



**GOVERNMENT OF INDIA**  
**CENTRAL PUBLIC WORKS DEPARTMENT**

# **DELHI SCHEDULE OF RATES**

# **2013**



Published under the Authority of Director General, CPWD, New Delhi

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### **A GOVERNMENT OF INDIA PUBLICATION**

Published by  
**DIRECTOR GENERAL**  
CPWD, NIRMAN BHAWAN, NEW DELHI-110 011

Printed & Marketed by  
**JAIN BOOK AGENCY**  
Authorised Dealers of Govt. Publications  
C-9, Connaught Place, New Delhi-110001  
Phone : 44556677 Fax : 41513850  
E-mail : sales@jainbookagency.com  
Website : www.jainbookagency.com

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शहरी विकास एवं संसदीय कार्य मंत्री  
भारत

## MINISTER OF URBAN DEVELOPMENT INDIA

### MESSAGE

The Delhi Schedule of Rates, published by the Central Public Works Department periodically since 1931, is a benchmark for the construction industry in India.

The Delhi Schedule of Rates-2013 edition is being brought out by CPWD after incorporating Green Building concepts and new technology items, which will facilitate the sustenance of environment and our rich heritage.

The Delhi Schedule of Rates-2013 will benefit CPWD as well as the entire construction sector in India.

My best wishes to CPWD.

(Kamal Nath)



डॉ. सुधीर कृष्ण  
Dr. Sudhir Krishna



सत्यमेव जयते

सचिव भारत सरकार  
Secretary to the Government of India

शहरी विकास मंत्रालय  
निर्माण भवन, नई दिल्ली-110108  
MINISTRY OF URBAN DEVELOPMENT  
NIRMAN BHAVAN, NEW DELHI-110108

Tel. : 23062377, Fax : 23061459

E-mail : [secyurban@nic.in](mailto:secyurban@nic.in)

URL : <http://urbanindia.nic.in>

### MESSAGE

Central Public Works Department under the Ministry of Urban Development is one of the oldest Central Government Department, providing engineering excellence over 150 years in the construction field. It has been entrusted with construction and maintenance of Heritage Buildings, Buildings for most of the Central Government, Ministries, Departments, besides the PSUs and autonomous bodies.

For any construction work, Schedule of Rates plays an important role in pre-construction stage like preparation of estimates, design etc. To meet this objective, CPWD is publishing the Delhi Schedule of Rates since the year 1931 on regular intervals based on the experiences and latest technologies that can be adopted in the construction sector.

It gives me immense pleasure to know that CPWD is releasing Delhi Schedule of Rates 2013, after updating the existing items and incorporating many useful new items, including items related to green building concepts, new technology in construction sector, which can be used for new constructions by all concerned departments and organisations.

I congratulate all the officers involved in the preparation of DSR -2013. I am sure this will be a great help to officers of CPWD and of other organisations also.

I wish all success to Central Public Works Department in its efforts.

(Sudhir Krishna)



## FOREWORD

Delhi Schedule of Rates, being published by C.P.W.D. from time to time, is a very comprehensive document and useful in execution of works. Apart from C.P.W.D., this Schedule of Rates is used as a guide by a number of departments, public sector undertakings, private sector builders and architects etc.

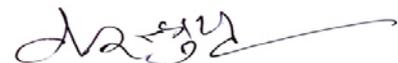
The Central Public Works Department Schedule of Rates was first compiled in the year 1931, followed by a number of revisions from time to time in order to bring it in line with the prevailing technology and market rates. The Delhi Schedule of Rates were revised many times in the subsequent years viz. 1977, 1981, 1985, 1989, 1993, 1997, 2002, 2007 & 2010 (Reprint), 2012.

The last Delhi Schedule of Rates was printed in 2012. The prices of labour and materials have registered substantial increase since then. Besides the cost, there has been spurt of new construction materials and introduction of Green Building concepts, new technology items etc. This has necessitated revision of existing DSR-2012 to include the above changes. The DSR-2012 Supplement (Green Building and New technology items) was published in Feb-2013. Several new items, based on new materials and new technologies in the construction sector, being adopted in CPWD works, have also been included in this document.

Although this DSR contains most of the items of DSR 2012, and incorporate the items of the DSR Supplement, the nomenclature of existing items has been reviewed & updated wherever found necessary. The Similar items have been clubbed together to facilitate convenience of use.

I wish to place on record the technical input effective coordination on the part of Shri B.B Bhatia, the then ADG(TD) and Shri V.K. Rokade , the then CE(CSQ), and the efforts put in by Shri Mathura Prasad, SE(TAS) and his team of officers in TAS unit in finalizing the DSR-2013 in a record time.

I am sure that this Schedule of Rates-2013 will be quite useful to all concerned in the Building construction industry in general and CPWD in particular.



(V.K. Gupta)  
DIRECTOR GENERAL,  
CPWD

New Delhi



## PREFACE

1. Delhi Schedule of Rates- 2013 includes the existing items of DSR 2012 & its Supplement, with deletion of few obsolete items, merger of similar items and addition of new items in line with emerging trends in construction Industry.
2. Following are the **salient features** of DSR- 2013.
  - (a) DSR- 2013 is a bilingual (Hindi version will follow).
  - (b) A new sub-head for Structural Glazing & Aluminium Composite panel as introduced in DSR-2012 Supplement has been incorporated.
  - (c) This DSR 2013 shall be read along with CPWD specifications 2009 Vol. I & II with up to date Correction Slips.
  - (d) New Material Codes have been assigned for the newly introduced materials.
  - (e) The basic materials incorporated in this DSR 2013 are considered to be conforming to BIS Standards/CPWD Specifications/ Materials of good quality generally available in the market.
- 3 Sub- head wise additions, items introduced in supplement to DSR 2012 and included in this DSR- 2013 are as under:
  - 3.1 **Sub head 5 : Reinforced Cement Concrete**  
Items of the expansion joints.
  - 3.2 **Sub head 8 : Marble and Granite Work**
    - (a) Items of Italian marble stone for wall lining
    - (b) Item of flame finish granite for flooring in open areas.
  - 3.3 **Sub head 11 : Flooring**
    - (a) Items of Italian marble flooring.
    - (b) Item of glass mosaic tiles on walls.
    - (c) Items of Raised flooring for computer rooms, work stations etc.
  - 3.4 **Sub head 12 : Roofing**
    - (a) Items of fully perforated calcium silicate tiles for false ceiling.
    - (b) Items of calcium silicate board for false ceiling.
  - 3.5 **Sub head 16 : Road work**
    - (a) Items of Granite stone flooring for footpaths.

- (b) Items of Granite stone blocks for paving in floors, drains etc.
- (c) Items of matt finish vitrified tiles for footpaths.
- (d) Item of tactile tile for vision impaired persons for approaches & footpaths.
- (e) Items of PU moulded paver blocks for footpath & pathways.

3.6 **Sub head 19 : Drainage**

Items of NP3 & NP4 RCC pipes.

3.7 **Sub head 26 : Structural glazing and Aluminium composite panel (New Sub Head):-**

- (a) Items of structural glazing.
- (b) Items of Aluminium composite panel.

4. The following **new items** have been introduced in the DSR -2013.

4.1. **Sub head 5: Reinforced Cement Concrete.**

- (a) Items of RCC frames for doors and windows.
- (b) Items of self compacting Concrete.
- (c) Items of Diaphragm wall.

4.2 **Sub head 9: Wood and PVC Work.**

Items for MDF board.

4.3 **Sub head 18: Water Supply**

Items for SS – 304 grade water supply pipes with fittings.

4.4 **Sub head 26: Structural Glazing and Aluminium composite Panel.**

Item of Spider Glazing for main entrance lobby etc.

5. The following items have been deleted/ modified from DSR-2012 & DSR - 2012 Supplement.

5.1 **Sub head 6: Brick Work**

Items of Fly ash lime autoclaved bricks deleted.

5.2 **Sub head 12: Roofing**

The heading for Non asbestos sheet roofing and accessories has been deleted.

5.3 **Sub head 16: Road work**

Item no 16.93 of the plain quality concrete for road work with slip form paver deleted.

6. **Wherever the work of Flyover, Bridge , Grade separator and Highways/ Hill Road/Major Road are involved, MoRTH specifications and its Standard data book for the analysis of rates shall be followed.**

7. DSR- 2013 is based on the prevailing market rates of materials in Delhi between Jan. 2013 to March 2013. The labour rates adopted are as per minimum wages issued by Govt. of Delhi w.e.f. 1/4/2013.

7.1 The cost index for DSR 2013 is 100 with reference to DPAR- 2012, having base 100 as on 1/10/2012.

7.2. **The technical sanctioning Authority may decide non application of cost index judiciously on the items, where the estimated cost of the item is close to the market rate.**

8. I convey my deep appreciation and sincere thanks to Shri V.K. Rokade, the then CE(CSQ), Shri Mathura Prasad, SE(TAS), Shri A.P. Mathur, SE(QA), Shri R.K. Saraswat, EE-I (TAS), Shri R.K.Vashisth, AE, Shri Chhabilal Singh, AE, Shri R.K.Goel, JE, Shri Abhishek Kumar, JE, Shri Ram Janam Chaudhary, JE, Shri Kashinath Ratha, JE, Shri Vijay Singh, Estimator, Shri Bahal Singh, Estimator and other officers and staff of TAS unit for sincere efforts made in the preparation of this document in such a short time. Various field units, who contributed field inputs, also deserve appreciation for their timely help.

I also express my sincere thanks to Shri V. J. Reddy EE(P), Hyderabad Central Circle-II, CPWD who has contributed & helped in finalizing the DSR in addition of his normal duties.

9. Although due care has been taken to print the DSR- 2013 as correctly as possible, there is possibility that some errors might have crept in inadvertently.

In case, any error or omission is noticed, it may be brought to the notice of Superintending Engineer (TAS), CPWD, Room no. 418, ' A', Nirman Bhawan, New Delhi – 110011.

Suggestions for improvement are always welcome.



(B.B. Bhatia)  
Addl. D.G. (TD), CPWD,



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# **BASIC RATES**



**BASIC RATES**  
**0.1 HIRE CHARGES OF PLANTS**

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
0001	Hire charges of Coaltar Boiler 900 to 1400 litres	day	830.00
0002	Hire charges of Concrete Mixer 0.25 to 0.40 cum with Hopper	day	800.00
0003	Hire charges of Diesel Road Roller - 8 to 10 tonne	day	1500.00
0004	Production cost of concrete by batch mix plant	cum	350.00
0005	Hire charges of Diesel Truck - 9 tonne	day	1700.00
0006	Hire charges of Spraying machine including electric charges	day	250.00
0007	Hire charges of Coaltar Sprayer	day	300.00
0008	Hire charges of Barber green, drying, mixing and Asphalt Plant, with accessories, capacity 30/45 tonne	day	7700.00
0009	Pumping charges of concrete including Hire charges of pump, piping work & accessories etc.	cum	150.00
0010	Hire charges of Derrick monkey rope	day	800.00
0011	Hire charges of Pump set of capacity 4000 litres/hour	day	550.00
0012	Vibrator (Needle type 40 mm)	day	325.00
0013	Machine for rubbing of floors	day	350.00
0014	Front end loader capacity 1.00 cum	day	5000.00
0016	Mastic Cooker	day	750.00
0017	Hire and running charges of tipper	day	1700.00
0018	Hire and running charges of loader	day	5000.00
0019	Hand Grinder for mirror polish	day	230.00
0020	Hydraulic Excavator (3D) with driver and fuel	day	8000.00
0021	Pin vibrator	day	325.00
0022	Surface Vibrator	day	400.00
0023	Hot Bitumen Mixer 0.5 cum i/c hand cart	day	4000.00
0024	Hire and running charges of hydraulic piling rig with power unit etc. including complete accessories and shifting at site	day	34000.00
0025	Hire and running charges of light crane	day	2200.00
0026	Hire and running charges of bentonite pump	day	4200.00
0027	Hire and running charges of vibrating pile driving hammer complete with power unit and accessories	day	35000.00
0028	Hire and running charges of crane 20 tonne capacity	day	9300.00
0029	Carriage of concrete by transit mixer	km/cum	30.00
0030	Generator 250 KVA	day	2200.00
0033	Paint applicator	day	750.00
0037	Mobile crane	day	6500.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
0038	Tractor with ripper attachment	day	1350.00
0039	Tractor with trolley	day	1500.00
0040	Air compressor 250 cfm with two leads for pneumatic cutters / hammers	day	1900.00
0041	Joint cutting machine with 2-3 blades	day	1000.00
0042	C.C .batch mix plant	day	10000.00
0043	Road sweeper	day	550.00
0045	Slip form paver with sensor	day	13000.00
0046	Water tanker 5000 litre	day	1000.00
0047	Concrete joint cutting machine	day	900.00
0048	Texturing machine	day	925.00
	Note :- Above hire - charges include cost of services of operating staff and supply of lubricating oil.		
0049	Dozer D-80-A 12	hour	3800.00
0050	Motor Grader 3.35 metre blade	hour	2450.00
0051	Hydraulic Excavator of 1 cum bucket	hour	1300.00
0052	Front end loader 1 cum bucket capacity (incl POL)	hour	800.00
0053	Tipper -5 Cum	tonne km	3.00
0054	Vibratory roller 8 to 10 tonne	hour	1500.00
0055	Smooth Wheeled Roller 8 to 10 tonne	hour	460.00
0056	Tandem Road Roller	hour	1150.00
0057	Water Tanker 5 to 6 KL capacity	hour	150.00
0058	Air compressor	hour	325.00
0059	Wet Mix Plant 60 TPH	hour	1200.00
0060	Mechanical Broom Hydraulic	hour	360.00
0061	Emulsion Pressure Distributor @ 1750 sqm per hour	hour	800.00
0062	Hot mix Plant -120 TPH capacity	hour	23700.00
0063	Hot mix Plant 100 TPH Capacity	hour	17500.00
0064	Paver finisher Hydrostatic with sensor control 100 TPH	hour	2700.00
0065	Paver finisher Mechanical 100 TPH	hour	1000.00
0066	Batching and Mixing Plant @ 75 cum per hour	hour	2500.00
0068	Concrete Paver finisher with 40 HP Motor and sensor	hour	2900.00
0069	Generator 250 KVA	hour	900.00
0070	Generator 100 KVA/125 KVA	hour	700.00
0071	Truck 5.5 cum/ 10 tonnes	tonne km	3.00
0075	Road sweeper (Mechanical Broom) @ 1250 sqm per hour	hour	360.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
0076	Drum Type HMP of 60-90 TPH capacity @ 75 tonne per hour actual output	hour	14000.00
0080	Hire and running charges of drill machine up to 400 mm dia (including cost of mobile oil, diesel consumption in ordinary soil and operator)	day	7500.00
0081	Pile Integrity testing equipment	day	3000.00
0082	Excavation of Diaphragm wall by Mechanical Grab	sqm	1500.00
	Note :- Above hire - charges (from item code 0049 to 0082) include cost of services of operating staff, supply of lubricating oil and diesel also.		

## BASIC RATES

### 0.2 LABOUR

Note :- These rates are exclusive of contractor's profit and over heads and are inclusive of wages for weekly day of rest

Code No.	Description	Unit	Rate ₹
0100	Bandhani	day	328.00
0101	Bhisti	day	328.00
0102	Blacksmith 1 st class	day	393.00
0103	Blacksmith 2nd class	day	361.00
0111	Carpenter 1 st class	day	393.00
0112	Carpenter 2nd class	day	361.00
0113	Chowkidar	day	297.00
0114	Beldar	day	297.00
0115	Coolie	day	297.00
0116	Fitter (grade 1)	day	393.00
0117	Assistant Fitter or 2nd class Fitter	day	361.00
0119	Glazier	day	361.00
0122	Mason (for plaster of paris work) 1 st class	day	393.00
0123	Mason (brick layer) 1 st class	day	393.00
0124	Mason (brick layer) 2nd class	day	361.00
0125	Mason (for plain stone work) 2nd class	day	361.00
0126	Mason (for ornamental stone work) 1 st class	day	393.00
0127	Driver (for Road Roller, Concrete Mixer, Truck etc.)	day	393.00
0128	Mate	day	328.00
0130	Mistry	day	393.00
0131	Painter	day	361.00
0132	Rock Excavator	day	297.00
0133	Rock Breaker	day	297.00
0134	Rock Hole Driller	day	297.00
0135	Stone Chiseller	day	328.00
0138	Sprayer (for bitumen, tar etc.)	day	328.00
0139	Skilled Beldar (for floor rubbing etc.)	day	328.00
0141	White Washer	day	328.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
0155*	Mason (average)	day	377.00
0156*	Carpenter (average)	day	377.00
0157	Operator (Pile/ Special machine)	day	350.00
0159	Skilled torch operator for laying tack	day	393.00
0160	Technician	day	700.00
0161	Helper (Technician)	day	300.00

**Note :-** \* These rates are average of 1st class and 2nd class categories. This is for use in the analysis of rate only.

## BASIC RATES

### 0.3 MATERIALS

Note :- These rates are exclusive of contractor's profit, over heads and carriage but include octroi, royalty, sales tax (VAT) etc.

