	150mm dia	1	No	40200.00
		<b>DELUGE VALVE</b>			
	<b>ELEC-10.7.44</b>	Supplying, installation, testing & commissioning of deluge valve (to be used for water curtains) UL listed with wet pilot basic trim assembly for DVA with test and alarm, drip and drain valve with water motor gong complete as required. Makes : HD / TYCO / NEWAGE or its equivalent make as desired by the department.			
1977	a	50 mm dia	1	Set	72000.00
1978	b	80 mm dia	1	Set	74000.00
1979	c	100mm dia	1	Set	76000.00
1980	d	150mm dia	1	Set	92000.00
1981	<b>ELEC-10.7.45</b>	Supply, installation, testing & commissioning of water curtain nozzle 15mm dia nickel chrome plated brass, BSPT, K-factor as per design consideration complete as required.	1	No	550.00
1982	<b>ELEC-10.7.46</b>	Supply, installation, testing & commissioning of electric release trim assembly for deluge wall with two way solenoid valve, weather proof operation on 24 volts DC supply complete as required.	1	No	6000.00
1983	<b>ELEC-10.7.47</b>	Supply, installation, testing & commissioning of adjustable rosette plate for 15mm dia in white finish UL Listed or FM approved complete as required.	1	No	200.00
		<b>SLUICE VALVE</b>			
	<b>ELEC-10.7.48</b>	Supply, fixing, testing & commissioning of double flanged sluice valve of rating PN 1.6 with non-rising spindle, bronze/gun metal seat, ISI marked complete with nuts, bolts, washers, gaskets and conforming to IS 780 of following sizes as required :			
1984	a	40 mm dia	1	Set	4500.00
1985	b	50 mm dia	1	Set	6000.00
1986	c	65 mm dia	1	Set	8000.00
1987	d	80 mm dia	1	Set	8500.00
1988	e	100 mm dia	1	Set	13000.00
1989	f	150 mm dia	1	Set	18000.00
1990	g	200 mm dia	1	Set	35000.00
1991	h	250 mm dia	1	Set	40000.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
1992	i	300 mm dia <b>ORIFICE PLATE</b>	1	Set	55000.00
1993	ELEC-10.7.49	Supply and fixing orifice plate made out of 6 mm thick stainless steel (Grade 304) with orifice of required size to be fitted between flange & landing valve of external and internal hydrants to reduce pressure at the outlet to the level of 3.5 kg/cm <sup>2</sup> complete as required.	1	No	10000.00
		<b>SECTION - 11</b>			
	11.1	<b>GENERATORS SPECIFICATION</b>			
	ELEC-11.1.1	Supply, Transportation, erection and commissioning (Excluding Foundation) of 3 Phase, 415, 50Hz, water cooled multi cylinder diesel generator set with alternator of - - - KVA/ - - - - KW output continuous rating directly coupled Engine and Alternator with guard and mounted on a common base plate of Robust construction and complete with standard control panel having IP-52 protection, Acoustic Enclosure as per CPCB norms , sound absorbing material, to restrict sound level up to 75 dB up to 1 Mtr distance and as per CPCB norms etc as per following specifications mentioned below. <b>A. Alternator :</b> Kirloskar / Stamford / Crompton Greaves / Leroy Somer make. The alternator of the output rating shall be 3 Phase, 415V, 50Hz, Ac , 0.8 P.F. lagging at 1500 RPM. The alternator is self-excited, self-regulated, and shall conform to IS: 13364 of 1992 with regulation of +5% from no load to full load. degree of protections shall be IP23. <b>B.Diesel Engine :</b> Kirloskar / Cummins / Mahindra & Mahindra / Greaves Cotton / Eicher / Ashok Leyland Diesel Engine start, developing suitable ----- BHP output at 1500 RPM with mechanical / electronic governing so as to enable the alternator to give - - - -KVA continuous output at 0.8 P.F. lagging at NTP conditions. The diesel engine shall be capable of providing 10% O/L for 1 Hr for every 11 Hrs. of continuous running at full load. The engine with 1st filling of oil and Diesel etc. 01. Exhaust pipe of required size and length with insulation as per the site condition with aluminum cladding. 02. Diesel tank suitable for 8 to 12 Hours running capacity. 03. Residential Silencer. 04. SMF Batteries with leads as per the Manufacturer standards			
1994	a	15 KVA, 3 Phase, 415, 50 Hz, 19 BHP, water cooled multi-cylinder diesel generator set with alternator of 15 KVA output continuous rating at 0.8 p.f. Batteries.	1	No	412335.00
1995	b	30 KVA, 3 Phase, 415, 50 Hz, 40 to 42 BHP, water cooled multi-cylinder diesel generator set with alternator of 30 KVA output continuous rating at 0.8 p.f. Batteries.	1	No	533610.00
1996	c	40 KVA, 3 Phase, 415, 50 Hz, 56 BHP, water cooled multi-cylinder diesel generator set with	1	No	664587.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit	Scheduled Rate for 2021-22
		alternator of 40 KVA output continuous rating at 0.8 p.f. Batteries.		
		<b>DG SET WITH AMF PANEL</b>		
	<b>ELEC-11.1.2</b>	Supply, Transportation, erection and commissioning (Excluding Foundation) of 3 Phase, 415, 50Hz, water cooled multi cylinder diesel generator set with alternator of - - - KVA / - - - - KW output continuous rating directly coupled Engine and Alternator with guard and mounted on a common base plate of Robust construction and complete with AMF panel having IP-52 protection, Acoustic Enclosure as per CPCB norms , sound absorbing material, to restrict sound level up to 75 dB up to 1 Mtr distance and as per CPCB norms etc as per following specifications mentioned below.		
		<b>A. Alternator :</b> Kirloskar / Stamford / Crompton Greaves / Leroy Somer make. The alternator of the output rating shall be 3 Phase, 415V, 50Hz, Ac , 0.8 P.F. lagging at 1500 RPM. The alternator is self-excited, self-regulated, and shall conform to IS: 13364 of 1992 with regulation of +5% from no load to full load. degree of protections shall be IP21.		
		<b>B. Diesel Engine :</b> Kirloskar / Cummins / Mahindra & Mahindra / Greaves Cotton / Eicher / Ashok Leyland Diesel Engine start, developing suitable ----- BHP output at 1500 RPM with mechanical / electronic governing so as to enable the alternator to give - - - -KVA continuous output at 0.8 P.F. lagging at NTP conditions. The diesel engine shall be capable of providing 10% O/L for 1 Hr for every 11 Hrs. of continuous running at full load. The engine with 1st filling of oil and Diesel etc. 01. Exhaust pipe of required size and length with insulation or cladding. 02. Diesel tank suitable for 8 to 12 Hours running capacity. 03. Residential Silencer. 04. SMF Batteries with leads as per the Manufacturer standards		
		<b>C. AMF Control Panel:-</b> AMF control panel shall be fabricated with 16SWG CRCA sheet shall be totally enclosed with dust and Vermin proof, floor mounted / wall mounted type and shall be comprising the following. 01. Voltmeter with selector switch. 02. 4 Pole MCCB incomer of -----A rating of Schneider / L&T make for EB and DG . 03. Ammeter with selector switch with CTs. 04. PF Meter and frequency Meter. 05. Indicator lamps (set Run, Load ON) with fuses. 06. KWH Meter of required rating. 07. Set of control fuses and current transformer. 08. Input Terminal board and output Terminal Board. 09. Battery charger with transformer rectifier unit. 10. Alternator supply air break contactor of L&T		

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		make.			
		11. Main supply air break contactor of L&T make.			
		12. Audio Visual annunciation .			
		13. Main supply voltage set of control relays and timers with one mode selector switch, set of push buttons.			
		14. Control cable up to 15 Mtrs 2.5Sq.mm 6 Core			
1997	a	62.5 KVA, 3 Phase, 415, 50 Hz, 78 to 83 BHP, water cooled multi-cylinder diesel generator set with alternator of 63 KVA output continuous rating at 0.8 p.f. Batteries.	1	No	873180.00
1998	b	125 KVA, 3 Phase, 415, 50 Hz, 154 BHP, water cooled multi-cylinder diesel generator set with alternator of 125 KVA output continuous rating at 0.8 p.f. Batteries.	1	No	1176368.00
1999	c	160 KVA, 3 Phase, 415, 50 Hz, not less than 200 BHP, water cooled multi-cylinder diesel generator set with alternator of 160 KVA output continuous rating at 0.8 p.f. Batteries.	1	No	1540193.00
2000	d	250 KVA, 3 Phase, 415, 50 Hz, not less than 310 BHP, water cooled multi-cylinder diesel generator set with alternator of 250 KVA output continuous rating at 0.8 p.f. Batteries.	1	No	2376990.00
	<b>ELEC-11.1.3</b>	Supply, Transportation, erection and commissioning (Excluding Foundation) of 3 Phase, 415, 50Hz, water cooled multi cylinder diesel generator set with alternator of - - - KVA/ - - - - KW output continuous rating directly coupled Engine and Alternator with guard and mounted on a common base plate of Robust construction and complete with AMF panel having IP-52 protection, Acoustic Enclosure as per CPCB norms , sound absorbing material, to restrict sound level up to 75 dB up to 1 Mtr distance and as per CPCB norms etc as per following specifications mentioned below.			
		<b>A. Alternator :</b> Kirloskar / Stamford / Crompton Greaves / Leroy Somer make. The alternator of the output rating shall be 3 Phase, 415V, 50Hz, Ac , 0.8 P.F. lagging at 1500 RPM. The alternator is self-excited, self-regulated, and shall confirm to IS: 13364 of 1992 or latest version with regulation of +5% from no load to full load. degree of protections shall be IP23.			
		<b>B. Diesel Engine :</b> Kirloskar / Cummins / Caterpillar Diesel Engine start, developing suitable ----- BHP output at 1500 RPM with mechanical / electronic governing so as to enable the alternator to give - - - - -KVA continuous output at 0.8 P.F. lagging at NTP conditions. The diesel engine shall be capable of providing 10% O/L for 1 Hr for every 11 Hrs. of continuous running at full load. The engine with 1st filling of oil and Diesel etc.			
		01. Exhaust pipe of required size and length with insulation as per the site condition with aluminum cladding.			
		02. Diesel tank suitable for 8 to 12 Hours running capacity.			
		03. Residential Silencer.			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		04. SMF Batteries with leads as per the Manufacturer standards			
		<b>C. AMF Control Panel:-</b> AMF control panel shall be fabricated with 16SWG CRCA sheet shall be totally enclosed with dust and Vermin proof, floor mounted / wall mounted type and shall be comprising the following.			
		01. Voltmeter with selector switch.			
		02. 4 Pole MCCB incomer of -----A rating of Schneider / L&T make for EB and DG .			
		03. Ammeter with selector switch with CTs.			
		04. PF Meter and frequency Meter.			
		05. Indicator lamps (set Run, Load ON) with fuses.			
		06. KWH Meter of required rating.			
		07. Set of control fuses and current transformer.			
		08. Input Terminal board and output Terminal Board.			
		09. Battery charger with transformer rectifier unit.			
		10. Alternator supply air break contactor of L&T make.			
		11. Main supply air break contactor of L&T make.			
		12. Audio Visual annunciation .			
		13. Main supply voltage set of control relays and timers with one mode selector switch, set of push buttons.			
		14. Control cable up to 15 Mtrs 2.5Sq.mm 6 Core			
2001	a	320 KVA, 3 Phase, 415, 50 Hz, not less than 380 BHP, water cooled multi-cylinder diesel generator set with alternator of 320 KVA output continuous rating at 0.8 p.f. Batteries.	1	No	3080385.00
2002	b	500 KVA, 3 Phase, 415, 50 Hz, not less than 580 BHP, water cooled multi-cylinder diesel generator set with alternator of 500 KVA output continuous rating at 0.8 p.f. Batteries.	1	No	4305263.00
		<b>DG SET WITH STANDARD CONTROL PANEL</b>			
	ELEC-11.1.4	Supply, Transportation, erection and commissioning (Excluding Foundation) of 3 Phase, 415, 50Hz, water cooled multi cylinder diesel generator set with alternator of - - - KVA/ - - - - KW output continuous rating directly coupled Engine and Alternator with guard and mounted on a common base plate of Robust construction and complete with AMF panel having IP-52 protection, Acoustic Enclosure as per CPCB norms , sound absorbing material, to restrict sound level up to 75 dB up to 1 Mtr distance and as per CPCB norms etc as per following specifications mentioned below.			
		<b>A. Alternator :</b> Kirloskar / Stamford / Crompton Greaves / Leroy Somer make. The alternator of the output rating shall be 3 Phase, 415V, 50Hz, Ac , 0.8 P.F. lagging at 1500 RPM. The alternator is self-excited, self-regulated, and shall confirm to IS: 13364 of 1992 with regulation of +5% from no load to full load. degree of protections shall be IP21.			

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		<p><b>B.Diesel Engine</b> : Kirloskar / Cummins / Mahindra &amp; Mahindra / Greaves Cotton / Eicher / Ashok Leyland Diesel Engine start, developing suitable ----- BHP output at 1500 RPM with mechanical / electronic governing so as to enable the alternator to give - - - -KVA continuous output at 0.8 P.F. lagging at NTP conditions. The diesel engine shall be capable of providing 10% O/L for 1 Hr for every 11 Hrs. of continuous running at full load. The engine with 1st filling of oil and Diesel etc. With standard control panel.</p> <p>01. Exhaust pipe of required size and length with insulation as per the site condition with aluminum cladding.</p> <p>02. Diesel tank suitable for 8 to 12 Hours running capacity.</p> <p>03. Residential Silencer.</p> <p>04. SMF Batteries with leads as per the Manufacturer standards</p>			
2003	a	62.5 KVA, 3 Phase, 415, 50 Hz, 78 to 83 BHP, water cooled multi-cylinder diesel generator set with alternator of 63 KVA output continuous rating at 0.8 p.f. Batteries.	1	No	693000.00
2004	b	125 KVA, 3 Phase, 415, 50 Hz, 154 BHP, water cooled multi-cylinder diesel generator set with alternator of 125 KVA output continuous rating at 0.8 p.f. Batteries.	1	No	907500.00
	ELEC-11.1.5	Supply, Transportation, erection and commissioning (Excluding Foundation) of 3 Phase, 415, 50Hz, water cooled multi cylinder diesel generator set with alternator of - - - KVA/ - - - - KW output continuous rating directly coupled Engine and Alternator with guard and mounted on a common base plate of Robust construction and complete with AMF panel having IP-52 protection, Acoustic Enclosure as per CPCB norms , sound absorbing material, t to restrict sound level up to 75 dB up to 1 Mtr distance and as per CPCB norms etc as per following specifications mentioned below.			
		<p><b>A. Alternator</b> : Kirloskar / Stamford / Crompton Greaves / Leroy Somer make. The alternator of the output rating shall be 3 Phase, 415V, 50Hz, Ac , 0.8 P.F. lagging at 1500 RPM. The alternator is self-excited, self-regulated, and shall confirm to IS: 13364 of 1992 or latest version with regulation of +5% from no load to full load. degree of protections shall be IP23.</p>			
		<p><b>B.Diesel Engine</b> : Kirloskar / Cummins / Caterpillar Diesel Engine start, developing suitable ----- BHP output at 1500 RPM with mechanical / electronic governing so as to enable the alternator to give - - - -KVA continuous output at 0.8 P.F. lagging at NTP conditions. The diesel engine shall be capable of providing 10% O/L for 1 Hr for every 11 Hrs. of continuous running at full load. The engine with 1st filling of oil and Diesel etc with standard control panel.</p> <p>01. Exhaust pipe of required size and length with</p>			



Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
		insulation as per the site condition with aluminum cladding.			
		02. Diesel tank suitable for 8 to 12 Hours running capacity.			
		03. Residential Silencer.			
		04. SMF Batteries with leads as per the Manufacturer standards			
2005	a	160 KVA, 3 Phase, 415, 50 Hz, not less than 200 BHP, water cooled multi-cylinder diesel generator set with alternator of 160 KVA output continuous rating at 0.8 p.f. Batteries.	1	No	1309770.00
2006	b	250 KVA, 3 Phase, 415, 50 Hz, not less than 310 BHP, water cooled multi-cylinder diesel generator set with alternator of 250 KVA output continuous rating at 0.8 p.f. Batteries.	1	No	1758488.00
2007	c	320 KVA, 3 Phase, 415, 50 Hz, not less than 380 BHP, water cooled multi-cylinder diesel generator set with alternator of 320 KVA output continuous rating at 0.8 p.f. Batteries.	1	No	2728688.00
2008	d	500 KVA, 3 Phase, 415, 50 Hz, not less than 580 BHP, water cooled multi-cylinder diesel generator set with alternator of 500 KVA output continuous rating at 0.8 p.f. Batteries.	1	No	3820163.00
		<b>NOTE:</b> if only supply of DG sets is there, deduct 2% on above cost towards, installation, testing and commissioning.			
		<b>SECTION - 12</b>			
	<b>12.1</b>	<b>UPS SYSTEMS</b>			
	<b>ELEC-12.1.1</b>	Supply and installation of ----- home UPS system pure sine wave output, single phase input / Single phase output. Makes: Servomax / Top Power / Amar Raja / Samhitha / Microtech / Excide / Sucom.			
2009	a	800VA, 12VDC	1	No	8075.00
2010	b	1400VA, 24VDC	1	No	11400.00
2011	c	2000VA, 36VDC	1	No	16150.00
	<b>ELEC-12.1.2</b>	Supply, Transportation and installation of ----- true on line UPS system IGBT technology pure sine wave output, double conversion with auto and manual static by pass switch single phase input / Single phase output. Makes: Power one / Numeric / Emerson.			
2012	a	2.0KVA	1	No	24700.00
2013	b	3.0KVA, 72VDC	1	No	33250.00
2014	c	5.0KVA, 180/192VDC	1	No	57600.00
2015	d	7.5KVA, 180/192VDC	1	No	79800.00
2016	e	10KVA, 180/192VDC	1	No	93100.00
	<b>ELEC-12.1.3</b>	Supply, Transportation and installation of ----- on line UPS system IGBT based rectifier with input power factor correction 32 bit microprocessor based with isolation transformers double conversion, SNMP controls, LCD display, Pure sine wave output, with auto static switch three phase input / Three phase output and modular structure for better thermal technology / cooling facility, with warranty up to three years. Makes: APC / Numeric / Emerson.			
2017	a	10KVA / 312V DC	1	No	130000.00
2018	b	15KVA / 312V DC	1	No	150000.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
	<b>12.2</b>	<b>UPS BATTERY RACKS AND WIRE LEADS</b>			
	<b>ELEC-12.2.1</b>	Supply and providing of UPS cum battery rack --- -----			
2019	<b>a</b>	Up to 4 batteries	1	No	1350.00
2020	<b>b</b>	5 to 10 batteries	1	No	2500.00
2021	<b>c</b>	11 to 20 batteries	1	No	4600.00
	<b>ELEC-12.2.2</b>	Supply and fixing of ----- SMF battery including wire leads. Makes : Quanta / Racket / Exide.			
2022	<b>a</b>	12V 26 AH	1	No	3400.00
2023	<b>b</b>	12V 42 AH	1	No	5700.00
2024	<b>c</b>	12V 65 AH	1	No	7000.00
2025	<b>d</b>	12V 100 AH	1	No	8800.00
2026	<b>e</b>	12V 120 AH	1	No	9500.00
	<b>ELEC-12.2.3</b>	Supply and fixing of -----MF battery including wire leads. Makes : Amar Raja (Power Zone) or Equivalent model of Exide / Panasonic / Gotech.			
2027	<b>a</b>	12V, 120 AH	1	No	8900.00
2028	<b>b</b>	12V, 150 AH	1	No	11500.00
		<b>SECTION - 13</b>			
	<b>13.1</b>	<b>Public Addressing SYSTEM</b>			
2029	<b>ELEC-13.1.1</b>	Supply, Installation, Testing and Commissioning of Amplifier 120 W for PA system suitable to operate on 230 V AC / 12 V DC supply etc., complete.(AHUZA/OMEGA or equivalent)	1	No	18000.00
2030	<b>ELEC-13.1.2</b>	Supply, Installation, Testing and Commissioning of 15 W Sound Column etc., complete with connection (AHUZA/OMEGA or equivalent)	1	No	2800.00
2031	<b>ELEC-13.1.3</b>	Supply, Installation, Testing and Commissioning of microphone etc., complete with connections. (AHUZA/OMEGA or equivalent)	1	No	5000.00
2032	<b>ELEC-13.1.4</b>	Supply, Installation, Testing and Commissioning of stand for microphone etc., complete with connections.	1	No	1800.00
2033	<b>ELEC-13.1.5</b>	Supply, Installation, Testing and Commissioning of Table stand for microphone etc., complete with connections.	1	No	1200.00
2034	<b>ELEC-13.1.6</b>	Supply, Installation, Testing and Commissioning of 2 core shielded microphone cable etc., complete with connections	1	Mtr	135.00
2035	<b>ELEC-13.1.7</b>	Supply, Installation, Testing and Commissioning of 0.5 Sq mm speaker cable etc., complete with connections	1	Mtr	35.00
2036	<b>ELEC-13.1.8</b>	Supply, Installation, Testing and Commissioning of 0.75 Sq mm speaker cable etc., complete with connections	1	Mtr	45.00
2037	<b>ELEC-13.1.9</b>	Supply, Installation, Testing and Commissioning of 1.0 Sq mm speaker cable etc., complete with connections	1	Mtr	50.00
2038	<b>ELEC-13.1.10</b>	Supply, Installation, Testing and Commissioning of 1.5 Sq mm speaker cable etc., complete with connections	1	Mtr	65.00
		<b>SECTION - 13 - OLD MATERIAL RATES</b>			
<b>S.No</b>	<b>14.1</b>	<b>Dismantled item :</b>			
2039	<b>ELEC-14.1.1</b>	PVC insulated aluminum cables and wires	1	Kg	11.00
2040	<b>ELEC-14.1.2</b>	PVC insulated copper cables and wires	1	Kg	50.00
2041	<b>ELEC-14.1.3</b>	Aluminum Materials	1	Kg	62.00
2042	<b>ELEC-14.1.4</b>	MS / Iron poles, angle etc	1	Kg	25.00

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
2043	ELEC-14.1.5	Copper/Brass materials	1	Kg	140.00
2044	ELEC-14.1.6	PVC pipe/PVC materials.	1	Kg	5.00
2045	ELEC-14.1.7	IC switches/DBs/Feeder pillars.	1	No	13.00
2046	ELEC-14.1.8	All types of Ammeter/Voltmeter / any meter	1	No	25.00
2047	ELEC-14.1.9	All types of ACBs/OCBs/VCBs LT	1	No	1300.00
2048	ELEC-14.1.10	All types of ceiling fans/cabin fans/Bracket fans and pedestal fans etc.	1	No	150.00
2049	ELEC-14.1.11	All type Tube light fittings/MV/SV/MH fittings.	1	No	21.00
2050	ELEC-14.1.12	All types of Air circulators/Pedestal Type Air Circulators	1	No	500.00
2051	ELEC-14.1.13	All types chokes/condensers/Motor starters	1	Kg	17.00
2052	ELEC-14.1.14	Lift ropes/belt types	1	Kg	20.00
2053	ELEC-14.1.15	All types of electric Motors	1	HP	340.00
2054	ELEC-14.1.16	All types of water pump sets	1	HP	340.00
2055	ELEC-14.1.17	All types of compressors	1	HP	500.00
2056	ELEC-14.1.18	All Types of AC units (window)	1	No	1800.00
2057	ELEC-14.1.19	All Types of AC units (Split ACs) ODU	1	No	2310.00
2058	ELEC-14.1.20	All Types of Indoor units of Split Acs	1	No	800.00
2059	ELEC-14.1.21	Copper piping of Acs	1	Kg	135.00
2060	ELEC-14.1.22	water cooler instant type	1	No	900.00
2061	ELEC-14.1.23	Water cooler storage type	1	Ltr	40.00
2062	ELEC-14.1.24	Refrigerator up to 165 Ltr	1	No	1452.00
2063	ELEC-14.1.25	Refrigerator above 165 Ltr	1	No	2000.00
2064	ELEC-14.1.26	Exhaust fans 9"	1	No	150.00
2065	ELEC-14.1.27	Exhaust fans 12"	1	No	200.00
2066	ELEC-14.1.28	Exhaust fan 15"	1	No	330.00
2067	ELEC-14.1.29	Exhaust fan 18"	1	No	400.00
2068	ELEC-14.1.30	Exhaust Fan 24"	1	No	500.00
2069	ELEC-14.1.31	Air cooler of any size without fan	1	No	500.00
2070	ELEC-14.1.32	Air cooler of any size with fan	1	No	800.00
2071	ELEC-14.1.33	Transformer Oil	1	Ltr	5.00
2072	ELEC-14.1.34	DG Set	1	KVA	500.00
2073	ELEC-14.1.35	Transformer	1	KVA	200.00
2074	ELEC-14.1.36	EPABX system	1	No	800.00
2075	ELEC-14.1.37	Telephone instrument	1	No	50.00
2076	ELEC-14.1.38	Water Purifier	1	No	80.00
2077	ELEC-14.1.39	Invertor/UPS	1	KVA	100.00
2078	ELEC-14.1.40	Voltage stabilizer	1	KVA	100.00
2079	ELEC-14.1.41	Amplifier small	1	No	400.00
2080	ELEC-14.1.42	Amplifier Big	1	No	450.00
2081	ELEC-14.1.43	Mikes	1	No	70.00
		<b>Note:</b> Rates of items which are not covered under above List should be calculated on the basis of materials / equipments considering its site condition and prevailing market rates and approval should be taken from the concerned Superintending Engineer(Electrical)			
		<b>Dismantling Rates</b>			
1		Dismantling the existing ceiling fan / exhaust fan / cabin fan for clearing the site.	1	No	
2		Dismantling the existing steel pole / RS joist pole / Girder with bracket clamps, insulators or stay from the cement concrete foundation clearing the site, refilling the pit etc.	1	No	
3		Dismantling the existing tube light / SV lamp / MV lamp and making the site clear.	1	No	
4		Dismantling the existing geyser and making the site clear.	1	No	

Sl. No	ITEM CODE	DESCRIPTION OF ITEM	Unit		Scheduled Rate for 2021-22
5		Dismantling Light / Fan / Separate socket wiring with casing / conduit / batten complete with all accessories and clearing the site duly removing the gutties and refilling the holes with cement mortar and painting with match colour of wall and ceiling.	1	No	
6		Dismantling Light / Fan / Separate socket wiring with casing / conduit / batten complete with all accessories and clearing the site.	1	No	
7		Dismantling the existing armored / unarmored cable, single / multi core cable of sub main, main circuit of any system of wiring including coiling.	1	No	
8		Dismantling the existing armored / unarmored underground cable.	1	No	
9		Dismantling the DBs and TPN switches	1	No	



**PART-IV**  
**PUBLIC HEALTH WORKS**

# PART-IV INDEX

## Public Health Works

S.No.	Description	Page No	
		From	To
1	Labour Rates & PH Items	401	416
2	Materials	417	477

**PUBLIC HEALTH ITEMS**

Sl. No.	Description	Unit	Scheduled Rates for 2021-22
1	2	3	4
1	RATES OF LABOUR		
	1. Caulkar	Per Day	As per Labour rates of SoR
	2. Plumber 1st Class	Per Day	
	3. Plumber 2nd Class	Per Day	
	4. Sewer Cleaner	Per Day	
	5. Well Sinker	Per Day	
	6. Pipe line Fitter 1st Class	Per Day	
	7. Pipe line Fitter 2nd Class	Per Day	
	8. Pump Operator	Per Day	
	9. Bore Mechanic	Per Day	
	10. Light Vehicle Driver	Per Day	
	Note:The rate at relevant item in common SoR is applicable for occasional employment.		
2	RATES FOR EARTH WORK :		
a.	Earth work excavation in all types soils for pipe lines, for drainage and water supply, where the depth is more than 1.5 times the width.		To follow the relevant items of Irrigation work items as per Standard data
b.	Earth work excavation in all types soils for pipe lines, for drainage and water supply, where the depth is less than 1.5 times the width.		
c.	Earth work excavation in all types soils for open trenches, for valve pits, inspection chambers, etc.		
3.	Excavation of pipe line trenches for drainage and water supply in rock requiring blasting with initial lead and lift including cost of blasting materials where the depth is more than 1.5 times the width, in places where there is no habitation.		To follow the relevant items of Irrigation work items as per Standard data
a.	Excavation of pipe line trenches for drainage and water supply in rock requiring blasting with initial lead and lift including cost of blasting materials where the depth is less than 1.5 times the width, in places where there is no habitation.		
b.	Cutting rock for pipe line trenches by hammers, knuckles and chisels including stacking where the depth is 1.5 times or more than the width.		
c.	Cutting rock for pipe line trenches by hammers, knuckles and chisels including stacking where the depth is less than 1.5 times the width.		
d.	Cutting rock for works other than pipe lines trenches by hammers, knuckles and chisels including stacking.		
e.	For controlled blasting at restricted places		
	NOTE :- Rock should be measured in solids. In case it is not possible, stacks should be made in which case 40% for voids to be deducted from the stack measurements.		
4	Loading or unloading materials such as C.I. Pipes, PVC Pipes, AC Pressure Pipes, DI Pipes, SW Pipes, PVC Pipes, A.C/Specials less than 300 mm dia upto 4 m in length including stacking.		
a.	C.I. Pipes/D.I. Pipes and fittings	Per Tonne	To follow as per Standard data
b.	A.C. Pipes & Specials	Per Tonne	
c.	Stoneware pipes & Specials	Per Tonne	
d.	P.V.C. Pipes and fittings	Per Tonne	
5	Loading or unloading materials such as C.I. Pipes, DI pipes, SW pipes, AC pressure pipes & fittings/ specials from 300 mm to 600 mm dia upto 4 m in length including stacking.		
a.	C.I. Pipes/D.I. Pipes and fittings	Per Tonne	To follow as per Standard data
b.	A.C. Pipes & Specials	Per Tonne	
c.	Stoneware pipes & Specials	Per Tonne	



Sl. No.	Description	Unit	Scheduled Rates for 2021-22
6	Loading or unloading materials such as C.I. Pipes, DI pipes, PVC pipes, AC pipes less than 300 mm dia, above 4 m in length including stacking.		
a.	C.I. Pipes/D.I. Pipes and fittings	Per Tonne	To follow as per Standard data
b.	A.C. Pipes & Specials	Per Tonne	
c.	P.V.C. Pipes and fittings	Per Tonne	
7	Loading or unloading materials such as C.I. Pipes, DI pipes, AC pipes from 300 mm to 600 mm above 4 m in length including stacking.		
a.	C.I. Pipes/D.I. Pipes and fittings	Per Tonne	To follow as per Standard data
b.	A.C. Pipes & Specials	Per Tonne	
	Note:- For loading and unloading the above materials at Railway Stations, the rates may be adopted based on the competitive quotations or the hammalae charges if prevailing.		
8. a.	Lowering C.I. / D.I. Pipes (all classes) and specials (fittings) with s/s ends carefully into trenches and laying them true to alignment and gradient including all sundries but excluding cost and conveyance of pipes from source of supply (Ref to specifications. BIS No.3114/1994)		
	Diameter of Pipe/Fittings in mm :		
	80mm to 1000mm dia	Per Metre	To follow as per Standard data
	1100mm dia	Per Metre	1360.00
	1200mm dia	Per Metre	1558.00
8. b.	Lowering C.I. / D.I. Pipes (all classes) and specials (fittings) with flanged ends carefully into trench and laying them true to alignment and gradient including all sundries but excluding cost and conveyance of pipes from source of supply. (Reference to specifications. BIS No.3114/1994).		
	Diameter of Pipe/Fittings in mm :		
	80mm to 750mm dia		To follow as per Standard data
	800mm dia	Per Metre	651.00
	900mm dia	Per Metre	846.00
	1000mm dia	Per Metre	1099.00
	1100mm dia	Per Metre	1354.00
	1200mm dia	Per Metre	1611.00
9. a.	Jointing CI /DI pipes & fittings with S/S ends including cost of pig lead, Spun yarn and sundries such as cost of fuel for melting lead, filling with water with lead up to 500m and testing to required pressure complete. (Reference to specifications. BIS No.3114/94/12288:1997).		
	Diameter of Pipe/Fittings in mm :		
	80mm to 800mm		To follow as per Standard data
	900mm dia	Each Joint	14965.00
	1000mm dia	Each Joint	16759.00
	1100mm dia	Each Joint	18528.00
	1200mm dia	Each Joint	20271.00
9. b.	Jointing C.I./ D.I. pipes and fittings with rubber gasket (push-on-joint), excluding the cost of the gasket but including all sundries filling with water, with a water lead up to 500m and testing to required pressure, etc. complete (Reference to specifications IS 3114/1994/12888/1997)		
	Diameter of Pipe/Fittings in mm :		

Sl. No.	Description	Unit	Scheduled Rates for 2021-22
	80mm to 1000mm dia	Each Joint	To follow as per Standard data
	1100mm dia	Each Joint	1075.00
	1200mm dia	Each Joint	1163.00
10	Jointing CI/DI pipes, fittings and valves with flanged ends including cost of jointing materials such as bolts, rubber insertion, white lead including filling with water, with lead up to 500 meters and testing to required pressure complete. (Reference to specifications. BIS No.3114/1994.)		
	Diameter of pipe/Fittings/ valve in mm :		
	80mm to 750mm dia	Each Joint	To follow as per Standard data
	800mm dia	Each Joint	5988.00
	900mm dia	Each Joint	7106.00
	1000mm dia	Each Joint	8227.00
	1100mm dia	Each Joint	9372.00
	1200mm dia	Each Joint	10550.00
11a	Lowering the RCC plain ended pipes carefully into the trench laying them true to alignment and gradient, jointing RCC pipes with Cement joints including curing, the cost of jointing materials i.e., Cement Mortar (1:1.5), hemp yarn etc., and testing including filling with water with a water lead upto 500 metres as per BIS No.783/85.		
	Dia in mm	Per Metre	
	80	Per Metre	76.00
	100	Per Metre	103.00
	150	Per Metre	153.00
	200	Per Metre	205.00
	250	Per Metre	256.00
	300	Per Metre	314.00
	350	Per Metre	366.00
	400	Per Metre	417.00
	450	Per Metre	471.00
	500	Per Metre	522.00
	600	Per Metre	627.00
	700	Per Metre	731.00
	800	Per Metre	836.00
	900	Per Metre	939.00
	1000	Per Metre	1044.00
	1100	Per Metre	1149.00
	1200	Per Metre	1254.00
	1400	Per Metre	1463.00
	1600	Per Metre	1672.00
	1800	Per Metre	1881.00
11b	Lowering the RCC S/S pipes carefully into the ready made trenches laying them true to alignment and gradient, jointing with rubber rings and testing including filling with water lead upto 500 meters excluding cost of rubber rings as per BIS No. 783/1985.		
	80mm to 600mm	Per Metre	To follow as per Standard data
	700mm dia	Per Metre	423.00
	800mm dia	Per Metre	506.00
	900mm dia	Per Metre	607.00
	1000mm dia	Per Metre	726.00
12	Lowering and Jointing G.I. pipes and specials / fittings including excavation of trench of 0.5m width and 0.50 m depth in all soils except rock requiring blasting and refilling trenches after laying and		

Sl. No.	Description	Unit	Scheduled Rates for 2021-22
	jointing pipes and also including cost of jointing materials but excluding the cost of pipes. Reference to specifications. BIS No.783/85		
a	G.I. Pipes :Dia in mm		
	15mm to 150mm	Per Metre	To follow as per Standard data
12b	Lowering, Laying, jointing of PVC/HDPE/MDPE pipes as per BIS No.7634 part-III/75 for PVC and BIS No.7634 part-II/75 for HDPE pipes including earth work excavation, testing to hydraulic test pressure including cost of water with a water lead of 500m etc., complete, but excluding road cutting (BT/CC) charges., Complete.		
	Dia (OD) in mm		
	20mm dia	Per Metre	41.00
	25mm dia	Per Metre	42.00
	32mm dia	Per Metre	47.00
	40mm dia	Per Metre	47.00
	50mm dia	Per Metre	47.00
	(ii) If the depth of excavation is more than 0.6 m separate rates to be worked out. The above rates are excluding road cutting if any.		
13	Lowering and laying in ready made trench true to alignment and gradient, jointing, and testing of Stone ware pipes including cost of jointing material such as Cement Mortar (1:1) proportion and hemp yarn but excluding cost and conveyance of pipe. (Reference to specifications BIS No. 6530/72)		
	Dia of Pipes in mm .		
	100mm to 450mm	Per Metre	To follow as per Standard data
14	Lowering, laying, jointing and testing to hydraulic test pressure including cost of water with minimum water lead of 500m for <u>UPVC pressure pipes</u> in ready made trenches true to alignment and gradient including all sundries but excluding cost & conveyance of pipes from source of supply and jointing materials as per BIS No. 7634 - Part III - 1975.		
	Dia of Pipes in mm .		
	63mm to 315mm	Per Metre	To follow as per Standard data
15	Laying and jointing of HDPE pipes in ready made trench by butt fusion welding as per IS:7634 - part-II/1975 as amended from time to time to the alignment and gradient and testing the pipeline to the required pressure.		
	Outer Dia of pipes in MM		
	63mm dia OD	Per Metre	43.00
	75mm dia OD	Per Metre	47.00
	90mm dia OD	Per Metre	54.00
	110mm dia OD	Per Metre	67.00
	125mm dia OD	Per Metre	80.00
	140mm dia OD	Per Metre	84.00
	160mm dia OD	Per Metre	91.00
	180mm dia OD	Per Metre	100.00
	200mm dia OD	Per Metre	109.00
	225mm dia OD	Per Metre	121.00
	250mm dia OD	Per Metre	128.00
	280mm dia OD	Per Metre	141.00
	315mm dia OD	Per Metre	218.00
	355mm dia OD	Per Metre	243.00
	400mm dia OD	Per Metre	271.00

Sl. No.	Description	Unit	Scheduled Rates for 2021-22
	450mm dia OD	Per Metre	301.00
16	Lowering, keeping in position and fixing C.I / D.I sluice valves (with cap / with hand wheel & Reflex valves) excluding cost of bolts, nuts, rubber insertion, sluice valve and tail pieces		To follow as per Standard data
	<u>Dia of Valve in mm.</u>		
	80mm to 600mm	Each	
17	Labour charges for fixing Air valves including boring the mains and threading the bore fixing nipple etc., complete.		
	<u>Dia of Air valve in mm.</u>		
	25mm dia	Each	To follow as per Standard data
	40mm dia	Each	
	50mm dia	Each	222.00
	80mm dia	Each	239.00
18	Labour charges for fixing Kinetic Air Valves with isolating Sluice valves, Double Air valves/ Air Cushion valve excluding cost of jointing materials such as bolts, nuts and rubber insertions etc., complete.		
	<u>Dia of Air valve in mm.</u>		
	80mm dia (Double Air valves)	Each	297.00
	100mm dia (Double Air valves)	Each	347.00
	125mm dia (Double Air valves)	Each	515.00
	150mm dia (Double Air valves)	Each	563.00
	200mm dia (Double Air valves)	Each	613.00
19	Uprooting C.I./ DI Pipes by melting the lead, loosening the joints, scraping the pipes, hoisting and keeping within a lead of 10 m but excluding earth work excavation and refilling.		
	80mm to 600mm	Per Metre	To follow as per Standard data
20	Uprooting of RCC pipes including breaking the collars, loosening the joint, separating the pipes, hoisting and keeping within a lead of 10 m but excluding earthwork excavation and refilling.		
	100mm to 300mm	Per Metre	To follow as per Standard data
21	Removing old G.I. pipes and specials / fittings and cleaning, scraping the pipes, hoisting and keeping with in 50m lead but excluding earth work excavation of trenches and refilling.		
	<u>Dia of Pipes in mm</u>		
	15mm to 50mm	Per Metre	To follow as per Standard data
22	Cutting C.I./ DI Pipes without water in mains.		
	<u>Dia of Pipes in mm</u>		
	80mm to 600mm	Each cut	To follow as per Standard data
	700mm dia	Each cut	654.00
	750mm dia	Each cut	706.00
	800mm dia	Each cut	750.00
	900mm dia	Each cut	842.00
	1000mm dia	Each cut	935.00
	1100mm dia	Each cut	1032.00
	1200mm dia	Each cut	1126.00
23	Cutting A.C. Pipes without water in mains.		
	<u>Dia of Pipes in mm</u>		
	80mm dia	Each cut	39.00
	100mm dia	Each cut	39.00

Sl. No.	Description	Unit	Scheduled Rates for 2021-22
	125mm dia	Each cut	39.00
	150mm dia	Each cut	39.00
	200mm dia	Each cut	41.00
	250mm dia	Each cut	66.00
	300mm dia	Each cut	66.00
	350mm dia	Each cut	82.00
	400mm dia	Each cut	91.00
	450mm dia	Each cut	113.00
	500mm dia	Each cut	127.00
	600mm dia	Each cut	138.00
24	Drilling and tapping CI/ DI / GI Main and fixing brass screw down ferrule and plug.		
	10 mm to 20mm	Each Tapping	To follow as per Standard data
	25 mm to 40mm	Each Tapping	
25	Cutting road surface including stacking of excavated materials for pipe line trench work.		
	a) Cutting B.T.Road surface	1 Cum	1127.00
	b) Cutting C.C.Road Surface	1 Cum	2345.00
	c) Cutting Water Bound Macadam/Wet Mix Macadam Road.	1 Cum	288.00
26	Bailing out water		
	a) Bailing out water from the pipe line trenches with oil engine driven pumpsets, including hire charges, fuel charges and wages for Driver and Helper.	HP-Hour	To follow as per I&CAD SoR
	b) Bailing out water from the pipe line trenches with Electric Driven pumpset including hire charges, current charges and wages for Driver and Helper.	HP-Hour	
27	Shoring and strutting of trenches for water and sewer main.		
	a) Single Staging from (0 to 2.5 Mts.)	1 Sqm of Shoring area	To follow as per Standard data
	b) Double staging from (2.5 m to 4.5 Mts.)	1 Sqm of Shoring area	
28	Barricading, hoarding, lighting and watching etc., for water supply and sewerage works for trenches.	1 RMT	To follow as per Standard data
29	Excavation of trenches for infiltration galleries, syphon lines and connecting mains in all soils under water including all leads, lifts, shoring, strutting, bailing out water and removal of shoring and strutting materials, after completion of pipe line work.		
	a) 0 to 1 m deep under water.	1 Cum	1392.00
	b) 1 to 2 m deep under water.	1 Cum	1993.00
	c) 2 to 5 m deep under water.	1 Cum	2992.00
	d) Beyond 5 m deep under water for every additional 1 m depth over item 'c'	1 Cum	572.00
	NOTE:- The above rates do not include rock requiring blasting or chiselling.		
30	Laying and jointing perforated RCC pipes inclusive of bailing out water and jointing with Cement fillets and all other incidental charges for infiltration gallery inclusive of bailing out water by pumping to keep the trench reasonably dry to facilitate the work excluding cost of perforated pipes and collars.	Per Metre	49.00
	per every 25 mm dia/mtr.		
31	Centring and scaffolding charges for RCC members including all materials and labour charges for forming and dismantling.		
a)	for R C C Elevated Service Reservoir of staging up to 15 metre below L W L.		

Sl. No.	Description	Unit	Scheduled Rates for 2021-22
	1) Slabs for thickness (150 mm to 300 mm)	One Sqm of Centering area	4151.00
	2) Slabs for thickness above 300 mm, extra for every 50 mm thickness.		497.00
	3) Side walls curved surfaces including both sides of wall per Sqm of member area.		3135.00
	4) Side wall straight surfaces including both sides of wall per Sqm of member area.		2792.00
	5) Top dome		1709.00
	6) Bottom Dome.		3400.00
	7) Roof Slab.		938.00
	8) Columns, braces and beams		1399.00
	9) Circular braces, ring beams & circular column.		1536.00
	10) Conical Slab 150 mm to 300 mm thickness		4348.00
	11) Conical Slab for above 300 mm thickness, extra for every 50mm thickness		551.00
	Note:- For RCC ELSR of staging above 15 m, the % increase in these rates shall be as follows. above 15 m - up to 18 m --- 9% above 18 m-up to 21m --- 15% above 21m- up to 24 m --- 21% above 24 m- up to 27m --- 27% above 27m --- 30%		
b)	For Ground level works/ Below the Ground level works :-		
	1) Slabs	1 Sqm	To follow as per R&B SoR
	2) Beams & Lintels	1 Cum	
	3) Sun shades	1 Sqm	
	4) RCC vertical walls of plane surface including both sides of wall per Sqm of member area	1 Sqm of centering area	1149.00
	5) RCC vertical walls of circular faces including both sides of wall per Sqm of member area.		1463.00
	6) Dome		1609.00
	NOTE: The above centering charges are applicable for water retaining structures only.		
c)	Centering and scaffolding charges including labour charges for erection and dismantling of shuttering and scaffolding for CC /RCC side walls of Culverts / Storm water drains /Nalas (where sewage/Sullage flows through them and not for normal / routine nature of drain works)	1 Sqm	346.00
32	Lift or delift of materials :		
	a) Lifting of Cement concrete for RCC Elevated/Ground reservoir. For every 3m height or part thereof over the initial lift of 3 m. Rate/1 Cum.	1 Cum	175.00
	b) Delifting the materials such as stones, concrete etc., for concrete below ground level for construction of ground level reservoirs, inspection wells, test wells and sump wells etc., for every 1 m depth or part thereof beyond the initial depth of 4 meters from ground level. Rate / 1 cum	1 Cum	53.00
33	Labour charges for fixing ventilating shafts complete with all accessories.	Each	To follow as per Standard data
34	Labour charges for fixing water closets including fixing of foot rests (for all sizes).	Each	Relevant Building SoR items
35	Labour charges for fixing of flushing cistern including fixing of flush pipes, lead pipe, jointing etc., complete	Each	
36	Labour charges for fixing wash hand basin including fixing of inlet and waste pipe connections etc., complete	Each	
37	Fixing urinal with inlet and waste pipe connections etc., complete.	Each	
38	Refilling the trench for pipe line with excavated earth including	10 Cum	

Sl. No.	Description	Unit	Scheduled Rates for 2021-22
	watering and tamping etc., complete		
39 (a)	Extra allowance for isolated scattered works viz., valve pits, public fountains, meter pits and manholes, etc., complete for maintenance works including cost of material.	Each	50% extra over the basic cost of Work.
(b)	Repairs to the existing mains, interconnections, replacement of valves/specials etc., including the cutting, jointing, bailing out of water, drying, earth work excavation etc., complete, but excluding cost of pipes, valves and specials.		150% extra over the basic cost of work
40	Removal of wet silt and sludge from sullage drains, with aid of baskets and vessels, etc with initial lift of 3 m and lead of 50 m.	1 Cum	
	Labour component		396.00
	Implements		43.00
41	Well sinking in sandy and other loose soils under water either by manual labour, divers, or dredgers, weighting the top of staining to assist sinking etc., including dewatering and other incidental charges such as hire charges for mechanical equipment etc.,		
	Upto 2 m below GL/m	Per metre	To adopt as per Standard data
	From 2 to 4 m below GL/m	Per metre	
	From 4 to 6 m below GL/m	Per metre	
	From 6 to 8 m below GL/m	Per metre	
	From 8 to 10 m below GL/m	Per metre	
	Note:-Below 10 m for every metre depth or part thereof add Rs.250/- per m. For higher dia, observed data is to be prepared and got approved.		
42	Sinking in Hard strata other than rock but in soils like limestone, gravel, clay under water including, pumping dewatering, hire charges for mechanical equipment etc., complete.		Observed Data
43	Rates for OHSRs/ELSRs including fixtures with a staging of 15 m, with seismic analysis Zone -II and excluding Seigniorage charges.		
a	500 Kilo litres	Per litre	18.61
b	1000 Kilo litres	Per litre	15.13
c	1500 Kilo litres	Per litre	13.97
d	2000 Kilo litres	Per litre	13.20
e	2500 Kilo litres	Per litre	12.51
	1) The above rates are arrived with base rate of Cement Rs.5600/- per MT & Steel for Rs.56000/- per MT (Fe-500/500D/550D from Primary Producers) for the month of May-2021		
	2) All concrete components shall be designed with minimum of M30 Design Mix.		
	3) For intermediate capacities proportional rates shall be adopted.		
	4) The foundations shall be designed for Annular Raft Footings. The above rates are applicable for Elevated Level Services Reservoirs / OHSRs for SBC of 15 T/Sqm.		
	a) For every decrease of 2.50 T/Sqm of SBC, the rate shall be increased by 2.5% on basic rate .		
	b) For every increase of 2.5 T/Sqm of SBC, the rate shall be decreased by 1.0% on basic rate up to 20 T/Sqm.		
	c) For SBC below 10T/sqm , solid raft shall be provided and for solid raft the rate shall be increased by 10% on basic rates		
	5) For staging less than 15 m, the rate shall be decreased by Rs.0.05 paise on basic rate per litre per every metre decrease in staging.		
	6) For staging above 15 m, the rate shall be increased by Rs.0.10 paise on basic rate per litre per every metre additional staging.		
	7) The above rates shall be increased / decreased due to increase/decrease in the cost of Cement by Basic rate x (Rc-5600)/5600 x 0.069		

Sl. No.	Description	Unit	Scheduled Rates for 2021-22
	Rc = Rate of Cement (Rs per MT) at the time of preparation of estimate.		
	8) The above rates shall be increased / decreased due to increase/decrease in the cost of Steel by Basic rate x (Rs-56000)/56000 x 0.135		
	Rs = Rate of Steel (Rs. per MT) (Fe-500/500D/550D from Primary Producers) at the time of preparation of estimate.		
	The above formula applicable only for preparation of estimate. The price adjustment shall be adopted on the actual consumption of Steel and Cement.		
	9 a) Rate inclusive of three coats of epoxy paint Food Grade of best quality to inner surface of the Reservoir including roof.		
	b) Rate inclusive of 2 coats of weather proof emulsion painting for external surfaces over one coat of primer of approved make, lettering, all required fixtures, Pipes, Pipe specials, valves of DI material, Valve chambers etc., for pipe connections including cost of pipes, specials and valves as per departmental directions and drawings.		
	10) The above rates adopted for a wind pressure upto "250 kg/sq m". For every 50 kg/sqm decrease in wind pressure, the rate shall be decreased by 2.5%		
	11.a)The Basic rate is adopted by considering the design for Seismic forces for Zone-II only of seismic zones.		
	b) The basic rates shall be increased by 15 % for Zone-III of seismic zones.		
	12. The ELSR/OHSR shall be designed with minimum of two rows of columns for capacities from 500 KL & upto 1000KL.		
	13. The ELSR/OHSR shall be designed with minimum of three rows of columns for capacities above 1000KL.		
	14) The basic rate is inclusive of following fixtures		
	i) Pipe connections & Specials with D.I materials		
	a) All pipe connections for Inlet, Out let (2 Nos), Over Flow, Scour pipes shall be provided with D/F DI material. b) The Valves for above pipe connections also shall be of DI material of PN 16 c) All specials such as Bends, Tees, Puddle pipes, Reducers, Duckfoot Bends, Bell mouths etc., shall be of DI material.		
	ii) The sizes of the verticals for ELSR/OHSR shall be:		
	a) For 500 KL to 750 KL ELSRs Inlet Pipe -Not less than 300mm dia. Out let Pipe -Not less than 350mm dia and DI Valves 02 Nos Over Flow pipe -Not less than 350m dia Scour Pipe -Not less than 200mm dia		
	b) For 800 KL to 1500 KLELSRs Inlet Pipe -Not less than 400mm dia. Out let Pipe -Not less than 450mm dia and DI Valves 02 Nos Over Flow pipe -Not less than 450m dia Scour Pipe -Not less than 200mm dia		
	c) For above 1500 KL to 2500 KL ELSRs Inlet Pipe -Not less than 400mm dia. Out let Pipe -Not less than 500mm dia and DI Valves 02 Nos Over Flow pipe -Not less than 500m dia Scour Pipe - Not less than 200mm dia		
	iii) Manhole Frames & Covers		
	a) All man hole Frames & Covers shall be made of CI/DI materials with min. size of 0.60mX 0.60m - For Roof & Valve Chambers.		
	iv) CI/D.I Double Swan neck ventilators (min.of 150mm dia) shall be provided in top dome and slab with mosquito/fly proof nets - 8Nos minimum.		



Sl. No.	Description	Unit	Scheduled Rates for 2021-22
	v) RCC Finial ventilator with fly/bird protection with Copper or Stainless Steel mesh - 1 No.		
	vi) RCC precast ladders of 0.60 m width - 2 Nos.		
	vii) RCC dog legged stair case of 1.00 m flight width and 1.20 m landing width hand railing of 1.2 m height by using Stainless Steel pipe of grade 304, with top railing of 40mm dia pipe, middle railing of 25mm dia and verticals with 40mm dia at an interval not more than 1.00m c/c. - 1 No		
	viii)The staircase shall be enclosed with brick masonry walls on three side and collapsible MS gate on front side up to 1 <sup>st</sup> brace level, to prevent unauthorized entry.		
	ix) Construction of R.C.C valve chambers as per Standard Drawings with RCC cover slab fixed with CI/DI manhole Frame & Cover with lock and Key arrangement. The Mix shall not be less than VRCC M 20 grade with 150mm thick side walls, 150mm thick top slab, 150mm thick base slab over base course of 100mm thick (1:4:8) prop.		
	x) Balcony of 1.00 m width at floor slab level / middle ring beam level by using Stainless Steel pipe of grade 304 hand railing up to 1.20 m height, with top railing of 40mm dia pipe, middle railing of 25mm dia and verticals with 40mm dia at an interval not more than 1.00m c/c.		
	xi) Water Level Indicator of reputed make - Digital type (1 No) and Conventional type (1 No)		
	xii) Lightning Arrestor with all its accessories complete including earthing, with relevant IS Codes - 1 No.		
44	Rates for OHSRs/ELSRs with a staging of 12 m for Zone-II Seismic and excluding Seigniorage charges.		
a	Upto 10,000 Litres capacity	Per litre	88.86
b	20,000 Litres capacity	Per litre	52.83
c	40,000 Litres capacity	Per litre	42.54
d	60,000 Litres capacity	Per litre	30.32
e	1,00,000 Litres capacity	Per litre	26.79
f	1,20,000 Litres capacity	Per litre	23.42
g	1,50,000 Litres capacity	Per litre	21.29
h	2,00,000 Litres capacity	Per litre	20.07
i	2,50,000 Litres capacity	Per litre	19.47
j	3,00,000 Litres capacity	Per litre	18.84
k	4,00,000 Litres capacity	Per litre	16.47
l	4,50,000 Litres capacity	Per litre	14.68
	NOTE: -1) For intermediate ranges proportional rates may be adopted. All VRCC minimum of M30 grade design mix.		
	2)The above rates are applicable for Elevated Level Services Reservoirs / OHSRs with Raft Foundation and a rate of Rs.5600/- per tonne for Cement and Rs.56000/- per tonne for Steel.		
	3) For every metre of staging less than 12 m, the rate shall be reduced by Rs.0.05 paise per litre per every metre of difference in staging.		
	4) For every metre of staging above 12 m, the rate shall be increase by Rs.0.10 paise per litre per every metre of additional in staging.		
	5)The above rates shall be increased / decreased due to increase / decrease in the cost of Cement by Basic Rate x (Rc-5600)/5600 x 0.069 Rc = Rate of Cement (Rs per MT) at the time of preparation of estimate		
	6)The above rates shall be increased / decreased due to increase / decrease in the cost of Steel by Basic Rate x (Rs-56000)/56000 x 0.135		

Sl. No.	Description	Unit	Scheduled Rates for 2021-22
	Rs = Rate of Steel (Rs per MT) (Fe-500/500D/550D from Primary Producers) at the time of preparation of estimate.		
	The above formula applicable only for preparation of estimate. The price adjustment shall be adopted on the actual consumption of Steel and Cement.		
	7) Rate inclusive of three coats of food grade epoxy paint to inner surface of the reservoir including roof dome.		
	8) The above rates be adopted for estimate purposes for construction of ELSR for a finished work including 2 coats of weather proof emulsion painting for external surfaces over one coat of primer of approved make, lettering, all required fixtures, pipes, bends, valves etc., for pipe connections but excluding cost of pipes, bends and valves as per departmental designs and drawings.		
	9) The above rates are applicable for wind pressures upto 250 kg / sq m. For decrease in wind pressure the rate has to be decreased by 2.5% per every 50 kg/sqm. If the ELSR / OHSR is to be designed for seismic forces also, cost shall be arrived by working out detailed quantities based on the designs.		
	10) For Tribal/Agency area, the above rates shall be increased by 5%.		
	11) If the ELSR is to be designed for seismic forces a) The above rates are applied upto Zone-II earth quake. b) for Zone-III earth quake the above rates are to be increased by 15%.		
	12) Fixtures include :		
	a) RCC or Aluminium ladder inside 0.60 m wide.		
	b) spiral staircase on the outside shall be provided upto 200KL ELSR. Above 200KL ELSR Capacity dog legged staircase shall be provided with staircase flight width of 1.0mts and landing width of 1.20m. S.S railing to stair case upto 1.2m height.		
	c) Lightning arrestor, including conductor and earthing etc with relevant IS codes.		
	d) RCC ventilators with copper or stainless Steel fly proof mesh.		
	e) D.I Manholes frame and cover 0.60x0.60 m as per IS specifications (light duty) - 2 Nos.		
	f) Water level indicator of good quality with ebonite/ copper float approved pattern - 1 No.		
	g) The ladder shall be with Aluminium and Verticals with HDPE of 10kg/Sqcm shall be provided for single column OHSRs only.		
	h) The increase in staging shall be at 1.0mt interval.		
	i) The railing provided to the gallery and stair case shall be with stainless Steel of grade 304 for a height of 1.20m.		
	j) The dog legged staircase shall be enclosed with brick/CRS wall on three sides and front side with PVC door of standard make up to 1st brace level from ground level to prevent unauthorized entry.		
	k) D.I swan neck ventilators shall be provided in top dome and slab-4Nos minimum.		
	l) The above rates are exclusive of all inlet, outlet connections, valves and bolts & nuts but including labour charges for hoisting, jointing with rubber insertion, nuts and bolts. All valves near inlet, outlet and for scour of ELSRs shall be D.I valves.		
45	Construction of Rapid Gravity Filtration Plant including all Civil, Mechanical and Electrical works using sand as filter media, duly following relevant IS codes in the design of plant components including trial running for 90 days etc., complete and excluding Seigniorage charges.		
	1) 2.0 Mld	Per litre	5.02
	2) 5.0 Mld	Per litre	4.01
	3) 10.0 Mld	Per litre	3.43