Code No.	Description	Unit	Rate ₹
0222	Seam bolts and nuts 6 mm dia and 25 mm long	10 Nos	40.00
0223	Fibre (high impact poly propylene reinforced) cement corrugated sheet 6 mm thick	sqm	250.00
0224	Fibre (high impact poly propylene reinforced) cement close fitting adjustable ridge	metre	210.00
0225	Fibre (high impact poly propylene reinforced) cement corrugate serrated adjustable ridge	metre	210.00
0226	Fibre (high impact poly propylene reinforced) cement plain wing adjustable ridge	metre	200.00
0227	Fibre (high impact poly propylene reinforced) cement unserrated adjustable ridge for hips	metre	300.00
0228	Fibre (high impact poly propylene reinforced) cement corrugated apron piece	metre	225.00
0229	Fibre (high impact poly propylene reinforced) cement eaves filler piece	each	175.00
0230	Fibre (high impact poly propylene reinforced) cement north light curves	metre	310.00
0231	Fibre (high impact poly propylene reinforced) cement ventilator curves	each	410.00
0232	Fibre (high impact poly propylene reinforced) cement barge boards 6 mm thick	metre	410.00
0233	Fibre (high impact poly propylene reinforced) cement ridge finial	pair	160.00
0234	Fibre (high impact poly propylene reinforced) cement special north light curves	each	550.00
0235	Fibre (high impact poly propylene reinforced) cement S type louvers	each	250.00
0236	Multi purpose fibre (high impact poly propylene reinforced) cement board 6 mm thick	sqm	200.00
0237	Multi purpose fibre (high impact poly propylene reinforced) cement board 8 mm thick	sqm	250.00
0285	Brick Aggregate (Single size) : 63 mm nominal size	cum	500.00
0286	Brick Aggregate (Single size) : 50 mm nominal size	cum	500.00
0287	Brick Aggregate (Single size) : 40 mm nominal size	cum	510.00
0291	Stone Aggregate (Single size) : 63 mm nominal size	cum	1000.00
0292	Stone Aggregate (Single size) : 50 mm nominal size	cum	1000.00
0293	Stone Aggregate (Single size) : 40 mm nominal size	cum	1000.00
0294	Stone Aggregate (Single size) : 25 mm nominal size	cum	1050.00
0295	Stone Aggregate (Single size) : 20 mm nominal size	cum	1200.00
0296	Stone Aggregate (Single size) : 12.5 mm nominal size	cum	1050.00
0297	Stone Aggregate (Single size) : 10 mm nominal size	cum	1050.00
0298	Stone Aggregate (Single size) : 06 mm nominal size	cum	1100.00
0302	Safeda ballies 125 mm diameter	metre	42.00

Code No.	Description	Unit	Rate ₹
0303	Cowdung	cum	48.00
0304	Bajri	cum	1000.00
0305	Bamboo 25 mm dia 2.5 metre long	score	350.00
0308	Bhusa	quintal	400.00
0309	Paving bitumen of grade VG-10 of approved quality	tonne	40000.00
0310	Bitumen emulsion	tonne	30000.00
0312	Bitumen grade PMB - 40	tonne	41400.00
0313	Blown type petroleum bitumen of penetration 85/25 of approved quality	tonne	37000.00
0314	Bitumen hot sealing compound : grade A	kilogram	26.00
0316	Bitumen solution primer of approved quality	litre	45.00
0317	Premoulded joint filler 12 mm thick	sqm	350.00
0318	Bitumen felt fibre base (vegetable or animal):As per IS 7193 Grade I	sqm	60.00
0319	Bitumen felt as per IS 7193 Grade II	sqm	76.00
0322	Bitumen felt :Type 3 grade 1	sqm	60.00
0323	Separation Membrane of impermeable plastic sheeting 125 micron thick	sqm	12.00
0324	Coal Tar	litre	30.00
0325	Blasting powder	kilogram	35.00
0326	Blasting fuse (fuse wire)	each	15.00
0328	White face insulating board:12 mm thick	sqm	360.00
0332	Natural colour insulating board:12 mm thick	sqm	270.00
0336	Flame retardant face insulating board: 12 mm thick	sqm	315.00
0339	Flame retardant face insulating, Impregnated fibre board 12 mm thick	sqm	350.00
0341	Flat pressed 3 layer particle board (medium density) Grade 1, 12 mm thick	sqm	325.00
0346	Extra for veneered particle board with Teak veneering on one side and commercial veneering on other side	sqm	260.00
0347	Extra for veneered particle board with Commercial veneering on both sides	sqm	170.00
0348	Extra for veneered particle board with Teak veneering both sides	sqm	500.00
0349	Curing compound	litre	50.00
0362	Brick bats	cum	500.00
0364	Wire brush	each	20.00
0365	Soft brush	each	18.00
0367	Portland Cement	tonne	5240.00
0368	White Cement	tonne	14000.00
0369	Plastic sheath,1.25 mm thick for dowel bars	sqm	30.00
0370	Coal (steam)	quintal	400.00
0371	Sealant primer	kg	125.00
0373	Cramp Gun metal 25x6x300 mm	each	80.00
0374	Pre moulded Joint filler, 25 mm thick for expansion joint.	sqm	500.00

Code No.	Description	Unit	Rate ₹
0378	Brass butt hinges (light/ordinary type) : 125x70x4 mm	10 Nos	850.00
0379	Brass butt hinges (light/ordinary type) : 100x70x4 mm	10 Nos	700.00
0380	Brass butt hinges (light/ordinary type) : 75x40x2.5 mm	10 Nos	430.00
0381	Brass butt hinges (light/ordinary type) : 50x40x2.5 mm	10 Nos	180.00
0382	Brass butt hinges (heavy type) : 125x85x5.5 mm(0.70 kg)	10 Nos	3100.00
0383	Brass butt hinges (heavy type) : 100x85x5.5 mm(0.56 kg)	10Nos	2750.00
0384	Brass butt hinges (heavy type) :75x65x4.0 mm(0.20 kg)	10 Nos	950.00
0385	Brass parliamentary hinges 150x125x27x5 mm	10 Nos	2850.00
0386	Brass parliamentary hinges 125x125x27x5 mm	10 Nos	2500.00
0387	Brass parliamentary hinges 100x125x27x5 mm	10 Nos	2300.00
0388	Brass parliamentary hinges 75x100x20x3.2 mm	10 Nos	1750.00
0389	Brass single acting spring hinges 150 mm	each	310.00
0390	Brass single acting spring hinges 125 mm	each	270.00
0391	Brass single acting spring hinges 100 mm	each	170.00
0392	Brass double acting spring hinges 150 mm	each	500.00
0393	Brass double acting spring hinges 125 mm	each	370.00
0394	Brass double acting spring hinges 100 mm	each	320.00
0400	Brass tower bolt (barrel type) 250x10 mm	each	230.00
0401	Brass tower bolt (barrel type) 200x10 mm	each	180.00
0402	Brass tower bolt (barrel type) 150x10 mm	each	145.00
0403	Brass tower bolt (barrel type) 100x10 mm	each	95.00
0404	Brass flush bolt 250 mm	each	150.00
0405	Brass flush bolt 150 mm	each	130.00
0406	Brass flush bolt 100 mm	each	90.00
0408	Brass handles 125 mm with plate 175x32 mm	each	140.00
0409	Brass handles 100 mm with plate 150x32 mm	each	130.00
0410	Brass handles 75 mm with plate 125x32 mm	each	100.00
0411	Brass door latch 300x16x5 mm (0.380 kg)	each	165.00
0412	Brass door latch 250x16x5 mm (0.350 kg)	each	160.00
0413	Brass mortice latch and lock 100x65 mm with 6 levers and a pair of brass lever handles	each	370.00
0414	Brass mortice latch 100x65mm with a pair of brass lever handles	each	320.00
0417	Brass 150 mm floor door stopper (0.357kg)	each	170.00
0418	Brass hard drawn hooks and eyes 300 mm	10 Nos	750.00
0419	Brass hard drawn hooks and eyes 250 mm	10 Nos	700.00
0420	Brass hard drawn hooks and eyes 200 mm	10 Nos	645.00
0421	Brass hard drawn hooks and eyes 150 mm	10 Nos	620.00
0422	Brass hard drawn hooks and eyes 100 mm	10 Nos	525.00
0423	Brass casement window fastener	each	50.00
0424	Brass casement stays (straight peg type) 300 mm weighing not less than 0.33 kg	each	135.00
0425	Brass casement stays (straight peg type) 250 mm weighing not less than 0.28 kg	each	110.00

Code No.	Description	Unit	Rate ₹
0426	Brass casement stays (straight peg type) 200 mm weighing not less than 0.24 kg	each	100.00
0427	Brass quadrant stays 300 mm	each	125.00
0428	Brass fanlight catch	10Nos	175.00
0429	Brass fanlight pivot	10 Nos	195.00
0430	Brass chain with hook for fan light catch	each	40.00
0431	Brass hasps and staples (safety type) 150 mm	10 Nos	775.00
0432	Brass hasps and staples (safety type) 115 mm	10 Nos	650.00
0433	Brass hasps and staples (safety type) 90 mm	10Nos	560.00
0438	Brass night latch	each	495.00
0442	Brass helical spring 150 mm	each	310.00
0444	Brass curtain rod 20 mm dia 1.25 mm thick	metre	115.00
0445	Brass curtain rod 25 mm dia 1.25 mm thick	metre	135.00
0446	Brass brackets (curtain rods) 20 mm	each	42.00
0447	Brass cupboard knob or wardrobe knob 50 mm	each	35.00
0449	Brass screws 50 mm	100 Nos	210.00
0450	Brass screws 40 mm	100 Nos	170.00
0451	Brass screws 30 mm	100 Nos	135.00
0452	Brass screws 25 mm	100 Nos	95.00
0453	Brass screws 20 mm	100 Nos	90.00
0524	Chromium plated Brass butt hinges (heavy) type 75x65x4 mm (200gms)	10 Nos	1000.00
0525	Chromium plated Brass butt hinges (light/ordinary) type 125x70x4mm	10 Nos	850.00
0526	Chromium plated Brass butt hinges (light/ordinary) type 100x70x4 mm	10Nos	700.00
0527	Chromium plated Brass butt hinges (light/ordinary) type 75x40x2.5 mm	10Nos	460.00
0528	Chromium plated Brass butt hinges (light/ordinary) type 50x40x2.5 mm	10Nos	200.00
0555	Chromium plated Brass handles 125 mm with plate 175 x32 mm	each	175.00
0556	Chromium plated Brass handles 100 mm with plate 150 x 32 mm	each	150.00
0557	Chromium plated Brass handles 75mm with plate 125x32 mm	each	130.00
0558	Chromium plated Brass mortice latch and lock 100x65 mm with 6 levers and a pair of brass lever handles	each	540.00
0568	Chromium plated brass casement window fastener	each	95.00
0569	Chromium plated Brass casement stays (straight peg type) 300 mm weighing not less than 0.33 kg	each	150.00
0570	Chromium plated Brass casement stays (straight peg type) 250 mm weighing not less than 0.28 kg	each	130.00
0571	Chromium plated Brass casement stays (straight peg type) 200 mm weighing not less than 0.24 kg	each	115.00
0583	Chromium plated Brass Night latch	each	530.00
0584	Chromium plated Brass Wardrobe Knob 50 mm	each	48.00
0585	Chromium plated Brass screws 50 mm	100 Nos	240.00
0586	Chromium plated Brass screws 40 mm	100Nos	200.00
0587	Chromium plated Brass screws 30 mm	100 Nos	155.00
0588	Chromium plated Brass screws 25 mm	100 Nos	120.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
0589	Chromium plated Brass screws 20 mm	100 nos	100.00
0590	Chromium plated Brass curtain rod 12 mm dia 1.25mm thick	metre	190.00
0591	Chromium plated Brass curtain rod 20 mm dia 1.25mm thick	metre	260.00
0592	Chromium plated Brass curtain rod 25 mm dia 1.25mm thick	metre	350.00
0594	Bright finished or black enameled mild steel butt hinges 125x65x2.12 mm	10 Nos	140.00
0595	Bright finished or black enameled mild steel butt hinges 100x58x1.90 mm	10Nos	85.00
0596	Bright finished or black enameled mild steel butt hinges 75x47x1.70 mm	10 nos	60.00
0597	Bright finished or black enameled mild steel butt hinges 50x37x1.50 mm	10 Nos	50.00
0608	Nickel plated bright finished mild steel piano hinges 1 mm thick 25 mm wide	metre	40.00
0635	Bright finished or black enameled mild steel screws 50 mm	100 Nos	65.00
0637	Bright finished or black enameled mild steel screws 40 mm	100 nos	50.00
0638	Bright finished or black enameled mild steel screws 30 mm	100 nos	40.00
0639	Bright finished or black enameled mild steel screws 25 mm	100 Nos	35.00
0640	Bright finished or black enameled mild steel screws 20 mm	100 Nos	30.00
0641	Bright finished or black enameled mild steel bolts and nuts 50x6 mm	each	7.00
0642	Oxidised mild steel butt hinges 125x65x2.12 mm	10 Nos	140.00
0643	Oxidised mild steel butt hinges 100x58x1.90 mm	10 Nos	90.00
0644	Oxidised mild steel butt hinges 75x47x1.70 mm	10 Nos	65.00
0645	Oxidised mild steel butt hinges 50x37x1.50 mm	10 Nos	55.00
0646	Oxidised mild steel parliamentary hinges 150x125x27x2.8 mm	10 Nos	340.00
0647	Oxidised mild steel parliamentary hinges 125x125x27x2.8 mm	10 Nos	315.00
0648	Oxidised mild steel parliamentary hinges 100x125x27x2.8 mm	10 Nos	235.00
0649	Oxidised mild steel parliamentary hinges 75x100x20x2.24 mm	10 Nos	200.00
0650	Oxidised mild steel single acting spring hinges 150 mm	each	115.00
0651	Oxidised mild steel single acting spring hinges 125 mm	each	110.00
0652	Oxidised mild steel single acting spring hinges 100 mm	each	90.00
0653	Oxidised mild steel double acting spring hinges 150 mm	each	115.00
0654	Oxidised mild steel double acting spring hinges 125 mm	each	110.00
0655	Oxidised mild steel double acting spring hinges 100 mm	each	90.00
0656	Nickel plated mild steel piano hinges 1 mm thick 35 mm wide	metre	45.00
0660	Oxidised mild steel sliding door bolt 300x16 mm	each	95.00
0661	Oxidised mild steel sliding door bolt 250x16 mm	each	90.00
0662	Oxidised mild steel door latch 300x20x6 mm	each	48.00
0663	Oxidised mild steel door latch 250x20x6 mm	each	40.00
0664	Oxidised mild steel tower bolt (barrel type) 250x10 mm	each	45.00
0665	Oxidised mild steel tower bolt (barrel type) 200x10 mm	each	40.00
0666	Oxidised mild steel tower bolt (barrel type) 150x10 mm	each	30.00
0667	Oxidised mild steel tower bolt (barrel type) 100x10 mm	each	25.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
0668	Oxidised mild steel handles 125 mm	each	19.00
0669	Oxidised mild steel handles 100 mm	each	16.00
0670	Oxidised mild steel handles 75 mm	each	15.00
0679	Oxidised mild steel hasps and staples (safety type) 150 mm	10 Nos	125.00
0680	Oxidised mild steel hasps and staples (safety type) 115 mm	10 Nos	100.00
0681	Oxidised mild steel hasps and staples (safety type) 90 mm	10 Nos	75.00
0682	Oxidised mild steel screws 50 mm	100 Nos	75.00
0683	Oxidised mild steel screws 40 mm	100 Nos	60.00
0684	Oxidised mild steel screws 30 mm	100 Nos	55.00
0685	Oxidised mild steel screws 25 mm	100 Nos	45.00
0686	Oxidised mild steel screws 20 mm	100 Nos	35.00
0687	Anodised Aluminium butt hinges 125x75x4 mm	10 Nos	570.00
0688	Anodised Aluminium butt hinges 125x63x4 mm	10 Nos	530.00
0689	Anodised Aluminium butt hinges 100x75x4 mm	10 Nos	520.00
0690	Anodised Aluminium butt hinges 100x63x3.2 mm	10 Nos	500.00
0691	Anodised Aluminium butt hinges 100x63x4 mm	10 Nos	510.00
0692	Anodised Aluminium butt hinges 75x63x4 mm	10 Nos	500.00
0693	Anodised Aluminium butt hinges 75x63x3.2 mm	10 Nos	470.00
0694	Anodised Aluminium butt hinges 75x45x3.2 mm	10 Nos	390.00
0696	Anodised Aluminium sliding door bolt 300x16 mm	each	160.00
0697	Anodised Aluminium sliding door bolt 250x16 mm	each	130.00
0698	Anodised Aluminium tower bolt (barrel type) 300x10 mm	10 Nos	750.00
0699	Anodised Aluminium tower bolt (barrel type) 250x10 mm	10 Nos	600.00
0700	Anodised Aluminium tower bolt (barrel type) 200x10 mm	10 Nos	480.00
0701	Anodised Aluminium tower bolt (barrel type) 150x10 mm	10 Nos	380.00
0702	Anodised Aluminium tower bolt (barrel type) 100x10 mm	10 Nos	300.00
0703	Anodised Aluminium handles 125 mm with plate 175 x 32 mm	10 Nos	500.00
0704	Anodised Aluminium handles 100 mm with plate 150 x 32 mm	10 Nos	380.00
0705	Anodised Aluminium handles 75mm with plate 125 x 32 mm	10 Nos	320.00
0706	Anodised Aluminium kicking plate 50 cm long 100x3.15 mm	each	130.00
0713	Block board construction flush door with teak wood ply on both faces 35 mm thick	sqm	1700.00
0714	Block board construction flush door with teak wood ply on both faces 30 mm thick	sqm	1550.00
0715	Block board construction flush door with teak wood ply on both faces 25 mm thick	sqm	1400.00
0717	Block board construction flush door with commercial ply on both faces 35 mm thick	sqm	1150.00
0718	Block board construction flush door with commercial ply on both faces 30 mm thick	sqm	1000.00
0719	Block board construction flush door with commercial ply on both faces 25 mm thick	sqm	900.00
0752	Block board construction flush door lipping	sqm of door area	300.00

Code No.	Description	Unit	Rate ₹
0753	Square vision panel in Block board construction flush door	sqm of door area	115.00
0754	Circular vision panel in Block board construction flush door	sqm of door area	180.00
0755	Decorative type louvers in Block board construction flush door	sqm of door area	310.00
0757	Rebate cutting in block board construction flush door	sqm of door area	85.00
0759	Decorative plywood 4 mm	sqm	420.00
0761	Fuel wood	quintal	500.00
0763	Glue	kilogram	68.00
0765	Hessian cloth	sqm	25.00
0768	Cement Concrete Jali 50 mm thick	sqm	210.00
0769	Cement Concrete Jali 40 mm thick	sqm	180.00
0770	Cement Concrete Jali 25 mm thick	sqm	150.00
0771	Kerosene oil	litre	45.00
0773	Unslaked lime	quintal	300.00
0775	Dehradun white lime	quintal	480.00
0776	Satna lime	quintal	300.00
0777	Dry hydrated lime (factory made)	quintal	230.00
0784	Marble dust/ powder	cum	1000.00
0785	Marble chips up to 4 mm and down size White & black	quintal	200.00
0788	Marble chips large size above 4 mm White & black	quintal	200.00
0801	Silicon and acrylic emulsion	litre	200.00
0802	Acrylic distemper 1st quality , having VOC content less than 50 grams/ litre	Kg	38.00
0803	Acrylic emulsion , having VOC content less than 50 grams/ litre	litre	250.00
0804	Premium acrylic emulsion of interior grade, having VOC content less than 50 grams/ litre	litre	350.00
0805	Synthetic enamel paint , having VOC (Volatile Organic Compound) content less than 150 grams/ litre	litre	220.00
0806	Ready mixed pink or grey primer on wood work (hard and soft wood) having VOC content less than 50 grams/ litre	litre	120.00
0807	Ready mixed red oxide zinc chromatic on steel/ iron work, having VOC content less than 250 grams/ litre	litre	130.00
0808	Water thinnable cement primer for interior wall surface, having VOC content less than 50 grams/ litre	litre	60.00
0809	Exterior primer	kilogram	40.00
0810	Moorum	cum	450.00
0811	Mud (dry)	cum	60.00
0815	Dry distemper	kilogram	36.00
0816	Oil bound washable distemper/ Acrylic distemper	kilogram	45.00
0818	Linseed oil (double boiled)	litre	110.00
0820	Cement primer	litre	90.00
0821	Distemper primer	litre	90.00
0823	Pink primer (for wood)	litre	90.00

Code No.	Description	Unit	Rate ₹
0824	White cement based putty	kg	24.00
0826	Aluminium paint	litre	130.00
0827	Acid proof paint (chocolate or black)	litre	150.00
0828	Anticorrosive bituminous paint (black)	litre	90.00
0829	Black Japan paint	litre	95.00
0830	Enamel paint	litre	160.00
0831	Floor enamel paint in all shades except green	litre	120.00
0833	Synthetic enamel paint in black or chocolate shade	litre	130.00
0834	Synthetic enamel paint in all shades except black or chocolate shade	litre	140.00
0835	Plastic emulsion paint	litre	180.00
0845	Roofing paint for iron sheets in red colour	litre	120.00
0850	White lead	kilogram	90.00
0851	Water proofing cement paint	kilogram	45.00
0855	Wax polish (ready made)	kilogram	200.00
0856	Ordinary varnish	litre	75.00
0857	Superior copal varnish	litre	125.00
0858	Superior spar varnish	litre	125.00
0859	Oil type wood preservative	litre	80.00
0863	Putty for wood work	kilogram	30.00
0865	Pig lead	kilogram	125.00
0868	Premixed super white gypsum plaster.	kg	7.00
0869	Plaster of Paris	kilogram	4.00
0870	Plug	each	10.00
0873	Copper pins 6 mm dia 7.5 cm long	each	10.00
0874	Black colour dark shade pigment	kilogram	55.00
0875	Red, chocolate, orange, buff or yellow (red oxide of iron) light shade pigment	kilogram	75.00
0876	Green or blue medium shade pigment	kilogram	65.00
0886	Standard holder bat clamps for sand cast iron or cast iron pipes 150 mm dia	each	25.00
0966	Sand Cast iron plain shoe 150 mm dia	each	325.00
0967	Copper plate	kilogram	270.00
0969	Pulley 25 mm dia	each	35.00
0973	Rolling shutter made of 80x1.25 mm machine rolled laths	sqm	1250.00
0974	Top cover for rolling shutters 1.25 mm thick	metre	600.00
0975	27.5 cm long wire spring grade No. 2 for rolling shutters	each	280.00
0976	Ball bearing for rolling shutters	each	330.00
0977	Extra for mechanical devices chain and cranked operation for operating rolling shutters: exceeding 10.00 sqm and up to 16.80 sqm area of door	sqm	550.00
0978	Extra for mechanical devices chain and cranked operation for operating rolling shutters: exceeding 16.80 sqm area of door	sqm	580.00
0979	Royalty for good earth	cum	30.00

Code No.	Description	Unit	Rate ₹
0980	Royalty for sludge	cum	90.00
0982	Coarse sand (zone III)	cum	1120.00
0983	Fine sand (zone IV)	cum	650.00
0992	Galvanised steel plain sheets	quintal	5200.00
0994	Standard quality hard board sheet 3 mm thick	sqm	125.00
0996	Standard quality hard board sheet 4.5 mm thick	sqm	150.00
0999	Shellac	kilogram	210.00
1000	Spirit	litre	70.00
1001	Spun yarn	kilogram	40.00
1002	Mild steel round bar 12 mm dia and below	quintal	4500.00
1003	Mild steel round bar above 12 mm dia	quintal	4300.00
1004	Average rate of Mild steel round bars for reinforcement	quintal	4500.00
1005	Twisted steel/ deformed bars	quintal	4700.00
1006	Mild steel square bars	quintal	4500.00
1007	Structural steel such as tees, angles channels and R.S. joists	quintal	4650.00
1008	Flats up to 10 mm in thickness	quintal	4200.00
1009	Flats exceeding 10 mm in thickness	quintal	4500.00
1010	Mild steel plates	quintal	4700.00
1011	Steel glazed door, window/ ventilator, all members viz. F7D, F4B, K11 and K12B etc.	kg	48.00
1013	Mild steel sheets for tanks	quintal	4900.00
1015	Mild steel expanded metal 20x60 mm strands	sqm	290.00
1019	Mild steel hooks	each	35.00
1020	Mild steel rivets	quintal	5000.00
1021	Hard drawn steel wire fabric	sqm	430.00
1022	Galvanised steel bolts & nuts 6 mm dia and 25 mm long round head with slots	10 Nos	25.00
1023	Galvanised steel J or L hooks 8 mm dia	10 Nos	110.00
1024	Galvanised steel bolts & nuts 10 mm dia and 125 mm long round head with slots	each	12.00
1025	Mild steel bolts 6 mm dia and 25 mm long with hexagonal head	10 Nos	30.00
1028	Straining bolts	each	70.00
1029	Galvanised steel barbed wire	quintal	5200.00
1030	Galvanised steel turn buckles	each	17.00
1031	Galvanised steel bolts & nuts 10 mm dia and 27 cm long both sides threaded with 4 galvanised steel nuts	each	25.00
1032	Galvanised steel bolts 10 mm dia and 7 cm long with nuts	each	20.00
1034	Bolts and nuts up to 300 mm in length	quintal	5600.00
1035	Bolts and nuts above 300 mm in length	quintal	5600.00
1036	Iron pintels including welded pin	each	40.00
1143	Steel beading	metre	25.00
1145	Aluminium Plain Strip edging 38x12x3 mm	metre	100.00

Code No.	Description	Unit	Rate ₹
1149	Glass strip 4 mm thick 40 mm deep	metre	9.00
1151	Boundary stone top chisel dressed 15x15x90 cm	each	60.00
1154	Through and bond stone	100 Nos	1200.00
1157	Stone for masonry work	cum	700.00
1158	Stone for pitching 15 cm x 22.5 cm	cum	450.00
1159	Stone dust	cum	1000.00
1160	Red sand stone block	10 cudm	65.00
1161	White sand stone block	10 cudm	70.00
1163	White sand stone slab 75 mm thick (un-dressed)	sqm	300.00
1164	Red sand stone slab 40 mm thick (un-dressed)	sqm	160.00
1165	White sand stone slab 40 mm thick (un-dressed)	sqm	180.00
1166	Red sand stone slab 30 mm thick (un-dressed)	sqm	130.00
1168	Kota stone slab 20 mm to 25 mm thick (semi-polished)	sqm	290.00
1169	Kota stone slab 25mm thick (rough chiseled)	sqm	210.00
1174	Red sand stone slab 45 mm to 50 mm thick (un-dressed)	sqm	172.00
1175	White sand stone slab 45 mm to 50 mm thick (un-dressed)	sqm	225.00
1177	Stone grit 6 mm and down size or pea sized gravel	cum	925.00
1179	Crushed stone 2.36 mm to 12.5 mm size	cum	950.00
1182	Surkhi	cum	700.00
1186	Superior class teak wood such as Dandeli, Balarshah or Malabar in planks	10 cudm	1100.00
1187	First class teak wood in scantling	10 cudm	800.00
1188	First class teak wood in planks	10 cudm	850.00
1189	Second class teak wood in scantling	10 cudm	660.00
1190	Second class teak wood in planks	10 cudm	725.00
1194	Second class deodar wood in planks	10 cudm	500.00
1196	First class kail wood in planks	10 cudm	310.00
1197	Second class kail wood in scantling	10 cudm	260.00
1198	Second class kail wood in planks	10 cudm	260.00
1199	Sal wood in scantling	10 cudm	520.00
1200	Kiln seasoned selected sheesham wood planks	10 cudm	650.00
1201	Precast terrazzo tiles 22 mm thick (light shade)	sqm	260.00
1202	Precast terrazzo tiles 22 mm thick (medium shade)	sqm	240.00
1203	Precast terrazzo tiles 22 mm thick (dark shade)	sqm	220.00
1204	Precast heat resistant terrace tiles (size 300x300 mm) and 20 mm thick	sqm	482.00
1207	G.I. Limpet washer	100 nos	35.00
1208	Bitumen washer	100 Nos	30.00
1209	G.I. plain washer thick	100 Nos	35.00
1210	G.I. plain washer thin	100 Nos	32.00
1211	G.I. plain washer for seam bolts	100Nos	30.00
1213	Water proofing materials	kilogram	32.00
1214	Welding by gas plant	cm	2.00

Code No.	Description	Unit	Rate ₹
1215	Welding by electric plant	cm	1.80
1216	Whiting	quintal	500.00
1219	Wire nails	kilogram	60.00
1220	Wire mesh (rabbit)	sqm	45.00
1221	20 mm dia holding down bolts	quintal	5800.00
1222	Mild steel sheets with bolts and nuts to rest on pintels	each	130.00
1224	Hard drawn steel wire	quintal	5500.00
1225	Mild steel flat strap fitting	quintal	4450.00
1227	Chequered terrazzo tiles 22 mm thick(light shade)	sqm	325.00
1228	Chequered terrazzo tiles 22 mm thick(medium shade)	sqm	285.00
1229	Chequered terrazzo tiles 22 mm thick (dark shade)	sqm	250.00
1231	Extra for selected planks of second class teakwood	10 cudm	140.00
1234	Aluminium Plain Strip edging 57x12x3 mm	metre	135.00
1235	Diesel oil	litre	48.63
1237	Cutting marble or sand stone slab up to 50 mm thick by mechanical device	metre	9.00
1238	Extra for selected planks of first class teakwood	10 cudm	140.00
1239	18 mm thick Flamed finish granite stone slab	sqm	1695.00
1240	18 mm thick Italian Marble stone slab, Perlato (slab area up to 0.5 sqm).	sqm	3330.00
1241	Commercial LPG in cylinder	kg	70.00
1242	Glass mosaic tiles (20 mm x 20 mm x 4 mm ).	sqm	1050.00
1243	Tile fixing chemical adhesive	kg	34.00
1244	Cement Polymer Grout Compound	kg	34.00
1245	Acid for cleaning tiles	litre	16.00
1301	Bleaching powder	quintal	1750.00
1304	Surface box for stop cock	each	125.00
1305	Surface box for sluice valve	each	210.00
1307	Surface box for water meter	each	250.00
1309	C.I. bracket for wash basin and sinks	pair	70.00
1314	C.P.brass chain with 32 mm dia rubber plug	each	40.00
1315	C.P.brass chain with 40 mm dia rubber plug	each	40.00
1330	Clamps and M.S. stays including bolts and nuts for 100 mm pipe	each	35.00
1331	M.S.Holder bat clamp of approved design for 100 mm S.C.I. pipe	each	20.00
1332	M.S.Holder bat clamp of approved design for 75 mm S.C.I. pipe	each	18.00
1334	Clamps and M.S. stays including bolts and nuts for 50 mm pipe	each	28.00
1335	Clamps and M.S. stays including bolts and nuts for 75 mm pipe	each	30.00
1336	Clearing eye with chain and lid 100 mm dia	each	44.00
1337	Clearing eye with chain and lid 150 mm dia	each	50.00
1339	Brass bib-cock 15 mm dia	each	210.00
1340	Brass bib-cock 20 mm dia	each	225.00
1342	Brass stop-cock 15 mm dia	each	210.00
1343	Brass stop-cock 20 mm dia	each	280.00

Code No.	Description	Unit	Rate ₹
1350	Mosquito proof coupling of approved design	each	30.00
1352	C.I. cover and frame 300x300 mm inside	each	300.00
1353	C.I. cover without frame 300x300 mm inside i/c cover of 4.50 kg	each	225.00
1354	Rectangular cover 455x610 mm with frame (low duty)	each	1500.00
1355	Rectangular cover 455x610 mm without frame (low duty)	each	1000.00
1356	500 mm dia cover with frame (medium duty)	each	4750.00
1357	500 mm dia cover without frame (medium duty)	each	2300.00
1360	C.I. mouth, brass ferrule 15 mm dia	each	140.00
1361	C.I. mouth, brass ferrule 20 mm dia	each	160.00
1362	C.I. mouth, brass ferrule 25 mm dia	each	220.00
1363	Vitreous china foot rests 250x130x30 mm	pair	100.00
1364	C.I. grating 100x100 mm	each	15.00
1366	C.I. grating 150x150 mm	each	25.00
1367	C.I. grating 180x180 mm	each	30.00
1369	S.C.I. gully or nahani grating 100 mm dia	each	18.00
1373	Rubber insertions for 80 mm dia pipe joints	each	15.00
1374	Rubber insertions for 100 mm dia pipe joints	each	18.00
1375	Rubber insertions for 125 mm dia pipe joints	each	20.00
1376	Rubber insertions for 150 mm dia pipe joints	each	20.00
1377	Rubber insertions for 200 mm dia pipe joints	each	25.00
1378	Rubber insertions for 250 mm dia pipe joints	each	40.00
1379	Rubber insertions for 300 mm dia pipe joints	each	45.00
1380	Rubber insertions for 350 mm dia pipe joints	each	50.00
1381	Rubber insertions for 400 mm dia pipe joints	each	73.00
1382	Rubber insertions for 450 mm dia pipe joints	each	92.00
1383	Rubber insertions for 500 mm dia pipe joints	each	110.00
1384	Rubber insertions for 600 mm dia pipe joints	each	125.00
1392	Mirror of superior make glass 60x45 cm	each	310.00
1396	Vitreous china pedestal for wash basin	each	700.00
1397	Pig lead	kilogram	90.00
1464	S & S.C.I. standard specials upto 300 mm dia (heavy class)	quintal	3600.00
1466	S & S.C.I. standard specials over 300 mm dia (heavy class)	quintal	3700.00
1468	Flanged C.I. standard specials upto 300 mm dia (heavy class)	quintal	5500.00
1470	Flanged C.I. standard specials over 300 mm dia (heavy class)	quintal	5800.00
1472	Casing pipe 100 mm dia	metre	335.00
1532	Flush pipe with union spreaders and clamps all in C.P. brass for single stall	each	270.00
1533	Flush pipe with union spreaders and clamps all in C.P. brass for double stall	each	400.00
1534	Flush pipe with union spreaders and clamps all in C.P. brass for range of three stall	each	520.00
1535	Flush pipe with union spreaders and clamps all in C.P. brass for range of four stall	each	600.00

Code No.	Description	Unit	Rate ₹
1540	Flush pipe and spreaders G.I. for single set of one squatting plate urinal	each	175.00
1541	Flush pipe and spreaders G.I. for range of two squatting plates urinal	each	250.00
1542	Flush pipe and spreaders G.I. for range of three squatting plates urinal	each	300.00
1543	Flush pipe and spreaders G.I. for range of four squatting plates urinal	each	390.00
1545	G.I. pipes 15 mm dia	metre	85.00
1546	G.I. pipes 20 mm dia	metre	110.00
1547	G.I. pipes 25 mm dia	metre	150.00
1548	G.I. pipes 32 mm dia	metre	180.00
1549	G.I. pipes 40 mm dia	metre	220.00
1550	G.I. pipes 50 mm dia	metre	275.00
1551	G.I. pipes 65 mm dia	metre	365.00
1552	G.I. pipes 80 mm dia	metre	460.00
1555	G.I. back (jam) nuts 25 mm dia	each	10.00
1559	G.I. back (jam) nuts 65 mm dia	each	22.00
1608	G.I. tees (equal) 25 mm	each	45.00
1612	G.I. tees (equal) 65 mm	each	280.00
1614	G.I. inlet connection	each	65.00
1616	S.C.I. soil, waste and vent single socketed pipe 1.80 metres long: 75 mm dia	each	950.00
1617	S.C. I. soil, waste and vent single socketed pipe 1.80 metres long: 100 mm dia	each	1150.00
1618	S.C.I. soil, waste and vent single socketed pipe 1.80 metres long: 150 mm dia each 1750.00		
1620	S.C.I. plain bend 75 mm dia	each	170.00
1621	S.C.I. plain bend 100 mm dia	each	350.00
1622	S.C.I. plain bend 150 mm dia	each	600.00
1624	S.C.I. bend with access door 75 mm dia	each	200.00
1625	S.C.I. bend with access door 100 mm dia	each	252.00
1627	S.C.I. plain single equal junctions 75x75x75 mm dia	each	265.00
1628	S.C.I. plain single equal junctions 100x100x100 mm dia	each	450.00
1630	S.C.I. single equal junctions 75x75x75 mm dia with access door	each	278.00
1631	S.C.I. single equal junctions 100x100x100 mm dia with access door	each	376.00
1633	S.C.I. plain double equal junctions 75x75x75x75 mm dia	each	346.00
1634	S.C.I. plain double equal junctions 100x100x100x100 mm dia	each	520.00
1636	S.C.I. double equal junctions 75x75x75x75 mm dia with access door	each	425.00
1637	S.C.I. double equal junctions 100x100x100x100 mm dia with access door	each	550.00
1639	Slotted cowl (terminal guard ) 75 mm dia	each	151.00
1640	Slotted cowl (terminal guard) 100 mm dia	each	190.00
1641	G.I. Union 15 mm nominal bore	each	55.00
1642	G.I. Union 20 mm nominal bore	each	75.00
1643	G.I. Union 25 mm nominal bore	each	85.00
1644	G.I. Union 32 mm nominal bore	each	120.00

Code No.	Description	Unit	Rate ₹
1645	G.I. Union 40 mm nominal bore	each	185.00
1646	G.I. Union 50 mm nominal bore	each	220.00
1647	G.I. Union 65 mm nominal bore	each	430.00
1648	G.I. Union 80 mm nominal bore	each	510.00
1649	Polyethylene water storage tank with cover and suitable locking arrangement	per litre	4.50
1653	Sand cast iron S&S plain single unequal junctions: 100x100x75 mm dia	each	370.00
1656	Sand cast iron S&S single unequal junctions: 100x100x75 mm dia with access door	each	400.00
1659	Sand cast iron S&S plain double unequal junctions:100x100x75x75 mm dia	each	550.00
1662	Sand cast iron S&S double unequal junctions: 100x100x75x75 mm dia with access door	each	550.00
1666	Sand cast iron heel rest bend 75 mm dia	each	220.00
1667	Sand cast iron heel rest bend 100 mm dia	each	250.00
1669	S.C.I. single equal invert branch of required degree 75x75x75 mm dia	each	320.00
1670	S.C.I. single equal invert branch of required degree 100x100x100 mm dia	each	410.00
1672	S.C.I. double equal invert branch of required degree 75x75x75x75 mm dia	each	410.00
1673	S.C.I. double equal invert branch of required degree 100x100x100x100 mm dia	each	550.00
1674	S.C.I. single unequal invert branch of required degree 100x100x75 mm dia	each	495.00
1677	S.C.I. double unequal invert branch of required degree 100x100x75x75 mm dia	each	570.00
1682	S.C.I. door pieces 75 mm dia	each	275.00
1683	S.C.I. door pieces 100 mm dia	each	400.00
1685	S.C.I. collar 75 mm dia	each	113.00
1686	S.C.I. collar 100 mm dia	each	143.00
1687	Unplasticised P.V.C. connection pipe with brass union 30 cm long 15 mm bore	each	30.00
1688	Unplasticised P.V.C. connection pipe with brass union 30 cm long 20 mm bore	each	35.00
1689	Unplasticised P.V.C. connection pipe with brass union 45 cm long 15 mm bore	each	35.00
1690	Unplasticised P.V.C. connection pipe with brass union 45 cm long 20 mm bore	each	48.00
1693	S.C.I. hand pump	each	670.00
1700	R.C.C. pipes NP2 class 100 mm dia	metre	200.00
1701	R.C.C. pipes NP2 class 150 mm dia	metre	210.00
1702	R.C.C. pipes NP2 class 250 mm dia	metre	260.00
1703	R.C.C. pipes NP2 class 300 mm dia	metre	300.00
1704	R.C.C. pipes NP2 class 450 mm dia	metre	400.00
1705	R.C.C. pipes NP2 class 500 mm dia	metre	580.00
1706	R.C.C. pipes NP2 class 600 mm dia	metre	920.00