Sl. No.	Description	Unit	Scheduled Rates for 2021-22
	4) 20.0 Mld	Per litre	2.94
	5) 30.00 Mld and above.	Per litre	2.60
	NOTE :-		
	a) For intermediate capacities proportional rates may be adopted		
	b) The above rates are applicable with Cement @ rate of Rs.5600/- MT and Steel of Rs.56000/MT (Fe-500/500D/550D from Primary Producers)		
	c)The above rates shall be increased / decreased due to increase / decrease in the cost of Cement by Basic Rate x (Rc-5600)/5600 x 0.069 Rc = Rate of Cement (Rs per MT) at the time of preparation of estimate only		
	d)The above rates shall be increased / decreased due to increase / decrease in the cost of Steel by Basic Rate x (Rs-56000)/56000 x 0.135 Rs = Rate of Steel (Rs per MT) (Fe-500/500D/550D from Primary Producers) at the time of preparation of estimate.		
	The above formula applicable only for preparation of estimate. The price adjustment shall be adopted on the actual consumption of Steel and Cement.		
	The components of the filtration plant will include the following		
	A) Civil Works (All works of VRCC minimum of M30 design mix)		
	1) Stilling Chamber including Aeration cascade		
	2) Pre-Settling tank shall be provided for 30 MLD and above capacities of WTP for a minimum of 1 hour capacity.		
	3)Raw water channel with Stainless Steel Weir of SS304L Grade material and also with digital flow meters.		
	4) Flash Mixer chamber with Flash mixing arrangements including SS shaft & SS Blades with gear wheel arrangements etc, Using 304L Grade Steel.		
	5) Clariflocculator / Flocculation tanks with the components of central driven circular clarifier with scrapper & bridge arrangements made with Stainless Steel Grade 304 L tubes /angulars for durability & chemical resistant with wheel arrangements etc.,		
	6) Filter house, Chemical house, Alum store, Laboratory room, Chlorination plant room, toilet etc. (All structures shall be provided with RCC roof only).Chemical house & Chlorinator rooms are to be isolated.		
	7) Wash water tank of suitable capacity shall be constructed independently		
	8) All the Doors and Windows shall be of UPVC. The entrance door shall be minimum size of 2.40 X 2.40 mts.		
	9) All pipes and valves in Plant shall be of D.I. materials. All the Connecting pipes of the plant components such as from Flash mixer to Clariflocculator/ Clarifier/Flocculation tank, to Filter beds, sludge disposal pipes shall be of D.I. material. The size of sludge disposal pipe shall be minimum of 450 mm dia with D.I D/F pipe.		
	10) The Pipe gallery way for Clear water/ Back wash water/ pipe connections shall be sufficiently spaced for easy operation, maintenance and inspection .		
	11) The bottom level of the wash water control chamber must be above G.L so as to dispose the wash water and sludge from Clariflocculator by gravity to disposal point.		
	Additional specifications		
	12) Railing for all the components (Clariflocculator, Filter House, Staircase etc.,) shall be provided with Stainless Steel of grade 304 for a height of 1.00m, with 40mm dia pipe for top horizontals,25mm dia for middle row and 40mm dia verticals spaced at interval of not		

Sl. No.	Description	Unit	Scheduled Rates for 2021-22
	more than 1.00m c/c.		
	13) Inspection / Path ways in filter beds : Middle pathway: Minimum of 1.50m, Side pathway: Minimum of 1.20m.		
	14) Flooring in the buildings (Filter house, Chemical House, Chlorinator Room, Laboratory) shall be provided with Non-skid tiles of approved make & quality, as per standard specifications. Dadoing shall be provided upto 1.80mts from floor level in chemical room and Chlorination room.		
	15) The basement of the Filtration plant building shall be minimum of 0.75m above the existing nearby Road top level.		
	16) Minimum head room of 2.00m shall be provided , at the alum mixing chambers in alum store for inspection & maintenance.		
	17) The minimum width of entrance hall for the Filter House shall be 4.50m , and Laboratory of min size .of 3.30 X 4.50m .		
	18) High efficient Air Blowers of standard make shall be installed to the design requirement with low noise pollution , environmental pollution as per PCB guide lines & Testing of blowers as per I.S norms at site.		
	19) UPVC pipes shall be provided for water drain. Filter pipe manifolds shall be assembled with HDPE pipes.		
	20) Alum storage capacity shall be designed for minimum period of 90 days. Consumables shall be provided for 2115 Running Hours of WTP.		
	21A) Chlorinator : Vacuum type chlorinator shall be provided with following specifications: a) Vacuum operated solution feed type Vacuum Regulator, Rotameter, Rate setting Valve, built-in NRV, Gas Overflow out let by manifolding to mount the system with the unit. b) The unit shall consists of Ejector with necessary accessories such as Check Valve, Drain Valve and Vacuum relief Valves - for control of chlorinator dosage. c) The Accessories and manifolds shall be chlorine resistant and made of carbon Steel seamless pipes, copper tube with brass fittings of suitable size & dimensions, with diaphragm sealed chlorine pressure gauge arrangements.		
	d) Water Booster Pump of pumping capacity ranging from 2 cum/hr to 12 cum/hr, with Head ranging from 16 to 35 MWC e) The water & solution carrying pipes shall be made of UPVC material of suitable size incl. all specials such as Tee's , Bends, couplings & NRVs and also Pressure Gauges of suitable range. f) Chlorine Gas detector with alarm indicator. The installation includes all necessary accessories, Civil and Mechanical works, manifold header installations, injector fixing, connection with UPVC pipes, solution pipings, fixing of motors as per standard specifications and commissioning of Chlorination plant to the required demand, with a defect liability period of 1 year. The chlorinator may be of any reputed make or any make of Metito/Toshocow-Jesco/Industrial devices.		
	g) Life breathing operators.		
	h) Chlorine escape BA Set.		
	i) 2 to 10 MLD Plants - 1Kg/hr Chlorinator Rate .073 paise on basic rate of WTP-for Post Chlorination		
	ii) 10 MLD to 20 MLD Plants - 2 Kg/hr Chlorinator Rate .033 paise on basic rate of WTP-for Post Chlorination		
	iii) 20 MLD to 50 MLD Plants - 5 Kg/hr Chlorinator Rate .015 paise on basic rate of WTP-for Post Chlorination		
	<b>B) Mechanical Equipment</b>		
	1) Alum dosing equipment with SS 304 material made stirrers &		

Sl. No.	Description	Unit	Scheduled Rates for 2021-22
	paddles for chemical resistance. (Alum tanks must be bound with corrosion resistant material (HDPE Lining, Bitumen Coating, tiles etc)		
	2) Flash mixer equipment with SS 304 material made stirrers & paddles for chemical resistance.		
	3) Filtration plant equipment instrumentation and piping.		
	4) Clariflocculation equipment (with stainless Steel blades) with rotating bridge arrangement etc., The equipment consists of following components a) Flocculator Drive Mechanisms These will consist of suitable H.P geared electric motor mounted on M S Frame work on bridge platform. b) Flocculating Mechanisms and raking in the flocculation compartment .These will consist of vertical shafts and arms, paddles, guides, bearings etc with stainless Steel bush bearing for the shafts at the bottom. c) Mechanism for raking in clarifier compartment.		
	d) Revolving Bridge This will be made of suitable sections with torsion proof fabrication of required length and width of 1.22 m. The Bridge will have an outer travelling trolley. The walk way will be 1.22 m wide and shall have chequered plates. The web of the bridge structure shall perform the function of hand railing on both the sides also. The scarping plates will be fitted with the scrapper frame work with hinges and stainless Steel pins and will be fitted 12 mm thick rubber edging . The scrapers will be so adjusted as to ensure smooth and even scarping of the floor. e) Bridge Drive The Bridge will be driven by an electrically operated geared motor with suitable H.P.		
	f) Bridge Drive Mechanisms This will consist of two nos. of Steel wheels driven by electric geared motor. The wheels will be fitted on the trolley with necessary bearings, pedestals etc . These wheels travel along the periphery of the clariflocculator tank on rails. g) Electrical Arrangements These will consist of electrical cables PVC insulated with copper wires run from the main switch board provided in the chemical store and run under the tank and along the central column. The cable will be connected to the central slip arrangements. The electric geared motors will be controlled from the control panel fitted on the bridge with necessary weather proof housing cabinet with necessary cables, wires, starters , switches etc .		
	5) Stainless Steel wheel shall be provided for the bridge clariflocculator.		
	6) Wash water tank fittings and pumpsets with 100% stand by.		
	7) Air blower with motor 100% stand by and pipe connections. Air Scouring type with twin lobe rotary having required capacity and pressure as per hydraulic design having following components: Blower, Base Frame for blower and motor, Foundation Bolts, Nuts and Washers, Slide Rail and Motor Bolts, V Belts, Pulley, Guard, Suction Silencer, Discharge Silencer, Safety Relief Valve and Non Return Valve , Companion Flange, Interconnection Pipe, Flexible Bellow, Safety Valve and T Connection, First Fill of Lubricants, Anti vibration Pads, Acoustic Enclosure and Motor : CGL/KEC/ABB make.		
	A) Materials of Construction : a) Housing : C.I IS 201 FG 260b) Rotor Shaft : S G IRONc) Shaft : EN 19 forged and heat treated d) Timing Gears : Cast Alloy Steel ( 20 microns) forged and heat treated.e) Pulley , Gear side , plates and covers : C.I IS 210 FG 260 f) V Belts : Reinforced rubber g) Base plate : MS Enamel Painted h) Belt Guard : MS Enamel Painted i) Fasteners : As per IS 1363/ IS 1367		

Sl. No.	Description	Unit	Scheduled Rates for 2021-22
	8)Spares & Tools and the same shall be handed over after 2 years defect liability period.		
	9)Gaseous Chlorination with cylinders has to be provided with protection measures.		
	<b>C) Electrical Equipment</b>		
	1) Necessary power supply wiring to motors and switches bus bar connections as per IE Rules.		
	2) Internal wiring and illumination and fittings and fixtures for internal and external lighting exhaust fans, ceiling fans etc.		
	3) Erecting mechanical and electrical equipment, trial run for 90 days 23.50 hours per day testing the treated water for efficient standards and maintenance of records and imparting training to staff.		
	4) Supply of 6 - Sets of completion plans and maintenance manual and brochures.		
	5) All cables shall be with of copper material, Cable ducts shall be covered with MS / Aluminium chequered plate.		
	6) Yard lighting shall be provided at 6 locations with required fixtures..		
	<b>D ) Equipment for Flow measurements</b>		
	1) Equipment for Flow of Conductivity, Turbidity, Ph value, Residual Chlorine with recording & data storage facility (Computer based) & Alarm by SMS or other methods.		
	2) Off - Site Supervisory and Data Acquisition (OSSADA) system for Raw water & Clear water flows by installing Digital Flow meters to measure the flows at Raw water Channel and at each filter bed individually and combined for measuring the quantities of water treated with a facility to record and store the readings & also to send messages to the assigned designatories about the variations/ deficiencies in the flow including alerts for back wash requirements of filter beds, and recovery of data for the past 360 days. All the Digital Flow Meters & Pressure Gauges shall be provided of standard approved make.		
	<b>Hardware:</b>		
	i) Wall mounted Sensor House for measuring Raw water & Clear water flow from Filter bed out lets with accessories.		
	ii)Electrode Type: General type, Scraper type or replaceable type Electrode made with material of SS external Ultra Touch Sensors as per requirement.		
	iii)Customised Application Requirement : Sensors with Interface logic control board with serial interfaces, On - sensor Board Buffer, Timer, RS485 Communication, Analog to Digital Sensing Sensor Circuit, 32 Sensors Sensing Tags, Interval Power Supply System , LCD 16c/2L, Filter Bed Working Status Indication LED, Filter Bed Wash Indication Button and memory of Data Storage for 30Days , status of Filter Bed Level indicator, Rating, Reading on LCD Display, Menu Driven Data for sending to Onsite Big Display, operated with Battery Power of any reputed make or any equivalent make.		
	iv)Customised Application Requirement: Power Sensors Interface logic control board with support 8 Power Sensing tags, Central System Interfacing Communication, On - board analog to Digit Convert Integrate Circuit of any reputed make or any equivalent make.		
	v)Customised Application Requirement: Centralized System with two serial interfaces, 3 Nos of Add-On ports, One external DC Power Socket, On - Board Buffer, On - Board Timer, On - Board RS485 Communication, On - Board RS 232 Communication, On - Board GPRS/GSM Module, On - Board Voice Chip, On - Board Power Sensing Module, LCD 16c/2L, Filter Bed Wash Precaution Indication		

Sl. No.	Description	Unit	Scheduled Rates for 2021-22
	with Stop Button, Memory of Data Storage for 30 Days, Total Bed Rating, Reading display on LCD Display, Menu Driven, Menu Navigate Keypad, sending data to the Web Server, Communication with GPRS , operated with Battery Power of any reputed make or any equivalent make.		
	<b>Software:</b>		
	The software shall be designed with Web Domain with Data Base Server and Web Name as per the directions of the Departmental Authorities		
	The application of Software for Web design & Desktop shall meet the following requirements:		
	Onsite Display: Letters with size of 1.5' Seven Segment LED Display with Interface for each Filter Bed, for Onsite Display, by displaying the Bed Levels, Ratings, Readings in 3 Columns , for each bed of the plant in successive rows and cumulative results at the bottom of the screen.		
	Off Site Display: Letters with size of 1.5' seven Segment LED Display with Interface GPRS/GSM Modules Offsite Display, with Display of Bed Total Rating, Total Cumulative Reading as specified on On-site Display Features.		
	The system shall have also the features of Onsite Bed Wash Voice Precautions for Bed Levels, Readings, Ratings, Bed Capacity Readings and Ratings and Bed Low Level Triggering, before & after Bed wash.		
	The software shall also have the features of sending messages to the mobiles of the Departmental designatories indicating Bed Low Levels, Power Supply timings, Bed Wash timings and its status, Power Supply timings and its status Grid View Table, Motor Working time and its status Grid View Table, all trigger events and schedule information and including all Snap View Reports, all Daily, Monthly, Yearly Reports, all Power Working Reports, all Power Events Information etc.,.		

**1. R.C.C. PLAIN ENDED PIPES**

Sl. No.	Description				
1	Manufacture, Supply and Delivery of R.C.C. Spun / Vibrated Cast (Reinforced) Plain ended pipes conforming to B.I.S 458/2003, Ex-factory, Excluding transportation & taxes.				
	Size	Unit	Rate		
			NP - 2 Class	NP - 3 Class	NP - 4 Class
	80 mm dia	Metre	174		
	100 mm dia	Metre	202		
	150 mm dia	Metre	240		
	200 mm dia	Metre	285		
	225 mm dia	Metre	307		
	250 mm dia	Metre	330		
	300 mm dia	Metre	470	1042	1080
	350 mm dia	Metre	589	1326	1350
	400 mm dia	Metre	679	1465	1498
	450 mm dia	Metre	828	1673	1691
	500 mm dia	Metre	915	1830	2096
	600 mm dia	Metre	1349	2733	3255
	700 mm dia	Metre	1732	3408	4365
	800 mm dia	Metre	2134	4499	5720
	900 mm dia	Metre	2684	5662	7115
	1000 mm dia	Metre	3248	7011	9701
	1100 mm dia	Metre	3877	8283	11254
	1200 mm dia	Metre	4614	9760	13165
	1400 mm dia	Metre	6264	12645	18268
	1600 mm dia	Metre	7301	16430	22181
	1800 mm dia	Metre	9533	21795	29777
	2000mm dia	Metre		26500	36400
	2200mm dia	Metre		31629	43608
	2400mm dia	Metre		36760	50819

Note: All the prices are ex-works. Taxes extra as applicable at the time of supply.

The above rates of RCC Plain ended pipes are based on the following raw materials cost.

Cement Rs.5600/- per MT (excluding all taxes but including freight).

Steel (M.S. Rods) - Rs.55000/- per MT. (excluding all taxes but including freight).

The revised cost of RCC pipes due to increase / decrease in the cost of raw materials shall be as per the following formula.

Revised Cost = Cost as per the above table + R1 + R2

R1 = Variation (increase / decrease) in cost (Rs. per metre) due to change in the cost of M.S. Rods  
=  $(S2 - S1) / 1000 \times Ws$ .

R2 = Variation (increase / decrease) in cost (Rs. per metre) due to change in the cost of Cement  
=  $(C2 - C1) / 1000 \times Wc$ .

S1 = Rs.55000/- , S2 = Cost of M S Rods (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate.

C1 = Rs.5600/- C2 = Cost of Cement (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate.

Ws = Weight of MS Rods required (Kg.) per metre of pipe as per IS:458/2003.

Wc = Weight of Cement required (Kg.) per metre of pipe.



**2. R.C.C. COLLARS**

Sl. No.	Description				
1	2				
1	Manufacture, Supply and Delivery of R.C.C. Collars conforming to B.I.S. 458/2003 (rate per each collar) suitable for R.C.C. Plain ended pipes including transportation but excluding taxes.				
	Size	Unit	Rate		
			NP - 2 Class	NP - 3 Class	NP - 4 Class
	80 mm dia	Each	52		
	100 mm dia	Each	53		
	150 mm dia	Each	56		
	200 mm dia	Each	75		
	225 mm dia	Each	76		
	250 mm dia	Each	86		
	300 mm dia	Each	116	166	166
	350 mm dia	Each	140	202	202
	400 mm dia	Each	155	233	233
	450 mm dia	Each	243	306	306
	500 mm dia	Each	278	366	366
	600 mm dia	Each	376	479	479
	700 mm dia	Each	488	650	650
	800 mm dia	Each	692	819	819
	900 mm dia	Each	823	953	953
	1000 mm dia	Each	962	1198	1198
	1100 mm dia	Each	1183	1515	1515
	1200 mm dia	Each	1438	1895	1895
	1400 mm dia	Each	1855	2402	2402
	1600 mm dia	Each	2366	3084	3084
	1800 mm dia	Each	2501	3981	3981

Note: Taxes extra as applicable at the time of supply.

The above rates of RCC Collars suitable to plain ended pipes are based on the following raw materials cost.

Cement. Rs.5600/- per MT (excluding all taxes but including freight).

Steel (M.S. Rods) - Rs.55000/- per MT. (excluding all taxes but including freight).

The revised cost of RCC collars due to increase / decrease in the cost of raw materials shall be as per the following formula.

Revised Cost = Cost as per the above table + R1 + R2

R1 = Variation (increase / decrease) in cost (Rs. per each) due to change in the cost of M.S. Rods  
=  $(S2 - S1) / 1000 \times Ws$ .

R2 = Variation (increase / decrease) in cost (Rs. per each) due to change in the cost of Cement  
=  $(C2 - C1) / 1000 \times Wc$ .

S1 = Rs.55000/-, S2 = Cost of M S Rods (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate.

C1 = Rs. 5600/-, C2 = Cost of Cement (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate

Ws = Weight of MS Rods required (Kg.) per each collar.

Wc = Weight of Cement required (Kg.) per each collar.

**3. R.C.C. S/S PIPES (Non - Pressure)**

Sl. No.	Description				
1	2				
1	Manufacture, Supply and Delivery of R.C.C. Spun / Vibrated Cast (Reinforced) Socket and Spigot pipes conforming to B.I.S. 458/2003 at ex-factory (rate per meter of effective length) Excluding transportation & taxes.				
	Size	Unit	Rate		
			NP - 2 Class	NP - 3 Class	NP - 4 Class
	80 mm dia	Metre	215		
	100 mm dia	Metre	242		
	150 mm dia	Metre	284		
	200 mm dia	Metre	342		
	225 mm dia	Metre	376		
	250 mm dia	Metre	400		
	300 mm dia	Metre	561	1314	1406
	350 mm dia	Metre	720	1716	1746
	400 mm dia	Metre	798	1903	1936
	450 mm dia	Metre	992	2100	2116
	500 mm dia	Metre	1141	2403	2612
	600 mm dia	Metre	1609	3371	3516
	700 mm dia	Metre	2092	4301	4583
	800 mm dia	Metre	2676	5691	6004
	900 mm dia	Metre	3376	7158	7528
	1000 mm dia	Metre	4083	8136	9072
	1100 mm dia	Metre	4821	9608	10491
	1200 mm dia	Metre	5484	11338	12281
	1400 mm dia	Metre	7748	15022	17420
	1600 mm dia	Metre	9578	19514	21181
	1800 mm dia	Metre	10874	25869	28430
	2000mm dia	Metre		31363	34399
	2200mm dia	Metre		37444	41197
	2400mm dia	Metre		43526	47998

Note: All the prices are ex-works, Taxes extra as applicable at the time of supply. The above rates of RCC S/S Non-Pressure pipes are based on the following raw materials cost Cement. Rs.5600/- per MT (excluding all taxes but including freight).

Steel (M.S. Rods) - Rs.55000/- per MT. (excluding all taxes but including freight).

The revised cost of RCC pipes due to increase / decrease in the cost of raw materials shall be as per the following formula. Revised Cost = Cost as per the above table +R1+R2

R1= Variation (increase / decrease) in cost (Rs. per metre) due to change in the cost of M.S. Rods  
 $= (S2-S1)/1000 \times Ws$ .

R2= Variation (increase / decrease) in cost (Rs. per metre) due to change in the cost of Cement  
 $= (C2-C1)/1000 \times Wc$ .

S1 = Rs.55000/- , S2 = Cost of M S Rods (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate.

C1 = Rs.5600/- , C2 = Cost of Cement (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate

Ws=Weight of MS Rods required (Kg.) per metre of pipe as per IS:458/2003.

Wc= Weight of Cement required (Kg.) per metre of pipe.

**4. R.C.C. S/S PIPES (Pressure)**

Sl. No.	Description				
1	2				
1	Manufacture, Supply and Delivery of R.C.C. Socket and Spigot pipes conforming to B.I.S. 458/2003 Ex-factory (rate per meter of effective length) Excluding transportation, taxes & duties.				
	Size	Unit	Rate		
			P1 - Class	P2 - Class	P3 - Class
	80 mm dia	Metre	273	312	353
	100 mm dia	Metre	311	370	430
	150 mm dia	Metre	427	556	688
	200 mm dia	Metre	499	715	944
	225 mm dia	Metre	562	815	1057
	250 mm dia	Metre	614	877	1120
	300 mm dia	Metre	832	1268	1588
	350 mm dia	Metre	1037	1749	2283
	400 mm dia	Metre	1232	2307	2999
	450 mm dia	Metre	1334	2737	3717
	500 mm dia	Metre	1752	3003	4252
	600 mm dia	Metre	2400	4473	5948
	700 mm dia	Metre	3188	5939	7604
	800 mm dia	Metre	3996	7145	9259
	900 mm dia	Metre	4836	8465	
	1000 mm dia	Metre	6057	9781	
	1100 mm dia	Metre	7260		
	1200 mm dia	Metre	8553		

Note: All the prices are ex-works, Taxes extra as applicable at the time of supply.

The above rates of RCC S/S Pressure pipes are based on the following raw materials cost.

Cement. Rs.5600/- per MT (excluding all taxes but including freight).

Steel (M.S. Rods) - Rs.55000/- per MT. (excluding all taxes but including freight).

The revised cost of RCC pipes due to increase / decrease in the cost of raw materials shall be as per the following formula.

Revised Cost = Cost as per the above table + R1 + R2

R1 = Variation (increase / decrease) in cost (Rs. per metre) due to change in the cost of M.S. Rods  
 $= (S2 - S1) / 1000 \times Ws$ .

R2 = Variation (increase / decrease) in cost (Rs. per metre) due to change in the cost of Cement  
 $= (C2 - C1) / 1000 \times Wc$ .

S1 = Rs.55000/- S2 = Cost of M S Rods (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate.

C1 = Rs. 5600/-, C2 = Cost of Cement (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate

Ws = Weight of MS Rods required (Kg) per metre of pipe as per IS: 458 / 2003.

Wc = Weight of Cement required (Kg) per metre of pipe.

**5. RUBBER RINGS TO SUIT R.C.C. S/S PIPES**

Sl. No.	Description				
1	<b>2</b>				
1	Manufacture, Supply and Delivery of Rubber rings to suit R.C.C. Spun / Vibrated Cast (Reinforced) Socket and Spigot pipes conforming to B.I.S 5382/ 1985 (rate per each rubber ring) including transportation but excluding taxes. the Rubber Rings shall be tested at the factory premises conforming to B.I.S. 5382/1985.				
	Size	Unit	Rate		
			NP - 2 Class	NP - 3 Class	NP - 4 Class
	80 mm dia	Each	31		
	100 mm dia	Each	39		
	150 mm dia	Each	69		
	200 mm dia	Each	80		
	225 mm dia	Each	90		
	250 mm dia	Each	99		
	300 mm dia	Each	122	158	158
	350 mm dia	Each	141	186	186
	400 mm dia	Each	156	212	212
	450 mm dia	Each	176	241	241
	500 mm dia	Each	231	275	275
	600 mm dia	Each	303	402	402
	700 mm dia	Each	411	479	479
	800 mm dia	Each	522	581	581
	900 mm dia	Each	652	786	786
	1000 mm dia	Each	763	948	948
	1100 mm dia	Each	917	1214	1214
	1200 mm dia	Each	1469	1526	1526
	1400 mm dia	Each	1615	1679	1679
	1600 mm dia	Each	2013	2050	2050
	1800 mm dia	Each	2505	2618	2618
	2000mm dia	Each		2988	2988
	2200mm dia	Each		3359	3359
	2400mm dia	Each		3729	3729
2	Manufacture, Supply and Delivery of Rubber rings to suit R.C.C. Socket and Spigot pipes conforming to B.I.S 5382/ 1985 (rate per each rubber ring) including transportation but excluding taxes. The Rubber Rings shall be tested at the factory premises conforming to B.I.S. 5382/1985.				
	Size		P1 - Class	P2 - Class	P3 - Class
	80 mm dia	Each	31	31	31
	100 mm dia	Each	39	41	41
	150 mm dia	Each	69	69	69
	200 mm dia	Each	80	80	80
	225 mm dia	Each	90	91	93
	250 mm dia	Each	99	102	105
	300 mm dia	Each	122	129	134
	350 mm dia	Each	141	162	176
	400 mm dia	Each	156	212	216
	450 mm dia	Each	176	243	249
	500 mm dia	Each	231	275	288
	600 mm dia	Each	303	341	346
	700 mm dia	Each	411	451	479
	800 mm dia	Each	522	577	577
	900 mm dia	Each	652	727	
	1000 mm dia	Each	763	877	
	1100 mm dia	Each	917		
	1200 mm dia	Each	1144		

**Note:** Taxes as applicable shall be added as per rules at the time of preparation of estimate.

**6. CONVEYANCE OF R.C.C. PLAIN ENDED PIPES**

Sl. No.	Description	Rate upto 5 Kms Lead including Loading, unloading and stacking	Rate for every additional 1 KM lead or part thereof.	Rate upto 5 Kms Lead including Loading, unloading and stacking	Rate for every additional 1 KM lead or part thereof.
1	2	3	4	5	6
1	Conveyance of R.C.C Spun / Vibrated Cast (Reinforced) Plain ended pipes on all weathered roads including loading, unloading and stacking (per metre)				
		NP - 2 Class		NP - 3 Class & NP - 4 Class	
	80 mm dia	3.90	0.16		
	100 mm dia	5.13	0.16		
	150 mm dia	7.69	0.34		
	200 mm dia	10.25	0.34		
	225 mm dia	11.59	0.50		
	250 mm dia	12.93	0.50		
	300 mm dia	18.05	0.68	50.13	1.38
	350 mm dia	25.73	1.55	54.03	1.55
	400 mm dia	28.29	1.71	64.39	2.07
	450 mm dia	37.33	2.07	69.50	2.39
	500 mm dia	39.87	2.39	75.86	2.39
	600 mm dia	57.93	3.76	114.51	5.31
	700 mm dia	73.29	5.31	127.33	6.18
	800 mm dia	86.22	5.31	153.06	6.18
	900 mm dia	99.03	5.31	200.74	11.65
	1000 mm dia	146.70	10.95	241.83	11.65
	1100 mm dia	160.86	10.95	262.44	12.68
	1200 mm dia	182.69	11.65	293.30	12.68
	1400 mm dia	220.01	11.65	398.90	13.19
	1600 mm dia	254.76	11.65	478.66	13.19
	1800 mm dia	293.30	11.65	638.18	18.51
	2000 mm dia				
	2200 mm dia				
	2400 mm dia				

**7. CONVEYANCE OF R.C.C. S/S PIPES**

Sl. No.	Description	Rate upto 5 Kms Lead including Loading, unloading & stacking	Rate for every additional 1 KM lead or part thereof.	Rate upto 5 Kms Lead including Loading, unloading and stacking	Rate for every additional 1 KM lead or part thereof.
1	Conveyance of R.C.C. Spun / Vibrated Cast (Reinforced) Socket and Spigot pipes on all weather roads including loading, unloading and stacking (per metre of effective length).				
	Size	NP - 2 & P1 Class		NP - 3 & NP - 4 Class	
	80 mm dia	5.13	0.15		
	100 mm dia	5.13	0.30		
	150 mm dia	9.02	0.30		
	200 mm dia	11.59	0.63		
	225 mm dia	12.93	0.63		
	250 mm dia	14.14	1.41		
	300 mm dia	23.16	1.56	59.14	1.87
	350 mm dia	27.07	1.71	64.39	2.17
	400 mm dia	27.07	2.02	79.76	4.06
	450 mm dia	38.66	2.17	87.45	4.06
	500 mm dia	42.44	2.34	96.47	4.37
	600 mm dia	55.36	4.06	130.00	6.23
	700 mm dia	68.18	4.37	175.00	12.31
	800 mm dia	93.91	6.70	207.19	12.31
	900 mm dia	140.24	11.98	239.27	12.31
	1000 mm dia	159.53	11.98	252.20	12.31
	1100 mm dia	180.13	12.31	270.24	12.31
	1200 mm dia	200.74	12.31	302.33	12.61
	1400 mm dia	249.63	12.31	405.25	12.61
	1600 mm dia	295.97	12.61	478.66	13.54
	1800 mm dia	366.71	12.61	638.18	18.53
		P2 - Class		P3 - Class	
	80 mm dia	5.13	0.15	5.13	0.15
	100 mm dia	5.13	0.30	5.13	0.30
	150 mm dia	9.02	0.30	9.02	0.30
	200 mm dia	11.59	0.63	15.49	1.41
	225 mm dia	15.49	1.41	18.05	1.56
	250 mm dia	16.71	1.56	21.84	1.71
	300 mm dia	32.20	1.87	37.33	2.02
	350 mm dia	39.87	2.17	51.47	2.34
	400 mm dia	47.57	2.34	68.18	4.06
	450 mm dia	60.49	3.90	84.88	4.06
	500 mm dia	68.18	4.06	102.93	6.07
	600 mm dia	90.13	4.06	149.27	7.79
	700 mm dia	135.13	8.24	217.44	12.31
	800 mm dia	178.80	11.68	277.94	12.31
	900 mm dia	217.44	12.31		
	1000 mm dia	267.57	12.61		

**8. A.C. PIPES**

The PH & ME department banned the usage of RCC & AC pipes for water supply works vide Memo no 146/T2/SoR/2014-15/2014 dated 30.06.2014. However ENC (RWS) requested in the SoR meeting on 06.05.2015 to incorporate A.C pipes rates in SoR for carrying out O&M works, accordingly the following rates are adopted.