Code No.	Description	Unit	Rate ₹
1707	R.C.C. pipes NP2 class 700 mm dia	metre	1050.00
1709	R.C.C. pipes NP2 class 800 mm dia	metre	1170.00
1710	R.C.C. pipes NP2 class 900 mm dia	metre	1280.00
1711	R.C.C. pipes NP2 class 1000 mm dia	metre	1590.00
1712	R.C.C. pipes NP2 class 1100 mm dia	metre	1875.00
1713	R.C.C. pipes NP2 class 1200 mm dia	metre	1925.00
1714	R.C.C. collars NP2 class 100 mm dia	each	30.00
1715	R.C.C. collars NP2 class 150 mm dia	each	35.00
1716	R.C.C. collars NP2 class 250 mm dia	each	50.00
1717	R.C.C. collars NP2 class 300 mm dia	each	55.00
1718	R.C.C. collars NP2 class 450 mm dia	each	100.00
1719	R.C.C. collars NP2 class 500 mm dia	each	115.00
1720	R.C.C. collars NP2 class 600 mm dia	each	140.00
1721	R.C.C. collars NP2 class 700 mm dia	each	150.00
1723	R.C.C. collars NP2 class 800 mm dia	each	200.00
1724	R.C.C. collars NP2 class 900 mm dia	each	235.00
1725	R.C.C. collars NP2 class 1000 mm dia	each	280.00
1726	R.C.C. collars NP2 class 1100 mm dia	each	300.00
1727	R.C.C. collars NP2 class 1200 mm dia	each	350.00
1728	RCC pipe 450 mm dia NP-3 spigot	metre	1496.00
1729	RCC pipe 600 mm dia NP-3 spigot	metre	1995.00
1730	RCC pipe 900 mm dia NP-3 spigot	metre	3150.00
1731	RCC pipe 1000 mm dia NP-3 spigot	metre	3885.00
1732	RCC pipe 1200 mm dia NP-3 spigot	metre	5040.00
1733	RCC pipe 1800 mm dia NP-3 spigot	metre	9450.00
1734	RCC pipe 450 mm dia NP-4 spigot	metre	1733.00
1735	RCC pipe 600 mm dia NP-4 spigot	metre	2310.00
1736	RCC pipe 900 mm dia NP-4 spigot	metre	4595.00
1737	RCC pipe 1000 mm dia NP-4 spigot	metre	5565.00
1738	RCC pipe 1200 mm dia NP-4 spigot	metre	6510.00
1739	RCC pipe 1800 mm dia NP-4 spigot	metre	13650.00
1854	Stoneware pipes grade A (60 cm long) 100 mm dia	each	50.00
1855	Stoneware pipes grade A (60 cm long) 150 mm dia	each	80.00
1856	Stoneware pipes grade A (60 cm long) 200 mm dia	each	135.00
1857	Stoneware pipes grade A (60 cm long) 230 mm dia	each	170.00
1858	Stoneware pipes grade A (60 cm long) 250 mm dia	each	220.00
1859	Stoneware pipes grade A (60 cm long) 300 mm dia	each	240.00
1863	Fire clay kitchen sink: 600x450x250 mm	each	1350.00
1871	White vitreous china laboratory sink 450x300x150 mm	each	820.00
1872	White vitreous china laboratory sink 600x450x200 mm	each	1525.00
1875	White plastic seat (solid) with lid C.P. brass hinges and rubber buffers	each	330.00

Code No.	Description	Unit	Rate ₹
1876	Black plastic seat (solid) with lid C.P. brass hinges and rubber buffers	each	310.00
1878	Shower rose C.P. brass for 15 to 20 mm inlet 100 mm dia	each	50.00
1879	Shower rose C.P. brass for 15 to 20 mm inlet 150 mm dia	each	60.00
1881	Spun yarn	kilogram	50.00
1882	Strainer brass 40 mm dia 1.5 metre long	each	600.00
1885	15 mm C.P. brass tap	each	210.00
1889	C.P. brass toilet paper holder of standard size	each	170.00
1891	C.I. trap for standard urinal with vent arm with operating and other couplings in C.P. brass: 50 mm dia	each	170.00
1893	C.I. trap for standard urinal with vent arm with operating and other couplings in C.P. brass: 80 mm dia	each	225.00
1895	C.P. brass trap 40 mm dia	each	150.00
1896	100 mm S.C.I. trap with vent heel	each	315.00
1897	100 mm S.C.I. trap with 100 mm inlet and 100 mm outlet	each	275.00
1898	100 mm S.C.I. trap with 100 mm inlet and 75 mm outlet	each	218.00
1900	S.W. gully trap P type 100x100 mm	each	90.00
1902	S.W. gully trap P type 150x100 mm	each	130.00
1904	S.W. gully trap P type 180x150 mm	each	225.00
1913	Vitreous china lipped front urinal	each	460.00
1915	Vitreous china squatting plate urinal	each	760.00
1922	H.P. or L.P. ball valve with polythene floats: 15 mm dia	each	210.00
1923	H.P. or L.P. ball valve with polythene floats: 20 mm dia	each	305.00
1924	H.P. or L.P. ball valve with polythene floats: 25 mm dia	each	330.00
1927	Brass full way valve with C.I. wheel (screwed end) 25 mm dia	each	350.00
1928	Brass full way valve with C.I. wheel (screwed end) 32 mm dia	each	410.00
1929	Brass full way valve with C.I. wheel (screwed end) 40 mm dia	each	480.00
1930	Brass full way valve with C.I. wheel (screwed end) 50 mm dia	each	620.00
1931	Brass full way valve with C.I. wheel (screwed end) 65 mm dia	each	1080.00
1932	Brass full way valve with C.I. wheel (screwed end) 80 mm dia	each	1620.00
1933	Gunmetal non-return valve-horizontal (screwed end) 25 mm dia	each	330.00
1934	Gunmetal non-return valve-horizontal (screwed end) 32 mm dia	each	450.00
1935	Gunmetal non-return valve-horizontal (screwed end) 40 mm dia	each	560.00
1936	Gunmetal non-return valve-horizontal (screwed end) 50 mm dia	each	820.00
1937	Gunmetal non-return valve-horizontal (screwed end) 65 mm dia	each	1490.00
1938	Gunmetal non-return valve-horizontal (screwed end) 80 mm dia	each	2120.00
1940	C.I. sluice valve (with caps) class I: 100 mm dia	each	2410.00
1941	C.I. sluice valve (with caps) class I : 125 mm dia	each	2600.00
1942	C.I. sluice valve (with caps) class I: 150 mm dia	each	3600.00
1943	C.I. sluice valve (with caps) class I : 200 mm dia	each	7500.00
1944	C.I. sluice valve (with caps) class I : 250 mm dia	each	10980.00
1945	C.I. sluice valve (with caps) class I: 300 mm dia	each	15500.00
1947	Vitreous china flat back wash basin 630x450 mm	each	725.00

Code No.	Description	Unit	Rate ₹
1949	Vitreous china angle back wash basin 600x480 mm	each	725.00
1950	Vitreous china angle back wash basin 400x400 mm	each	425.00
1951	C.P. brass waste 32 mm	each	80.00
1952	C.P. brass waste 40 mm	each	95.00
1953	Vitreous china Indian type W.C. pan size 580 mm	each	450.00
1954	Vitreous china orrisa type W.C. pan size 580 mm	each	780.00
1955	Vitreous china pedestal type water closet	each	700.00
1956	Bolts and nuts 16 mm dia 60 mm long	each	12.00
1957	Bolts and nuts 16 mm dia 65 mm long	each	12.00
1958	Bolts and nuts 20 mm dia 65 mm long	each	15.00
1959	Bolts and nuts 20 mm dia 70 mm long	each	15.00
1960	Bolts and nuts 20 mm dia 75 mm long	each	16.00
1961	Bolts and nuts 20 mm dia 80 mm long	each	18.00
1962	Bolts and nuts 24 mm dia 85 mm long	each	28.00
1963	Bolts and nuts 24 mm dia 90 mm long	each	32.00
1964	Bolts and nuts 27 mm dia 100 mm long	each	38.00
1965	White vitreous china dual purpose closet (Anglo Indian W.C.) suitable for use as squatting pan or European type water closet as per manufacturer's specifications	each	1300.00
1970	Vitreous china foot rests 250x125x25 mm	pair	100.00
1980	Fly ash	cum	7.75
1984	Common burnt clay F.P.S. bricks tile class designation 10	1000 Nos	4800.00
1986	Common burnt clay modular bricks class designation 12.5	1000 Nos	5250.00
2391	Strips-Aluminium fluted 3.15 mm thick and 150 mm wide	metre	228.00
2392	Strips Aluminium fluted 3.15 mm thick and 200 mm wide	metre	323.00
2393	1 mm thick Stainless Steel Cover plate grade 304	kg	275.00
2394	Coupler 16 mm dia	each	67.00
2395	Coupler 20 mm dia	each	88.00
2396	Coupler 25 mm dia	each	130.00
2397	Coupler 28 mm dia	each	192.00
2398	Coupler 32 mm dia	each	231.00
2399	Complete Roof Joint of 100 mm	metre	4500.00
2400	Complete Roof Joint of 150 mm	metre	4800.00
2401	Complete Roof Joint of 200 mm	metre	5000.00
2402	Epoxy adhesive	kg	150.00
2403	Floor Joint of 100 mm	metre	4500.00
2404	Floor Joint of 150 mm	metre	5000.00
2405	Floor Joint of 200 mm	metre	5400.00
2406	Float glass sheet of nominal thickness 4 mm (weight not less than 10 kg/sqm)	sqm	330.00
2407	Float glass sheet of nominal thickness 5.5 mm (weight not less than 13.50 kg/sqm)	sqm	500.00
2408	Float glass sheet of nominal thickness 8 mm (weight not less than 20.00 kg/sqm)	sqm	700.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
2409	Wall Joint of 100 mm	metre	3400.00
2410	Wall Joint of 150 mm	metre	3700.00
2411	Wall Joint of 200 mm	metre	4000.00
2412	Ply wood 5 ply with commercial ply on both faces 6 mm thick	sqm	360.00
2413	12 mm commercial ply	sqm	580.00
2414	18 mm thick block board with commercial ply veneering on both side	sqm	700.00
2447	Hollock ballies 125 mm diameter	metre	35.00
2449	Oxidised mild steel pull bolt lock (locking bolt) of size 85 mm x 42 mm with screws, bolts, nuts and washers complete	each	50.00
2451	Brass cupboard lock 6 levers of approved quality, 40 mm size	each	70.00
2452	Brass cupboard lock 6 levers of approved quality, 50 mm size	each	75.00
2453	Brass cupboard lock 6 levers of approved quality, 65 mm size	each	80.00
2454	Brass cupboard lock 6 levers of approved quality, 75 mm size	each	100.00
2455	Brass hanging type door stopper 150 mm	each	65.00
2456	Hydraulic door closer bottle type M.S. body with necessary accessories and screws complete	each	590.00
2459	Anodised Aluminium hanging type door stopper	each	25.00
2464	Anodised Aluminium pull bolt lock (locking bolt) of size 85 mm x 42 mm with screws, bolts, nuts and washers complete	each	50.00
2465	Anodised Aluminium Casement stay 250 mm	each	50.00
2466	Hollock wood in scantling	10 cudm	325.00
2467	Chromium plated Brass pull bolt lock (locking bolt) of size 85 mm x 42 mm with screws, bolts, nuts and washers complete	each	165.00
2468	Nickled Chromium Brass cupboard lock 40 mm size	each	65.00
2469	Nickled Chromium Brass cupboard lock 50 mm size	each	75.00
2470	Nickled Chromium Brass cupboard lock 65 mm size	each	85.00
2471	Nickled Chromium Brass cupboard lock 75 mm size	each	110.00
2480	Ply wood 5 ply with teak ply on both faces 9 mm thick	sqm	1030.00
2481	Ply wood 5 ply with teak ply on one face and commercial ply on another face 9 mm thick	sqm	840.00
2483	Ply wood 7 ply with teak ply on one face and commercial ply on another face 9 mm thick	sqm	920.00
2484	Pre-laminated with decorative lamination on both side exterior Grade - I MDF Board 12 mm thick confirming to IS:14587	sqm	691.90
2485	Pre-laminated with decorative lamination on both side exterior Grade - I MDF Board 18 mm thick confirming to IS:14587	sqm	922.50
2486	Pre-laminated with decorative lamination one side and other side balancing lamination exterior Grade - I MDF Board 25 mm thick confirming to IS:14587	sqm	1198.15
2487	Pre-laminated with decorative lamination one side and other side balancing lamination exterior Grade - I MDF Board 12 mm thick confirming to IS:14587	sqm	641.25
2488	Pre-laminated with decorative lamination one side and other side balancing lamination exterior Grade - I MDF Board 18 mm thick confirming to IS:14587	sqm	860.65
2489	PVC edge bending tape 2.00 mm thick	metre	28.55
2500	Extra for selected planks of second class deodar wood	10 cudm	100.00

Code No.	Description	Unit	Rate ₹
2504	Kiln seasoning of timber	cum	730.00
2505	Hollock wood in planks	10 cudm	370.00
2506	Carben Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10 mm x 60 mm	10 nos	250.00
2507	Carben Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10 mm x 80 mm	10nos	293.00
2508	Carben Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10 mm x 120 mm	10 nos	364.00
2509	Carben Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10 mm x 140 mm	10 Nos	450.00
2510	Carben Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10 mm x 160 mm	10 Nos	570.00
2602	Common burnt clay F.P.S. (non modular) bricks class designation 7.5	1000 Nos	4800.00
2603	Common burnt clay F.P.S. (non modular) bricks class designation 5.0	1000 Nos	3500.00
2605	Structural sealant - 6 mm x 12 mm	metre	31.60
2606	Spacer tape 6.4 mm thick x 6 mm wide	metre	18.00
2607	Weather Sealant - Non Staining (600 ml)	each	459.15
2608	Weather Sealant - Normal (300 ml)	each	143.20
2609	MS Brackets/Aluminium Alloy Brackets	kg	100.00
2610	Silicon Gasket in Kg (Above 50 g / m)	kg	601.25
2611	EPDM Gasket in Kg (Above 60 g / m)	kg	160.00
2612	Anchor Fastner - M10	each	110.95
2613	SS Bolt with washer of sizes for structural glazing / ACP Cladding	each	35.00
2614	SS Screws of sizes for structural glazing / ACP Cladding	each	5.00
2615	Protective Tape	metre	25.00
2616	GI flashing - 1.2 mm Thick	kg	66.00
2617	6 mm thick High performance glass	sqm	1910.00
2618	6 mm thick clear heat strengthened glass	sqm	770.00
2619	6 mm thick clear heat strengthened glass	each	145.00
2620	ARMS GS HD -TOP HUNG -20"-TYPE P-COUPLE	pair	1570.80
2621	Connection Block	each	39.35
2622	Curtain wall striker	each	102.70
2623	Adjustable Fastening Pawl	each	38.25
2624	Corner drive	each	294.95
2625	Top wedge Block	each	136.55
2626	Glass wool Denisity 48 Kg / m3 with Black Glass Tissue (BGT)	sqm	230.00
2627	SS Screws - # 8 x 19	each	10.00
2628	Weather Sealant - DC 789	cartridge	135.00
2629	Cement Board	sqm	250.00

Code No.	Description	Unit	Rate ₹
2630	Baker rod	metre	5.00
2631	4 mm thick ACP	sqm	1200.00
2632	Fire Stop	metre	561.95
2634	GI/Aluminium Sheet (0.8 mm thick)	kg	57.00
2704	Aluminium Strip 40 mm wide and 2 mm thick	kilogram	220.00
2708	Truf Paver (500 x 500 x 40 mm)	sqm	1090.00
2709	Ceremic Tiles Pieces for Crazy Flooring	quintal	135.00
2710	White marble makrana second quality plain veined stone pieces for crazy flooring	quintal	140.00
2711	FS800H Grade Flooring Panel ( Size 600 mm x600 mm x32 mm)	each	750.00
2712	Zinc Electroplated Pedestals - 300 mm	each	140.00
2713	Zinc Electroplated Pedestals - 450 mm	each	150.00
2714	Zinc Electroplated Tube Stinger	each	70.00
2715	Machine Screw for Fixing	each	2.00
2750	8 mm thick granite stone tiles (mirror polished of all shades)	sqm	700.00
2751	8 mm thick marble tiles (polished) Raj Nagar	sqm	360.00
2901	Stone Aggregate (Single size) : 100 mm nominal size	cum	800.00
2902	Stone Aggregate (Single size) : 80 mm nominal size	cum	800.00
2903	Stone chippings/ screenings 4.75 mm nominal size	cum	1150.00
2904	Stone chippings/ screenings 150 micron nominal size	cum	1150.00
2908	Over burnt (Jhama) Brick Aggregate: 120 mm to 40 mm size	cum	380.00
2909	Over burnt (Jhama) Brick Aggregate: 90 mm to 40 mm size	cum	400.00
2910	Stone chippings/ screenings 12.5/ 13.2 mm nominal size	cum	1100.00
2911	Stone chippings/ screenings 10/ 11.2 mm nominal size	cum	1100.00
2914	Solvent	kilogram	25.00
2916	Paving Asphalt VG 10 of approved quality	tonne	40000.00
3002	Polyvinyle chloride sheet 400 micron thick	sqm	35.00
3004	Stone ware spouts 100 mm dia 60 cm long	each	35.00
3050	Galvanised steel corrugated sheets	quintal	5400.00
3080	Gunmetal non-return valve - vertical (screwed end) 25 mm dia	each	360.00
3084	Gunmetal non-return valve - vertical (screwed end) 32 mm dia	each	520.00
3088	Gunmetal non-return valve - vertical (screwed end) 40 mm dia	each	750.00
3092	Gunmetal non-return valve - vertical (screwed end) 50 mm dia	each	1010.00
3096	Gunmetal non-return valve - vertical (screwed end) 65 mm dia	each	1710.00
3213	Vitreous china Surgeon type wash basin of size 660x460 mm	each	1100.00
3228	600x120 mm glass shelf with anodised aluminium angle frame, C.P. brass brackets and guard rail of standard size	each	250.00
3229	Vitreous china flat back wash basin 550x400 mm	each	550.00
3300	Gunmetal non-return valve - vertical (screwed end) 80 mm dia	each	2890.00
3311	C.I.slucice valve (with caps) class II : 100 mm dia	each	2910.00
3314	C.I.slucice valve (with caps) class II : 125 mm dia	each	3500.00
3317	C.I.slucice valve (with caps) class II : 150 mm dia	each	4300.00

Code No.	Description	Unit	Rate ₹
3320	C.I.sluiice valve (with caps) class II : 200 mm dia	each	9210.00
3321	C.I.sluiice valve (with caps) class II : 250 mm dia	each	14800.00
3326	C.I.sluiice valve (with caps) class II : 300 mm dia	each	18500.00
3327	15 mm Battery Based Sensor Pillar Cock	each	5822.00
3617	C.P. Brass union 40mm dia	each	195.00
3620	C.C.I. (spun) socketed soil, waste and vent pipe 1.80 metres long:100 mm dia	each	1250.00
3621	C.C.I. (spun) socketed soil, waste and vent pipe 1.80 metres long: 75 mm dia	each	1035.00
3624	S.C.I. S&S bends with access door 100 mm dia	each	290.00
3625	S.C.I. S&S bends with access door 75 mm dia	each	240.00
3628	S.C.I. S&S bend 100 mm dia	each	265.00
3629	S.C.I. S&S bend 75 mm dia	each	195.00
3634	S.C.I. S&S heel rest sanitary bend 100 mm dia	each	296.00
3635	S.C.I. S&S heel rest sanitary bend 75 mm dia	each	250.00
3640	S.C.I. S&S single equal junctions 100x100x100 mm	each	472.00
3641	S.C.I. S&S single equal junctions 75x75x75 mm	each	330.00
3644	S.C.I. S&S single equal junctions with access door 100x100x 100 mm	each	495.00
3645	S.C.I. S&S single equal junctions with access door 75x75x75 mm	each	373.00
3650	S.C.I. S&S double equal junctions 100x100x100x100 mm	each	620.00
3651	S.C.I. S&S double equal junctions 75x75x75x75 mm	each	462.00
3654	S.C.I. S&S double equal junctions with access door 100x100x 100x100 mm	each	615.00
3655	S.C.I. S&S double equal junctions with access door 75x75x75x 75 mm	each	480.00
3660	S.C.I. S&S single unequal junctions 100x100x75 mm	each	570.00
3664	S.C.I. S&S single unequal junctions with access door 100x100x 75 mm	each	640.00
3670	S.C.I. S&S double unequal junctions 100x100x75x75 mm	each	800.00
3674	S.C.I. S&S double unequal junctions with access door 100x100x 75x75 mm	each	850.00
3681	S.C.I. S&S single equal invert branch of required degree 100x100x 100 mm dia	each	425.00
3682	S.C.I. S&S single equal invert branch of required degree 75x75x 75 mm dia	each	323.00
3685	S.C.I. S&S double equal invert branch of required degree 100x100x 100x100 mm dia	each	530.00
3686	S.C.I. S&S double equal invert branch of required degree 75x75x 75x75 mm dia	each	425.00
3690	S.C.I. S&S single unequal invert branch of required degree 100x 100x75 mm dia	each	545.00
3695	S.C.I. S&S double unequal invert branch of required degree 100x 100x75x75 mm dia	each	725.00
3699	S.C.I. S&S, 75 mm offset for 75 mm dia pipe	each	225.00
3707	S.C.I. S&S, 150 mm offset for 75 mm dia pipe	each	285.00

Code No.	Description	Unit	Rate ₹
3708	S.C.I. S&S, 150 mm offset for 100 mm dia pipe	each	390.00
3712	S.C.I. S&S, 114 mm offset for 75 mm dia pipe	each	300.00
3713	S.C.I. S&S, 114 mm offset for 100 mm dia pipe	each	383.00
3716	S.C.I. S&S, 152 mm offset for 75 mm dia pipe	each	358.00
3717	S.C.I. S&S, 152 mm offset for 100 mm dia pipe	each	465.00
3728	S.C.I. S&S door pieces 100 mm dia	each	400.00
3729	S.C.I. S&S door pieces 75 mm dia	each	295.00
3733	S.C.I. S&S, Slotted Cowl (Terminal Guard) 100 mm	each	350.00
3734	S.C.I. S&S, Slotted Cowl (Terminal Guard) 75 mm	each	300.00
3738	S.C.I. S&S, collars 100 mm	each	250.00
3739	S.C.I. S&S, collars 75 mm	each	170.00
3746	S.C.I. S&S, 75 mm offset for 75 mm dia pipe	each	218.00
3747	S.C.I. S&S, 75 mm offset for 100 mm dia pipe	each	363.00
3749	Vitreous china toilet paper holder of standard size	each	150.00
3860	560 mm dia cover with frame (Heavy duty)	each	9000.00
3861	560 mm dia cover without frame (Heavy duty)	each	5000.00
4001	Stainless steel (Grade-304)hollow section round/square tubes	kg	350.00
4002	Stainless steel bolts/square bar and plates	kg	130.00
4006	Pressed steel door frames (mild steel sheet 1.60 mm) Profile "B"	metre	220.00
4007	Pressed steel door frames (mild steel sheet 1.60 mm) Profile "C"	metre	240.00
4008	Pressed steel door frames (mild steel sheet 1.60 mm) Profile "E"	metre	270.00
4009	Mild steel tubes hot finished welded type	kilogram	52.00
4010	Mild steel tubes hot finished seamless type	kilogram	65.00
4011	Mild steel tubes electric resistant or induction butt welded	kilogram	70.00
4012	Circular C.I. Box for ceiling fan	each	60.00
4013	Pulley 40 mm dia	each	30.00
4201	Aluminium primer	litre	100.00
4202	Red oxide Zinc chromate primer	litre	70.00
4203	Copper acetate	kilogram	300.00
4204	Hydrochloric acid	kilogram	35.00
4205	Copper chloride	kilogram	300.00
4206	Copper nitrate	kilogram	220.00
4207	Ammonium chloride	kilogram	20.00
5001	Mobil oil	litre	200.00
6001	White marble slab Makrana second quality plain veined 18 mm thick	sqm	1870.00
6007	Pink marble slab plain 18 mm thick	sqm	645.00
6010	Udaypur green marble slab plain 18 mm thick	sqm	690.00
6019	Black Zebra marble slab plain 18 mm thick	sqm	500.00
6501	Sand zone V (Jamuna)	cum	550.00
7001	Brass 100mm mortice latch and lock with 6 levers without pair of handles	each	260.00
7003	Pair of Anodised Aluminium lever handles for 100 mm mortice latch and lock	each	315.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
7004	Vitreous china flat back wash basin 450x300 mm	each	425.00
7005	Vitreous china 10 litres low level cistern without fittings	each	925.00
7006	Vitreous china 10 litres low level cistern with fittings	each	1600.00
7008	F.P.S. (non modular) clay fly ash bricks class designation 7.5	1000 Nos	4600.00
7009	12.5 mm thick tapered edge gypsum plain borad	sqm	200.00
7010	Galvanised Steel ceiling section (size 80x26x0.50 mm)	metre	39.00
7011	Galvanised Steel perimetre Channel (Size 20x27x30x0.50 mm)	metre	27.00
7012	Galvanised Steel intermediate Channel (Size 15x45x15x0.90 mm)	metre	42.00
7013	Galvanised Steel angle hanger (Ceiling angle) (Size 25x10x0.50 mm)	metre	19.00
7014	Galvanised Steel connecting clips (2.64 mm dia and 230 mm long GI wire)	each	6.20
7015	Galvanised Steel soffit cleat (Size 27x37x25x0.60 mm)	each	4.00
7016	Joint filler	kilogram	22.00
7017	Joint finisher	kilogram	24.00
7018	Joint tape roll	roll	145.00
7019	Dash fastener / Chemical fastner	each	15.00
7020	All drive screws ( for gypsum board)	100 Nos	60.00
7021	Primer ( for gypsum board)	litre	85.00
7022	Chlorpyriphos 20% E.C. / Lindane 20% E.C.	litre	160.00
7023	Chromium plated brackets ( curtain rods)	each	7.00
7024	Acid Proof cement	tonne	8150.00
7027	M.S. Butt hinges 125x90x4 mm	10 Nos	110.00
7028	12.5 mm thick Fully Perforated gypsum board	sqm	927.00
7029	Galvanised wire mesh of average width of aperture 1.4 mm and nominal dia of wire 0.63 mm	sqm	250.00
7030	12.5 mm thick tapered edge gypsum fire resistant board	sqm	237.00
7031	12.5 mm thick tapered edge gypsum moisture resistant board	sqm	271.00
7032	Frosted glass sheet of nominal thickness 4 mm (weighing not less than 10 kg/sqm)	sqm	335.00
7033	Nickel plated M.S. pipe 25 mm dia	metre	80.00
7034	Nickel plated M.S. pipe 20 mm dia	metre	70.00
7035	Nickel plated M.S. Brackets for curtain rod 20 mm	each	7.00
7036	Nickel plated M.S - Brackets for curtain rod 25 mm	each	8.00
7040	Oxidised mild steel screws 35 mm	100 Nos	50.00
7042	Mild steel conduit pipe (heavy type) ISI marked-20 mm dia	metre	60.00
7043	Mild steel conduit pipe (heavy type) ISI marked-25 mm dia	metre	70.00
7044	Rolling shutters of 80x0.90 mm laths	sqm	1080.00
7045	Rolling shutters of 80x1.2 mm laths	sqm	1150.00
7046	Top cover of Rolling shutters 0.90 mm thick	metre	320.00
7047	Top cover of Rolling shutters 1.20 mm thick	metre	350.00
7048	Rawl plug 50 mm (designation 10 nos)	each	10.00
7049	Teak wood lipping of size 25x3 mm in pelmets	metre	22.00

Code No.	Description	Unit	Rate ₹
7050	PU Primer	sqm	41.00
7051	40 mm (average) PU spray having 40-45 kg/m <sup>3</sup> density	sqm	421.00
7052	GI wire netting 3/4" x 24 G	sqm	27.00
7053	400 G polythene sheet	sqm	15.00
7055	Flat pressed 3 layer and graded particle board (medium density) Grade 1 conforming to IS : 3087 - 18 mm thick	sqm	420.00
7056	Aluminium tee channel (heavy duty) with rollers and stop end	metre	50.00
7059	Aluminium hanging floor door stopper with twin rubber & stopper	each	65.00
7060	Hydraulic door closer tubular type Aluminium section body	each	840.00
7063	Oxidised M.S.casement stay (straight peg type) 300 mm not less than 0.33 kg	each	22.00
7064	Oxidised M.S.casement stay (straight peg type) 250 mm not less than 0.28 kg	each	20.00
7065	Oxidised M.S. casement stay (straight peg type) 200 mm not less than 0.24 kg	each	18.00
7068	Extra for providing grilled rolling shutters with 8 mm dia M.S. rod	sqm	270.00
7070	Chequered precast cement concrete tiles 22 mm thick using marble chips of size 6mm - Light shade using white cement	sqm	470.00
7071	White marble Raj Nagar plain 18 mm thick upto 0.50 sqm area	sqm	600.00
7072	Wall mounted water closet	each	4650.00
7073	Adjustable Vitreous China Cistern with fittings	each	2500.00
7074	White Vitreous China Waterless Urinal	each	15000.00
7075	Cistern with fittings for Waterless Urinal	each	3400.00
7076	White Vitreous Urinal	each	14000.00
7077	Acid and alkali resistant tiles 300x300 mm size, 10 mm thick	10 Nos	570.00
7087	S.C.I. Tee 150 mm	each	600.00
7090	Expanded polystyrene type N- Normal	sqm	130.00
7091	Expanded polystyrene type - SE	sqm	155.00
7095	Stainless steel kitchen sink - with drain board bowl depth 250 mm	each	5185.00
7096	Stainless steel kitchen sink - with drain board 510 x 1040 mm bowl depth 225 mm	each	4950.00
7097	Stainless steel kitchen sink - with drain board 510 x 1040 mm bowl depth 200 mm	each	4250.00
7098	Stainless steel kitchen sink - with drain board 510x1040 mm bowl depth 178 mm	each	3000.00
7101	Stainless steel kitchen sink - without drain board 610x510 mm bowl depth 200 mm	each	3150.00
7102	Stainless steel kitchen sink - without drain board 610x460 mm bowl depth 200 mm	each	2845.00
7103	Stainless steel kitchen sink - without drain board 470x420 mm bowl depth 178 mm	each	2120.00
7104	Coloured Orissa pattern W.C. pan 580x440 mm	each	1320.00
7105	Coloured Pedestal type W.C. pan 580x440 mm (European type)	each	1150.00
7106	Coloured Vitreous china 10 lit. low level cistern	each	1720.00
7107	Coloured (other than black) solid P.V.C. seat in European W.C. pan	each	550.00
7112	Circular shape 450 mm dia Mirror with Plastic moulded frame	each	450.00

Code No.	Description	Unit	Rate ₹
7113	Rectangular shape 453x357 mm Mirror with Plastic moulded frame	each	300.00
7114	Oval shape 450x350 mm (outer dimensions) Mirror with Plastic moulded frame	each	350.00
7115	Rectangular shape 1500x450 mm Mirror with Plastic moulded frame	each	700.00
7116	Hard board 6 mm thick	sqm	175.00
7117	Semi Rigid PVC waste pipe for sink and wash basin 32 mm dia with length not less than 700 mm i/c PVC waste fittings	each	30.00
7118	Semi Rigid PVC waste pipe for sink and wash basin 40 mm dia with length not less than 700 mm i/c PVC waste fittings	each	35.00
7119	Flexible (coil shaped) PVC waste pipe for sink and washbasin 32 mm dia with length not less than 700 mm i/c PVC waste fittings	each	28.00
7120	Flexible (coil shaped) PVC waste pipe for sink and wash basin 40 mm dia with length not less than 700 mm i/c PVC waste fittings	each	30.00
7123	Coloured High density polyethylene / poly propylene 10 lit. (full flush) capacity controlled low level flushing cistern with fittings	each	685.00
7126	White Vitreous china 10 litre (full flush) capacity controlled low level flushing cistern with all fittings	each	975.00
7127	Coloured Vitreous china 10 litre (full flush) capacity controlled low level flushing cistern with all fittings	each	1500.00
7128	S.W. intercepting trap 100 mm dia	each	190.00
7129	S.W. intercepting trap 150 mm dia	each	250.00
7130	Rectangular shape 600x450 mm precast R.C.C. manhole cover with frame - L.D. - 25	each	750.00
7131	Square shape 450x450 mm precast R.C.C. manhole cover with frame - L.D. - 25	each	650.00
7132	Circular shape 450 mm dia precast R.C.C. manhole cover with frame - L.D. - 25	each	600.00
7133	Rectangular shape 500x500 mm precast R.C.C. manhole cover with frame - M.D. - 10	each	700.00
7134	Circular shape 500 mm dia precast R.C.C. manhole cover with frame -M.D.-10	each	660.00
7135	Circular shape 560 mm dia precast R.C.C. manhole cover with frame - H.D. - 20	each	1100.00
7136	Circular shape 560 mm dia precast R.C.C. manhole cover with frame - E.H.D. - 35	each	1225.00
7137	Factory made 35 mm thick shutters with laminated veneer lumber styles & rails as per TADS 15:1995 and panels of 12 mm thick plain type-I, medium density flat pressed three layer, graded particle board (FPT-I) as per IS:3087 bonded with BWP type synthetic resin adhesive, as per IS:848	sqm	1850.00
7139	Factory made 35 mm thick shutters with laminated veneer lumber styles & rails as per TADS 15:1995 and panels of 12 mm thick both sides prelaminated type-I, medium density flat pressed three layer, graded particle board (FPT-I) as per IS:3087 bonded with BWP type synthetic resin adhesive, as per IS:848	sqm	2030.00
7143	Factory made 35 mm thick shutters with laminated veneer lumber styles & rails as per TADS 15:1995 and panels of 12 mm thick one side prelaminated type-I, and other side balancing lamination, medium density flat pressed three layer, graded particle board (FPT-I) as per IS:3087 bonded with BWP type synthetic resin adhesive, as per IS:848	sqm	1950.00

Code No.	Description	Unit	Rate ₹
7151	Factory made 30 mm thick shutters with laminated veneer lumber styles & rails as per TADS 15:1995 and panels of sheet glass using 10 kg/ sqm glass panes	sqm	1650.00
7154	Factory made 35 mm thick shutters with laminated veneer lumber styles & rails as per TADS 15:1995 and panels of galvanised wire gauge with average width of aperture 1.4 mm in both directions with wire of dia 0.63 mm	sqm	1630.00
7155	Factory made 30 mm thick shutters with laminated veneer lumber styles & rails as per TADS 15:1995 and panels of galvanised wire gauge with average width of aperture 1.4 mm in both directions with wire of dia 0.63 mm	sqm	1450.00
7157	Laminated veneer lumber confirming to TADS 15:1995 manufactured in factory in frames of doors, windows	10 cudm	710.00
7178	Chemical ASTM C-type I	kg	110.00
7181	C.I. pile shoe	kilogram	50.00
7182	M.S. clamps for pile shoe	kilogram	45.00
7183	Bentonite	tonne	3100.00
7184	Oxidised M.S. safety chain (weighing not less than 450 gms) for door	each	60.00
7187	C.I. grating 150 mm dia, weighing not less than 440 gm	each	25.00
7188	uPVC pipes (working pressure 4 kg / cm <sup>2</sup> ) Single socketed pipe 75 mm dia	metre	67.00
7189	uPVC pipes (working pressure 4 kg / cm <sup>2</sup> ) Single socketed pipe 110 mm dia	metre	129.00
7190	uPVC pipes (working pressure 4 kg / cm <sup>2</sup> ) Rubber (Seal) Ring 75 mm dia	each	16.00
7191	uPVC pipes (working pressure 4 kg / cm <sup>2</sup> ) Rubber (Seal) Ring 110 mm dia	each	20.00
7192	uPVC coupler for UPVC drainage pipes 75 mm	each	34.00
7193	uPVC coupler for UPVC drainage pipes 110 mm	each	52.00
7194	uPVC pushfit coupler (single) 75 mm thick	each	50.00
7195	uPVC pushfit coupler (single) 110 mm thick	each	81.00
7196	uPVC single equal Tee (without door) 75x75x75 mm	each	95.00
7197	uPVC single equal Tee (without door) 110x110x110 mm	each	128.00
7198	uPVC single equal Tee (with door) 75x75x75 mm	each	115.00
7199	uPVC single equal Tee (with door) 110x110x110 mm	each	180.00
7208	UPVC bend 87.5° 75 mm bend	each	56.00
7209	UPVC bend 87.5° 110 mm bend	each	95.00
7212	UPVC plain shoe 75 mm bend	each	107.00
7213	UPVC plain shoe 110 mm bend	each	207.00
7214	UPVC pipe clip 75 mm bend	each	16.00
7215	UPVC pipe clip 110 mm bend	each	31.00
7231	Resin Bonded Glass wool 16 kg/ m <sup>3</sup> : 50 mm thick	sqm	145.00
7232	Resin Bonded Glass wool 24 kg/ m <sup>3</sup> : 50 mm thick	sqm	204.00
7233	Fibre glass tissue reinforcement Type II Grade I	sqm	72.00
7236	Precast chequered cement tiles 22 mm thick Dark shade using ordinary cement	sqm	230.00

Code No.	Description	Unit	Rate ₹
7237	Precast chequered cement tiles 22 mm thick medium shade using 50% white cement 50% ordinary cement	sqm	370.00
7238	High Albedo paint	kg	246.00
7239	Epoxy paint	litre	250.00
7240	Fire retardant paint	litre	260.00
7241	Melamine polish	litre	300.00
7244	Table rubbed polished stone 18 mm thick (75x50cm) Agaria Marble stone - 18 mm thick	sqm	1750.00
7245	Table rubbed polished stone 18mm thick (75x50cm) Granite stone-18 mm thick	sqm	1800.00
7246	Vertical load testing (initial) of piles in accordance with IS : 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification and up to 50 tonne capacity pile	per test	33200.00
7247	Vertical load testing (initial) of piles in accordance with IS : 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & above 50 tonne and up to 100 tonne	per test	40300.00
7248	Vertical load testing (initial) of piles in accordance with IS : 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & group of two or more up to 50 tonne	per test	48500.00
7249	Cyclic vertical load testing of piles in accordance with IS : 2911 (Part-IV) including preparation of pile head etc. for Single pile up to 50 tonne capacity	per test	15000.00
7250	Cyclic vertical load testing of piles in accordance with IS : 2911 (Part- IV) including preparation of pile head etc. for Single pile above 50 tonne capacity pile and up to 100 tonne capacity pile	per test	23000.00
7251	Cyclic vertical load testing of piles in accordance with IS : 2911 (Part- IV) including preparation of pile head etc. for Group of two piles up to 50 tonne capacity each	per test	29500.00
7252	Lateral load testing of single pile in accordance with IS : 2911 part -IV for determining safe allowable lateral load on pile up to 50 tonne capacity	per test	15000.00
7253	Lateral load testing of single pile in accordance with IS : 2911 part -IV for determining safe allowable lateral load on pile above 50 tonne capacity	per test	23600.00
7254	Hardening compound	litre	40.00
7255	Road marking paint (spirit based)	litre	120.00
7256	Superior quality road marking paint ( water based )	litre	170.00
7257	C.P. Brass bibcock 15 mm	each	375.00
7258	C.P. Brass long nose bibcock 15 mm	each	657.00
7259	C.P. Brass long body bibcock 15 mm	each	501.00
7260	C.P. Brass stop cock (concealed) 15 mm	each	513.00
7261	C.P. Brass angle valve 15 mm	each	417.00
7266	Pressed clay tiles 20mm thick 250x250 mm size	1000 Nos	12150.00
7267	Plain ceiling tiles (BWP type phenol formaldehyde synthetic resin bonded) (600x600x12 mm)	each	120.00