Sl. No	Description				
1	Manufacture, Supply of A.C*. Pressure pipes (mazza process) as per BIS No: 1592/2003 as amended from time to time duly marked with BIS mark, including cost of material, incidental handling, loading and packing charges but are exclusive of transportation, unloading, stacking at departmental stores, and excluding taxes. The pipes shall be tested at factory premises conforming to IS code 1592/2003.				
	Size	Unit	Class - 15	Class - 20	Class - 25
	80 mm dia	Rate/Metre	218	240	299
	100 mm dia	Rate/Metre	288	365	447
	125 mm dia	Rate/Metre	374	464	585
	150 mm dia	Rate/Metre	525	656	822
	200 mm dia	Rate/Metre	868	1114	1414
	250 mm dia	Rate/Metre	1101	1430	1790
	300 mm dia	Rate/Metre	1540	2008	2566
	350 mm dia	Rate/Metre	1874	2438	3076
	400 mm dia	Rate/Metre	2435	3190	3959
	450 mm dia	Rate/Metre	2899	3849	4820
	500 mm dia	Rate/Metre	3573	4704	5907
	600 mm dia	Rate/Metre	5082	6642	8463
	700 mm dia	Rate/Metre	6682	9063	11719
	750 mm dia	Rate/Metre	7614	10463	13409
	800 mm dia	Rate/Metre	8711	11854	15213
	850 mm dia	Rate/Metre	9774	13333	17131
	900 mm dia	Rate/Metre	10895	14898	19162
	1000 mm dia	Rate/Metre	13450	18289	23563
2	Lowering, laying and jointing of AC pressure pipes with ac couplings or CID joints complete with Rubber rings in readymade trenches true to alignment and gradient including filling with water lead upto 500 mts and testing to required pressure including all sundries but excluding cost of jointing materials and conveyance from source of supply as per BIS No. 6530/1972				
	80 mm dia	Rate/Metre	42	42	42
	100 mm dia	Rate/Metre	62	62	62
	125 mm dia	Rate/Metre	67	67	67
	150 mm dia	Rate/Metre	80	80	80
	200 mm dia	Rate/Metre	105	105	105
	250 mm dia	Rate/Metre	126	126	126
	300 mm dia	Rate/Metre	156	156	156
	350 mm dia	Rate/Metre	264	264	264
	400 mm dia	Rate/Metre	397	397	397
	450 mm dia	Rate/Metre	482	482	482
	500 mm dia	Rate/Metre	613	613	613
	600 mm dia	Rate/Metre	659	659	659
	700 mm dia	Rate/Metre	736	736	736
	750 mm dia	Rate/Metre	819	819	819
	800 mm dia	Rate/Metre	862	862	862
	850 mm dia	Rate/Metre	919	919	919
	900 mm dia	Rate/Metre	1004	1004	1004
	1000 mm dia	Rate/Metre	1032	1032	1032

	<p>1. The above rates of AC Pipes are based on the Cement cost of Rs.5600/- per MT (excluding all taxes but including frieght).</p> <p>2. The above rates of AC pipes are based on the Fiber cost of Rs.78,500/- per M.T (excluding all taxes but including frieght)</p> <p>For any Increase/ Decrease in the rate of cement, the price of AC pipe per Rmt shall be increased/decreased as under.</p> <p><math>W \times 0.85 \times IC</math> Where W = Weight of pipe in Kg's/Rmt  IC = Increase/Decrease in cost of cement/Kg</p> <p>For any increase/decrease in the rate of fiber, the price of AC pipe per Rmt shall be increased/Decreased as under :</p> <p><math>W \times 0.15 \times IF</math> Where : W=: Weight of pipe in Kg's/Rmt  IF = Increase /Decrease in cost of fiber/Kg</p>	
<b>Note:</b>	<p>1) The Fiber rates are to be obtained from A.C. Pipe manufacturer of "Mazza" process.</p> <p>2) The cement rate shall be communicated by the sub-committee of Board of Chief engineers.</p> <p>3)The taxes as applicable shall be added as per rules at the time of preparation of estimate</p>	
<b>2</b>	Transportation of AC pressure pipes at site of work anywhere in Telangana State on motor able roads for full truck loads including transit insurance, unloading, and stacking at site of work etc. Complete (AC Couplings and Rubber rings are to be supplied free of transportation charges).	5% on the basic cost of corresponding AC Pressure pipes.

\*Under any Circumstances the A.C. pipes shall not be procured for laying new water lines, except O&M works.



## 9. A.C. COUPLINGS

The PH & ME department banned the usage of RCC & AC pipes for water supply works vide Memo no 146/T2/SoR/2014-15/2014 dated 30.06.2014. However ENC (RWS) requested in the SoR meeting on 06.05.2015 to incorporate A.C pipes rates in SoR for carrying out O&M works, accordingly the following rates are adopted.

Sl. No	Description				
1	2				
1	Manufacture, Supply of A.C* Couplings suitable to A.C*.Pressure pipes (mazza process) as per BIS: 1592/2003 excluding cost of rubber rings to suit AC* pressure pipes including cost of material, incidental handling, packing, transportation and unloading at site transit risk, but excluding taxes and testing of joints as per IS Code.				
	Size	Unit	Rate		
			Class - 15	Class - 20	Class - 25
	80 mm dia	Rate/Each	102	108	125
	100 mm dia	Rate/Each	130	144	170
	125 mm dia	Rate/Each	166	181	218
	150 mm dia	Rate/Each	192	240	296
	200 mm dia	Rate/Each	352	389	494
	250 mm dia	Rate/Each	413	521	661
	300 mm dia	Rate/Each	539	698	898
	350 mm dia	Rate/Each	696	899	1147
	400 mm dia	Rate/Each	1074	1400	1789
	450 mm dia	Rate/Each	1286	1693	2173
	500 mm dia	Rate/Each	1532	2046	2611
	600 mm dia	Rate/Each	1893	2379	3043
	700 mm dia	Rate/Each	2484	3347	4351
	750 mm dia	Rate/Each	2804	3832	4946
	800 mm dia	Rate/Each	3181	4313	5582
	850 mm dia	Rate/Each	3543	4824	6257
	900 mm dia	Rate/Each	3921	5363	6963
	1000 mm dia	Rate/Each	4786	6519	8497

1. The above rates of AC Coupling are based on the Cement cost of Rs.5600/- per MT (Excluding all taxes and freight).

2. The above rates of AC Coupling are based on the Fiber cost of Rs. 78,500/- per M.T (Excluding all taxes & Frieght)

For any Increase/ Decrease in the rate of cement, the price of AC Coupling per Each shall be increased/decreased as under.

$W \times 0.85 \times IC$  Where W = Weight of Coupling in Kgs/Each, IC = Increase/Decrease in cost of cement/kg.

For any increase/decrease in the rate of fiber, the price of AC Coupling per Each shall be increased/Decreased as under:

$W \times 0.15 \times IF$  **Where:** W=: Weight of Coupling in Kgs/Each, IF = Increase /Decrease in cost of fiber/kg.The Fiber rates are to be obtained from A.C. Pipe manufacturer of "Mazza" process.The cement rate shall be communicated by the sub-committee of Board of Chief engineers.Note: Taxes as applicable shall be added as per rules at the time of preparation of estimate.

**10. RUBBER RINGS TO SUIT A.C. COUPLINGS**

The PH & ME department banned the usage of RCC & AC pipes for water supply works vide Memo no 146/T2/SoR/2014-15/2014 dated 30.06.2014. However ENC (RWS) requested in the SoR meeting on 06.05.2015 to incorporate A.C pipes rates in SoR for carrying out O&M works, accordingly the following rates are adopted.

Sl. No.	Description		
1	2		
1	Schedule of rate for supply of Rubber rings manufactured as per BIS: 5382/1988 with BIS Mark embossed per each set suitable for A.C* Couplings including cost of material, incidental, handling, packing, transportation and unloading at site transit risk etc., but excluding taxes. The Rubber Rings shall be tested at the factory premises conforming to B.I.S 5382/1988		
	Size	Unit	Rate
			Class - 15, 20 & 25
	80 mm dia	Each Set	81
	100 mm dia	Each Set	100
	125 mm dia	Each Set	129
	150 mm dia	Each Set	164
	200 mm dia	Each Set	170
	250 mm dia	Each Set	197
	300 mm dia	Each Set	197
	350 mm dia	Each Set	224
	400 mm dia	Each Set	274
	450 mm dia	Each Set	321
	500 mm dia	Each Set	371
	600 mm dia	Each Set	422
	700 mm dia	Each Set	873
	750 mm dia	Each Set	908
	800 mm dia	Each Set	976
	850 mm dia	Each Set	1086
	900 mm dia	Each Set	1143
	1000 mm dia	Each Set	1266

**Note:** The taxes as applicable shall be added as per rules at the time of preparation of estimate.

### 11. PRE-STRESSED (NON-CYLINDER) CONCRETE PIPES

Sl.No.	Description							
1	Manufacture, Supply, Delivery of Pre-stressed (Non-cylinder) concrete pipes conforming to IS 784/2001 ex-factory excluding transportation & taxes, for the following field test pressures.(the manufacture shall design the pipes as per the IS Code 784-2001)							
	Size	Unit	Rate					
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
			6 Kg/cm <sup>2</sup>	8 Kg/cm <sup>2</sup>	10 Kg/cm <sup>2</sup>	12 Kg/cm <sup>2</sup>	14 Kg/cm <sup>2</sup>	16 Kg/cm <sup>2</sup>
	350 mm dia	Metre	3027	3037	3051	3073	3136	3248
	400 mm dia	Metre	3251	3276	3314	3364	3429	3484
	450 mm dia	Metre	3462	3482	3527	3602	3697	3781
	500 mm dia	Metre	3749	3769	3806	3894	3981	4102
	600 mm dia	Metre	4313	4350	4404	4550	4702	4852
	700 mm dia	Metre	5058	5139	5270	5433	5600	5840
	800 mm dia	Metre	6145	6294	6452	6665	6878	7223
	900 mm dia	Metre	7057	7254	7459	7798	8061	8671
	1000 mm dia	Metre	8324	8580	8847	9123	9447	10150
	1100 mm dia	Metre	9344	9638	9966	10296	10668	11505
	1200 mm dia	Metre	10513	10900	11267	11541	11753	13260
	1300 mm dia	Metre	11928	12366	12805	13246	14473	15059
	1400 mm dia	Metre	13803	14316	14840	15708	16769	17536
	1500 mm dia	Metre	15596	16202	16777	18262	19012	21218
	1600 mm dia	Metre	17562	18221	18884	20711	21505	23652
	1700 mm dia	Metre	18846	19607	20359	22278	24637	25818
	1800 mm dia	Metre	20860	22229	23535	25588	26546	29413
	1900 mm dia	Metre	22283	23551	25744	27256	29683	32050
	2000 mm dia	Metre	24518	26089	27563	30148	33396	34765
2	Cost of laying jointing, testing to hydrostatic field test pressure including cost of rubber rings, cost of transportation of water and emptying pipe line after completion of field testing etc.							
	350 mm dia	Metre	252	252	252	252	252	252
	400 mm dia	Metre	272	272	272	272	272	272

	450 mm dia	Metre	314	314	314	314	314	314
	500 mm dia	Metre	334	334	334	334	334	334
	600 mm dia	Metre	411	411	411	411	411	411
	700 mm dia	Metre	481	481	481	481	481	481
	800 mm dia	Metre	545	545	545	545	545	545
	900 mm dia	Metre	596	596	596	596	596	596
	1000 mm dia	Metre	689	689	689	689	689	689
	1100 mm dia	Metre	774	774	774	774	774	774
	1200 mm dia	Metre	857	857	857	857	857	857
	1300 mm dia	Metre	972	972	972	972	972	972
	1400 mm dia	Metre	1100	1100	1100	1100	1100	1100
	1500 mm dia	Metre	1193	1193	1193	1193	1193	1193
	1600 mm dia	Metre	1337	1337	1337	1337	1337	1337
	1700 mm dia	Metre	1455	1455	1455	1455	1455	1455
	1800 mm dia	Metre	1539	1539	1539	1539	1539	1539
	1900 mm dia	Metre	1625	1625	1625	1625	1625	1625
	2000 mm dia	Metre	1712	1712	1712	1712	1712	1712
<b>3</b>	<b>Conveyance of pre-stressed (Non-cylinder) concrete pipes and accessories including loading at factory, un-loading at site and stacking for the following sizes.(minimum distance of 100 km to be considered if the distance is less by 100 km from factory to site)</b>							
	350 mm dia	PerKM/M	1.67	1.67	1.67	1.67	1.67	1.67
	400 mm dia	PerKM/M	1.67	1.67	1.67	1.67	1.67	1.67
	450 mm dia	PerKM/M	2.04	2.04	2.04	2.04	2.04	2.04
	500 mm dia	PerKM/M	2.14	2.14	2.14	2.14	2.14	2.14
	600 mm dia	PerKM/M	2.39	2.39	2.39	2.39	2.39	2.39
	700 mm dia	PerKM/M	3.94	3.94	3.94	3.94	3.94	3.94
	800 mm dia	PerKM/M	3.94	3.94	3.94	3.94	3.94	3.94
	900 mm dia	PerKM/M	3.94	3.94	3.94	3.94	3.94	3.94
	1000 mm dia	PerKM/M	6.33	6.33	6.33	6.33	6.33	6.33
	1100 mm dia	PerKM/M	6.33	6.33	6.33	6.33	6.33	6.33

	1200 mm dia	PerKM/M	12.04	12.04	12.04	12.04	12.04	12.04
	1300 mm dia	PerKM/M	12.17	12.17	12.17	12.17	12.17	12.17
	1400 mm dia	PerKM/M	12.17	12.17	12.17	12.17	12.17	12.17
	1500 mm dia	PerKM/M	12.17	12.17	12.17	12.17	12.17	12.17
	1600 mm dia	PerKM/M	13.60	13.60	13.60	13.60	13.60	13.60
	1700 mm dia	PerKM/M	13.60	13.60	13.60	13.60	13.60	13.60
	1800 mm dia	PerKM/M	13.95	13.95	13.95	13.95	13.95	13.95
	1900 mm dia	PerKM/M	14.54	14.54	14.54	14.54	14.54	14.54
	2000 mm dia	PerKM/M	14.54	14.54	14.54	14.54	14.54	14.54
4	<b>Cost of Machine End pair (Socket +Spigot) with 100mm length MS Barrel on each side of Socket and Spigot for providing M.S Specials on PSC pipelines excluding cost of M.S Specials &amp; Taxes but including cost of conveyance to site etc., complete.</b>							
	350 mm dia	Per Pair	10736	10736	10736	10736	10736	10736
	400 mm dia	Per Pair	12316	12316	12316	12316	12316	12316
	450 mm dia	Per Pair	13901	13901	13901	13901	13901	13901
	500 mm dia	Per Pair	15498	15498	15498	15498	15498	15498
	600 mm dia	Per Pair	18443	18443	18443	18443	18443	18443
	700 mm dia	Per Pair	21620	21620	21620	21620	21620	21620
	800 mm dia	Per Pair	24716	24716	24716	24716	24716	24716
	900 mm dia	Per Pair	28056	28056	28056	28056	28056	28056
	1000 mm dia	Per Pair	30415	30415	30415	30415	30415	30415
	1100 mm dia	Per Pair	33596	33596	33596	33596	33596	33596
	1200 mm dia	Per Pair	36634	36634	36634	36634	36634	36634
	1300 mm dia	Per Pair	39640	39640	39640	39640	39640	39640
	1400 mm dia	Per Pair	47100	47100	47100	47100	47100	47100
	1500 mm dia	Per Pair	55609	55609	55609	55609	55609	55609
	1600 mm dia	Per Pair	62152	62152	62152	62152	62152	62152
	1700 mm dia	Per Pair	69981	69981	69981	69981	69981	69981
	1800 mm dia	Per Pair	80265	80265	80265	80265	80265	80265
	1900 mm dia	Per Pair	93119	93119	93119	93119	93119	93119

	2000 mm dia	Per Pair	109057	109057	109057	109057	109057	109057
5	<b>Cost of M.S Flanges including cost of bolts, nuts, rubber packing etc., complete and flange thickness conforming to IS:7322-1985 and flange dimensions conforming to IS:1538-1993 excluding cost of MS specials including cost and conveyance to site etc., complete.</b>							
	Diameter and thickness	Unit	Rate	Diameter and thickness	Unit	Rate		
	80 mm dia x 15 mm thick	Each Flange	769	500mm dia x 20 mm thick	Each Flange	7877		
	100 mm dia x 15 mm thick	Each Flange	1060	600 mm dia x 20 mm thick	Each Flange	9916		
	125 mm dia x 15 mm thick	Each Flange	1274	700 mm dia x 25 mm thick	Each Flange	13996		
	150 mm dia x 15 mm thick	Each Flange	1699	750 mm dia x 25 mm thick	Each Flange	15393		
	200 mm dia x 15 mm thick	Each Flange	2121	800 mm dia x 25 mm thick	Each Flange	17239		
	250 mm dia x 15 mm thick	Each Flange	2763	900 mm dia x 25 mm thick	Each Flange	19797		
	300 mm dia x 15 mm thick	Each Flange	3144	1000 mm dia x 25 mm thick	Each Flange	23329		
	350 mm dia x 18 mm thick	Each Flange	4558	1050 mm dia x 25 mm thick	Each Flange	24780		
	400 mm dia x 18 mm thick	Each Flange	5695	1100 mm dia x 25 mm thick	Each Flange	26724		
	450 mm dia x 18 mm thick	Each Flange	6622	1200 mm dia x 32 mm thick	Each Flange	35402		

Note: a) The above rate of PSC pipes are based on the HT wire cost of Rs.64500/-MT (excluding all taxes but including freight). and cement price of Rs.5600/- per MT (excluding all taxes but including freight)

The rates may be revised depending upon the increase/decrease in the cost of HT wire and cement. as per the following method. The cost of HT wire may be obtained from reputed firms like SAIL/TATA/ SS Ltd. etc.,

Revised Cost =Cost as per the above table +R1+R2.

R1= Variation (increase / decrease) in cost (Rs. per metre) due to change in the cost of HT Wire  $= (H2-H1)/1000 \times Wh$ .

R2= Variation (increase / decrease) in cost (Rs. per metre) due to change in the cost of Cement  $= (C2-C1)/1000 \times Wc$ .

H1 = Rs.64500/- H2 = Cost of HT Wire (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate.

C1 = Rs. 5600/- C2 = Cost of Cement (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate

Wh=Weight of HT Wire required (Kg.) per metre of pipe. Wc= Weight of Cement required (Kg.) per metre of pipe.

The rates for MS flanges are considering landed price of MS Plates of Rs.65000/- per MT. Price variation to be released on actual weight of flange.

**Note:** The duties and taxes as applicable shall be added as per rules at the time of preparation of estimate.

## 12. PRE-STRESSED (CYLINDER) CONCRETE PIPES

Sl No.	Description										
1	2										
1	Pre-stressed (Cylinder type ) concrete pipes conforming to IS 784/2001 @ ex-factory cost of pipes, excluding transportation, laying, jointing, testing, bends, tees, specials & taxes. For the following field test pressures.(the manufacture shall design the pipes as per the IS Code 784-2001).										
	Size	Unit	Rate								
			4 Kg/cm2	6 Kg/cm2	8 Kg/cm2	10 Kg/cm2	12 Kg/cm2	14 Kg/cm2	16 Kg/cm2	18 Kg/cm2	20 Kg/cm2
	400 mm dia	Meter	5773	5773	5773	5773	5801	5861	5960	6055	6129
	450 mm dia	Meter	6284	6284	6284	6311	6384	6471	6578	6629	6688
	500 mm dia	Meter	6720	6720	6781	6843	6900	6979	7069	7137	7205
	600 mm dia	Meter	7724	7801	7881	7971	8052	8131	8266	8368	8460
	700 mm dia	Meter	8797	8898	9012	9115	9228	9330	9521	9636	9783
	800 mm dia	Meter	10065	10187	10319	10463	10595	10728	10926	11113	11269
	900 mm dia	Meter	11430	11605	11772	11948	12125	12301	12768	12999	13274
	1000 mm dia	Meter	13712	13921	14132	14352	14562	14782	15399	15707	16015
	1100 mm dia	Meter	15214	15468	15732	15986	16250	16503	17260	17600	17996
	1200 mm dia	Meter	16912	17220	17518	17827	18146	18454	19351	19779	20210
	1300 mm dia	Meter	18891	19254	19617	19980	20344	21036	21777	22312	22896
	1400 mm dia	Meter	21148	21597	22058	22560	23457	24036	24883	25121	26114
	1500 mm dia	Meter	24758	25310	25781	26263	27208	27746	28463	29551	30154
	1600 mm dia	Meter	27871	28615	29242	30250	30864	31541	32767	33446	34125
	1700 mm dia	Meter	29963	30776	31390	32539	33229	34679	35459	36235	37019
	1800 mm dia	Meter	32776	33677	35444	36539	37610	39620	41321	42187	43072
	1900 mm dia	Meter	38045	38819	40177	41021	42739	43698	44675	45648	46618
	2000 mm dia	Meter	40049	41465	42403	43352	45264	46320	47405	48475	49562
2	Cost of laying jointing, testing to hydrostatic field test pressure including cost of site welding and fixing of polypropylene diapher cloth, cost of transportation of water and emptying pipe line after completion of field testin										
	400 mm dia	Meter	536	536	536	536	536	536	536	536	536
	450 mm dia	Meter	629	629	629	629	629	629	629	629	629
	500 mm dia	Meter	686	686	686	686	686	686	686	686	686
	600 mm dia	Meter	802	802	802	802	802	802	802	802	802
	700 mm dia	Meter	914	914	914	914	914	914	914	914	914
	800 mm dia	Meter	1050	1050	1050	1050	1050	1050	1050	1050	1050
	900 mm dia	Meter	1183	1183	1183	1183	1183	1183	1183	1183	1183
	1000 mm dia	Meter	1296	1296	1296	1296	1296	1296	1296	1296	1296
	1100 mm dia	Meter	1470	1470	1470	1470	1470	1470	1470	1470	1470

	1200 mm dia	Meter	1603	1603	1603	1603	1603	1603	1603	1603	1603	1603
	1300 mm dia	Meter	1716	1716	1716	1716	1716	1716	1716	1716	1716	1716
	1400 mm dia	Meter	1888	1888	1888	1888	1888	1888	1888	1888	1888	1888
	1500 mm dia	Meter	2096	2096	2096	2096	2096	2096	2096	2096	2096	2096
	1600 mm dia	Meter	2269	2269	2269	2269	2269	2269	2269	2269	2269	2269
	1700 mm dia	Meter	2555	2555	2555	2555	2555	2555	2555	2555	2555	2555
	1800 mm dia	Meter	2709	2709	2709	2709	2709	2709	2709	2709	2709	2709
	1900 mm dia	Meter	2955	2955	2955	2955	2955	2955	2955	2955	2955	2955
	2000 mm dia	Meter	3146	3146	3146	3146	3146	3146	3146	3146	3146	3146
<b>3</b>	<b>Conveyance of Pre-stressed (Cylinder type) concrete pipes and accessories including loading at factory, un-loading at site and stacking for the following sizes. (minimum distance of 100 km to be considered if the distance is less by 100 km from factory to site)</b>											
	400 mm dia	Per KM/M	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43
	450 mm dia	Per KM/M	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43
	500 mm dia	Per KM/M	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04
	600 mm dia	Per KM/M	2.27	2.27	2.27	2.27	2.27	2.27	2.27	2.27	2.27	2.27
	700 mm dia	Per KM/M	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
	800 mm dia	Per KM/M	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
	900 mm dia	Per KM/M	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
	1000 mm dia	Per KM/M	5.72	5.72	5.72	5.72	5.72	5.72	5.72	5.72	5.72	5.72
	1100 mm dia	Per KM/M	5.72	5.72	5.72	5.72	5.72	5.72	5.72	5.72	5.72	5.72
	1200 mm dia	Per KM/M	11.33	11.33	11.33	11.33	11.33	11.33	11.33	11.33	11.33	11.33
	1300 mm dia	Per KM/M	11.33	11.33	11.33	11.33	11.33	11.33	11.33	11.33	11.33	11.33
	1400 mm dia	Per KM/M	11.33	11.33	11.33	11.33	11.33	11.33	11.33	11.33	11.33	11.33
	1500 mm dia	Per KM/M	11.33	11.33	11.33	11.33	11.33	11.33	11.33	11.33	11.33	11.33
	1600 mm dia	Per KM/M	11.33	11.33	11.33	11.33	11.33	11.33	11.33	11.33	11.33	11.33
	1700 mm dia	Per KM/M	13.60	13.60	13.60	13.60	13.60	13.60	13.60	13.60	13.60	13.60
	1800 mm dia	Per KM/M	13.60	13.60	13.60	13.60	13.60	13.60	13.60	13.60	13.60	13.60
	1900 mm dia	Per KM/M	13.60	13.60	13.60	13.60	13.60	13.60	13.60	13.60	13.60	13.60
	2000 mm dia	Per KM/M	14.44	14.44	14.44	14.44	14.44	14.44	14.44	14.44	14.44	14.44

Note: The rates of PCCP pipes which were incorporated in the SoR are based on the following raw materials cost.

HT Wire: - Rs.64500/- (excluding all taxes but including freight)

HR Coil (Hot Rolled): - Rs.64500/- (excluding all taxes but including freight)

Cement Cost Rs. 5600/- .per MT (excluding all taxes but including freight)

The rates may be revised depending upon the increase/ decrease in the cost of raw materials (landed price) as per the following method.

Revised Cost =Cost as per the above table +R1+R2+R3.

R1= Variation (increase / decrease) in cost (Rs. per metre) due to change in the cost of HT Wire =(H2-H1)/1000 X Wh.

R2= Variation (increase / decrease) in cost (Rs. per metre) due to change in the cost of HR Coil =(R2-R1)/1000 X Wr.



R3= Variation (increase / decrease) in cost (Rs. per metre) due to change in the cost of Cement  $= (C2-C1)/1000 \times Wc$ .

H1 = Rs.64500/- H2 = Cost of HT Wire (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate.

R1 = Rs.64500/- R2 = Cost of HR Coil (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate.

C1 = Rs. 5600/- C2 = Cost of Cement (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate

Wh=Weight of HT Wire required (Kg.) per metre of pipe.

Wc= Weight of Cement required (Kg.) per meter of pipe.

Wr = Weight of HR Coil required (kg) per metre of pipe.

**Note:** The duties and taxes as applicable shall be added as per rules at the time of preparation of estimate

### 13. BAR WRAPPED STEEL CYLINDER (BWSC) PIPES

Sl.No	Description											
1	Bar Wrapped Steel Cylinder (BWSC) pipes conforming to IS 15155 - 2002, ex-factory excluding transportation, taxes and duties etc., for bar wrapped steel cylinder pipes for the following field test pressures.											
	Size	Unit	Rate									
			4 -12 Kg/cm <sup>2</sup>	14 Kg/cm <sup>2</sup>	16 Kg/cm <sup>2</sup>	18 Kg/cm <sup>2</sup>	20 Kg/cm <sup>2</sup>	22 Kg/cm <sup>2</sup>	24 Kg/cm <sup>2</sup>	26 Kg/cm <sup>2</sup>	28 Kg/cm <sup>2</sup>	30 Kg/cm <sup>2</sup>
	250 mm dia	Meter	2865	2865	2865	2865	2865	2865	3150	3255	3301	3453
	300 mm dia	Meter	3217	3217	3217	3217	3217	3364	3787	3932	4022	4211
	350 mm dia	Meter	3879	3879	3879	3944	4139	4348	4544	4739	4947	5127
	400 mm dia	Meter	4282	4282	4373	4637	4882	5142	5386	5647	5865	6146
	450 mm dia	Meter	4808	4847	5184	5496	5832	6093	6444	6687	6970	7465
	500 mm dia	Meter	5219	5585	5975	6390	6743	7219	7588	7914	8470	8939
	600 mm dia	Meter	6536	6992	7565	8110	8694	9276	10006	10660	11297	11787
	700 mm dia	Meter	7912	8753	9496	10260	11201	12002	12760	14032	14728	15318
	800 mm dia	Meter	9463	10648	11623	12728	14033	15022	16350	17528	18437	19397
	900 mm dia	Meter	11564	12906	14115	15434	16846	18455	19667	21237	22702	24092
	1000 mm dia	Meter	13645	15327	17114	18857	20343	21729	23609	25374	27825	29185
	1100 mm dia	Meter	18339	18728	20521	22513	24443	26251	29032	30586	33186	35066
	1200 mm dia	Meter	20034	21400	23571	25835	28128	30339	33423	36505	39329	41249
2	Cost of laying jointing, testing to hydrostatic field test pressure including cost of site welding and fixing of polypropylene diaher cloth, cost of transportation of water and emptying pipe line after completion of field testing.											
	250 mm dia	Meter	365	365	365	365	365	365	365	365	365	365
	300 mm dia	Meter	430	430	430	430	430	430	430	430	430	430
	350 mm dia	Meter	507	507	507	507	507	507	507	507	507	507
	400 mm dia	Meter	568	568	568	568	568	568	568	568	568	568
	450 mm dia	Meter	568	568	568	568	568	568	568	568	568	568
	500 mm dia	Meter	711	711	711	711	711	711	711	711	711	711
	600 mm dia	Meter	874	874	874	874	874	874	874	874	874	874
	700 mm dia	Meter	1019	1019	1019	1019	1019	1019	1019	1019	1019	1019
	800 mm dia	Meter	1159	1159	1159	1159	1159	1159	1159	1159	1159	1159

	900 mm dia	Meter	1362	1362	1362	1362	1362	1362	1362	1362	1362	1362
	1000 mm dia	Meter	1505	1505	1505	1505	1505	1505	1505	1505	1505	1505
	1100 mm dia	Meter	1769	1769	1769	1769	1769	1769	1769	1769	1769	1769
	1200 mm dia	Meter	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980
3	<b>Conveyance of Bar Wrapped Steel Cylinder (BWSC) pipes and accessories including loading at factory, un-loading at site and stacking for the following sizes. (minimum distance of 100 km to be considered if the distance is less by 100 km from factory to site)</b>											
	250 mm dia	Per KM/M	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
	300 mm dia	Per KM/M	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
	350 mm dia	Per KM/M	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	400 mm dia	Per KM/M	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
	450 mm dia	Per KM/M	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64
	500 mm dia	Per KM/M	2.01	2.01	2.01	2.01	2.01	2.01	2.01	2.01	2.01	2.01
	600 mm dia	Per KM/M	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13
	700 mm dia	Per KM/M	2.39	2.39	2.39	2.39	2.39	2.39	2.39	2.39	2.39	2.39
	800 mm dia	Per KM/M	3.14	3.14	3.14	3.14	3.14	3.14	3.14	3.14	3.14	3.14
	900 mm dia	Per KM/M	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38
	1000 mm dia	Per KM/M	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89
	1100 mm dia	Per KM/M	8.67	8.67	8.67	8.67	8.67	8.67	8.67	8.67	8.67	8.67
	1200 mm dia	Per KM/M	12.12	12.12	12.12	12.12	12.12	12.12	12.12	12.12	12.12	12.12

Note: The above rates of BWSC pipes are based on the following raw materials' cost.