Code No.	Description	Unit	Rate ₹
7268	Semi perforated ceiling tiles (600x600x12 mm)	each	120.00
7269	25 mm thick particle board	sqm	480.00
7270	30 mm thick prelaminated flush door shutter	sqm	850.00
7271	IInd class teak wood lipping 25 mm wide x 12 mm thick	metre	40.00
7272	25 mm thick melamine faced prelaminated three layer particle board	sqm	940.00
7273	Resin Bonded Rockwool 48 kg/m3	sqm	211.00
7280	Waste plastic additive	tonne	40000.00
7281	Chemical ASTMC-type II	kg	170.00
7295	Granite of any colour, 18 mm thick (slab area upto 0.50 sqm)	sqm	1900.00
7296	Granite of any colour, 30 mm thick (slab area upto 0.50 sqm)	sqm	2300.00
7297	Granite of any colour, 18 mm thick (slab area above 0.50 sqm)	sqm	2000.00
7306	Aluminium T or L sections	kilogram	200.00
7307	For flush door shutters Extra for providing teak veneering on one side instead of commercial veneering	sqm	340.00
7309	Paving Asphalt of grade VG-30 of approved quality	tonne	41000.00
7312	Expandable fastener with plastic sleeve and M.S. screws : 25 mm long	each	10.00
7313	Expandable fastener with plastic sleeve and M.S. screws : 32 mm long	each	11.00
7314	Expandable fastener with plastic sleeve and M.S. screws : 40 mm long	each	14.00
7315	Expandable fastener with plastic sleeve and M.S. screws. 50 mm long	each	15.00
7318	Plasticizer / super plasticizer	kilogram	38.00
7319	Wall form panel 1250x500 mm	each	1050.00
7320	Tie bolt 12 mm dia 100 mm length	each	50.00
7321	Tie bolt 12 mm dia 150 mm length	each	60.00
7322	Tie bolt 20 mm dia 150 mm length	each	75.00
7323	Tie bolt 20 mm dia 225 mm length	each	90.00
7324	Spring coil 12 mm	each	16.00
7325	Plastic cone 12 mm dia	each	18.00
7326	Corner angle 45x45x5 mm 1.50 m long	each	300.00
7327	100 mm channel shoulder 2.5 m long	each	1160.00
7328	Double clip ( bridge clip)	each	97.00
7329	Single clip	each	77.00
7330	M.S. tube 40 mm dia	metre	280.00
7331	Wall form panel 1250x450 mm	each	1040.00
7332	Corner angle 45x45x5 mm 2.50 m long	each	340.00
7333	Column clamp 450x1070 mm	each	1220.00
7334	Prop 2 m ( 2-3.5 m)	each	830.00
7335	Binding wire	kilogram	53.00
7338	Gun metal cramp	kilogram	330.00
7339	Stainless steel cramp	kilogram	340.00

Code No.	Description	Unit	Rate ₹
7340	Stainless steel pin.	kg	190.00
7342	Adjustable span ESO+SI (2.35-3.40)	each	1900.00
7343	Adjustable telescopic prop 3 m (2.02-3.75 m)	each	1200.00
7344	Beam clamp 300-380 mm (450-1070 mm)	each set	422.00
7345	Prop 4 m	each	1170.00
7346	Double coupler	each	55.00
7347	Cadmium plated full threaded steel screws (30x4 mm dia)	100 Nos	28.00
7348	Aluminium washer 2 mm thick 15 mm dia	100 nos	10.00
7349	12 mm M.S. 'U' beading	metre	15.00
7354	Plastic encapsulated M.S. foot rest 30x20x15 cm	each	115.00
7358	Flushing Cistern P.V.C. 10 litre capacity ( low level ) (White) ( with fittings, accessories and flush pipe)	each	640.00
7359	P.V.C. automatic flushing cistern 5 litre capacity	each	490.00
7361	P.V.C. automatic flushing cistern 10 litre capacity	each	530.00
7363	15 mm C.P. brass tap with elbow operation lever	each	700.00
7364	White glazed fire clay draining board 600x450x25 mm	each	550.00
7366	Glass reinforced Gypsum ( GRG) board 12.5 mm thick	sqm	240.00
7367	Galvanised M.S. sheet 0.5 mm thick pressed channel section of size 50x32 mm	metre	60.00
7369	Galvanised M.S. sheet 0.50 mm thick pressed stud : 48x34x36 mm	metre	75.00
7375	G.I. flush pipe and C.P. brass spreader including C.P. connecting pipe Single lipped urinal	each	465.00
7376	G.I. flush pipe and C.P. brass spreader including C.P. connecting pipe Range of two lipped urinals	each	1050.00
7377	G.I. flush pipe and C.P. brass spreader including C.P. connecting pipe Range of three lipped urinals	each	1250.00
7378	G.I. flush pipe and C.P. brass spreader including C.P. connecting pipe Range of four lipped urinals	each	1900.00
7379	White vitreous china clay half stall urinal flat back 580x380x350 mm or angle back 450x375x350 mm with waste fittings as per IS: 2556	each	1600.00
7380	Precast R.C.C. grating with frame 500x450 mm horizontal grating	each	650.00
7381	Precast R.C.C. grating with frame 450x100 mm vertical grating	each	325.00
7382	Bitumen emulsion rapid setting (R.S.) conforming to IS : 8887	tonne	29800.00
7385	3 mm thick translucent white acrylic plastic sheet	sqm	570.00
7386	12 mm thick particle board ceiling tile	sqm	260.00
7387	Spigot for standard jointing	kilogram	45.00
7388	Dash hold fastener 12.5 mm dia, 50 mm long with 6 mm dia bolt	each	50.00
7389	Anodising 15 microns on aluminium sections	kilogram	40.00
7390	Neoprene/EPDM rubber gasket	metre	25.00
7391	Anodising 25 microns on aluminium sections	kilogram	50.00
7392	Powder coating 50 microns on aluminium sections	kilogram	64.00
7393	Polyester powder coating 50 microns on aluminium sections	kilogram	70.00
7394	Double action hydraulic floor spring with stainless steel cover plate	each	1550.00
7395	6 mm dia G.I. adjustable hangers including clips (up to 1.2 m length)	each	28.00

Code No.	Description	Unit	Rate ₹
7396	Double action hydraulic floor spring with brass cover plate	each	1700.00
7397	Base Jack	each	180.00
7398	Challies	each	800.00
7399	Cup locks	each	80.00
7400	15 mm PTMT bib cock	each	100.00
7401	15 mm PTMT bib cock with flange (fancy)	each	140.00
7402	15 mm PTMT bib-cock long body with flange	each	160.00
7403	15 mm dia PTMT stop cock(male thread)	each	100.00
7405	20 mm dia PTMT stop cock	each	130.00
7406	PTMT pillar cock	each	160.00
7407	PTMT push cock 15 mm dia	each	90.00
7408	PTMT push cock 12 mm dia 20 mm BSP	each	80.00
7409	PTMT grating 100 mm dia	each	31.00
7410	PTMT Pillar cock (fancy) 15 mm foam flow	each	225.00
7411	125 mm grating with waste hole	each	42.00
7412	Rectangular type with openable circular lid 150 mm size 18 mm high with 100 mm dia (110 gm)	each	122.00
7415	Double acting air valve 50 mm	each	4000.00
7416	Double acting air valve 80 mm	each	5200.00
7417	Double acting air valve 100 mm	each	6800.00
7418	Water meter (including testing charges) 80 mm	each	2130.00
7419	Water meter (including testing charges) 100 mm	each	3300.00
7420	Water meter (including testing charges) 150 mm	each	5000.00
7421	Water meter (including testing charges) 200 mm	each	5400.00
7422	Dirt box strainer 80 mm	each	2810.00
7423	Dirt box strainer 100 mm	each	4580.00
7424	Dirt box strainer 150 mm	each	5810.00
7425	Dirt box strainer 200 mm	each	8250.00
7426	Cat's eye	each	180.00
7427	Water stops Serrated with central bulb (225 mm wide, 8-11 mm thick)	metre	415.00
7428	Water stops Dumb bell with central bulb	metre	390.00
7429	Kickers	metre	375.00
7430	Wedge expansion hold fastener 1/4" or 6 mm	each	14.00
7431	Wedge expansion hold fastener 3/8" or 10 mm	each	15.00
7432	Wedge expansion hold fastener 1/2" or 12 mm	each	28.00
7439	8mm thick (mirror polished tiles machine cut edge) Raj Nagar white	sqm	500.00
7442	Wheel 75 mm dia. 40 mm wide	each	65.00
7443	Aluminium single cleat of size 30x32x3 mm	each	14.00
7444	Aluminium grip strip of size 50x12x2 mm	each	11.00
7445	25 mm thick prelaminated flush door shutter both side decorative	sqm	830.00
7449	Aluminium U beading	kilogram	220.00
7451	Glass sheet (Pin headed) 4 mm thick	sqm	300.00

Code No.	Description	Unit	Rate ₹
7452	Raj nagar plain white marble (table rubbed and polished) 18 mm thick (slab area upto 0.50 sqm)	sqm	650.00
7453	Raj nagar plain white marble (table rubbed and polished) 18 mm thick (slab area more than 0.50 sqm)	sqm	750.00
7466	Second class deodar teak wood lipping 30 mm wide x 12 mm thick	metre	30.00
7468	Veneered particle board with commercial veneering on both sides 12 mm thick	sqm	500.00
7477	Prelaminated particle board with one side decorative and other side balancing lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade) 12 mm thick	sqm	740.00
7478	Prelaminated particle board with one side decorative and other side balancing lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade) 18 mm thick	sqm	850.00
7479	Prelaminated particle board with one side decorative and other side balancing lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade) 25 mm thick	sqm	930.00
7480	Pre/aminated particle board with both sides decorative lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade) 12 mm thick	sqm	780.00
7485	Oxidised M. S. hinges finished with nickel plating 50 mm (Over all width)	metre	42.00
7486	Oxidised M. S. hinges finished with nickel plating 65 mm (Over all width)	metre	54.00
7491	PTMT - Waste Coupling 31/32 mm	each	51.00
7492	PTMT - Waste Coupling 38/40 mm	each	64.00
7493	PTMT - Bottle Trap 31/32 mm	each	317.00
7494	PTMT - Bottle Trap 38/40 mm	each	345.00
7495	PTMT Ball Cock 15mm complete with Epoxy Coated Aluminium Rod & H.D. Ball	each	134.00
7496	PTMT Ball Cock 20mm complete with Epoxy Coated Aluminium Rod & H.D. Ball	each	195.00
7497	PTMT Ball Cock 25mm complete with Epoxy Coated Aluminium Rod & H.D. Ball	each	420.00
7498	PTMT Ball Cock 40mm complete with Epoxy Coated Aluminium Rod & H.D. Ball	each	780.00
7499	PTMT Ball Cock 50mm complete with Epoxy Coated Aluminium Rod & H.D. Ball	each	1150.00
7500	PTMT Angle Stop cock with Flange 15 mm	each	130.00
7501	PTMT Swiveling shower 15 mm	each	87.00
7503	PTMT Liquid Soap Container of 400 ml capacity	each	145.00
7504	PTMT Towel Ring 215x200x37 mm	each	116.00
7505	PTMT- Towel Rail (450 mm)	each	192.00
7506	PTMT - Towel Rail (600 mm)	each	226.00
7507	PTMT Shelf 450x124x36 mm	each	258.00
7508	PTMT - Urinal Spreader 15 mm	each	127.00

Code No.	Description	Unit	Rate ₹
7509	PTMT Soap Dish/Holder 138x102x75 mm	each	120.00
7512	PTMT handle 125x34x24 mm	each	30.00
7513	PTMT handle 150x34x24 mm	each	34.00
7514	PTMT butt hinges 75x60x10 mm	each	42.00
7515	PTMT butt hinges 100x75x10 mm	each	56.00
7516	PTMT Tower bolt 152x42x18 mm	each	65.00
7517	PTMT Tower bolt 202x42x18 mm	each	80.00
7518	PTMT door catcher 72x42 mm	each	27.00
7552	Coir veneered board 4 mm thick	sqm	290.00
7553	Coir veneered board 6 mm thick	sqm	390.00
7555	Coir veneered board 12 mm thick	sqm	650.00
7556	Coir veneered board 18 mm thick	sqm	1030.00
7651	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 100 mm dia	metre	800.00
7652	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 150 mm dia	metre	1200.00
7653	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 200 mm dia	metre	1650.00
7654	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 250 mm dia	metre	2300.00
7655	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 300 mm dia	metre	2860.00
7656	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 350 mm dia	metre	3510.00
7657	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 400 mm dia	metre	4500.00
7658	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 450 mm dia	metre	5200.00
7659	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 500 mm dia	metre	6580.00
7660	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 600 mm dia	metre	7930.00
7661	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 700 mm dia	metre	11000.00
7662	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 750 mm dia	metre	11900.00
7663	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 800 mm dia	metre	12000.00
7664	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 900 mm dia	metre	14500.00
7665	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 1000 mm dia	metre	16300.00
7666	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 100 mm dia	each	30.00
7668	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 150 mm dia	each	38.00
7669	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 200 mm dia	each	66.00
7670	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 250 mm dia	each	78.00
7671	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 300 mm dia	each	115.00
7672	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 350 mm dia	each	132.00
7673	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 400 mm dia	each	240.00
7674	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 450 mm dia	each	280.00
7675	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 500 mm dia	each	305.00
7676	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 600 mm dia	each	380.00
7677	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 700 mm dia	each	575.00
7678	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 750 mm dia	each	690.00
7679	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 800 mm dia	each	760.00
7680	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 900 mm dia	each	1000.00
7681	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 1000 mm dia	each	1200.00

Code No.	Description	Unit	Rate ₹
7682	Ductile Iron K - 12 specials suitable for push on jointing up to 600 mm dia	quintal	13000.00
7683	Ductile Iron K - 12 specials suitable for push on jointing over 600 mm dia	quintal	18000.00
7684	Ductile Iron specials suitable for mechanical jointing as per I.S. 9523 - up to 600 mm dia	quintal	13700.00
7685	Ductile Iron Specials suitable for mechanical jointing as per I.S. 9523 over 600 mm dia	quintal	19650.00
7686	Ductile Iron Pipe Class K-9 flanges and welding 100 mm dia	metre	2180.00
7687	Ductile Iron Pipe Class K-9 flanges and welding 150 mm dia	metre	3500.00
7688	Ductile Iron Pipe Class K-9 flanges and welding 200 mm dia	metre	4110.00
7689	Ductile Iron Pipe Class K-9 flanges and welding 250 mm dia	metre	3425.00
7690	Ductile Iron Pipe Class K-9 flanges and welding 300 mm dia	metre	6960.00
7691	Ductile Iron Pipe Class K-9 flanges and welding 350 mm dia	metre	8800.00
7692	Ductile Iron Pipe Class K-9 flanges and welding 400 mm dia	metre	10610.00
7693	Ductile Iron Pipe Class K-9 flanges and welding 450 mm dia	metre	12900.00
7694	Ductile Iron Pipe Class K-9 flanges and welding 500 mm dia	metre	15100.00
7695	Ductile Iron Pipe Class K-9 flanges and welding 600 mm dia	metre	20630.00
7696	Ductile Iron Pipe Class K-9 flanges and welding 700 mm dia	metre	25600.00
7697	S&S Centrifugally (Spun) C.I. Pipe class LA 100 mm dia	metre	900.00
7698	S&S Centrifugally (Spun) C.I. Pipe class LA 125 mm dia	metre	1120.00
7699	S&S Centrifugally (Spun) C.I. Pipe class LA 150 mm dia	metre	1350.00
7700	S&S Centrifugally (Spun) C.I. Pipe class LA 200 mm dia	metre	2300.00
7701	S&S Centrifugally (Spun) C.I. Pipe class LA 250 mm dia	metre	3000.00
7702	S&S Centrifugally (Spun) C.I. Pipe class LA 300 mm dia	metre	4050.00
7703	S&S Centrifugally (Spun) C.I. Pipe class LA 350 mm dia	metre	4850.00
7704	S&S Centrifugally (Spun) C.I. Pipe class LA 400 mm dia	metre	6400.00
7705	S&S Centrifugally (Spun) C.I. Pipe class LA 450 mm dia	metre	7750.00
7706	S&S Centrifugally (Spun) C.I. Pipe class LA 500 mm dia	metre	9000.00
7707	S&S Centrifugally (Spun) C.I. Pipe class LA 600 mm dia	metre	12595.00
7708	S&S Centrifugally (Spun) C.I. Pipe Specials as per IS 1538 suitable for lead jointing up to 300 mm dia	quintal	5450.00
7709	S&S Centrifugally (Spun) C.I. Pipe Specials as per IS 1538 suitable for lead jointing over 300 mm dia	quintal	8200.00
7710	S&S Centrifugally (Spun) C.I. Pipe specials suitable for mechanical joint as per I.S. 13382 up to 300 mm dia	quintal	9000.00
7711	S&S Centrifugally (Spun) C.I. Pipe Specials suitable for mechanical joint as per I.S. 13382 over 300 mm dia	quintal	9500.00
7712	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 100 mm dia	metre	1375.00
7713	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 150 mm dia	metre	2150.00
7714	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 200 mm dia	metre	3400.00
7715	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 250 mm dia	metre	4100.00

Code No.	Description	Unit	Rate ₹
7716	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 300 mm dia	metre	5240.00
7717	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 350 mm dia	metre	6600.00
7718	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 400 mm dia	metre	8550.00
7719	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 450 mm dia	metre	10900.00
7720	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 500 mm dia	metre	13560.00
7721	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 600 mm dia	metre	18800.00
7722	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 100 mm dia	metre	775.00
7723	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 150 mm dia	metre	1120.00
7724	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 200 mm dia	metre	1550.00
7725	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 250 mm dia	metre	2100.00
7726	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 300 mm dia	metre	2900.00
7727	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 350 mm dia	metre	3445.00
7728	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 400 mm dia	metre	4015.00
7729	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 450 mm dia	metre	4852.00
7730	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 500 mm dia	metre	5735.00
7731	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 600 mm dia	metre	7480.00
7732	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 700 mm dia	metre	9613.00
7733	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 800 mm dia	metre	12100.00
7734	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 900 mm dia	metre	16070.00
7735	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 1000 mm dia	metre	17032.00
7736	Extruded burnt flyash clay sewer bricks conforming to I.S 4885	1000 Nos	5400.00
7737	Fly ash lime bricks (FALG Bricks) conforming to I.S. 12894	1000 Nos	4700.00
7738	Calcium Silicate Bricks machine moulded conforming to I.S. 4139	1000 Nos	5000.00
7739	Modified Bitumen Refinery produced CRMB - 55	tonne	40900.00
7741	Modified Bitumen Refinery produced CRMB - 60	tonne	40800.00
7742	Bitumen emulsion medium setting (M.S.) confirming to IS : 8887	tonne	30000.00
7743	M.S. pipe 150 mm dia casing pipe	metre	1060.00
7744	M.S. pipe 200 mm dia casing pipe	metre	1300.00
7745	PVC blind pipe 150 mm dia as per IS: 12818	metre	500.00
7746	PVC blind pipe 200 mm dia as per IS: 12818	metre	750.00
7747	M.S. cap 150 mm dia	each	160.00
7748	M.S. cap 200 mm dia	each	200.00
7749	M.S bail plug 150 mm dia	each	200.00
7750	M.S bail plug 200 mm dia	each	220.00
7751	PVC slotted pipe 150 mm dia as per IS: 12818	metre	450.00
7752	PVC slotted pipe 200 mm dia as per IS: 12818	metre	700.00
7753	Boulder 50 mm to 200 mm	cum	350.00
7754	Gravel 5 mm to 10 mm	cum	700.00

Code No.	Description	Unit	Rate ₹
7755	Gravel 1.5 mm to 2 mm	cum	650.00
7756	Gravel 3 mm to 6 mm	cum	680.00
7757	M.S. pipe 100 mm dia casing pipe	metre	770.00
7758	uPVC blind pipe 100 mm dia as per IS: 12818	metre	360.00
7759	uPVC slotted pipe 100 mm dia as per IS: 12818	metre	380.00
7760	M.S. cap 100 mm dia	each	130.00
7761	M.S. bail plug 100 mm dia	each	160.00
7762	Precast R.C.C. perforated slab	each	800.00
7763	Water supply tanker of 5000 litre capacity	each	800.00
7764	M.S. socket 100 mm dia	each	180.00
7765	M.S. socket 150 mm dia	each	220.00
7766	M.S. socket 200 mm dia	each	280.00
7767	Stone cleaning chemical approved by ASI	litre	165.00
7768	Water repellent chemical approved by ASI	litre	1587.00
7769	Stone surface strengthening chemical approved by ASI	litre	1020.00
7770	Turpentine oil	litre	68.00
7771	Liquid Amonia 5%	litre	161.00
7772	Pea Gravel	cum	750.00
7773	Coloured inter locking C.C. paver Block	sqm	500.00
7774	Stone size 10x10x7.50cm	each	9.00
7775	Sodium pentachlorophenate	kilogram	630.00
7800	Ceramic Glazed Tiles 1st quality minimum thickness 5mm in all colours shades and designs except burgundy, bottle green, black	sqm	300.00
7801	Ceramic Glazed Tiles 1st quality 300 x 300 mm in all shades and designs of White, Ivory, grey, Fume Red brown etc.	sqm	365.00
7802	Ceramic Glazed Tiles 1st quality 300 x 300 in all shades designs except White, Ivory, Grey, Fume Red Brown etc.	sqm	375.00
7803	Rectified Ceramic Glazed Tiles 1st quality 300 x 300 mm or more in all shades designs White, Ivory, Grey, Fume Red Brown etc.	sqm	515.00
7804	Rectified Ceramic Glazed Tiles 1st quality 300 x 300 mm or more in all shades designs except White, Ivory, Grey, Fume Red Brown etc.	sqm	545.00
7805	Salem Stainless steel AISI - 304 (18/8) Orrisa pattern W.C. pan 724 mm X 578 mm	each	3800.00
7806	Salem Stainless steel AISI - 304 (18/8) Round basin 405mm X 355 mm	each	1850.00
7807	Salem Stainless steel AISI - 304 (18/8) Wash basin 530mm X 345 mm	each	1650.00
7808	Centrifugally cast (spun) iron S&S 100 mm inlet and 100 mm outlet	each	435.00
7809	Centrifugally cast (spun) iron S&S 100 mm inlet and 75 mm outlet	each	468.00
7850	Agaria White marble slab plain 18 mm thick	sqm	1120.00
7857	P.T.M.T. Grating square slit 150 mm	each	77.00
7858	P.T.M.T. Urinal cock 15 mm dia	each	120.00
7859	P.T.M.T. Bib cock with nozzle 15 mm	each	145.00
7861	P.T.M.T. Stop cock (concealed) 15 mm	each	158.00
7862	15 mm nominal bore and 30 cm length PVC connection pipe with P.T.M.T. Nuts	each	32.00

Code No.	Description	Unit	Rate ₹
7863	15 mm nominal bore and 45 cm length PVC connection pipe with P.T.M.T. Nuts	each	40.00
7864	P.T.M.T. extension nipple 15 mm	each	32.00
7865	P.T.M.T. extension nipple 20 mm	each	38.00
7866	P.T.M.T. extension nipple 25 mm	each	57.00
7893	Tactile tile	sqm	868.00
7895	Matt finished vitrified tile 100x100 x16 mm	sqm	930.00
7896	Vitrified tile	sqm	510.00
7900	Modular common burnt clay bricks of class designation 7.5	1000 Nos	4500.00
7901	Machine moulded perforated common burnt clay FPS (non modular) bricks of class designation 12.5	1000 Nos	4600.00
7902	Machine moulded common burnt clay modular perforated bricks of class designation 12.5	1000 Nos	4600.00
7903	Machine moulded common burnt clay FPS (non modular) bricks of class designation 12.5	1000 Nos	4500.00
7904	Machine moulded common burnt clay tile bricks of class designation 12.5	1000 Nos	5000.00
8001	24 mm thick Factory made shutters with style, rails and panels of PVC extruded sections in white, grey or wooden finish	sqm	2150.00
8002	30 mm thick Factory made shutters with style, rails and panels of PVC extruded sections in white, grey or wooden finish	sqm	2250.00
8003	Factory made PVC rigid foam panelled shutter i/c carriage	sqm	2150.00
8004	Factory made PVC rigid foam panelled shutter as per IS : 4020 i/c carriage	sqm	2550.00
8006	Factory made PVC rigid foam sheet 1 mm thick	sqm	185.00
8007	Factory made PVC rigid foam sheet 5 mm thick	sqm	632.00
8008	Factory made prelaminated PVC rigid foam sheet 5 mm thick	sqm	752.00
8010	48mmX40mmX1.5mm thick Factory made door frame of PVC extruded sections in white, grey or wooden finish	metre	150.00
8011	Factory made door frame PVC extruded sheet i/c carriage	metre	350.00
8012	Adhesive solvent cement	kg	165.00
8014	Factory made door frame of size 50x47 mm with wall thickness 5 mm made of single piece extruded profile	metre	490.00
8100	Powder coated M.S. butt hinges 100 mm X58 mmX1.9 mm	10 Nos	85.00
8200	A.P.P. modified polymeric felt (two layers) 1.5 mm thick	sqm	60.00
8201	A.P.P. modified polymeric felt (two layers) 2 mm thick	sqm	99.00
8203	A.P.P. modified 2 mm thick membrane reinforced with glass fibre matt	sqm	167.00
8204	A.P.P. modified 3 mm thick membrane reinforced with glass fibre matt	sqm	207.00
8205	A.P.P. modified 3 mm thick membrane reinforced with polyester matt	sqm	245.00
8206	Bitumen primer for bitumen membrane	litre	82.00
8207	Geotextile 120 grams per sqm membrane	sqm	38.00
8210	Stainless steel screws 50 mm	100 Nos	250.00
8211	Stainless steel screws 40 mm	100 Nos	200.00
8212	Stainless steel screws 30 mm	100 Nos	150.00
8214	Stainless steel screws 20 mm	100 Nos	100.00
8215	Stainless steel butt hinges 125x64x1.9 mm IS : 12817 marked	10 Nos	250.00

Code No.	Description	Unit	Rate ₹
8216	Stainless steel butt hinges 100x58x1.9 mm IS: 12817 marked	10 Nos	230.00
8217	Stainless steel butt hinges 75x47x1.8 mm IS : 12817 marked	10 Nos	150.00
8218	Stainless steel butt hinges 50x37x1.5 mm IS : 12817 marked	10 Nos	130.00
8219	Stainless steel butt hinges (heavy weight) 125x64x2.5 mm IS : 12817 marked	10 Nos	330.00
8220	Stainless steel butt hinges (heavyweight) 100x60x2.5 mm IS : 12817 marked	10 Nos	240.00
8221	Stainless steel butt hinges (heavy weight) 75x50x2.5 mm IS : 12817 marked	10 Nos	195.00
8222	M.S. heavy weight butt hinges 125x90x4.0 mm IS: 1341 marked.	10 Nos	330.00
8223	M.S. heavy weight butt hinges 100x75x3.5 mm IS: 1341 marked	10 Nos	170.00
8224	M.S. heavy weight butt hinges 75x60x3.1 mm IS: 1341 marked	10 nos	90.00
8225	M.S. heavy weight butt hinges 50x40x2.5 mm IS : 1341 marked	10 Nos	75.00
8300	1216 mm PE-AL-PE Composite pressure pipe	metre	95.00
8301	1620 mm PE-AL-PE Composite pressure pipe	metre	125.00
8302	2025 mm PE-AL-PE Composite pressure pipe	metre	160.00
8303	2532 mm PE-AL-PE Composite pressure pipe	metre	205.00
8304	3240 mm PE-AL-PE Composite pressure pipe	metre	340.00
8305	4050 mm PE-AL-PE Composite pressure pipe	metre	375.00
8501	Polymer modified cementation coating	kilogram	135.00
8502	Fibre glass cloth	sqm	44.00
8504	Multi surface paint	litre	275.00
8505	Acrylic exterior paint	litre	140.00
8506	Premium Acrylic exterior paint	litre	235.00
8507	Textured exterior paint	litre	200.00
8508	Primer for cement paint	litre	78.00
8509	Special Primer (C.W.)	litre	83.00
8510	Metal Primer (U.G.)	litre	120.00
8589	Calcium Silicate tegular edged ceiling tiles 595x595 mm and 15 mm thick	sqm	858.00
8590	Galvanised Steel main Tee ceiling section Size 24x38x0.33 mm (3 metre long)	each	192.00
8591	Galvanised Steel perimeter wall Angle Size 24 x 24 x 0.40 mm (3.00 metre long)	each	125.00
8592	Galvanised Steel intermediate cross T section Size 24 x 25 x 0.33 mm (1.2 metre long)	each	77.00
8593	Galvanised Steel intermediate cross T section Size 24 x 25 x 0.33 mm ( 0.6 metre long)	each	39.00
8594	Galvanised Steel soffit cleat size 25x35x1.60 mm	each	3.00
8595	Wooden screws with plastic rawl plugs 35x8 mm	each	0.60
8597	GI Metal Tile Clip in Plain Beveled edge global white colour tiles of size 600x600 mm and 0.5 mm thick	sqm	895.00
8598	GI Metal Tile Clip in Perforated Beveled edge global white colour tiles of size 600x600 mm and 0.5 mm thick	sqm	1000.00
8599	GI Metal Tile Lay-in Plain Tegular edge global white color tiles of Size 595x595 mm and 0.5 mm thick	sqm	809.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
8600	GI Metal Tile Lay-in Perforated Tegular edge global white color tiles of Size 595x595 mm and 0.5 mm thick	sqm	906.00
8601	PVC Laminated Gypsum Tiles (Square edge) of Size 595x595 mm and 12.5 mm thick	sqm	468.00
8602	Gypsum Tiles Fully Perforated Square edge of Size 595x595 mm and 12.5 mm thick	sqm	484.00
8604	Spring T-section 24x34x0.45 mm (3.00 meter long)	metre	180.00
8605	C Wall angle section 20x30x20x0.50 mm (3.00 meter long)	metre	155.00
8606	Main C Carrier Size 10x38x10x0.70 mm (3.00 meter long)	metre	164.00
8607	Spring T-connector	each	5.00
8608	C Carrier Connector	each	11.00
8609	C Suspension Clip	each	11.00
8610	Wire Coupling Clip	each	9.00
8611	Main T ceiling sections 24x38x0.3 mm (3 metre long)	each	187.00
8612	Perimeter wall angle 24 x 24 x 0.3 mm (3 metre long)	each	118.00
8613	Intermediate cross T-Section 24x25x0.3 mm (1.2 m long)	each	72.00
8614	Intermediate cross T-Section 24x25x0.3 mm (0.6 m long)	each	34.00
8615	Hanger rod 4 mm thick	each	8.00
8616	Adjustment clip 85x30x0.8 mm	each	6.00
8617	Soffit cleat (Size 27x37x25x1.60 mm)	each	3.00
8618	Dash fastener 6 mm dia 50 mm long	each	11.00
8620	Vitrified floor tile 50x50 cm	sqm	745.00
8621	Vitrified floor tile 60x60 cm	sqm	880.00
8622	Vitrified floor tile 80x80 cm	sqm	1085.00
8623	Vitrified floor tile 100x100 cm	sqm	1650.00
8625	Poly propylene- Random - Co - Polymer (PPR) pipes SDR 7.4 - 16 mm Outer dia	metre	37.00
8626	Poly propylene - Random - Co - Polymer (PPR) pipes SDR 7.4 - 20 mm Outer dia	metre	57.00
8627	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 - 25 mm outer dia	metre	88.00
8628	Poly propylene - Random - Co - poymer (PPR) pipes SDR 7.4 - 32 mm Outer dia	metre	142.00
8629	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 - 40 mm Outer dia	metre	213.00
8630	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 - 50 mm Outer dia	metre	333.00
8631	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 - 63 mm Outer dia	metre	513.00
8632	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 - 75 mm Outer dia	metre	700.00
8633	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 - 90 mm Outer dia	metre	1066.00
8634	Poly propylene - Random - Co - polymer (PPR) pipes SDR - 11 - 110 mm Outer dia	metre	1200.00
8635	Poly propylene - Random - Co - polymer (PPR) pipes SDR - 11- 160 mm Outer dia	metre	2500.00

Code No.	Description	Unit	Rate ₹
8636	Chlorinated Polyvinyl - chloride (CPVC) pipe 15 mm outer dia	metre	55.00
8637	Chlorinated Polyvinyl - chloride (CPVC) pipe 20 mm outer dia	metre	68.00
8638	Chlorinated Polyvinyl - chloride (CPVC) pipe 25 mm outer dia	metre	95.00
8639	Chlorinated Polyvinyl - chloride (CPVC) pipe 32 mm outer dia	metre	130.00
8640	Chlorinated Polyvinyl - chloride (CPVC) pipe 40 mm outer dia	metre	185.00
8641	Chlorinated Polyvinyl - chloride (CPVC) pipe 50 mm outer dia	metre	300.00
8642	Chlorinated Polyvinyl - chloride (CPVC) pipe 62.5 mm inner dia	metre	910.00
8643	Chlorinated Polyvinyl - chloride (CPVC) pipe 75 mm inner dia	metre	1300.00
8644	Chlorinated Polyvinyl - chloride (CPVC) pipe 100 mm inner dia	metre	1800.00
8645	Chlorinated Polyvinyl - chloride (CPVC) pipe 150 mm inner dia	metre	2150.00
8646	Silicon sealant	cartridge	307.00
8647	Stainless steel screws 30 mm x4 mm	100 Nos	29.00
8648	Hermetically sealed double glazed unit made with 6 mm thick clear float glass both side having 12 mm air gap	sqm	2290.00
8649	Stainless steel (SS 304 grade) adjustable friction window stay 205 x 19 mm	each	172.00
8650	Stainless steel (SS 304 grade) adjustable friction window stay 255 x 19 mm	each	215.00
8651	Stainless steel (SS 304 grade) adjustable friction window stay 355 x 19 mm	each	275.00
8652	Stainless steel (SS 304 grade) adjustable friction window stay 510 x 19 mm	each	490.00
8653	Stainless steel (SS 304 grade) adjustable friction window stay 710 x 19 mm	each	850.00
8654	Masking tape	metre	2.50
8655	Autoclaved aerated cement (AAC) blocks	cum	2025.00
8656	Gypsum panel 666 X 500 X 100 mm size	sqm	480.00
8657	Bonding plaster for Gypsum panel	kg	55.00
8659	Water proof ply 12 mm thick	sqm	650.00
8660	Aluminium casement window fastener (Anodised AC 15 )	each	40.00
8661	Aluminium casement window fastener (powder coated )	each	41.00
8662	Aluminium casement window fastener (polyester powder coated)	each	40.00
8663	Aluminium round shape handle (anodised AC 15)	each	49.00
8664	Aluminium round shape handle (powder coated)	each	54.00
8665	Aluminium round shape handle (polyester powder coated)	each	59.00
8666	Stainless steel screws 25 mm x4 mm	100 Nos	32.00
8667	UV stabilised 2 mm thick plain FRP sheet	sqm	465.00
8668	UV stabilised 2 mm thick corrugated FRP sheet	sqm	538.00
8669	Mangalore ridge tiles 20 mm thick	each	29.00
8670	Mangalore tiles 20 mm thick	each	10.50
8671	Precoated galvanised iron profile sheet 0.50 mm TCT	sqm	435.00
8672	Precoated galvanised steel plain ridges	metre	440.00
8673	Precoated galvanised steel flashings/aprons	metre	440.00

Code No.	Description	Unit	Rate ₹
8674	Precoated galvanised steel gutter	metre	455.00
8675	Precoated galvanised steel north light curves	metre	455.00
8676	Precoated galvanised steel barge board	metre	445.00
8677	Precoated galvanised steel crimp curve	sqm	475.00
8678	1 mm thick 35 mm wide bright finished stainless steel piano hinges	metre	40.00
8682	Epoxy Grout	kg	510.00
8683	Red sand stone gang saw cut 30 mm thick	sqm	460.00
8684	White sand stone gang saw cut 30 mm thick	sqm	480.00
8685	Delineator	each	310.00
8686	Precast C.C. Kerb stone M - 25	cum	4100.00
8687	Thermoplastic paint	kg	63.00
8688	Glass beads	kg	62.00
8689	Interlocking C.C. paver block ( 60 mm thick, M-30)	sqm	325.00
8690	High intensity retro - reflective sheet	sqm	1525.00
8691	Punched tape concertina coil 600 mm dia 10 m openable length (Total length 90 m)	bundle	750.00
8692	RBT reinforced barbed wire	metre	9.00
8693	Turn buckle and strengthening bolt	each set	40.00
8694	Precast pavement slab 450 x 450 x 50 mm (M - 30)	each	60.00
8695	Chain link fabric fencing mesh of size 50x50 mm made of G.I. wire of dia 4 mm	sqm	258.00
8696	Chain link fabric fencing mesh of size 50x50 mm made of G.I. wire of dia 4 mm, PVC coated to outer dia 5 mm	sqm	285.00
8697	Chain link fabric fencing mesh of size 25x25 mm made of G.I. wire of dia 3 mm	sqm	340.00
8698	Stainless steel cramps(weight 260 grams) with nuts, bolts and washer for dry stone cladding	each	90.00
8699	8 mm thick tapered edge calcium silicate board	sqm	368.00
8700	10 mm thick calcium silicate board	sqm	390.00
8701	SS pipe 304 grades with press fit technology as per JIS 3448 standard 48.60 mm outer dia	metre	680.00
8702	Coupling/Socket fittings for 15.88 mm outer dia SS pipe	each	57.00
8703	Telescopic drawer channels 300 mm long	set	140.00
8704	Stainless steel roller for sliding arrangement in racks/ cupboards/ cabinets shutter	each	8.00
8705	50 mmX42 mmX2 mm thick Factory made door frame of PVC extruded sections in white, grey or wooden finish	metre	140.00
8706	25 mm thick factory made PVC flush door shutter i/c carriage	sqm	2150.00
8707	Factory made glass reinforced plastic door frame 90x45 mm i/c carriage	metre	380.00
8708	30 mm thick factory made glass fiber reinforced plastic panel door shutter i/c carriage	sqm	1850.00
8709	30 mm thick factory made solid PVC profile panelled door single piece extruded profile decorative finish (wood grain printed on both side)	sqm	2650.00
8710	Factory made solid PVC door frame 60 x 30 mm i/c carriage	metre	290.00