HR Plates - Rs.64500/- per MT (excluding all taxes but including freight), M.S. Wire rods - Rs.55000/- per MT (excluding all taxes but including freight)

Cement Cost Rs. 5600/- per MT (excluding all taxes but including freight)

The rates may be revised depending upon the increase/ decrease in the cost of raw materials (landed price) as per the following method.

Revised Cost = Cost as per the above table +R1+R2+R3.

R1= Variation (increase / decrease) in cost (Rs. per metre) due to change in the cost of HR Plate = $(H2-H1)/1000 \times Wh$ .

R2= Variation (increase / decrease) in cost (Rs. per metre) due to change in the cost of wire rods = $(W2-W1)/1000 \times Ww$ .

R3= Variation (increase / decrease) in cost (Rs. per metre) due to change in the cost of Cement = $(C2-C1)/1000 \times Wc$ .

H1 = Rs. 64500/- H2 = Cost of HR Plate (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate.

W1 = Rs. 55000/- W2 = Cost of Wire rods (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate.

C1 = Rs. 5600/- C2 = Cost of Cement (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate

Wh=Weight of HR Plate required (Kg.) per metre of pipe.

Wc= Weight of Cement required (Kg.) per metre of pipe.

Ww = Weight of wire rods required (kg) per metre of pipe.

**Note:** Taxes as applicable shall be added as per rules at the time of preparation of estimate.

## 14. M.S. PIPES

Sl. No.	Description	Unit	Thickness in mm	Rate (Rs.)
1	2	3	4	5
1	Manufacture, supply and delivery of M.S Pipes conforming to IS 3589/2001 including in lining with cement mortar (1:2) 15mm thick using 4 numbers of 6mm dia M.S.Rings at each end of the pipe and out coating with cement mortar (1:3) 30mm thick by shortcreting or gunetting duly providing wire mesh of size 50x50x3mm including cost of all materials, labour charges, transportation to anywhere in T.G, but excluding all taxes.			
	500 mm dia	Metre	8.00	10661
	500 mm dia	Metre	10.00	12563
	600 mm dia	Metre	8.00	12666
	600 mm dia	Metre	10.00	14928
	700 mm dia	Metre	8.00	14619
	700 mm dia	Metre	10.00	17275
	800 mm dia	Metre	8.00	16553
	800 mm dia	Metre	10.00	19559
	800 mm dia	Metre	12.00	22576
	900 mm dia	Metre	8.00	18546
	900 mm dia	Metre	10.00	21857
	900 mm dia	Metre	12.00	25213
	1000 mm dia	Metre	8.00	20564
	1000 mm dia	Metre	10.00	24269
	1000 mm dia	Metre	12.00	27975
	1000 mm dia	Metre	14.00	31636
	1100 mm dia	Metre	10.00	26496
	1100 mm dia	Metre	12.00	30553
	1100 mm dia	Metre	14.00	34608
	1100 mm dia	Metre	16.00	38734
	1200 mm dia	Metre	10.00	28909
	1200 mm dia	Metre	12.00	33316
	1200 mm dia	Metre	14.00	37666
	1200 mm dia	Metre	16.00	42081
	1200 mm dia	Metre	18.00	46486
	1300 mm dia	Metre	10.00	31197
	1300 mm dia	Metre	12.00	35892
	1300 mm dia	Metre	14.00	40646
	1300 mm dia	Metre	16.00	45460
	1300 mm dia	Metre	18.00	50230
	1300 mm dia	Metre	20.00	54995
	1400 mm dia	Metre	10.00	33492
	1400 mm dia	Metre	12.00	38597
	1400 mm dia	Metre	14.00	43701
	1400 mm dia	Metre	16.00	48863
	1400 mm dia	Metre	18.00	53979
	1400 mm dia	Metre	20.00	59155
	1400 mm dia	Metre	22.00	64259
	1500 mm dia	Metre	10.00	35835
	1500 mm dia	Metre	12.00	41292
	1500 mm dia	Metre	14.00	46688
	1500 mm dia	Metre	16.00	52143

Sl. No.	Description	Unit	Thickness in mm	Rate (Rs.)
	1500 mm dia	Metre	18.00	57669
	1500 mm dia	Metre	20.00	63124
	1500 mm dia	Metre	22.00	68716
	1500 mm dia	Metre	24.00	74171
	1600 mm dia	Metre	10.00	38200
	1600 mm dia	Metre	12.00	43936
	1600 mm dia	Metre	14.00	49797
	1600 mm dia	Metre	16.00	55603
	1600 mm dia	Metre	18.00	61418
	1600 mm dia	Metre	20.00	67223
	1600 mm dia	Metre	22.00	73099
	1600 mm dia	Metre	24.00	79031
	1600 mm dia	Metre	26.00	84916
	1700 mm dia	Metre	10.00	40421
	1700 mm dia	Metre	12.00	46631
	1700 mm dia	Metre	14.00	52787
	1700 mm dia	Metre	16.00	58883
	1700 mm dia	Metre	18.00	65166
	1700 mm dia	Metre	20.00	71320
	1700 mm dia	Metre	22.00	77475
	1700 mm dia	Metre	24.00	83767
	1700 mm dia	Metre	26.00	89993
	1700 mm dia	Metre	28.00	96217
	1800 mm dia	Metre	10.00	42830
	1800 mm dia	Metre	12.00	49345
	1800 mm dia	Metre	14.00	55836
	1800 mm dia	Metre	16.00	62342
	1800 mm dia	Metre	18.00	68848
	1800 mm dia	Metre	20.00	75419
	1800 mm dia	Metre	22.00	81993
	1800 mm dia	Metre	24.00	88500
	1800 mm dia	Metre	26.00	95129
	1800 mm dia	Metre	28.00	101715
	1900 mm dia	Metre	10.00	45127
	1900 mm dia	Metre	12.00	51967
	1900 mm dia	Metre	14.00	58824
	1900 mm dia	Metre	16.00	65665
	1900 mm dia	Metre	18.00	72530
	1900 mm dia	Metre	20.00	79455
	1900 mm dia	Metre	22.00	86365
	1900 mm dia	Metre	24.00	93229
	1900 mm dia	Metre	26.00	100232
	1900 mm dia	Metre	28.00	107136
	2000 mm dia	Metre	10.00	47404
	2000 mm dia	Metre	12.00	54609
	2000 mm dia	Metre	14.00	61811
	2000 mm dia	Metre	16.00	69016
	2000 mm dia	Metre	18.00	76276
	2000 mm dia	Metre	20.00	83483
	2000 mm dia	Metre	22.00	90750
	2000 mm dia	Metre	24.00	98027
	2000 mm dia	Metre	26.00	105288
	2000 mm dia	Metre	28.00	112564
	2000 mm dia	Metre	30.00	119905

Sl. No.	Description	Unit	Thickness in mm	Rate (Rs.)
	2100 mm dia	Metre	12.00	57309
	2100 mm dia	Metre	14.00	64865
	2100 mm dia	Metre	16.00	72406
	2100 mm dia	Metre	18.00	79972
	2100 mm dia	Metre	20.00	87581
	2100 mm dia	Metre	22.00	95192
	2100 mm dia	Metre	24.00	102816
	2100 mm dia	Metre	26.00	110437
	2100 mm dia	Metre	28.00	118063
	2100 mm dia	Metre	30.00	125743
	2100 mm dia	Metre	32.00	133424
	2100 mm dia	Metre	34.00	141129
	2200 mm dia	Metre	12.00	59951
	2200 mm dia	Metre	14.00	67841
	2200 mm dia	Metre	16.00	75756
	2200 mm dia	Metre	18.00	83715
	2200 mm dia	Metre	20.00	91677
	2200 mm dia	Metre	22.00	100219
	2200 mm dia	Metre	24.00	107552
	2200 mm dia	Metre	26.00	115583
	2200 mm dia	Metre	28.00	123488
	2200 mm dia	Metre	30.00	131519
	2200 mm dia	Metre	32.00	139559
	2200 mm dia	Metre	34.00	147660
	2200 mm dia	Metre	36.00	155635
	2300 mm dia	Metre	12.00	62610
	2300 mm dia	Metre	14.00	70852
	2300 mm dia	Metre	16.00	79144
	2300 mm dia	Metre	18.00	87453
	2300 mm dia	Metre	20.00	95719
	2300 mm dia	Metre	22.00	104029
	2300 mm dia	Metre	24.00	112340
	2300 mm dia	Metre	26.00	120721
	2300 mm dia	Metre	28.00	128985
	2300 mm dia	Metre	30.00	137366
	2300 mm dia	Metre	32.00	145747
	2300 mm dia	Metre	34.00	154197
	2300 mm dia	Metre	36.00	162589
	2400 mm dia	Metre	12.00	65233
	2400 mm dia	Metre	14.00	73821
	2400 mm dia	Metre	16.00	82428
	2400 mm dia	Metre	18.00	91150
	2400 mm dia	Metre	20.00	99742
	2400 mm dia	Metre	22.00	108402
	2400 mm dia	Metre	24.00	117143
	2400 mm dia	Metre	26.00	125803
	2400 mm dia	Metre	28.00	134479
	2400 mm dia	Metre	30.00	143140
	2400 mm dia	Metre	32.00	151879
	2400 mm dia	Metre	34.00	160679
	2400 mm dia	Metre	36.00	169409
	2500 mm dia	Metre	14.00	76890
	2500 mm dia	Metre	16.00	85831
	2500 mm dia	Metre	18.00	94841

Sl. No.	Description	Unit	Thickness in mm	Rate (Rs.)
	2500 mm dia	Metre	20.00	103852
	2500 mm dia	Metre	22.00	112925
	2500 mm dia	Metre	24.00	121935
	2500 mm dia	Metre	26.00	130947
	2500 mm dia	Metre	28.00	140027
	2500 mm dia	Metre	30.00	148992
	2500 mm dia	Metre	32.00	158072
	2500 mm dia	Metre	34.00	167220
	2500 mm dia	Metre	36.00	176301
	2600 mm dia	Metre	14.00	79932
	2600 mm dia	Metre	16.00	89223
	2600 mm dia	Metre	18.00	98523
	2600 mm dia	Metre	20.00	107884
	2600 mm dia	Metre	22.00	117245
	2600 mm dia	Metre	24.00	126658
	2600 mm dia	Metre	26.00	136028
	2600 mm dia	Metre	28.00	145459
	2600 mm dia	Metre	30.00	154818
	2600 mm dia	Metre	32.00	164248
	2600 mm dia	Metre	34.00	173688
	2600 mm dia	Metre	36.00	183188
	2600 mm dia	Metre	38.00	192618
	2600 mm dia	Metre	40.00	202119
	2600 mm dia	Metre	42.00	211629
	2700 mm dia	Metre	18.00	102281
	2700 mm dia	Metre	20.00	111921
	2700 mm dia	Metre	22.00	121632
	2700 mm dia	Metre	24.00	131352
	2700 mm dia	Metre	26.00	141117
	2700 mm dia	Metre	28.00	150952
	2700 mm dia	Metre	30.00	160729
	2700 mm dia	Metre	32.00	170450
	2700 mm dia	Metre	34.00	180231
	2700 mm dia	Metre	36.00	190083
	2700 mm dia	Metre	38.00	199872
	2700 mm dia	Metre	40.00	209721
	2700 mm dia	Metre	42.00	219502
	2800 mm dia	Metre	18.00	105953
	2800 mm dia	Metre	20.00	116024
	2800 mm dia	Metre	22.00	126083
	2800 mm dia	Metre	24.00	136145
	2800 mm dia	Metre	26.00	146204
	2800 mm dia	Metre	28.00	156329
	2800 mm dia	Metre	30.00	166512
	2800 mm dia	Metre	32.00	176573
	2800 mm dia	Metre	34.00	186703
	2800 mm dia	Metre	36.00	196843
	2800 mm dia	Metre	38.00	207043
	2800 mm dia	Metre	40.00	217173
	2800 mm dia	Metre	42.00	227430
	2900 mm dia	Metre	18.00	109773
	2900 mm dia	Metre	20.00	120113
	2900 mm dia	Metre	22.00	130525
	2900 mm dia	Metre	24.00	140944
	2900 mm dia	Metre	26.00	151353

Sl. No.	Description	Unit	Thickness in mm	Rate (Rs.)
	2900 mm dia	Metre	28.00	161818
	2900 mm dia	Metre	30.00	172298
	2900 mm dia	Metre	32.00	182718
	2900 mm dia	Metre	34.00	193251
	2900 mm dia	Metre	36.00	203787
	2900 mm dia	Metre	38.00	214338
	2900 mm dia	Metre	40.00	224827
	2900 mm dia	Metre	42.00	235378
	3000 mm dia	Metre	18.00	113393
	3000 mm dia	Metre	20.00	124209
	3000 mm dia	Metre	22.00	134909
	3000 mm dia	Metre	24.00	145667
	3000 mm dia	Metre	26.00	156428
	3000 mm dia	Metre	28.00	167244
	3000 mm dia	Metre	30.00	178083
	3000 mm dia	Metre	32.00	188844
	3000 mm dia	Metre	34.00	199729
	3000 mm dia	Metre	36.00	210612
	3000 mm dia	Metre	38.00	221452
	3000 mm dia	Metre	40.00	232351
	3000 mm dia	Metre	42.00	243238
2	<b>Cost of Laying, Jointing, Hydrostatic Filed Test Pressure, Including Cost of Site Welding, Jointing Materials And Cost of Transportation of Water Including Emptying Pipe Line After Completion Of Field Testing.</b>			Rate
	500 mm dia	Metre	8.00	863
	500 mm dia	Metre	10.00	884
	600 mm dia	Metre	8.00	1066
	600 mm dia	Metre	10.00	1088
	700 mm dia	Metre	8.00	1346
	700 mm dia	Metre	10.00	1373
	800 mm dia	Metre	8.00	1550
	800 mm dia	Metre	10.00	1580
	800 mm dia	Metre	12.00	1626
	900 mm dia		8.00	1882
	900 mm dia	Metre	10.00	1915
	900 mm dia	Metre	12.00	1971
	1000 mm dia	Metre	8.00	2082
	1000 mm dia	Metre	10.00	2118
	1000 mm dia	Metre	12.00	2179
	1000 mm dia	Metre	14.00	2207
	1100 mm dia	Metre	10.00	2185
	1100 mm dia	Metre	12.00	2250
	1100 mm dia	Metre	14.00	2281
	1100 mm dia	Metre	16.00	2344
	1200 mm dia	Metre	10.00	2253
	1200 mm dia	Metre	12.00	2324
	1200 mm dia	Metre	14.00	2357
	1200 mm dia	Metre	16.00	2424
	1200 mm dia	Metre	18.00	2493



Sl. No.	Description	Unit	Thickness in mm	Rate (Rs.)
	1300 mm dia	Metre	10.00	2323
	1300 mm dia	Metre	12.00	2400
	1300 mm dia	Metre	14.00	2435
	1300 mm dia	Metre	16.00	2510
	1300 mm dia	Metre	18.00	2582
	1300 mm dia	Metre	20.00	2681
	1400 mm dia	Metre	10.00	2554
	1400 mm dia	Metre	12.00	2636
	1400 mm dia	Metre	14.00	2673
	1400 mm dia	Metre	16.00	2751
	1400 mm dia	Metre	18.00	2831
	1400 mm dia	Metre	20.00	2862
	1400 mm dia	Metre	22.00	3029
	1500 mm dia	Metre	10.00	2615
	1500 mm dia	Metre	12.00	2702
	1500 mm dia	Metre	14.00	2743
	1500 mm dia	Metre	16.00	2825
	1500 mm dia	Metre	18.00	2910
	1500 mm dia	Metre	20.00	3023
	1500 mm dia	Metre	22.00	3054
	1500 mm dia	Metre	24.00	3170
	1600 mm dia	Metre	10.00	2675
	1600 mm dia	Metre	12.00	2769
	1600 mm dia	Metre	14.00	2814
	1600 mm dia	Metre	16.00	2903
	1600 mm dia	Metre	18.00	2994
	1600 mm dia	Metre	20.00	3109
	1600 mm dia	Metre	22.00	3195
	1600 mm dia	Metre	24.00	3338
	1600 mm dia	Metre	26.00	3495
	1700 mm dia	Metre	10.00	2742
	1700 mm dia	Metre	12.00	2840
	1700 mm dia	Metre	14.00	2886
	1700 mm dia	Metre	16.00	2980
	1700 mm dia	Metre	18.00	3077
	1700 mm dia	Metre	20.00	3201
	1700 mm dia	Metre	22.00	3329
	1700 mm dia	Metre	24.00	3468
	1700 mm dia	Metre	26.00	3621
	1700 mm dia	Metre	28.00	3784
	1800 mm dia	Metre	10.00	3035
	1800 mm dia	Metre	12.00	3137
	1800 mm dia	Metre	14.00	3188
	1800 mm dia	Metre	16.00	3284
	1800 mm dia	Metre	18.00	3389
	1800 mm dia	Metre	20.00	3519
	1800 mm dia	Metre	22.00	3654
	1800 mm dia	Metre	24.00	3802
	1800 mm dia	Metre	26.00	3964
	1800 mm dia	Metre	28.00	4133
	1900 mm dia	Metre	10.00	3474
	1900 mm dia	Metre	12.00	3586
	1900 mm dia	Metre	14.00	3636

Sl. No.	Description	Unit	Thickness in mm	Rate (Rs.)
	1900 mm dia	Metre	16.00	3741
	1900 mm dia	Metre	18.00	3850
	1900 mm dia	Metre	20.00	3986
	1900 mm dia	Metre	22.00	4128
	1900 mm dia	Metre	24.00	4283
	1900 mm dia	Metre	26.00	4452
	1900 mm dia	Metre	28.00	4636
	2000 mm dia	Metre	10.00	4391
	2000 mm dia	Metre	12.00	4507
	2000 mm dia	Metre	14.00	4560
	2000 mm dia	Metre	16.00	4669
	2000 mm dia	Metre	18.00	4783
	2000 mm dia	Metre	20.00	4927
	2000 mm dia	Metre	22.00	4974
	2000 mm dia	Metre	24.00	5136
	2000 mm dia	Metre	26.00	5315
	2000 mm dia	Metre	28.00	5506
	2000 mm dia	Metre	30.00	5814
	2100 mm dia	Metre	12.00	5062
	2100 mm dia	Metre	14.00	5120
	2100 mm dia	Metre	16.00	5232
	2100 mm dia	Metre	18.00	5355
	2100 mm dia	Metre	20.00	5505
	2100 mm dia	Metre	22.00	5663
	2100 mm dia	Metre	24.00	5831
	2100 mm dia	Metre	26.00	6018
	2100 mm dia	Metre	28.00	6042
	2100 mm dia	Metre	30.00	6360
	2100 mm dia	Metre	32.00	6406
	2100 mm dia	Metre	34.00	6781
	2200 mm dia	Metre	12.00	5643
	2200 mm dia	Metre	14.00	5704
	2200 mm dia	Metre	16.00	5821
	2200 mm dia	Metre	18.00	5929
	2200 mm dia	Metre	20.00	5948
	2200 mm dia	Metre	22.00	6094
	2200 mm dia	Metre	24.00	6272
	2200 mm dia	Metre	26.00	6467
	2200 mm dia	Metre	28.00	6677
	2200 mm dia	Metre	30.00	7004
	2200 mm dia	Metre	32.00	7197
	2200 mm dia	Metre	34.00	7383
	2200 mm dia	Metre	36.00	7846
	2300 mm dia	Metre	12.00	6407
	2300 mm dia	Metre	14.00	6468
	2300 mm dia	Metre	16.00	6593
	2300 mm dia	Metre	18.00	6726
	2300 mm dia	Metre	20.00	6888
	2300 mm dia	Metre	22.00	7082
	2300 mm dia	Metre	24.00	7247
	2300 mm dia	Metre	26.00	7450
	2300 mm dia	Metre	28.00	7491
	2300 mm dia	Metre	30.00	7827
	2300 mm dia	Metre	32.00	8034
	2300 mm dia	Metre	34.00	8171

Sl. No.	Description	Unit	Thickness in mm	Rate (Rs.)
	2300 mm dia	Metre	36.00	8703
	2400 mm dia	Metre	12.00	7714
	2400 mm dia	Metre	14.00	7778
	2400 mm dia	Metre	16.00	7908
	2400 mm dia	Metre	18.00	8045
	2400 mm dia	Metre	20.00	8217
	2400 mm dia	Metre	22.00	8395
	2400 mm dia	Metre	24.00	8587
	2400 mm dia	Metre	26.00	8799
	2400 mm dia	Metre	28.00	9027
	2400 mm dia	Metre	30.00	9273
	2400 mm dia	Metre	32.00	9486
	2400 mm dia	Metre	34.00	9755
	2400 mm dia	Metre	36.00	10105
	2500 mm dia	Metre	14.00	9500
	2500 mm dia	Metre	16.00	9634
	2500 mm dia	Metre	18.00	9808
	2500 mm dia	Metre	20.00	9957
	2500 mm dia	Metre	22.00	10141
	2500 mm dia	Metre	24.00	10340
	2500 mm dia	Metre	26.00	10563
	2500 mm dia	Metre	28.00	10799
	2500 mm dia	Metre	30.00	11051
	2500 mm dia	Metre	32.00	11325
	2500 mm dia	Metre	34.00	11615
	2500 mm dia	Metre	36.00	11920
	2600 mm dia	Metre	14.00	9707
	2600 mm dia	Metre	16.00	9848
	2600 mm dia	Metre	18.00	9998
	2600 mm dia	Metre	20.00	10179
	2600 mm dia	Metre	22.00	10372
	2600 mm dia	Metre	24.00	10581
	2600 mm dia	Metre	26.00	10810
	2600 mm dia	Metre	28.00	11054
	2600 mm dia	Metre	30.00	11319
	2600 mm dia	Metre	32.00	11601
	2600 mm dia	Metre	34.00	11902
	2600 mm dia	Metre	36.00	12217
	2600 mm dia	Metre	38.00	12558
	2600 mm dia	Metre	40.00	12914
	2600 mm dia	Metre	42.00	13284
	2700 mm dia	Metre	18.00	10084
	2700 mm dia	Metre	20.00	10275
	2700 mm dia	Metre	22.00	10474
	2700 mm dia	Metre	24.00	10691
	2700 mm dia	Metre	26.00	10929
	2700 mm dia	Metre	28.00	11183
	2700 mm dia	Metre	30.00	11457
	2700 mm dia	Metre	32.00	11747
	2700 mm dia	Metre	34.00	12061
	2700 mm dia	Metre	36.00	12390
	2700 mm dia	Metre	38.00	12740
	2700 mm dia	Metre	40.00	13105
	2700 mm dia	Metre	42.00	13556

Sl. No.	Description	Unit	Thickness in mm	Rate (Rs.)
	2800 mm dia	Metre	18.00	10298
	2800 mm dia	Metre	20.00	10492
	2800 mm dia	Metre	22.00	10698
	2800 mm dia	Metre	24.00	10926
	2800 mm dia	Metre	26.00	11170
	2800 mm dia	Metre	28.00	11431
	2800 mm dia	Metre	30.00	11714
	2800 mm dia	Metre	32.00	12019
	2800 mm dia	Metre	34.00	12342
	2800 mm dia	Metre	36.00	12561
	2800 mm dia	Metre	38.00	12920
	2800 mm dia	Metre	40.00	13305
	2800 mm dia	Metre	42.00	13706
	2900 mm dia	Metre	18.00	11718
	2900 mm dia	Metre	20.00	11923
	2900 mm dia	Metre	22.00	12134
	2900 mm dia	Metre	24.00	12368
	2900 mm dia	Metre	26.00	12621
	2900 mm dia	Metre	28.00	12895
	2900 mm dia	Metre	30.00	13188
	2900 mm dia	Metre	32.00	13499
	2900 mm dia	Metre	34.00	13833
	2900 mm dia	Metre	36.00	14188
	2900 mm dia	Metre	38.00	14559
	2900 mm dia	Metre	40.00	14953
	2900 mm dia	Metre	42.00	15367
	3000 mm dia	Metre	18.00	11814
	3000 mm dia	Metre	20.00	12021
	3000 mm dia	Metre	22.00	12242
	3000 mm dia	Metre	24.00	12482
	3000 mm dia	Metre	26.00	12747
	3000 mm dia	Metre	28.00	13027
	3000 mm dia	Metre	30.00	13330
	3000 mm dia	Metre	32.00	13654
	3000 mm dia	Metre	34.00	13999
	3000 mm dia	Metre	36.00	14363
	3000 mm dia	Metre	38.00	14749
	3000 mm dia	Metre	40.00	15157
	3000 mm dia	Metre	42.00	15584

The above rates of MS Spiral pipes are based on the following raw materials cost.

MS Plates = Rs 65000/- Per MT (excluding all taxes but including freight). The rates may be revised depending upon the increase/decrease in the cost of raw materials (landed price) as per the following method. Revised Cost = Cost as per the above table "R<sub>1</sub>".

R<sub>1</sub>= Variation (Increase/Decrease) in cost (Rs. Per metre) due to change in cost of MS Plates

=  $(M_2 - M_1) / 1000 \times W_m$ ,

M<sub>1</sub>= Rs.65000/-, M<sub>2</sub>= Cost of MS Plates (Rs. Per MT excluding all taxes but including freight) at the time of preparation of estimate,

W<sub>m</sub>=Weight of MS Plates required (Kg) per meter of pipe.

Note: The duties and taxes as applicable shall be added as per rules at the time of preparation of estimate.

**15. POLYETHYLENE PIPES (PE - 100 GRADE) FOR WATER SUPPLY**

Sl.No	Description	6.0 kg/sqcm (SDR 21)	8.0 kg/sqcm (SDR 17)	10.0 kg/sqcm (SDR 13.6)	12.5 kg/sqcm (SDR 11)	16.0kg/sqcm (SDR 9)
1	2	3	4	5	6	7
I	Manufacture, supply, & delivery of Polyethylene pipes (PE-100 Grade) for water supply conforming to IS 4984-2016 including transportation to any where in T.G, but excluding GST and specials etc., complete. (Supply upto 90 mm dia in coil & above 90 mm dia stright length in 6 M.)					
		<b>Rate per Meter</b>				
	OD 20 mm					30
	OD 25 mm					38
	OD 32 mm			36	49	60
	OD 40 mm		47	56	73	91
	OD 50 mm	58	73	87	113	142
	OD 63 mm	89	108	134	182	222
	OD 75 mm	126	157	190	257	316
	OD 90 mm	180	219	268	358	456
	OD 110 mm	306	330	396	544	669
	OD 125 mm	353	424	517	701	856
	OD 140 mm	440	532	647	883	1087
	OD 160 mm	580	697	846	1150	1400
	OD 180 mm	726	876	1069	1446	1769
	OD 200 mm	904	1085	1314	1794	2189
	OD 225 mm	1162	1401	1714	2265	2760
	OD 250 mm	1435	1731	2112	2808	3416
	OD 280 mm	1791	2170	2680	3527	4298
	OD 315 mm	2262	2754	3350	4442	5434
	OD 355 mm	2841	3446	4186	5643	6935
	OD 400 mm	3687	4457	5408	7152	8756
	OD 450 mm	4592	5537	6750	9041	10972
	OD 500 mm	5655	6843	8326	11200	13143
	OD 560 mm	6518	7871	9543	12405	
	OD 630 mm	8197	9954	12086	14596	
	OD 710 mm	10482	12627	15329		
	OD 800 mm	13269	16041	19567		
	OD 900 mm	16811	20308			
	OD 1000 mm	20769				

Note:-

Taxes extra as applicable at the time of supply.

The IPCL resin cost adopted for the above rates are

For PE - 100 grade Rs.1,11,520/- per MT. (Excluding Taxes)

The variation in cost of HDPE pipes due to increase / decrease in raw material cost shall be allowed as per the following price variation formula.

Price variation formula as follows:

$P2 = P1 + (A2 - A1) / 1000 \times M \times 0.95$  (for increase in raw material cost)

$P2 = P1 - (A1 - A2) / 1000 \times M \times 0.95$  (for decrease in raw material cost)

P2 = Revised pipe price in Rs. Per Metre Excluding Taxes

P1 = Existing pipe price in Rs. Per Metre Excluding Taxes

A2 = Revised price of raw material Rs. Per MT Excluding Taxes

A1 = Existing price of raw material Rs. Per MT Excluding Taxes

M = Weight of pipe in Kgs per Metre as per weight chart.

**16. H.D.P.E FITTINGS**

	<b>Manufacture, Supply, &amp; Delivery of HDPE fittings conforming to IS 4984 - 1995 including transportation to anywhere in T.G. Excluding taxes.</b>	<b>Rate per Each</b>
<b>I (a)</b>	<b>PIPE ENDS LONG NECK</b>	
	OD 50 mm	62
	OD 63 mm	79
	OD 75 mm	95
	OD 90 mm	123
	OD 110 mm	170
	OD 125 mm	306
	OD 140 mm	309
	OD 160 mm	431
	OD 180 mm	611
	OD 200 mm	786
	OD 225 mm	900
	OD 250 mm	1055
	OD 280 mm	1179
	OD 315 mm	1361
	OD 355 mm	2843
	OD 400 mm	3789
	OD 450 mm	6305
	OD 500 mm	7018
<b>(b)</b>	<b>MS FLANGES</b>	
	OD 50 mm	102
	OD 63 mm	130
	OD 75 mm	164
	OD 90 mm	178
	OD 110 mm	186
	OD 125 mm	255
	OD 140 mm	276
	OD 160 mm	363
	OD 180 mm	512
	OD 200 mm	663
	OD 225 mm	828
	OD 250 mm	979
	OD 280 mm	1109
	OD 315 mm	1304
	OD 355 mm	2210
	OD 400 mm	2741
	OD 450 mm	3580
	OD 500 mm	4098
<b>(c)</b>	<b>END CAPS</b>	
	OD 50 mm	42
	OD 63 mm	52
	OD 75 mm	64
	OD 90 mm	85
	OD 110 mm	98
	OD 125 mm	133
	OD 140 mm	156
	OD 160 mm	238
	OD 180 mm	388
	OD 200 mm	423
	OD 225 mm	441
	OD 250 mm	628
	OD 280 mm	643
	OD 315 mm	878
	OD 355 mm	1354
	OD 400 mm	2368
	OD 450 mm	3808
	OD 500 mm	7018

<b>(d)</b>	<b>REDUCERS</b>	<b>Rate per Each</b>
	OD 50 mm x 63 mm	60
	OD 63 mm x 75 mm	85
	OD 75 mm x 90 mm	139
	OD 90 mm x 110 mm	192
	OD 110 mm x 125 mm	293
	OD 125 mm x 140 mm	405
	OD 140 mm x 160 mm	563
	OD 160 mm x 180 mm	781
	OD 180 mm x 200 mm	1008
	OD 200 mm x 225 mm	1239
	OD 225 mm x 250 mm	1689
	OD 250 mm x 280 mm	2401
	OD 280 mm x 315 mm	3392
	OD 315 mm x 355 mm	3891
	OD 355 mm x 400 mm	5492
	OD 400 mm x 450 mm	5697
	OD 450 mm x 500 mm	7304
<b>(e)</b>	<b>TEES</b>	
	OD 50 mm	81
	OD 63 mm	130
	OD 75 mm	156
	OD 90 mm	274
	OD 110 mm	325
	OD 125 mm	488
	OD 140 mm	673
	OD 160 mm	1161
	OD 180 mm	1574
	OD 200 mm	2168
	OD 225 mm	3078
	OD 250 mm	4212
	OD 280 mm	5899
	OD 315 mm	8406
	OD 355 mm	11987
	OD 400 mm	17559
	OD 450 mm	24940
	OD 500 mm	34253
<b>(f)</b>	<b>BENDS</b>	
	OD 50 mm	52
	OD 63 mm	114
	OD 75 mm	148
	OD 90 mm	253
	OD 110 mm	332
	OD 125 mm	492
	OD 140 mm	647
	OD 160 mm	964
	OD 180 mm	1386
	OD 200 mm	1877
	OD 225 mm	2662
	OD 250 mm	3649
	OD 280 mm	5263
	OD 315 mm	7277
	OD 355 mm	10088
	OD 400 mm	15216
	OD 450 mm	22370
	OD 500 mm	30327

II	Supply and Fixing Electro Fusion Tapping saddle complying with BS EN 12201-3-2011, PN 12.5 rating & WRAS approved raw material as per BS 6920, manufactured from virgin resin of PE-80/PE-100 having blue/black colour using food grade compounded raw material for usage in drinking water system and having working pressure of 10 bar. The cost shall include testing of all materials, labour, inspection charges, transportation upto site, transit insurance, loading, unloading, stacking, providing and fixing etc. Complete as specified and directed by the Departmental Engineers, but excluding of all taxes.	Rate per Each
	SIZE	Rs.
	(Main pipe outer diameter in mm & Tapping size in Inches)	
	63x1/2"	253
	63 x3/4"	294
	63 x1"	338
	75 x1/2"	266
	75 x3/4"	306
	75 x1	336
	90 x1/2"	280
	90 x3/4"	318
	90 x1"	348
	90 x 1 1/4"	348
	90 x 1 1/2"	348
	90 x2"	348
	110x1/2"	280
	110 x3/4"	318
	110 x1"	348
	110 x 1 1/4"	348
	110x1 1/2"	348
	110x2"	348
	125x1/2"	280
	125x3/4"	340
	125x1"	370
	125x1 1/4"	370
	125x1 1/2"	370
	125x2"	370
	140x1/2"	280
	140x3/4"	324
	140x1"	360
	140x1 1/4"	360
	140x1 1/2"	360
	140x2"	360
	160 x1/2"	294
	160 x3/4"	342
	160 x1"	372
	160 x 1 1/4"	372
	160 x 1 1/2"	372
	160 x 2"	372
	200 x 1/2"	294
	200 x 3/4"	355
	200 x 1"	385
	200 x 1 1/4"	385
	200 x 1 1/2"	385
	200x 2"	385
	250 x 1/2"	372
	250 x3/4"	408
	250 x1"	444
	250 x 1 1/4"	444
	250 x1 1/2"	444
	250 x 2"	444
	315 x 1/2"	396
	315 x3/4"	432
	315x1"	492



	315x1 1/4"	492
	315x1 1/2"	492
	315x2"	492
<b>S.No.</b>	<b>Description</b>	
<b>III</b>	<b>HOUSE SERVICE CONNECTIONS (COMPRESSION FITTINGS)</b>	
<b>A</b>	Supply and Fixing of Compression Fittings shall comply with ISO 17885 - 2015, PN-16 rating and manufactured from virgin resin of PE-80 having blue colour. Raw material must be WRAS Approved as per BS 6920 for effect on water quality intended for human consumption. Compression fittings should have moulded-in SS 304 threaded insert outlet with thread dimension conforming to IS 554/ISO 7. The cost shall include testing of all materials, labour, inspection charges, transportation up to site, transit insurance, loading, unloading, stacking, providing and fixing etc. Complete as specified and directed by the Departmental Engineers, but excluding all taxes.	<b>Rate per each</b>
1	Compression Male/ Female threaded adapter with SS Insert D20mmx1/2"	103
2	Compression Male/Female threaded adapter with SS Insert D25mmx3/4"	137
3	Compression Male/Female threaded adapterwith SS Insert D32mmx1"	191
4	Compression Male/Female threaded elbow with SS Insert D20mmx1/2"	106
5	Compression Male/Female threaded elbow with SS Insert D25mmx3/4"	143
6	Compression Male/Female threaded elbow with SS Insert D32mmx1"	198
7	Double compression elbow 20mm	48
8	Double compression elbow 25mm	66
9	Double compression elbow 32mm	94
<b>B</b>	<b>HOUSE SERVICE CONNECTIONS (Composite Strap Saddle for DI/CI Pipes)</b>	
	Supply and Fixing of Composite Strap Saddle shall be of wrap around design, PN-16 rating. Body shall be manufactured using virgin compounded PE80/PE100 polymer with Stainless steel 304 grade stirrup plate mounted with PE straps(Engineering plastic) with Nut bolt joint. Sealing between the saddle and mains shall be obtained by using an elastomer seal(Underneath projection for self interlocking).The cost shall include testing of all materials, labour, inspection charges, transportation up to site, transit insurance, loading, unloading, stacking, providing and fixing etc. Complete as specified and directed by the Departmental Engineers, but excluding all taxes.	
	(Main pipe outer diameter in mm & Tapping size in Inches)	
1	100X1/2"	450
2	100X3/4"	502
3	100X1"	535
4	150X1/2"	470
5	150X3/4"	522
6	150X1"	555
7	200X1/2"	490
8	200X3/4"	542
9	200x1"	575
<b>C</b>	<b>HOUSE SERVICE CONNECTIONS (Regulating Brass ferrule)</b>	
	The cost shall include testing of all materials, labour, Inspection charges, Transportation upto site, transit insurance, loading, unloading,stacking,providing and fixing etc. complete as specified and directed by departmental engineers, but excluding of all taxes.	
1	1/2"	136
2	3/4"	223
3	1"	389
<b>D</b>	<b>Electrofusion Couplers</b>	
1	EF Coupler D20mm PE 100BK 4PIN	32
2	EF Coupler D25mm PE 100BK 4PIN	34
3	EF Coupler D32mm PE 100BK 4PIN	36
4	EF Coupler D40mm PE 100BK 4PIN	62
5	EF Coupler D50mm PE 100BK 4PIN	76
6	EF Coupler D63mm PE 100BK 4PIN	90
7	EF Coupler D75mm PE 100BK 4PIN	204
8	EF Coupler D90mm PE 100BK 4PIN	210
9	EF Coupler D110mm PE 100BK 4PIN	274
10	EF Coupler D125mm PE 100BK 4PIN	366
11	EF Coupler D140mm PE 100BK 4PIN	1058
12	EF Coupler D160mm PE 100BK 4PIN	938

13	EF Coupler D180mm PE 100BK 4PIN	1019
14	EF Coupler D200mm PE 100BK 4PIN	1226
15	EF Coupler D225mm PE 100BK 4PIN	1162
16	EF Coupler D250mm PE 100BK 4PIN	1558
17	EF Coupler D280mm PE 100BK 4PIN	1966
18	EF Coupler D315mm PE 100BK 4PIN	2862
<b>E</b>	<b>EF ELBOW 90 Degree</b>	
1	EF Elbow D20mm PE 100BK 4PIN	76
2	EF Elbow D25mm PE 100BK 4PIN	86
3	EF Elbow D32mm PE 100BK 4PIN	95
4	EF Elbow D40mm PE 100BK 4PIN	103
5	EF Elbow D63mm PE 100BK 4PIN	196
6	EF Elbow D75mm PE 100BK 4PIN	261
7	EF Elbow D90mm PE 100BK 4PIN	514
8	EF Elbow D110mm PE 100BK 4PIN	726
9	EF Elbow D125mm PE 100BK 4PIN	822
<b>F</b>	<b>EF ELBOW 45 Degree</b>	
1	EF Elbow D75mm PE 100BK 4PIN	294
2	EF Elbow D90mm PE 100BK 4PIN	586
<b>G</b>	<b>EF EQUAL TEE</b>	
1	EF Equal Tee D20mm PE 100BK 4PIN	71
2	EF Equal Tee D25mm PE 100BK 4PIN	78
3	EF Equal Tee D32mm PE 100BK 4PIN	91
4	EF Equal Tee D40mm PE 100BK 4PIN	121
5	EF Equal Tee D63mm PE 100BK 4PIN	292
6	EF Equal Tee D75mm PE 100BK 4PIN	383
7	EF Equal Tee D90mm PE 100BK 4PIN	546
8	EF Equal Tee D110mm PE 100BK 4PIN	614
9	EF Equal Tee D125mm PE 100BK 4PIN	1054
<b>H</b>	<b>EF REDUCER</b>	
1	EF Reducer D25X20mm PE 100BK 4PIN	38
2	EF Reducer D32X20mm PE 100BK 4PIN	42
3	EF Reducer D32X25mm PE 100BK 4PIN	47
4	EF Reducer D40X32mm PE 100BK 4PIN	59
5	EF Reducer D63X32mm PE 100BK 4PIN	98
6	EF Reducer D63X40mm PE 100BK 4PIN	104
7	EF Reducer D63X50mm PE 100BK 4PIN	109
8	EF Reducer D75X63mm PE 100BK 4PIN	230
9	EF Reducer D90X50mm PE 100BK 4PIN	318
10	EF Reducer D90X63mm PE 100BK 4PIN	451
11	EF Reducer D90X75mm PE 100BK 4PIN	471
12	EF Reducer D110X63mm PE 100BK 4PIN	543
13	EF Reducer D110X75mm PE 100BK 4PIN	565
14	EF Reducer D110X90mm PE 100BK 4PIN	587
15	EF Reducer D125X63mm PE 100BK 4PIN	702
16	EF Reducer D125X90mm PE 100BK 4PIN	755
<b>I</b>	<b>EF END CAP</b>	
1	EF End Cap D20mm PE 100BK 4PIN	69
2	EF End Cap D25mm PE 100BK 4PIN	70
3	EF End Cap D32mm PE 100BK 4PIN	72
4	EF End Cap D40mm PE 100BK 4PIN	190
5	EF End Cap D50mm PE 100BK 4PIN	247
6	EF End Cap D63mm PE 100BK 4PIN	168
7	EF End Cap D75mm PE 100BK 4PIN	392
8	EF End Cap D90mm PE 100BK 4PIN	504
9	EF End Cap D110mm PE 100BK 4PIN	596
10	EF End Cap D125mm PE 100BK 4PIN	653
11	EF End Cap D140mm PE 100BK 4PIN	1393

J	PP Clamp Saddle shall comply with AS/NZS 4793 or relevant international standards- Mechanical tapping saddles for water works purposes and designed for use with PVC/PE pipe as per IS 4985/ IS 4984 respectively. These saddles should be contoured to fit around the pipe. PP Saddles shall be blue with moulded SS female threaded outlets. Seal shall be thermoplastic elastomer rubber suitable for drinking water and SS nut-bolt-washer. Maximum working pressure rating of 10 bar.	Rate per each
1	63X1/2"	127
2	63X3/4"	127
3	63X1"	127
4	75X1/2"	148
5	75X3/4"	148
6	75X1"	148
7	90X1/2"	169
8	90X3/4"	169
9	90X1"	169
10	110X1/2"	203
11	110X3/4"	203
12	110X1"	203
13	125X1/2"	242
14	125X3/4"	242
15	125X1"	242
16	140X1/2"	288
17	140X3/4"	288
18	140X1"	288
19	160X1/2"	344
20	160X3/4"	353
21	160X1"	353
22	180X1/2"	359
23	180X3/4"	449
24	180X1"	499
25	200X1/2"	379
26	200X3/4"	469
27	200X1"	519

Note: The above rates (Items from D to J) are exclusive of GST.

## 17. PVC PIPES

Sl. No.	Description	4.0 Kgs/cm <sup>2</sup>	6.0 Kgs/cm <sup>2</sup>	10.0 Kgs/cm <sup>2</sup>
1	2	3	4	5
1	Manufacture, Supply and Delivery of Unplasticised PVCs Pipes for potable water supplies conforming to IS : 4985/2000 (3 <sup>rd</sup> revision) with bell ends (Socket) as per specification in light Grey/Natural Ivory Grey/ Any other Color (except White) inclusive of transportation to the sub-divisional stores anywhere in TG excluding Taxes.			
	DIA IN MM      Rate/Metre	Rs.	Rs.	Rs.
	20			16
	25			24
	32			35
	40		34	55
	50		51	84
	63	56	81	121
	75	82	111	177
	90	112	161	251
	110	163	232	373
	125	212	297	486
	140	265	381	604
	160	349	495	792
	180	445	637	1014
	200	540	776	1236
	225	722	1042	1658
	250	838	1276	2013
	280	1096	1612	2547
	315	1387	2027	3215
	355	1819	2640	
	400	2294	3359	

**Note:** Taxes as applicable shall be added as per rules at the time of preparation of estimate.

The resin cost adopted for the above rates is Rs.1,28,840/- per MT (Basic rate excluding Taxes)

The variation in cost of PVC pipes due to increase / decrease in raw material cost shall be allowed subject to the following price variation formula.

The price variation formula to be adopted is as follows:

$$P2 = P1 + (A2 - A1) / 1000 \times M \times 0.95 \text{ (for increase in raw material cost)}$$

$$P2 = P1 - (A1 - A2) / 1000 \times M \times 0.95 \text{ (for decrease in raw material cost)}$$

P2 = Revised pipe price in Rs. Per Metre,

P1 = Existing pipe price in Rs. Per Metre

A2 = Revised price of raw material Rs. Per MT,

A1 = Existing price of raw material Rs. Per MT

M = Weight of pipe in Kgs per Metre as per weight chart.

**18. NON- PRESSURE P.V.C.U PIPES**

Code No	Description	
1	2	4
	Manufacture, Supply, & Delivery of unplasticized Non-pressure polyvinyl chloride(PVC-U) pipes of dark (any shade of brown) for use in underground drainage & sewerage system conforming to IS 15328/2003) <u>with solvent cement jointing</u> as per specification inclusive of transportation to the sub-divisional stores anywhere in T.G, excluding Taxes.	Rate per Meter
		Rs.
	<b>Pipe Series (S25)</b>	
	OD 160 mm	295
	OD 200 mm	451
	OD 250mm	698
	OD 315 mm	1101
	<b>Pipe Series (S20)</b>	
	OD 125 mm	230
	OD 160 mm	367
	OD 200 mm	556
	OD 250mm	866
	OD 315 mm	1361
	<b>Pipe Series (S16.5)</b>	
	OD 110 mm	202
	OD 125 mm	272
	OD 160 mm	425
	OD 200 mm	661
	OD 250mm	1023
	OD 315 mm	1618

**Note:** Taxes as applicable shall be added as per rules at the time of preparation of estimate.

The resin cost adopted for the above rates is Rs.1,28,840/- per MT (Basic rate, excluding Taxes)

The variation in cost of PVC pipes due to increase / decrease in raw material cost shall be allowed subject to the following price variation formula.

The price variation formula to be adopted is as follows:

$P2 = P1 + (A2 - A1) / 1000 \times M \times 0.95$  (for increase in raw material cost)

$P2 = P1 - (A1 - A2) / 1000 \times M \times 0.95$  (for decrease in raw material cost)

P2 = Revised pipe price in Rs. Per Metre

P1 = Existing pipe price in Rs. Per Metre

A2 = Revised price of raw material Rs. Per MT

A1 = Existing price of raw material Rs. Per MT

M = Weight of pipe in Kgs per Meter as per weight chart.

**19. NON- PRESSURE P.V.C.U PIPES**

Code No	Description	
1	2	4
	Manufacture, supply, & delivery of un-plasticized Non-Pressure Polyvinyl Chloride(PVC-U) pipes of dark (any shade of Brown) for use in underground drainage & sewerage system conforming to IS 15328/2003) <u>with Elastomeric Seal Ring Joints</u> (Ringtite PVC Pipes)as per specification inclusive of transportation to the Sub-Divisional stores any where in T.G, excluding Taxes.	Rate per Meter
		Rs.
	<b>Pipe Series (S25)</b>	
	OD 160 mm	316
	OD 200 mm	479
	OD 250mm	744
	OD 315 mm	1170
	<b>Pipe Series (S20)</b>	
	OD 125 mm	246
	OD 160 mm	388
	OD 200 mm	590
	OD 250mm	920
	OD 315 mm	1445
	<b>Pipe Series (S16.5)</b>	
	OD 110 mm	214
	OD 125 mm	289
	OD 160 mm	454
	OD 200 mm	699
	OD 250mm	1087
	OD 315 mm	1714

**Note:** Taxes as applicable shall be added as per rules at the time of preparation of estimate.  
The resin cost adopted for the above rates is Rs. Rs.1,28,840/- per MT (Basic rate excluding Taxes)  
The variation in cost of PVC pipes due to increase / decrease in raw material cost shall be allowed subject to the following price variation formula.

The price variation formula to be adopted is as follows:

$$P2 = P1 + (A2 - A1) / 1000 \times M \times 0.95 \text{ (for increase in raw material cost)}$$

$$P2 = P1 - (A1 - A2) / 1000 \times M \times 0.95 \text{ (for decrease in raw material cost)}$$

P2 = Revised pipe price in Rs. Per Metre

P1 = Existing pipe price in Rs. Per Metre

A2 = Revised price of raw material Rs. Per MT

A1 = Existing price of raw material Rs. Per MT

M = Weight of pipe in Kgs per Metre as per weight chart.

## 20. CENTRIFUGALLY CAST (SPUN) IRON PRESSURE PIPES

Sl. No.	Description	Unit	Rate		
1	2	3	4	5	6
I	Socket and Spigot Centrifugally Cast (Spun) Iron pressure pipes for water, Gas and Sewage conforming to specification No: IS 1536/2001 (third revision) with amdt. No: 1 & 2 in standard lengths of 3.66 m, 4 m, 4.5m, 5 m, 5.5 m & 6 m and details given below, suitable either for lead jointing or rubber gasket (push on) jointing at purchasers option at ex-factory excluding transportation & taxes.		LA Class (Rs)	A Class (Rs)	B Class (Rs)
	Nominal dia (in MM)				
	80	Rmt	949	1030	1107
	100	Rmt	1159	1274	1361
	125	Rmt	1471	1607	1731
	150	Rmt	1794	1965	2117
	200	Rmt	2619	2843	3076
	250	Rmt	3530	3843	4158
	300	Rmt	4551	4978	5392
	350	Rmt	5802	6294	6828
	400	Rmt	7064	7719	8331
	450	Rmt	8541	9384	10121
	500	Rmt	10079	10979	11878
	600	Rmt	13349	14573	15785
	700	Rmt	17498	19117	20654
	750	Rmt	19598	21428	23245
	800	Rmt	21937	23903	25857
	900	Rmt	26731	30448	31602
	1000	Rmt	32115	35081	37915
II	Conveyance of Centrifugally Cast (Spun) Iron Pressure Pipes and accessories including loading at Factory, un-loading at site and stacking for the following sizes. (The Minimum distance/lead in Km for destination below 100 Km to be taken as 100 Km)		Class		
	SIZE IN MM	UNIT	LA	A	B
	80	Per KM/RMT	0.28	0.28	0.28
	100	Per KM/RMT	0.28	0.28	0.28
	125	Per KM/RMT	0.43	0.43	0.43
	150	Per KM/RMT	0.43	0.43	0.43
	200	Per KM/RMT	0.72	0.72	0.72
	250	Per KM/RMT	0.87	0.87	0.87
	300	Per KM/RMT	1.16	1.30	1.30
	350	Per KM/RMT	1.59	1.59	1.73
	400	Per KM/RMT	1.87	1.87	2.02
	450	Per KM/RMT	2.17	2.31	2.46
	500	Per KM/RMT	2.59	2.75	2.89
	600	Per KM/RMT	2.59	2.75	2.89
	700	Per KM/RMT	2.59	2.75	2.89
	750	Per KM/RMT	4.33	4.61	4.91
	800	Per KM/RMT	7.35	7.35	7.35
	900	Per KM/RMT	7.35	7.35	7.35
	1000	Per KM/RMT	7.35	7.35	7.35

**Note:** Taxes as applicable shall be added as per rules at the time of preparation of estimate.

Price Variation Formula due to Increase / Decrease in the cost of pig iron.  $P2=P1+ (R2-R1)/1000*M*1.0$

Where M= Weight of pipe in kg per metre.

P2 = Revised rate of pipe in Rs. per Rmt.,

P1 = Rate of pipe in Rs. per Rmt. as per above table.

R2 = Price of Pig Iron (Rs per MT excluding Taxes) at the time of preparation of estimate.

R1 = Price of Pig Iron (Rs per MT excluding Taxes) at the time of preparation of SoR =Rs. 41,000/-

## 21.DUCTILE IRON PRESSURE PIPES

Sl. No.	Description	Unit	Rate	
			4	5
1	Centrifugally cast (Spun) Ductile Iron pressure pipes for water, gas and sewage with <u>Socket Spigot ends</u> conforming to IS: 8329/2000 in standard working lengths of 4, 5 5.5 & 6 meter for classification K9 & K7 suitable for push-on-joint (rubber gasket d jointing) with cement mortar lining inside the pipes with outside zinc coating. Rates are ex-factory, excluding transportation & taxes.			
	<b>Nominal Dia in mm</b>	<b>Rmt</b>	<b>K7</b>	<b>K9</b>
	100	Rmt	859	1023
	150	Rmt	1197	1515
	200	Rmt	1661	2025
	250	Rmt	2223	2659
	300	Rmt	2851	3368
	350	Rmt	3586	4198
	400	Rmt	4347	5058
	450	Rmt	5220	6049
	500	Rmt	6215	7039
	600	Rmt	8266	9285
	700	Rmt	10682	11985
	750	Rmt	11962	13451
	800	Rmt	13232	14846
	900	Rmt	16138	18099
	1000	Rmt	19140	21466
	1100	Rmt	-	23113
	1200	Rmt	-	27003
2	Centrifugally cast (Spun) Ductile Iron pressure pipes for water, gas and sewage <u>with plain ends</u> conforming to IS:8329/2000in standard working lengths of 4, 5, 5.5 & 6 meter for classification K9 & K7 with cement mortar lining inside the pipes with outside zinc coating. Rates are ex-factory, excluding transportation & taxes.			
	<b>Nominal Dia in mm</b>		<b>K7</b>	<b>K9</b>
	100	Rmt	738	941
	150	Rmt	1066	1385
	200	Rmt	1502	1881
	250	Rmt	1956	2495
	300	Rmt	2566	3155
	350	Rmt	3219	3920
	400	Rmt	3890	4722
	450	Rmt	4650	5582
	500	Rmt	5531	6649
	600	Rmt	7320	8595
	700	Rmt	9661	10903
	750	Rmt	10798	12216
	800	Rmt	11949	13488
	900	Rmt	14448	16310
	1000	Rmt	17177	19389
	1100	Rmt		20802
	1200	Rmt		24200
3	Centrifugally cast (Spun) Ductile Iron pressure pipes with <u>flanged (welded) ends</u> for water, gas, sewage conforming to IS: 8329/2000 in standard working lengths of 1,2,3, 4, 5 mts for classification K9 with cement mortar lining inside the pipes with outside zinc coating. Rates are ex-factory, excluding transportation & taxes.			



	Nominal Dia in mm		1.0 Mt. Length	2.0 Mt. Length
	100	Each	3418	4498
	150	Each	4845	6425
	200	Each	6434	8596
	250	Each	8411	11293
	300	Each	10540	14187
	350	Each	16447	20970
	400	Each	20236	25699
	450	Each	24431	30877
	500	Each	29620	37185
	600	Each	41914	51862
	700	Each	49948	62573
	800	Each	61598	77215
	900	Each	73437	92319
	1000	Each	93650	115942
	1100	Each	109077	133009
			3.0 Mt. Length	4.0 Mt. Length
	100	Each	5576	6168
	150	Each	8006	8982
	200	Each	10761	12224
	250	Each	14177	16159
	300	Each	17827	20428
	350	Each	25495	28215
	400	Each	31162	34062
	450	Each	37320	40663
	500	Each	44750	48596
	600	Each	61810	66470
	700	Each	75199	81431
	800	Each	92830	100611
	900	Each	111204	120800
	1000	Each	139101	149550
	1100	Each	157384	186910
			5.0 Mt. Length	
	100	Each	7225	
	150	Each	10551	
	200	Each	14386	
	250	Each	19040	
	300	Each	24080	
	350	Each	32738	
	400	Each	39518	
	450	Each	47104	
	500	Each	56148	
	600	Each	76397	
	700	Each	94034	
	800	Each	116198	
	900	Each	143500	
	1000	Each	171959	
	1100	Each	201955	
4	Conveyance of Ductile Iron Pressure Pipes and accessories including loading at Factory, un-loading at site and stacking for the following sizes	Class		Welded Double Flanged Pipes
	SIZE IN MM	UNIT	K7	K9
	100	Per KM/RMT	0.25	0.37
	150	Per KM/RMT	0.37	0.48
	200	Per KM/RMT	0.37	0.73
	250	Per KM/RMT	0.48	0.99
	300	Per KM/RMT	0.73	1.23

	350	Per KM/RMT	0.85	0.99	1.47
	400	Per KM/RMT	0.99	1.10	1.72
	450	Per KM/RMT	1.23	1.35	2.09
	500	Per KM/RMT	1.47	1.59	2.45
	600	Per KM/RMT	2.09	2.09	3.19
	700	Per KM/RMT	3.06	3.06	4.67
	750	Per KM/RMT	3.68	3.68	5.63
	800	Per KM/RMT	6.25	6.25	9.31
	900	Per KM/RMT	6.25	6.25	9.31
	1000	Per KM/RMT	6.25	6.25	9.31
	1100	Per KM/RMT	6.25	6.25	
	1200	Per KM/RMT	6.68	6.68	
<b>5</b>	<b>Supply and Delivery of Polyethylene (PE) Sleeves for Ductile Iron Pipes used to guard the pipe against corrosion.</b>				
	<b>DIA IN MM</b>				
	100 mm dia			RMT	41
	150 mm dia			RMT	50
	200 mm dia			RMT	64
	250 mm dia			RMT	74
	300 mm dia			RMT	81
	350 mm dia			RMT	91
	400 mm dia			RMT	127
	450 mm dia			RMT	127
	500 mm dia			RMT	154
	600 mm dia			RMT	154
	700 mm dia			RMT	200
	750 mm dia			RMT	200
	800 mm dia			RMT	200
	900 mm dia			RMT	227
	1000 mm dia			RMT	227
	1100 mm dia			RMT	227
<b>6</b>	<b>Additional price for HAC(high alumina cement motar lining)</b>				
	<b>DIA IN MM</b>				
	100 mm dia			RMT	57
	150 mm dia			RMT	85
	200 mm dia			RMT	113
	250 mm dia			RMT	149
	300 mm dia			RMT	188
	350 mm dia			RMT	233
	400 mm dia			RMT	278
	450 mm dia			RMT	330
	500 mm dia			RMT	386
	600 mm dia			RMT	509
	700 mm dia			RMT	649
	750 mm dia			RMT	725
	800 mm dia			RMT	806
	900 mm dia			RMT	978
	1000 mm dia			RMT	1167
	1100 mm dia			RMT	1389
	1200 mm dia			RMT	1539

**Note:** Taxes as applicable shall be added as per rules at the time of preparation of estimate.

Price Variation Formula due to Increase / Decrease in the cost of pig iron.

$P2 = P1 + (R2 - R1) / 1000 * M * 0.96$ , Where

M = Weight of pipe in kg per metre as per I.S.8329-1994.

P2 = Revised rate of pipe in Rs. per Rmt.

P1 = Rate of pipe in Rs. per Rmt. as per above table.

R2 = Price of Pig Iron (Rs per MT excluding Taxes) at the time of preparation of estimate.

R1 = Price of Pig Iron (Rs per MT excluding Taxes) at the time of preparation of SoR =Rs.41000/-

## 22.DUCTILE IRON FITTINGS

Sl. No.	Description	Unit	Rate
1	2	3	4
	<b>Centrifugally cast (spun) Ductile Iron Fittings conforming to IS:9523/2000 having dimensions as per table. The rates mentioned here under are for fittings, zinc coated externally with inside mortar lining (with finishing as per class 13/IS 9523/2000) ( ex-works) Excluding Transportation and Taxes.</b>		
I	DI double socket branch flange Tee		
	Upto 500 x 500 mm dia	Kg	105
	Above 500 x 500 mm dia	Kg	117
II	DI All Socket Tees		
	Upto 300 x 300 mm dia	Kg	105
	Above 300 x 300 mm dia	Kg	117
III	DI Double socket Tapers (Reducer)		
	Upto 500 x 450 mm dia	Kg	105
	Above 500 x 450 mm dia	Kg	117
IV	DI Flanged Socket		
	Upto 500 mm dia	Kg	105
	Above 500 mm dia	Kg	117
V	DI Flanged Spigot		
	Upto 500 mm dia	Kg	105
	Above 500 mm dia	Kg	117
VI	DI Double Socket Duck Foot Bend		
	Upto 300mm dia	Kg	105
	Above 300mm dia	Kg	117
VII	DI Double Flange Duck/Foot bend		
	Upto 300 mm dia	Kg	105
	Above 300 mm dia	Kg	117
VIII	DI All socket Cross.		
	Upto 300 x 300 mm dia	Kg	105
	Above 300 x 300 mm dia	Kg	117
IX	DI All Flange Tee		
	Upto 500 x 500 mm dia	Kg	105
	Above 500 x 500 mm dia	Kg	117
X	DI All Flange Cross		
	Upto 300 x 300 mm dia	Kg	105
	Above 300 x 300 mm dia	Kg	117
XI	DI Double Flange Reducer		
	Upto 500 x 450 mm dia	Kg	105
	Above 500 x 450 mm dia	Kg	117
XII	Blank Flange		
	Upto 500 mm dia	Kg	105
	Above 500 mm dia	Kg	117
XIII	Mechanical Joints		
	Upto 300 mm dia	Kg	105
	Above 300 mm dia	Kg	117
XIV	DI Double Socket Bends		
	Upto 500mm dia	Kg	105
	Above 500 mm dia	Kg	117
XV	DI Double Flanged Bends		
	Upto 500mm dia	Kg	105
	Above 500 mm dia	Kg	117

**Note:** Taxes as applicable shall be added as per rules at the time of preparation of estimate.

**23. RUBBER GASKETS SUITABLE FORC.I/ D.I. S/S PIPES**

Sl. No.	Description	Unit	Rate
1	2	3	4
1	Manufacture as per BIS:12820/2004 with S.B.R. Quality Rubber conforming to BIS: 5382/85, supply and delivery of Rubber Gaskets suitable for C.I/ D.I S/S pipes anywhere in T.G. F.O.R. Destination departmental stores including cost of material, loading, incidental handling with companies standard packing, transportation, unloading & stacking but excluding taxes.		
	80mm dia	Each	65
	100mm dia	Each	101
	125mm dia	Each	120
	150mm dia	Each	148
	200mm dia	Each	180
	250mm dia	Each	200
	300mm dia	Each	305
	350mm dia	Each	386
	400mm dia	Each	420
	450mm dia	Each	452
	500mm dia	Each	627
	600mm dia	Each	744
	700mm dia	Each	988
	750mm dia	Each	1098
	800mm dia	Each	1315
	900mm dia	Each	1588
	1000mm dia	Each	1737

**24. CI PIPES AND SPECIALS**

Sl. No.	Description	Quality or sort	Rate/ Kg including packing, forwarding, Transit risk and delivery any where in T.G. Rs.
1	2	3	4
	Manufacture, Supply and Delivery of Cast Iron Fittings (spls.) Conforming to IS. No. 7181/1986, 5531/1988, 3950/1979 and C.I.D Joints conforming to IS No.8794/1988 at site of work anywhere in T.G. Including, loading, unloading, transportation to site of work stacking at site transit risk and package, excluding all taxes.	I.S. No. 7181/1986 5531/1988 3950/1979 & 8794/1988	86.13

**Foot Note:** The rate of CI pipes, CI Specials and CID Joints etc., which are to be incorporated in the SoR are based on the following raw materials cost.

**Pig Iron:** Rs. 41,000/- per M.T. (Excluding Taxes)

**Coke:** Rs. 32,000/- per M.T. (Excluding Taxes)

The rates may be revised depending upon the increase/decrease in the cost of raw materials as per the following method. For every increase/decrease of Rs.1000/- in the cost of raw materials or part there of proportionately.

**In respect of Pig Iron:** The increase/decrease in cost of CI Specials per Kg is 3.43%.

**In respect of coke:** The increase/decrease in cost of CI Specials per Kg is 0.67%.

The above price is at site of work, Taxes extra as applicable at the time of supply.

**Note:** The taxes as applicable shall be added as per rules at the time of preparation of estimate.

**25. WATER HAMMER CONTROL DEVICES**

(Rate Each in Rs.)

Sl. No.	Description	TEST PRESSURE				Additional charges for Flanged ended valves
		10 Kgs/cm <sup>2</sup>	15 Kgs/cm <sup>2</sup>	20 Kgs/cm <sup>2</sup>	25 Kgs/cm <sup>2</sup>	
1	2	3	4	5	6	7
1	Manufacture, supply and delivery of zero velocity valve/ PSLV with CI body with flanged ends as per AWWA, ex-factory excluding transportation etc., complete.					
	DIA IN MM      Rate/Each	Rs.	Rs.	Rs.	Rs.	
	150	66761	77929	82534	90790	
	200	69746	80207	86224	94844	
	250	78693	90496	97284	107013	
	300	88559	101843	109484	120430	
2	Manufacture, Supply and delivery of zero velocity valve/ PSLV with MS Fabricated Body with Plain ends. as per AWWA, Ex-factory excluding transportation etc. Complete.					
	DIA IN MM      Rate/ Each	Rs.	Rs.	Rs.	Rs.	Rs.
	350	94324	108471	116607	128266	8173
	400	104261	119899	128891	141786	9854
	450	121263	139453	149912	164904	11776
	500	140150	161170	173259	190585	12740
	525/550	150537	171131	188479	207326	16464
	600	168552	193833	208371	229208	23486
	650	188674	207544	235905	254653	26559
	700	219922	242033	274962	296954	31726
	750	243595	267989	304524	328919	35619
	800	296742	341256	366847	403530	40138
	900	352697	405602	427824	479625	48552
	1000	427824	427824	427824	594508	61649
	1050	432102	432102	432102	625969	64116
	1100	545067	618062	673855	741242	71385
	1200	656037	721655	822120	885694	80758
	1400	984056	1082480	1233180	1328536	113566
	1500	1146593	1261241	1433209	1547739	115837
	1600	1169524	1286463	1461874	1578691	121137
3	Manufacture, Supply and delivery of Air Cushion valves / Quick Released damped Air Valves (QRDA) as per AWWA, Ex-factory excluding transportation etc., complete.					
	DIA IN MM      Rate/Each	Rs.	Rs.	Rs.	Rs.	
	100	61050	70209	77228	84948	
	150	92776	106693	117361	129097	
	200	99025	113877	125267	137793	
4	Conveyance of valves and accessories including loading at factory and unloading, stacking at site of work.	5% on basic cost of valves				

**Note:** The taxes as applicable shall be added as per rules at the time of preparation of estimate.

## 26. CAST STEEL VALVES

Sl. No.	Description				
1	2	3	4	5	6
1	Manufacture, Supply and Delivery of Cast Carbon Steel rising / Non rising spindle sluice valve design standard as per IS:14846/2000 for Water Supply Scheme with SS Spindle & SS Working parts the grade of Cast Steel for body Bonnet, Dome, Stool Cover, Wedge, Stuffing Box, Gland Thrust Plate, shall be as per IS: 1030 / 1998. (The valve shall be used for High pressure schemes & pumping stations) excluding transportation etc., complete. ISI Marked	Class-150 Body 425PSI Seat 300 PSI PN-20	Class-300 Body 1100 PSI Seat 750 PSI PN-30	for Enclosed Spur Gear Arrangement.	
	Rate/Each			Class 150	Class 300
	DIA IN MM	Rs.	Rs.	Rs.	
	40	5443	10885		
	50	8968	16326		
	65	11223	20408		
	80	13461	24490		
	100	17952	32652		
	125	23023	41862		
	150	26936	48978		
	200	43504	88435	53246	97289
	250	61231	139191	70973	148047
	300	77349	175820	87089	184675
	350	103142	234428	116424	246503
	400	209520	476181	222803	488256
	450	234846	523275	248130	535352
	500	276289	627930	289572	640006
	600	315429	715841	328713	727917
	700	610138		623421	
	750	656187		674783	
	800	759795		778391	
	900	897941		916537	
	1000	1151206		1169802	
	1100	1243302		1261898	
	1200	1404471		1423067	
2	Manufacture, Supply and delivery of Cast Carbon Steel Bolted Cover Non Return Valve as per IS: 5312 / Part1 /2004. Round body heavy duty material spec. As per IS:1030/1998 with SS Hinge & Seat Rings. excluding transportation etc., complete. Dia in mm.				
	Rate/Each Rs.	PN-20	PN-30		
	40	5410	9838		
	50	8051	14651		
	65	10061	18315		
	80	12075	21978		
	100	16567	29305		
	125	20722	37677		
	150	22784	41443		
	200	34536	75351		
	250	48351	125586		
	300	69072	156983		
	350	92097	209311		
	400	188798	429086		
	450	211822	481413		
	500	248661	565138		
	600	287801	654093		

3	Manufacture, Supply and delivery of Cast Carbon Steel Multi Door Type Non return Valve as per IS; 5312/ Part II / 1984 Heavy duty material spec. as per 1030/1998 with SS hinges & Seat Rings excluding transportation and GST etc., complete.	PN-20			
		Rate/Each			
	500	418619			
	600	523275			
	700	627930			
	750	774448			
	800	1151206			
	900	1381446			
	1000	1507032			
	1100	1779136			
	1200	1800067			
4	Manufacture, Supply and delivery of Cast Carbon Steel D/F Butter fly Valves conforming to IS; 13095/1991 manually heavy duty Gear operation, excluding transportation and GST etc., complete.				
	DIA IN MM	Rate/Each	PN-1.0/1.6	PN-2.5	
	300	79899	99601		
	350	107481	135062		
	400	129153	167459		
	450	156514	198105		
	500	178405	227657		
	600	207957	267059		
	700	326164	404968		
	750	404968	503473		
	800	444370	552726		
	900	503473	631531		
	1000	798991	996002		
	1100	996002	1191518		
	1200	1193013	1291518		
	1300	1597980	1784047		
	1400	1685540	1882552		
	1500	1784047	1981058		
	1600	2079563	2375081		
	1800	2572092	2769103		
	2000	3557148	3852664		
5	Conveyance of valves and accessories including loading at factory and unloading, stacking at site of work.	5% on basic cost of valves			

Note : Taxes as applicable shall be added as per rules at the time of preparation of estimate.

**27. DI D/F VALVES****Rate/Each in Rs.**

Sl. No.	Description	TEST PRESSURE			
		3	4	5	6
1	2				
1	Manufacture, supply and delivery of Single Chamber DI <u>Air Valve</u> with Body and cover in Ductile Iron of grade GGG-40/SG-400/15 or GGG-50/SG-500/7 or equivalent grade as per I.S.3896-part2-1985 and subsequent revisions. All internal parts such as float, shell etc., all cover bolts, of stainless steel, and Gaskets and seals of EPDM food grade quality Epoxy powder coating (EP-P) inside and outside colour blue. Drilled as per requirement of the dept.				
	DIA IN MM	<u>PN 10</u>	<u>PN 16</u>	<u>PN 25</u>	
	25 (Screwed End)	8559	8559		
	32 (Screwed End)	17023	17023		
	40 (Screwed End)	17870	17870		
	50	30745	30745	39560	
	80	41016	41016	41016	
	100	47888	47888	55070	
	150	58298	58298	66625	
	200	63850	63850	74260	
	300	103455	103455	113905	
2	Manufacture, Supply and delivery of DI D/F <u>Gate Valves</u> (Soft Seated) Resilient seated soft sealing gate valves (Sluice valves) with body bonnet of ductile cast iron of grade GGG-40/ SG- 400/15 or GGG-50/SG-500/7 or equivalent grade as per I.S.3896-part2-1985 and subsequent revisions, wedge fully rubber lined with EPDM food grade quality and seals of NBR and the valves should be of vacuum tight and 100% leak proof with face to face dimensions as per BS5163-89/IS14846-2000/DIN 3202 F 4. All the valves should be with Electrostatic powder coating both inside and outside pocket less body passage. Drilled as per requirement of the dept.				
	DIA IN MM	<u>PN 10</u>	<u>PN 16</u>	<u>PN 25</u>	
	50	7360	7360	12439	
	80	9426	9426	15337	
	100	12434	12434	17389	
	150	19577	19577	29004	
	200	32532	32532	48920	
	250	45058	45058	72663	
	300	68098	68098	117862	
	350	206179	206179	344900	
	400	216249	216249	350810	
	450 With By-pass & Gear	372041	372041	699327	
	500 With By-pass & Gear	395083	395083	742639	
	600 With By-pass & Gear	508754	508754	956304	
3	Manufacture, Supply and delivery of DI D/F <u>Butterfly Valves</u> with GGG-40/SG-400/15 or GGG-50/SG-500/7 or equivalent grade as per I.S.3896-part 2-1985 and subsequent revisions, Double eccentrically Disc., with renewable soft seal on the disc and Body seat face of stainless steel / nickel weld overlay, with powder or liquid Epoxy coating with minimum thickness of 250 microns applied on both body and disc inside and outside. Face to face dimensions as per AWWA C 504 or BS 5155 or IS:13095. Drilled as per requirement of dept.				
	DIA IN MM	<u>PN 10</u>	<u>PN 16</u>	<u>PN 25</u>	<u>PN 40</u>
	150	78461	78461	80993	107529



	200	85456	88230	103668	130748
	250	99568	102462	120012	183215
	300	118806	122304	136415	192382
	350	135933	148297	172720	209389
	400	171210	193973	225841	320123
	450	187958	208609	265678	
	500	189744	223971	356159	395586
	600	248686	351120	413392	433457
	700	490950	518029	778576	
	800	532249	554677	1136362	
	900	696076	696076		
	1000	872565	872565	1647797	
	1100	1003450	1003450		
	1200	1169137	1169137	1840795	
	1400	2512703	2512703		
	1600	2996167	2996167		
	1800	3674971	3674971		
	2000	6277801	6277801		
	2200	9063238	9063238		
4	Manufacture, Supply and delivery of DI D/F <u>Swing Check Valves</u> Slanted/Straight seated with metallic, corrosion proof and wear resistant seat faces resilient seat, Body and Disc of ductile cast iron GGG-40/SG 400/15 or GGG-50/SG-500/7 or equivalent grade as per IS 3896(part2)-1985 and subsequent revisions. All the inside and outside of the body is to be coated with double coating of epoxy liquid. Drilled as per requirement of dept. Specification and Dimensions as per I.S 5312 or equivalent codes.				
	<b>DIA IN MM</b>	<b>PN 10</b>	<b>PN 16</b>	<b>PN 25</b>	<b>PN 40</b>
	100	31090	34544		
	150	52206	58007		
	200	79170	83880	123017	161019
	250	87128	92406	149407	188790
	300	109214	115710	181886	230443
	350	128539	136253	206897	251555
	400	156146	165484	209494	272424
	500	198533	210552	265521	349402
	600	297869	315775	391423	505935
	700	429941	468873	573115	726768
	800	537581	585885	722674	915539
5	Manufacture, supply and delivery of DI (Ductile Iron) Wafer Butterfly valves conforming to IS 13095 (and its amendments). With hand lever below 150 mm, with Worm gear for 200 mm and above.				
	<b>DIA IN MM</b>	<b>PN 10</b>	<b>PN 16</b>		
	40	5330	5330		
	50	5330	5330		
	65	5767	5767		
	80	6289	6892		
	100	8842	9166		
	125	11111	11111		
	150	15005	15330		
	200	20359	20359		
	250	27092	27092		
	300	38121	38121		
	350	46260	50183		

6	Manufacture and supply of "Air Release - Vacuum Break - Surge Alleviation" Valve for potable water. Construction material Cylindrical Body of Ductile Iron GGG-50/SG-500-7, Three cylindrical Floats of High Density Poly Ethylene. Baffle Plate, Orifice venture and all construction bolts of stainless steel, coating internally and externally. Electrostatically applied epoxy (1) Flange connection as per IS 1538, (2) Female (BSP/NPT Threaded for sizes 25 mm				
	<b>DIA IN MM</b>	<b>PN 10</b>	<b>PN 16</b>	<b>PN 25</b>	
	25 mm dia	14073	-	-	
	50 mm dia	-	45353	45353	
	80 mm dia	-	71151	71151	
	100 mm dia	-	78454	78454	
	150 mm dia	-	160890	160890	
	200 mm dia	-	241636	241636	
7	Manufacturer and supply of Metal Seated Gate Valve Non- Rising Stem with by-pass & gear operated, for water and sewage applications& dimensions conforming to IS 14846-2000. Material construction Body, Bonnet, Wedge and Distance Piece of ductile iron GGG-50/SG500/7 DIN1693 or equivalent. Body seat, Wedge seat and Stem nut of Aluminum Bronze BS EN 1982 CC331G/equivalent, Stem of Stainless steel BS EN 100881.4057 or equivalent. 'O' Seal Body/Cover is of EPDM food grade Quality. Fastners is of Steel Sheraplex coated to BS 3692 Gr 8.8 or equivalent. Body and Bonnet internally and externally blue two pack epoxy to WIS 4-52-01 Class B. Leakage tested for seat 1.1 PN and body 1.5 x PN. Flange connection as per IS 1538, ISI Marked.				
	<b>DIA IN MM</b>	<b>PN 10</b>	<b>PN 16</b>		
	DN700	1303581	1303581		
	DN800	1648187	1648187		
	DN 900	1863121	1863121		
	DN 1000	2087471	2087471		
	DN 1100	2844366	2844366		
	DN 1200	3233031	3233031		

NOTE:- All the prices are ex-go down /ex-factory. Taxes Extra as applicable at the time of supply. Packaging and Transportation extra at 5% on basic cost. The duties and taxes as applicable may be added as per rules at the time of preparation of estimate. The grade of DI & conformation to specifications shall be certified by a third party Quality Control Agency approved by indenting authority at the cost of supplier.

**28. SFRC MAN-HOLE FRAME WITH COVERS**

Sl.No.	Description	Unit	Rate.
1	2	3	4
I	Manufacture as per BIS:12592 (Part 1&2) Supply & Delivery of manhole covers and frames with ISI marking anywhere in T.G., F.O.R. destination including, loading, un-loading & stacking at site but excluding all taxes, as applicable. <u>I.S.I Mark</u>		Rs.
a)	M.D. -10 with 500mm diaclear opening	Each	1871
b)	H.D.-20 with 500mm diaclear opening	Each	2412
C)	H.D.-10with 560mmdia clear opening(New item)	Each	1892
d)	H.D.-20 with 560mm diaclear opening	Each	2587
e)	H.D.-35 with 560mm diaclear opening.	Each	2772
f)	24x24 MD 10	Each	2040
g)	24x18 MD 10	Each	1877
h)	24x24 HD 20	Each	2293
i)	24x18 HD 20	Each	2336
II	Manufacture as per company's standard specification supply and delivery of encapsulated plastic steps for man holes anywhere in T.G. including cost of materials packing as per company's standards, loading, transportation, unloading and stacking at site of work etc, complete but excluding taxes and others etc., as applicable.	Each	195

Note: Taxes as applicable shall be added as per rules at the time of preparation of estimate.

**29. CI and M.S. DISMANTLING JOINTS**

Sl.No.	Description	Unit	Rate
1	2	3	4
1	Manufacture, Supply and Delivery of C.I Dismantling Joints with both side flange end suitable for installation in between flange end pipes. These rates are excluding all Taxes and transportation charges etc., complete.		Rs.
	Nominal Dia. In MM		
	50	Each	5078
	80	Each	5559
	100	Each	7294
	125	Each	9379
	150	Each	10289
	200	Each	14591
	250	Each	17369
	300	Each	27791
2	Manufacture, Supply and Delivery of M.S. Dismantling Joints with both side flange end suitable for installation in between flange end pipes. Thickness as per IS: 7322. These rates are excluding all Taxes and transportation charges etc., complete	Each	
	Nominal Dia. In MM		
	350		65913
	400		75529
	450		81943
	500		98077
	600		114126
	700		126965
	750		130178
	800		155855
	900		162599
	1000		194768
	1100		210847
	1200		243013
	1300		275176
	1400		307966
	1600		340194
	1800		402859

	2000		501340
3	Conveyance of joints and accessories including loading at factory and unloading, stacking at site of work.		5% on basic cost

**Note:** Taxes as applicable shall be added as per rules at the time of preparation of estimate.

### 30. OTHER ITEMS

Sl. No.	Description	Unit	Rate
1	2	3	4
1	Supply and Delivery of Pig lead 99.99 % pure excluding all taxes.	Per Kg	330
2	Supply and Delivery of lead wool best quality excluding all taxes.	Per Kg	182
3	Supply and Delivery of spun yarn of best quality excluding all taxes.	Per Kg	130
4	Supply and Delivery of rubber packing excluding all taxes.		
	a) 3 MM Thick	Per Kg	111
	b) 6 MM Thick	Per Kg	111
5	Supply and Delivery of bolts and nuts with double washers excluding all taxes. (1/2" to 1")	Per Kg	As per I&CAD SoR

### 31. GLASS FIBRE REINFORCED PLASTIC (GRP) PIPES

The PH & ME department deleted GRP pipes from the SoR 2013-14 and was not included in SoR 2014-15. The ENC (RWS) requested in the SoR meeting on 06.05.2015 to incorporate GRP pipes from SoR-2015-16 for carrying out O&M works, accordingly the following rates are adopted and ENC(RWS) addressed this office, vide Lr no AE/DEE/TDWSP(Plg)/2015 dt 22.05.2015 to incorporate GRP pipes from SoR 2015-16 for O&M works.

Sl.No.	Description						
1	2						
1	GLASSFIBRE REINFORCED PLASTIC (GRP*) PIPES CONFORMING TO IS 12709 - 1994 Stiffness class 124 Kpa including transportation to any where in T.S. with jointing materials i.e., Reka couplings, Rubber Gaskets etc., for jointing pipes including cost of specials, loading, unloading and stacking etc., complete but excluding all taxes.						
	Size	Unit	Rate				
			3 Bar	6 Bar	9 Bar	12 Bar	15 Bar
	300 mm dia	Metre	2486	2554	2626	2695	2813
	350 mm dia	Metre	2668	2706	2788	2866	2997
	400 mm dia	Metre	2970	3103	3217	3366	3498
	450 mm dia	Metre	3485	3620	3818	4006	4234
	500 mm dia	Metre	3970	4131	4366	4640	4905
	600 mm dia	Metre	5045	5254	5573	6140	6426
	700 mm dia	Metre	6050	6324	7093	7736	8324
	800 mm dia	Metre	7405	7754	8372	9108	9833
	900 mm dia	Metre	9256	9650	10483	11370	12312
	1000 mm dia	Metre	11094	11605	12482	13613	14673
2	Cost of laying jointing, testing to Hydrostatic field test pressure including cost of transportation of water and emptying pipe line after completion of field testing.						
	Size	Unit	Rate.				
			3 Bar	6 Bar	9 Bar	12 Bar	15 Bar

	300 mm dia	Metre	112	112	112	112	112
	350 mm dia	Metre	168	168	168	168	168
	400 mm dia	Metre	252	252	252	252	252
	450 mm dia	Metre	308	308	308	308	308
	500 mm dia	Metre	392	392	392	392	392
	600 mm dia	Metre	419	419	419	419	419
	700 mm dia	Metre	475	475	475	475	475
	800 mm dia	Metre	559	559	559	559	559
	900 mm dia	Metre	614	614	614	614	614
	1000 mm dia	Meter	713	713	713	713	713

**\*Under any Circumstances the GRP pipes shall not be procured for laying new water lines, except O&M works.**

- Note: 1) The material component is 50% of total cost.  
 2) Taxes as applicable shall be added as per rules at the time of preparation of estimate  
 3) The cost of other specials like tees, reducers etc with flange will be charge @4 times per meter cost of pipe.  
 4) The cost of other special like plain ended tees, reducers etc will be charge @ 2.50 times per meter cost of pipe.

The methodology adopted for rates is as follows:

Percentage of raw materials in the finished product of the pipe

- a) Hoop Glass Fibre Rovings H% (35%), 2) Chop Glass C% (40%) and 3) Resin R% (25%)

The cost of variation in Raw materials are:

- a) Variation in cost of Hoop Glass : h%  
 b) Variation in cost of Chop Glass : c%  
 c) Variation in cost of Resin : r%

The percentage of variation in cost of pipe allowed is  $(H \times h + C \times c + R \times r)/100$

The above raw materials rates are obtained from the principal manufacturers.

The rates of raw materials are:

- a) Hoop Glass Fibre Rovings - Rs. 95.50/kg (Excluding taxes)  
 b) Chop Glass - Rs. 105.50/kg (Excluding taxes)  
 c) Resin - Rs.172.00/kg (Excluding taxes)

### 32. TRENCH LESS TECHNOLOGY WITH PIPE JACKING METHOD

Sl. No.	Description	Unit	Rate
1	2	3	4
1	Railway crossing/Road crossing/Canal crossing by adopting trenchless technology tunneling work through specialized pipe jacking method by erecting the equipment to true to the alignment and gradient, by hydraulic pipe jacking technique complete including tunneling, excavation in all types of soils including hard rock and construction of RCC chambers suitable to casing pipe pits, and conveyance charges of machinery and other required materials but excluding cost of encasing pipe, in co-ordination with the concerned authorities as per approved drawings and directed by the Engineer-in -Charge.		
	600 mm dia	Rmt	26460
	700 mm dia	Rmt	27405
	800 mm dia	Rmt	28665
	900 mm dia	Rmt	30098
	1000 mm dia	Rmt	31532
	1100 mm dia	Rmt	32965
	1200 mm dia	Rmt	34398
	1300 mm dia	Rmt	35831
	1400mm dia	Rmt	38698
	1500 mm dia	Rmt	42998

**Note:** Taxes as applicable shall be added as per rules at the time of preparation of estimate.

### 33. Water Meters

<b>A</b>	<b>Mechanical Flow meter (Domestic meters)</b>		
1	Supply of magnetically coupled, multijet, inferential type, dry dial Class-B water meters (Screwed end) AMR compatible manufactured in accordance with ISO 4064 standards and its latest ammendments/IS 779/1994 and its latest ammendments and shall have ISI/EEC/MID pattern approval (valid life cylce certificate and IP 68 protection from FCRI, GOI). (excluding all taxes-with 3 years warranty)	<b>Unit</b>	<b>Rate</b>
	15 mm Dia	Each	1210
	20 mm Dia	Each	1815
2	Installation & fixing cost of water meter.	Each	200
<b>B</b>	<b>Electromagnetic Flow Meters (Bulk Flow Meter)</b>		
	Supply & delivery of Electromagnetic Flow meter, manufacturer should have ISO 9001:2008 certification and flow meter testing conforming to ISO 17025; Flow meter Tube: SS 304;Flanges: Carbon Steel as per DIN PN 10 or higher rating as per requirement; Liner: Hard Rubber or PTFE suitable for drinking water application; Grounding: Grounding Rings SS 304 /Grounding Electrodes of material SS 316; Coil Housing and Junction Box: SS 304 /Die Cast Aluminum/ Carbon Steel with anticorrosive epoxy coating of minimum thickness 150 microns/ equivalent as per EN ISO-12944 standard (as per the site condition) ; Ingress Protection: IP 68 for sensor and IP 67 for transmitter; Flow Transmitter Accuracy: +/- 0.5% of the measured value for velocities 0.5 m/sec and above; Display: Digital LCD/LED (backlit LCD / LED ) Display, Instantaneous flow, Bi- Directional flow and Totalized flow; Cable between Flow Head and Transmitter: Maximum 25 meters including PVC conduit; Surge Arrester: To be provided;Power Supply & Output: 230 V AC or 24 V DC as applicable to Site condition & 4-20 mA HART; Compatible to SCADA/WEB Based Data acquisition System; Flow meter test lab certification should be provided from NABL approved lab/FCRI ; Excluding all taxes with 5 years Warranty. (Make: M/s Krohne Marshall/Endress+Hauser/ Yokogawa /Siemens/ Emerson/ABB/ or equivalent make)	<b>Unit</b>	<b>Rate</b>
	100 mm dia	Each	102120
	150 mm dia	Each	113220
	200 mm dia	Each	141660
	250 mm dia	Each	167100
	300 mm dia	Each	186780
	400 mm dia	Each	326520

	450 mm dia	Each	369604
	500 mm dia	Each	405035
	600 mm dia	Each	465479
	700 mm dia	Each	525949
	800 mm dia	Each	627284
	900 mm dia	Each	735853
	1000 mm dia	Each	787435
	1100 mm dia	Each	1304100
	1200 mm dia	Each	1422225
<b>C</b>	<b>AMR Water Meters</b>		
i)	<b>Multijet (Domestic) AMR Water Meter</b>		
	Supply installation and satisfactory field testing of Multijet Inferential Dry Dial screwed end Water Meters conforming to latest editions of IS 779/ISO 4064 with ISI/MID marking (PN-10). The water meters shall be manufactured with copper can/non magnetic metallic register and IP 68 protection. The module must be connected to meter without wire. The same model of the meter must have passed life cycle/Endurance test from FCRI after 2015. The meter should have IP 68 test report certificate conducted in FCRI. The RF based AMR accuracy test conducted at FCRI should also be submitted. The modules shall be warranted for 5 years battery life. The Module or meter interface unit shall be Radio Frequency based. The remote reading shall be two way communicating. The module should be battery operated and external power supply should not be required. The readings should be obtainable by either walkby or drive by on Android device. The module shall be fitted on the meter wirelessly and shall be with IP 68 protection. The IP 68 test report for module should have been conducted at FCRI. The radio frequency shall be as per Dept of Communications, Govt of India and supplier should specify the frequency of the AMR on the module. In case the RF band is free band, necessary documents from Dept. of Telecom, Govt of India shall be submitted along with declaration on a Rs.100 Stamp paper mentioning the band. The RF based meter reading software should have sync facility to upload the data back to CLOUD server after reading the meters from site using GPRS/Wifi. The AMR meters shall carry warranty of atleast 5 years from the date of delivery/date of installation which ever is earlier. The meter, module and AMR software shall be from the same manufacturer. Lot samples of the meters supplied shall be tested as per IS779 at FCRI for accuracy of meters. The rates are excluding GST.	Unit	Rate
	15 mm	Each	6708
	20 mm	Each	7280
	25 mm	Each	8112
	40 mm	Each	9880
ii)	<b>Woltman type (Bulk) AMR Meter</b>		
	Supply, installation and field testing of Horizontal Woltman type hermetically sealed type water meters with IP 68 protection (PN-10/ PN-16). The meters shall be manufactured as per ISO 4064 - 1:1993 with MID marking. The meter must have passed life cycle/Endurance test from FCRI. The module should be battery operated by inbuilt. The data logger shall be capable of transmitting data on daily bases to central server through GSM/GPRS. The AMR data hourly shall be collected by MIU and stored. The MIU shall be connected to Data logger. The data logger should have inbuilt battery. The AMR meter should be capable of providing data like reverse flow, tampering, daily flow rate distribution. The System shall send alerts for blocked meter, flow rate above limit, pressure below or above limits, back flow detection. The meters shall be installed with CI strainers. The AMR meter and battery shall carry warranty of atleast 5 years from the date of delivery/date of installation which ever is earlier. The data shall be accessible on web server as required by the Client. The rates are excluding of GST.	Unit	Rate
	50 mm	Each	56784
	80 mm	Each	61152
	100 mm	Each	66394
	150 mm	Each	79498
	200 mm	Each	97843
	250mm	Each	129293
	300mm	Each	275184

### 34. Instrumentation

1	<b>Ultrasonic Flow Meter:</b>	Unit	Rate
	Providing, installing and giving satisfactory test & trial of Ultrasonic Flow meter of ISO working on 85 -260 V AC, 50 HZ electric power supply of following type working on time of flight principle suitable for satisfactory continuous operation in all seasons & with following accessories, working conditions Specifications & duly tested as specified below:		
A)	<b>Ultrasonic Clamp-on portable type Flow Meter (Single Channel)</b>		
	Providing, installing and giving satisfactory test & trial of No ultrasonic clamp on portable type flow meter working on conditions & specifications, calibration, inspection, testing, training, guarantees and manufacturers test certificate/declaration copy along with accessories as mentioned above along with accessories like. 1)Magnetic Clamos - 1 Pair & 2)Suitable carrying case-1 No.	Each	304464
B)	<b>Ultrasonic Clamp-on Fixed type Flow Meter (Single Channel)</b>		
	Providing,installing and giving satisfactory test & trial of Ultrasonic damp on Fixed type flow meter working on <b>conditions</b> & specifications, calibration, inspection, testing, training, guarantees and manufacturers test certificate/ declaration copy along with accessories as mentioned in a (1) to (14) below	Each	296943
C)	<b>Ultrasonic Insertion Fixed type Flow Meter (Single Channel)</b>		
	Providing, installing and giving satisfactory test & trial of ultrasonic Insertion Fixed type flow meter working on conditions & specifications, calibration, inspection, testing, training, guarantees and manufacturers test certificate/ declaration copy along with accessories as mentioned in a (1) to (14) below & with inbuilt assembly to fix the insertion type transducer on the pipeline	Each	283843
a)	<b>Mandatory Accessories:</b>		
	1) Integrated signal converter transmitter enclosed in die cast aluminum case / any anticorrosive material conforming to IP-65 or better -1 No. 2) Pair of transducers (Sensors) conforming to IP-68 or better with junction boxes -1 No. 3) Stainless steel straps for mounting clamp on type sensors - 2 Nos. (only required for category A,B) 4) Grease count plant, 100 ml : Bottle - 5 Nos. (only required for category A,B) 5) Signal & power cables for each transducer -50 Mtrs length/each (insertion type flow meter) & 10 mtrs length /each (portable type flow meter) 6) a) for fixed type flow meter-UPS working on 230 V AC, 50 Hz or 24V DC power supply suitable for 24 hrs continuous operation.-1 No. (only required for category B,C).b) Built in portable type battery back up for minimum 5 Hrs continuous operation with spare battery and separate battery charger working on 230 V AC, 50 Hz power supply for charging battery-1 No. (only required for category A)c) Aluminium / anticorrosive carrying case for flow meter and all accessories (only required for category A) 7) Data storage capacity with built in or separate for date, time, actual flow rate, totaliser & error messages if any with storage capacity of 120 days and at 5 minutes interval data logging along with local indication and necessary cables and software to download data to laptop -1 No 8) Dot matrix printer of EPSON, WIPRO, WEP or Hewlett Packard make with built in or separate printer interface unit for printing of stored data with online / offline printing facility -1 No. 9) Proper earthing shall be provided for protection against high voltage surge (only required for category B,C) 10) Suitable over voltage protection unit for protection of instrument from higher voltage (upto 275 V-300 V AC & above ) 11) M.S. sensor protection boxes with suitable size for above ground lines where construction of chamber is not possible.(only required for category B,C) 12) Magnetic clamp for metallic pipe lines and Nylon / SS strips, chain arrangement for clamp on sensors suitable for pipe diameters 50 mm to 3000 mm (only required for category A,B)		



<p>13) Battery powered ultrasonic thickness gauge along with charger, test sample, coupling agent and carrying case suitable measuring thickness of 1 mm to 100 mm (only required for category A)</p> <p>14) 5 meter steel measurement tape with level bottle (only required for category A)</p> <p><b>15) Working Condition &amp; Specifications</b></p> <p>a) <b>Water Temp : 10° to 50° C</b></p> <p>b) Water Quality: Raw water, turbid in nature. Potable chlorinated water</p> <p>c) Operating pressures 0-15 Kg./cm<sup>2</sup></p> <p>d) Pipeline MOC : Cl, Dl, MS with /without mortar lined, Non-metallic pipes.</p> <p>e) Pipe diameter : &gt; 1000 mm -4000 mm</p> <p>f) Flow -Up to 300 Mld</p> <p>g) Pipe Condition: Pipe shall be running full</p> <p>h) Ultrasonic flow meters shall be designed, manufactured to international standards with accuracy of +/- 2% of actual flow. The supplier should have full ISO -9000 series accreditation &amp; facility for fully traceable calibration flow rig as per international standard</p> <p>i) Functional details: Freely programmable</p> <p>j) Measurement - Volumetric flow rate, totalized flow</p> <p>k) Flow direction- Forward &amp; Reverse</p> <p>l) Display- LCD display with suitable lines, digits, segments, markers, for identification of current output. The digit shall be clear, bold &amp; can be read from 1 Mtrs distance</p> <p>m) Out put- for current-4 m A-20mA HART (active/passive) for measuring flow in pipeline. Frequency output shall be 1 khz, Open collector, passive</p> <p>n) Status output-open collector</p> <p>o) Meter shall be suitable for remote facility</p> <p>p) Power supply-85-260 V AC(45-65 Hz)/20-55 V AC (45-65 Hz)/16-62 V DC</p> <p>q) Galvanic isolation- input &amp; output galvanically isolated from power supply from the sensor and from each other</p> <p>r) instruments must carry "CE" mark</p> <p>s) Functionality verification check should be possible inline using recommended software tools</p> <p>t) Future upgradation to field bus foundation. Profibus should be possible with minimal changes</p>		
<p><b>16) Calibration, Testing &amp; Inspection</b></p>		
<p>The 10% of total supply quantity shall be inspected and tested .The flowmeter shall be calibrated at manufacturers place as per international standard given above.Manufacturer having NABL lab accreditation ,the calibration testing shall be witness by Third party approved by MJP The manufacturer not having NABL lab accreditation shall be tested at FCRI/CWPRS/IDEMl etc, for which third party inspection is not required.</p>		
<p><b>17) Manufacturers Guarantee, Certificate &amp; Training</b></p>		
<p>The flow meters shall be supplied with manufacturer's test certificate as per international standards -given above, calibration certificates. 12 months guarantee for the trouble free performance and given Adequate training for handling flow meter and installation in field so that trainees can carryout the job independently</p>		
<p><b>18) 60 Month's O &amp; M towards flow meter &amp; accessories:</b></p>		
<p>The O &amp; M shall be decided based on " planned preventive maintenance" Program (PPM) to be finalized with suppliers with following service included (but not limited) for 60 months beyond standard warranty terms as per H) However for project cases user must discuss with supplier for lumpsum O &amp; M cost for the overall project.</p> <p>Planned Preventive Maintenance (PPM):</p> <p>a) Regular visit to the flow meters (once in 2 month to check the healthiness of instruments)</p> <p>b) Repairs/ replacement of components/spare parts as may be necessary during the flow meter inspection.</p> <p>c) Free replacement of the spare parts and consumables as necessary</p> <p>d) Emergency visit to site within 48 hours for attending any major trouble shooting and break downs.</p> <p>e) Technical training/ trouble shooting training to the user by the supplier.</p> <p>f) Providing complete technical details on instrument with necessary manuals</p>		
<p><b>19) General Terms &amp; Conditions</b></p>		

	<p>a) General Specifications with accessories (except required for each type of meter specified) working conditions, mandatory accessories, calibration, inspection testing manufacturers test certificates, installation and commissioning, guarantee and training shall be common for all flow meters as mentioned above. The Additional/ optional accessories mentioned above to be considered as per project and site requirements.</p> <p>b) The above prices are inclusive of import duty as applicable.</p> <p>c) The above prices inclusive of counter vailing duty (CVD) as applicable with education cess of 2% on CVD. Also includes necessary charges for customs clearances clearing and forwarding charges in India.</p> <p>d) The above prices are includes local inland transportation from manufacturer's godown / custom's godown upto sites anywhere in Telangana.</p> <p>e) The above prices includes necessary packing &amp; forwarding charges as applicable for each project</p> <p>f) Octroi charges are not included in above rates and shall be as per actuals which will be included wherever applicable in estimates for meter up to site storage</p> <p>g) The above prices are inclusive of Marine &amp; inland insurance of flow meters up to site storage</p> <p>h) Meter shall be procured with prior permission from concerned superintending Engineer/Chief Engineer.</p> <p>i) Planning for installation for meter shall be done during execution of pipe work. Straight pipe length of 5 D or more on up stream side and 2 D or more on down stream side of meter is necessary (D is diameter of flow meter) The meters shall be installed so as to have a laminar flow with pipe running full.</p> <p>j) The above rates are exclusive of GST.</p>		
b)	<b>Additional/Optional Accessories</b>		
	1) Pressure transducer, which should be connected to the pressure lead of dual channel data loggers, compatible with the dual channel loggers of appropriate type with a pressure range of 5m to 150 m with an accuracy of not less than +/-1% to be supplied and installed at the upstream of the flow meters.	Each	21834
	2) Fixing flow meter transmitter to internal walls of buildings in a suitably designed panel cabinet with proper locking arrangement with glass window on front door for seeing the readings of flow transmitter and data logger without opening of the panel cabinet. It should house complete ancillaries and including the provision for connection of electrical power supply from nearby apparatus. The panel cabinet shall be prewired and with suitable gland entries.	Each	23144
	3) Laptop with core 2 duo processor, 2 GB RAM, 256 GB HDD, DVD writer, web cam, 14" LCD screen with carrying case, windows XP professional branded with necessary software & upload data should be provided	Each	26201
	4) The portable Device shall be compatible to the logger & flow meters for the purpose of retrieving data & resetting the data loggers, The portable device should be simple to operate & robust in design. The portable hand held units shall have sufficient memory to download & store data up to 6 flow meters. Hand held units shall be supplied with necessary communication leads for data logger to hand held & hand held to commercial PC, All the necessary software for download & upload to be provided.	Each	26201
	5) Remote monitoring system for data acquisition/data transfer & alert SMS /warning based on GSM technology with complete hardware like wireless communication device, cables,necessary software system (BOM with each GSM system is as given below) for each flow meter excluding data SIM card & its regular billing.	Each	43668
	<p>a) Wireless communication device to communicate between central computer &amp; flow transmitter installed at remote site with GSM based system</p> <p>b) DA Scheduler software for CSV file storage and data acquisition</p> <p>c) Cables for pressure, flow &amp; totalized details from transmitter to field gate system {10 Mtrs with each GSM / GPRS system}</p> <p>d) OPC Software to be installed in central PC for SCADA interface.</p> <p>e) Commissioning charges for each locations</p> <p>f) Customized page with Java Applets XML-Data import software for online MIMIC</p> <p>g) R.F. Module / Cyble for operation of AMR shall be taken as Rs.7000 per meter</p> <p>h) RTU ( Remote Terminal Unit) for each meter shall be taken as Rs. 12000/-</p>		

	6) Sensor/Transmitter cable of following specification 3 x 0.38 mm <sup>2</sup> PVC cable with common branded copper shielded 7mm dia and individually shielded cores-with empty pipe detection 9 EPD: 4 x 0.38 mm <sup>2</sup> PVC cable with common branded copper shield 7 mm dia and individually shielded cores. Conductor resistance: <math>\leq 50</math> Ohm/Km. (Rate per meter).	Each	230
	7) Conduit pipe (PVC / HDPE plumbing) 32 mm diameter with suitable digging, laying and concealing the duct. ( Rate Per Meter)	Each	18
c)	<b>Other Civil Works:</b>		
	1)Flow meter chamber work with suitable man hole for entering the chamber & removal of flow meter for maintenance in future		
	2) Construction of meter room with roof slab (100 mm) brick masonry with pile foundation of minimum 1.5 M x 1.5 M or as per instruction from Engineer-in -Charge with RCC beam/column minimum 0.15m x 0.15m size with steel door & cement jali ventilator and plinth height of minimum 0.5 M above GL and roof slab shall be 2.1 M from plinth inner and outer plaster with water proof cement painting		

S.No	Item Description	Unit	Rates
2	Providing, installation, testing and commissioning of <b>ULTRASONIC LEVEL TRANSMITTER</b> for water application : Principle: Time of Flight / Sensor MOC PP/ Process connection 1 1/2 inch BSP or 2 inch BSP threaded type / Power Supply: 24 V DC / Out put: 4-20mA / Display: Integral Display for programming and Display reading/IP66. Ranging from 0 - 5 Mts, including LCD Display and configurable to any level and warranty for 5 years. The rates are excluding GST.	Each	62890
3	Providing, installation, testing and commissioning of <b>PRESSURE TRANSMITTER:</b> for water application: Range: 0-10 bar/power supply: 24 V DC / Output: 4-20 mA with HART / Diaphragm: SS316L / Process Connection: ½ "NPT (M) / Accuracy: 0.15% , Protection: IP67, including LCD Display and configurable to any level and warranty for 5 years. The rates are excluding GST.	Each	70751

### 35. FLOW CONTROL CUM NON-RETURN VALVE

S.No.	Description	Unit	Rate
1	Supply of tamper proof house hold non return cum flow control valve (with all three parts made by using sold steel bars of SS316) with CNC machine make and of 15mm dia designed for 5 LPM discharge @ 0.5 bar pressure loss, not exceeding the flow of 7 LPM at 1 bar pressure and working on float principle (as per CPHEEO manual) including cost of materials, manufacturing, loading, unloading, stacking, transit insurance, transportation but excluding GST.	Each	265

### 36. MDPE PIPE

Sl. No.	Description	Unit	Pipe Series	Pressure Class	Rate
	Manufacture, Supply & Delivery of MDPE pipe conforming to ISO 4427 Part-2 (or any equivalent Bureau of Indian Standards code) of PE-80 grade material along with all fittings, including cost of materials, manufacturing, loading, unloading, stacking, transit insurance, transportation to any where in Telangana but excluding GST.				
1	20mm OD	Mtr	SDR-11	PN-12.5	25.27
2	25mm OD	Mtr	SDR-11	PN-12.5	36.81
3	32mm OD	Mtr	SDR-11	PN-12.5	60.34

**37.DWC HDPE PIPES CONFORMING TO IS 16098- PART-2**

1	Manufacture, supply, & delivery of (DWC) structured wall polyethylene/polypropylene piping system class SN-8 with non smooth external annular corrugated and smooth internal surface (Double Wall) for non pressure sewage & Drainage application pipes of standard length 6 m, grade conforming to IS 16098 (part-II: 2013) including rubber gasket, transportation to anywhere in Telangana, loading, unloading charges but excluding all taxes etc complete.						
	Pipe OD	Pipe ID	Rate /mt				
	120	100	190.00				
	180	150	335.00				
	235	200	500.00				
	295	250	825.00				
2	Lowering , laying of Class SN 8 Double wall corrugated ( DWC) pipping system in into ready made trenches , laying true to line and level and perfect linking at joints, encasing the pipe around with soft gravel, testing and commissioning, and giving necessary hydraulic test to the required pressure as per ISS etc complete for finished item of work.						
	Pipe OD	Pipe ID	Rate /mt				
	120	100	150.00				
	180	150	210.00				
	235	200	230.00				
	295	250	285.00				



# Annexure

1. Latest G.Os
2. Seigniorage Charges



GOVERNMENT OF TELANGANA  
ABSTRACT



Mines & Minerals - New Sand Mining Policy - 2014 for the State of Telangana - Usage of Manufactured Sand - Certain Instructions - Issued.

INDUSTRIES AND COMMERCE (MINES.I) DEPARTMENT

G.O.Ms.No.37

Date:29.05.2018.

Read the following:-

1. G.O.Ms.No.38, Ind. & Com (M.I) Department, dated.12.12.2014
2. G.O.Ms.No.03, Ind. & Com (M.I) Department, dated.08.01.2015

\*\*\*\*\*

ORDER:

The Government of Telangana is committed to encourage use of Manufactured Sand as an alternative to river sand in order to conserve the environment on the one hand and to overcome the problem of growing shortage of natural sand on the other hand. In the references read above, the Government of Telangana have issued orders, for regulation of sand mining wherein it was mentioned that usage of Manufactured Sand shall be encouraged in place of river sand to meet the requirement of bulk consumers. Manufactured sand is defined as purpose made crushed fine aggregate produced from a suitable source material.

2. The utility and demand for manufactured sand has increased considerably over a period of time due to certification by reputed Scientific Organizations such as National Council for Cement and Building Material (NCCBM), National Academy of Construction (NAC), BICARD, a Scientific Research and Certification Lab at Department of Civil Engineering, JNTU, Hyderabad. The Technical viability of Manufactured Sand has been established without doubt.

3. Government, hereby direct all the Engineering Works Departments to use Manufactured Sand (Rock Sand) and Natural River sand in the ratio of 50:50 in all the mixes of cement concrete and in the items of works where sand is used earlier, to reduce the burden on Natural Resources and to make the sustainable ecosystem.

4. The Engineer in Chiefs, Roads and Buildings, Irrigation & Command Area Development and Panchayat Raj & Rural Development shall take necessary action in the matter accordingly.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF TELANGANA)

SHAILENDRA KUMAR JOSHI  
CHIEF SECRETARY TO GOVERNMENT

To  
The Engineer in Chief, Roads and Buildings.  
The Engineer in Chief, Irrigation & Command Area Development.  
The Engineer in Chief, Panchayat Raj.  
The Engineer in Chief, RWS&S.

Copy to:

The I&CAD Department, Telangana Secretariat.  
The TR&B Department, Telangana Secretariat.  
The PR&RD Department, Telangana Secretariat, Hyderabad.  
The Director of Mines & Geology, Telangana State, Hyderabad.  
The Vice Chairman & Managing Director, TSMDC Ltd, Hyderabad.  
The Commissioner of Panchayat Raj, Hyderabad  
All the District Collectors in the State of Telangana  
P.S to Principle Secretary to the Hon'ble Chief Minister.  
P.S to Hon'ble Minister for Mine and Geology.  
P.S to Hon'ble Minister for Panchayat Raj & Rural Development.  
P.S to Hon'ble Minister for Irrigation  
P.S to Hon'ble Minister for Roads & Buildings  
P.S to Chief Secretary to Government.  
P.S to Prl. Secretary Government & CIP (FAC), Ind & Com Dept.  
Sf/Sc (C.No.2823/M.I(1)/2018)

//FORWARDED : : BY ORDER//

*Mam/aj*  
SECTION OFFICER

*Circulate to all today  
Mink(R)  
P  
Dul  
30/5/18*



GOVERNMENT OF TELANGANA  
ABSTRACT

Mines and Minerals – Revision of Rates of Seigniorage Fee and Dead Rent - Orders  
– Issued.

INDUSTRIES AND COMMERCE (MINES.I) DEPARTMENT

G.O.MS.No. 67

Dated: 26/09/2015  
Read the following

- 1) G.O.Ms.No.198, Industries & Commerce (M.I) Dept., dt:13.08.2009
- 2) Government Memo No.418/M.I(1)/2015, dated:08.07.2015.
- 3) From the Director of Mines and Geology, Hyderabad Letter No.3305/MR/2014, dated:08.07.2015.

\*\*\*\*\*

**ORDER:**

The following notification will be published in the Extra-Ordinary Issue of the Telangana Gazettee dated:the 26<sup>th</sup> September, 2015.

**NOTIFICATION**

In exercise of the powers conferred by Section Sub-Section (1) of 15 of the Mines & Minerals (Development & Regulation) Act, 1957 (Central Act No.67 of 1957), the Government of Telangana hereby issue the following amendments to the A.P. Minor Mineral Concession Rules, 1966 issued in G.O.Ms.No.1172, Industries & Commerce (Mines-I) Department, dated:04-09-1967 and as amended subsequently from time to time and as adapted vide G.O.Ms.No.55, Industries & Commerce (Mines.I) Department, dated:26.08.2015 as A.P. Minor Mineral Concession Rules, 1966 (Telangana Adaptation) order, 2015.

**AMENDMENTS**

In the said rules, under rule 10 for Schedules I and II the following shall be substituted, namely:

**SCHEDULE-I**  
**RATES OF SEIGNIORAGE FEE**

Sl. No.	Name of the Minor Mineral	Unit	Rate of Seigniorage fee (In Rupees)
1	Building Stone, Rough Stone/ Boulders, Road Metal and Ballast	M3/MT	75/50
2	Dimensional Stone used for Kerbs & Cubes	MT	100/MT
3	Lime Kankar/ Limestone	MT	The rate of royalty as applicable to Limestone (other than LD Grade) in respect of major Minerals as per the 2 <sup>nd</sup> Schedule of the Mines & Minerals (D&R) Act, 1957.
4	Marble	M3/MT	250/100
5	Mosaic chips	MT	45
6	Morrum/Gravel & Ordinary Earth	M3/MT	30/20
7	Ordinary Sand	M3/MT	40/27
8	Shingle	M3/MT	25/17
9	Chalcedony Pebbles	M3/MT	75/50
10	Fullers Earth/ Bentonite	MT	150
11	Shale/Slate	MT	150
12	Rehmatti	MT	25
13	Limestone slabs	M2/MT	8/100

14	Brick Earth used in the manufacture of Bricks including Mangalore Tiles.	-	Rs.6000/- per kiln per annum	
15	Granite useful for cutting and polishing	Gang saw above 270 x above 150	Below 270 X below 150	Equal and below 70
a	Black Granite	3000	2300	1200
b	Colour Granite	2300	2000	1000

The rates shown at Sl.No.15 shall come into force w.e.f., two years from the date of this G.O. until then the rates ordered in G.O.Ms.No.198, Industries & Commerce (M.I) Dept., dt:13.08.2009 shall continue to be in force.

**SCHEDULE-II**  
**Rates of Dead Rent**

Sl. No.	Name of the mineral	Rate of Dead Rent per hectare per Annum (in Rs.)
1	Black Granite	1,00,000
2	Colour Granite	80,000
3	Limestone other than classified as Major Minerals used for Lime burning or building construction purposes, Marble, Boulders, Building Stone including Stone used for Road Metal, Fullers Earth, Ballast Concrete and other Constructions purposes, Slate and Pyllites.	50,000
4	Gravel Morrum, Shingle, Limestone Slabs, used for Flooring purposes, Chalcedony Pebbles used in the building purposes, Limeshell for burning used for building purposes and Rehmatti.	40,000

2. The rate of royalty revised by Government of India with effect from 01.09.2014 in respect of (31) Major Minerals now declared as Minor Minerals and transferred to the State Government in the extra-ordinary issue of the Gazette Government of India Notification No.423(E) dated:10.02.2015 shall be continued, until further orders.

3. This order issues with the concurrence of Finance Department vide their U.O.No.11350/292/EBS-VII/I&C/2015, dated:18-09-2015.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF TELANGANA)

ARVIND KUMAR  
SECRETARY TO GOVERNMENT & CIP

To,

The Commissioner of Printing, Stationary & Stores Purchase (Ptg. Wing)  
Hyderabad. (He is requested to publish the above Notification in the Extra-Ordinary issue of Telangana Gazette, and arrange to send 1000 copies of the same to Government in Industries & Commerce (M.I) Department).

The Director of Mines and Geology, Telangana State, Hyderabad  
The Vice Chairman & Managing Director, Telangana State Mineral Development Corporation Ltd., Hyderabad.

All the Joint Director/Deputy Director/Assistant Directors of Mines and Geology through the Director of Mines and Geology, Hyderabad

**Copy to:**

The Secretary to Government, Ministry of Mines, GoI

The Law (A) Department.

The Finance Department.

The Industries and Commerce (Mines.II) Department.

The P.S. to Hon'ble Minister for Mines and Geology.

The P.S. to Secretary to Government & CIP, Ind. & Com. Dept.,

SF/Sc.(C.No.418/M.I(1)/2015)

//Forwarded::By order//

SECTION OFFICER

**GOVERNMENT OF TELANGANA**  
**ABSTRACT**

Irrigation & CAD Department – Deduction of 0.385% towards insurance component from the provision of 14% towards contractor's profit and over heads for adoption in Standard Data in all Engineering Departments – Orders – Issued.

---

**IRRIGATION AND CAD (REFORMS) DEPARTMENT**

G.O.Ms.No. 71

Dated: 31-07-2018

Read the following:

1. G.O.Ms.No.49, I&CAD (PW: Reforms) Department, Dt:02-03-2009.
2. G.O.Ms.No.61, I&CAD (PW: Reforms) Department, Dt. 25.06.2013.
3. G.O.Ms.No.5, Finance (W&P) Department, Dt: 05-03-2014.
4. From the Engineer-in-Chief (IW), Hyderabad Lr.No.ENC/IW/P&M/EE.I/DEE.2/AEE.4/SoR16-17/Vol.I/16,Dt:05-08-2016,Dt:02-01-2017 and Dt: 02-01-2018 and Dt: 12-03-2018.

\*\*\*

**ORDER:-**

In the references 1<sup>st</sup> read above, orders were issued for adoption of revision and updating of A.P. Standard Dara in all Engineering and Public Works Department and other organizations wherein a provision of 14% is added in the data towards Contractor's Profit and Overheads. The overheads include site accommodation, water supply, electricity and general site arrangements, Laboratory Equipment, Mobilization/De-mobilization of resources and work Insurance/Compensation etc.,. But the percentage breakup for each component of overheads is not mentioned in the A.P. Revised standard Data.

**2.** Subsequently, the Government in the reference 2<sup>nd</sup> read above, have issued orders to dispense with insuring all works of I& CAD Department including weirs, dams, spill ways and critical components like high level bridges, tunnels and deep cuts etc. It is further instructed that if any critical work like dam or high bridge etc., is to be insured, proposal is to be sent by concerned Chief Engineer to the Government and the Government will take a case by case decision whether to insure or not to insure the work.

**3.** In the reference 3<sup>rd</sup> read above, Government have further issued orders dispensing with insurance cover of all works of Engineering Departments uniformly.

**4.** In the reference 4<sup>th</sup> read above, based on the recommendations of the Board of Chief Engineers minutes Dt: 25-05-2015 and 28-02-2018, the Engineer-in-Chief (IW) and the Chairman of the BOCE has requested the Govt., for deduction of 0.385% towards insurance component from the provision of 14% towards contractors profit and over heads for adoption in Standard Data for the works in all Engineering Departments, duly ratifying the action taken in adopting the over heads and contractors profit of 13.615% excluding insurance component in the Standard Data for the year 2015-16 onwards.

**5.** Government after careful examination of the above proposal, hereby permit the Engineer-in-Chief (IW) for deduction of 0.385% towards insurance component from the provision of 14% towards contractors profit and over heads for adoption in Standard Data for the works in all Engineering Departments as per the recommendations of the BOCEs, and ratify the action taken in adopting the over heads and contractors profit of 13.615% excluding insurance component in the Standard Data for the year 2015-16 onwards.

**6.** The Engineer-in-Chief (IW), Hyderabad shall take necessary action accordingly while preparing the Telangana State Revised Standard Data.

**7.** This order issues with the concurrence of Finance (EBS-IX) Department vide their U.O.No.3350/409/EBS.IX/A1/2018 Dt: 25-07-2018.

**(BY ORDER AND IN THE NAME OF THE GOVERNOR OF TELANGANA)**

**Dr. SHAILENDRA KUMAR JOSHI**  
**SPECIAL CHIEF SECRETARY TO GOVERNMENT (FAC)**

To  
The Engineer-in-Chief (I.W)/ The Engineer-in-Chief (I), I&CAD Department,  
Jalasoudha Buildings, Errumanzil, Hyderabad.

**(P.T.O)**