Code No.	Description	Unit	Rate ₹
8711	28 mm factory made solid PVC panel door shutter i/c carriage	sqm	2250.00
8712	30 mm thick factory made solid PVC profile panelled door single piece extruded profile non decorative finish	sqm	2108.00
8713	Fiber glass reinforced plastic chajja	sqm	3600.00
8714	Magnetic catcher triple strip vertical type	each	20.00
8715	Magnetic catcher double strip horizontal type	each	15.00
8716	100 mm mortice lock with 6 levers for aluminium door	each	330.00
8717	12.5 mm thick Glass fibre reinforced Gypsum board	sqm	170.00
8719	2nd class teak wood lipping / moulded beading or Taj beading of size 18X5 mm	metre	30.00
8720	Ceiling sections 0.55 mm thick having a knurled web of 51.55 mm and two flanges of 26 mm each with lips of 10.55 mm	metre	40.00
8721	Perimeter channel having one flange of 20 mm and another flange of 30 mm with thickness of 0.55 mm and web of length 27 mm	metre	25.00
8722	Nylon sleeves & wooden screws (40 mm)	each	2.00
8723	Counter sunk ribbed head screw 25 mm	100 Nos	75.00
8724	12 mm thick marine plywood conforming to IS: 710	sqm	850.00
8725	12 mm thick fire retardant plywood conforming to IS: 5509	sqm	880.00
8726	1.5 mm thick decorative laminated sheet	sqm	490.00
8727	1.0 mm thick decorative laminated sheet	sqm	380.00
8730	30 mm thick factory made glass fiber reinforced plastic flush door shutter i/c carriage	sqm	2150.00
8731	High polymer modified quickset tile adhesive	per kg	17.00
8732	Synthetic ployster triangular fibre of length 12 mm, effective diameter 10-40 microns and specific gravity of 1.34 to 1.40	kg	365.00
8733	Synthetic ployster triangular fibre of length 6 mm, effective diameter 10-40 microns and specific gravity of 1.34 to 1.40	kg	365.00
8734	P.V.C. Single piece extruded door frame of profile size 50 mm x 47 mm with wall thickness of 5 mm	metre	350.00
8735	35 mm thick factory made solid panel PVC door shutter of single piece extruded profile non decorative finished (Matt finished)	sqm	2100.00
8736	35 mm thick factory made solid panel PVC door shutter of single piece extruded profile decorative finished (wood grain finished)	sqm	2600.00
8737	Stainless steel wire guage (Grade-304) aperture 1.4 mm and 0.50 mm dia wire	sqm	830.00
8738	Factory made door frame fire rated ( 60 minutes) made with 16 SWG G.I. Sheet of section 143 mm x 57 mm duly filled with vermiculite based concrete mix	metre	1000.00
8739	Fire rated door shutter made with 16 SWG G.I. sheet( 60 minutes) without panel	sqm	5250.00
8740	Fire seal Putty	kg	700.00
8741	Clear fire resistant glass panes 6mm thick (60 minutes)	sqm	21000.00
8742	G.I. U beading of 16 SWG G.I. sheet (zinc coating >120gm/ m2) with ceramic tape of suitable thickness and fire resistant primer coating	metre	260.00
8743	Matrix Mineral Board	metre	65.00
8744	Panic Bar / latch (Double point)	each	5000.00

Code No.	Description	Unit	Rate ₹
8745	65 mm x 55 mm x 2 mm thick Factory made door frame of PVC extruded section in white,grey or wooden finish	metre	330.00
8746	37 mm thick Factory made shutter with style,rails and panels of PVC extruded section in white or grey finish i/c carriage	sqm	2350.00
8747	75 mm x 53 mm x 2.0 mm thick Factory made door frame of PVC extruded section in white,grey or wooden finish	metre	350.00
8748	37 mm thick Factory made fusion welded shutter with style,rails and panels of PVC extruded section in wooden finish	sqm	2450.00
8750	Zinc alloy (white powder coated) casement handle for uPVC windows	each	160.00
8751	Zinc alloy (white powder coated) Touch Lock for uPVC windows	each	110.00
8752	Zinc alloy rollers for uPVC windows	each	50.00
8753	Zinc alloy rollers for uPVC door	each	85.00
8754	Zinc alloy (white powder coated) casement lock for uPVC windows	each	100.00
8755	Stainless steel friction hinge of size 200 mm x 19 x 1.9 mm for uPVC windows	each	230.00
8756	Stainless steel friction hinge of size 250 mm x 19 x 1.9 mm for uPVC windows	each	290.00
8757	Stainless steel friction hinge of size 300 mm x 19 x 1.9 mm for uPVC windows	each	370.00
8758	Stainless steel friction hinge of size 350 mm x 19 x 1.9 mm for uPVC windows	each	420.00
8759	Stainless steel friction hinge of size 400 mm x 19 x 1.9 mm for uPVC windows	each	530.00
8760	uPVC extruded profile casement window Frame (50 mm x 50 mm)	metre	165.00
8761	uPVC extruded profile casement window sash (Style and Rail) (62 mm x 34 mm)	metre	150.00
8762	uPVC extruded profile casement window mullion (intermediate section) (66 mm x 50 mm)	metre	185.00
8763	uPVC extruded profile casement window 'T' profile (one vertical length in between two shutters) (24 mm x 34.5 mm)	metre	50.00
8764	uPVC extruded profile casement window glazing bead (12 mm x 18 mm)	metre	50.00
8765	uPVC extruded profile casement window Frame ( 67 mm x 62 mm)	metre	235.00
8766	uPVC extruded profile casement Window Sash/Mullion ( 67 mm x 75 mm)(Style,rail and intermediate section)	metre	265.00
8767	uPVC extruded profile casement window glazing bead (35 mm x 18 mm)	metre	85.00
8768	uPVC extruded profile Two Track Sliding frame (67 mm x 52 mm)	metre	245.00
8769	uPVC extruded profile Sliding window Sash (60 mm x 44 mm)	metre	230.00
8770	uPVC extruded profile Sliding Interlock for Window (one vertical length in each shutter) (45.5 mm x 28 mm)	metre	50.00
8771	uPVC extruded profile Sliding Door Sash (80 mm x 44 mm)	metre	290.00
8772	Aluminium Track on bottom rail for uPVC window	metre	25.00
8773	Wool Pine for uPVC window	metre	18.00
8774	Aluminium Grill	kg	250.00
8775	Steel Galvanised tubular reinforcement for uPVC door/ window	metre	50.00
8776	Stainless steel dash fastener of 8 mm dia and 75 mm long bolt	each	20.00

Code No.	Description	Unit	Rate ₹
8778	Toughened glass 12 mm thickness	sqm	1900.00
8779	SS pipe 304 grades with press fit technology as per JIS 3448 standard 15.88 mm outer dia	metre	144.00
8780	SS pipe 304 grades with press fit technology as per JIS 3448 standard 22.22 mm outer dia	metre	254.00
8781	SS pipe 304 grades with press fit technology as per JIS 3448 standard 28.58 mm outer dia	metre	330.00
8782	SS pipe 304 grades with press fit technology as per JIS 3448 standard 34.00 mm outer dia	metre	468.00
8783	SS pipe 304 grades with press fit technology as per JIS 3448 standard 42.70 mm outer dia	metre	582.00
8784	8 mm thick Calcium silicate perforated tiles of size 595 x595 mm	sqm	688.00
8786	Coupling/Socket fittings for 22.22 mm outer dia SS pipe	each	88.00
8787	Coupling/Socket fittings for 28.58 mm outer dia SS pipe	each	108.00
8788	Coupling/Socket fittings for 34.00 mm outer dia SS pipe	each	231.00
8789	Coupling/Socket fittings for 42.70 mm outer dia SS pipe	each	330.00
8790	Coupling/Socket fittings for 48.60 mm outer dia SS pipe	each	446.00
8791	Reducer for 22.22 mm X 15.88 mm outer Dia SS pipe	each	103.00
8792	Reducer for 28.58 mm X 15.88 mm outer Dia SS pipe	each	141.00
8793	Reducer for 28.58 mm X 22.22 mm outer Dia SS pipe	each	145.00
8795	Reducer for 34.00 mm X 22.22 mm outer Dia SS pipe	each	237.00
8796	Reducer for 34.00 mm X 28.58 mm outer Dia SS pipe	each	237.00
8797	Reducer for 42.70 mm X 15.88 mm outer Dia SS pipe	each	359.00
8798	Reducer for 42.70 mm X 22.22 mm outer Dia SS pipe	each	362.00
8799	Reducer for 42.70 mm X 28.58 mm outer Dia SS pipe	each	362.00
8800	Reducer for 42.70 mm X 34.00 mm outer Dia SS pipe	each	387.00
8801	Reducer for 48.60 mm X 15.88 mm outer Dia SS pipe	each	468.00
8802	Reducer for 48.60 mm X 22.22 mm outer Dia SS pipe	each	470.00
8803	Reducer for 48.60 mm X 28.58 mm outer Dia SS pipe	each	474.00
8804	Reducer for 48.60 mm X 34.00 mm outer Dia SS pipe	each	479.00
8805	Reducer for 48.60 mm X 42.70 mm outer Dia SS pipe	each	522.00
8806	Slip Coupling / Socket 15.88 mm outer dia SS pipe	each	113.00
8807	Slip Coupling / Socket 22.22 mm outer dia SS pipe	each	184.00
8808	Slip Coupling / Socket 28.58 mm outer dia SS pipe	each	236.00
8809	Slip Coupling / Socket 34.00 mm outer dia SS pipe	each	349.00
8810	Slip Coupling / Socket 42.70 mm outer dia SS pipe	each	490.00
8811	Slip Coupling / Socket 48.60 mm outer dia SS pipe	each	609.00
8812	Elbow 90 <sup>0</sup> for 15.88 mm outer dia SS pipe	each	86.00
8813	Elbow 90 <sup>0</sup> for 22.22 mm outer dia SS pipe	each	153.00
8814	Elbow 90 <sup>0</sup> for 28.58 mm outer dia SS pipe	each	211.00
8815	Elbow 90 <sup>0</sup> for 34.00 mm outer dia SS pipe	each	429.00
8816	Elbow 90 <sup>0</sup> for 42.70 mm outer dia SS pipe	each	657.00
8817	Elbow 90 <sup>0</sup> for 48.60 mm outer dia SS pipe	each	808.00

Code No.	Description	Unit	Rate ₹
8818	Reducing Elbow 90 <sup>0</sup> for 22.22 mm X 15.88 mm outer dia SS pipe	each	148.00
8819	Reducing Elbow 90 <sup>0</sup> for 28.58 mm X 15.88 mm outer dia SS pipe	each	216.00
8820	Reducing Elbow 90 <sup>0</sup> for 28.58 mm X 22.22 mm outer dia SS pipe	each	221.00
8821	Reducing Elbow 90 <sup>0</sup> for 34.00 mm X 22.22 mm outer dia SS pipe	each	321.00
8822	Reducing Elbow 90 <sup>0</sup> for 34.00 mm X 28.58 mm outer dia SS pipe	each	396.00
8823	Reducing Elbow 90 <sup>0</sup> for 42.70 mm X 34.00 mm outer dia SS pipe	each	698.00
8824	Equal Tee for 15.88 mm outer dia SS pipe	each	159.00
8825	Equal Tee for 22.22 mm outer dia SS pipe	each	231.00
8826	Equal Tee for 28.58 mm outer dia SS pipe	each	296.00
8827	Equal Tee for 34.00 mm outer dia SS pipe	each	617.00
8828	Equal Tee for 42.70 mm outer dia SS pipe	each	864.00
8829	Equal Tee for 48.60 mm outer dia SS pipe	each	1028.00
8830	Reducing Tee for 22.22 mm X 15.88 mm outer dia SS pipe	each	225.00
8831	Reducing Tee for 28.58 mm X 15.88 mm outer dia SS pipe	each	280.00
8832	Reducing Tee for 28.58 mm X 22.22 mm outer dia SS pipe	each	291.00
8833	Reducing Tee for 34.00 mm X 15.88 mm outer dia SS pipe	each	548.00
8834	Reducing Tee for 34.00 mm X 22.22 mm outer dia SS pipe	each	558.00
8835	Reducing Tee for 34.00 mm X 28.58 mm outer dia SS pipe	each	564.00
8836	Reducing Tee for 42.70 mm X 15.88 mm outer dia SS pipe	each	819.00
8837	Reducing Tee for 42.70 mm X 22.22 mm outer dia SS pipe	each	821.00
8838	Reducing Tee for 42.70 mm X 28.58 mm outer dia SS pipe	each	822.00
8839	Reducing Tee for 42.70 mm X 34.00 mm outer dia SS pipe	each	830.00
8840	Reducing Tee for 48.60 mm X 15.88 mm outer dia SS pipe	each	894.00
8841	Reducing Tee for 48.60 mm X 22.22 mm outer dia SS pipe	each	913.00
8842	Reducing Tee for 48.60 mm X 28.58 mm outer dia SS pipe	each	920.00
8843	Reducing Tee for 48.60mm X 34.00 mm outer dia SS pipe	each	958.00
8844	Reducing Tee for 48.60mm X 42.70mm outer dia SS pipe	each	993.00
8845	Male thread Tee for 15.88 mm outer dia X 15 mm nominal dia threaded	each	286.00
8846	Male thread Tee for 22.22 mm outer dia X 15 mm nominal dia threaded	each	344.00
8847	Male thread Tee for 22.22 mm outer dia X 20 mm nominal dia threaded	each	368.00
8848	Male thread Tee for 28.58 mm outer dia X 15 mm nominal dia threaded	each	414.00
8849	Male thread Tee for 28.58 mm outer dia X 20 mm nominal dia threaded	each	432.00
8850	Male thread Tee for 28.58 mm outer dia X 20 mm nominal dia threaded	each	483.00
8851	Male thread Tee for 34.00 mm outer dia X 15 mm nominal dia threaded	each	602.00
8852	Male thread Tee for 34.00 mm outer dia X 20 mm nominal dia threaded	each	651.00
8853	Male thread Tee for 34.00 mm outer dia X 25 mm nominal dia threaded	each	777.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
8854	Male thread Tee for 34.00 mm outer dia X 32 mm nominal dia threaded	each	981.00
8855	Male thread Tee for 42.70 mm outer dia X 15 mm nominal dia threaded	each	919.00
8856	Male thread Tee for 42.70 mm outer dia X 20 mm nominal dia threaded	each	941.00
8857	Male thread Tee for 42.70 mm outer dia X 25 mm nominal dia threaded	each	1024.00
8858	Male thread Tee for 42.70 mm outer dia X 32 mm nominal dia threaded	each	1137.00
8859	Male thread Tee for 42.70 mm outer dia X 40 mm nominal dia threaded	each	1381.00
8860	Male thread Tee for 48.60 mm outer dia X 15 mm nominal dia threaded	each	1000.00
8861	Male thread Tee for 48.60 mm outer dia X 20 mm nominal dia threaded	each	1030.00
8862	Male thread Tee for 48.60 mm outer dia X 25 mm nominal dia threaded	each	1074.00
8863	Male thread Tee for 48.60 mm outer dia X 32 mm nominal dia threaded	each	1290.00
8864	Male thread Tee for 48.60 mm outer dia X 40 mm nominal dia threaded	each	1431.00
8865	Male thread Tee for 48.60 mm outer dia X 50 mm nominal dia threaded	each	1749.00
8866	Female thread Tee for 15.88 mm outer dia X 15 mm nominal dia threaded	each	292.00
8867	Female thread Tee for 22.22 mm outer dia X 15 mm nominal dia threaded	each	344.00
8868	Female thread Tee for 22.22 mm outer dia X 20 mm nominal dia threaded	each	356.00
8869	Female thread Tee for 28.58 mm outer dia X 15 mm nominal dia threaded	each	445.00
8870	Female thread Tee for 28.58 mm outer dia X 20 mm nominal dia threaded	each	455.00
8871	Female thread Tee for 28.58 mm outer dia X 25 mm nominal dia threaded	each	498.00
8872	Female thread Tee for 34.00 mm outer dia X 15 mm nominal dia threaded	each	668.00
8873	Female thread Tee for 34.00 mm outer dia X 20 mm nominal dia threaded	each	679.00
8874	Female thread Tee for 34.00 mm outer dia X 25 mm nominal dia threaded	each	766.00
8875	Female thread Tee for 34.00 mm outer dia X 32 mm nominal dia threaded	each	910.00
8876	Female thread Tee for 42.70 mm outer dia X 15 mm nominal dia threaded	each	894.00
8877	Female thread Tee for 42.70 mm outer dia X 20 mm nominal dia threaded	each	910.00
8878	Female thread Tee for 42.70 mm outer dia X 25 mm nominal dia threaded	each	1022.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
8879	Female thread Tee for 42.70 mm outer dia X 32 mm nominal dia threaded	each	1067.00
8880	Female thread Tee for 42.70 mm outer dia X 40 mm nominal dia threaded	each	1162.00
8881	Female thread Tee for 48.60 mm outer dia X 15 mm nominal dia threaded	each	1065.00
8882	Female thread Tee for 48.60 mm outer dia X 20 mm nominal dia threaded	each	1076.00
8883	Female thread Tee for 48.60 mm outer dia X 25 mm nominal dia threaded	each	1115.00
8884	Female thread Tee for 48.60 mm outer dia X 32 mm nominal dia threaded	each	1184.00
8885	Female thread Tee for 48.60 mm outer dia X 40 mm nominal dia threaded	each	1233.00
8886	Female thread Tee for 48.60 mm outer dia X 50 mm nominal dia threaded	each	1366.00
8887	Female threaded Connector/Adapter for 15.88 mm outer dia X 15 mm nominal threaded	each	190.00
8888	Female threaded Connector/Adapter for 22.22 mm outer dia X 15 mm nominal threaded	each	230.00
8889	Female threaded Connector/Adapter for 22.22 mm outer dia X 20 mm nominal threaded	each	237.00
8890	Female threaded Connector/Adapter for 28.58 mm outer dia X 15 mm nominal threaded	each	277.00
8891	Female threaded Connector/Adapter for 28.58 mm outer dia X 20 mm nominal threaded	each	286.00
8892	Female threaded Connector/Adapter for 28.58 mm outer dia X 25 mm nominal threaded	each	337.00
8893	Female threaded Connector/Adapter for 34.00 mm outer dia X 25 mm nominal threaded	each	409.00
8894	Female threaded Connector/Adapter for 34.00 mm outer dia X 32 mm nominal threaded	each	538.00
8895	Female threaded Connector/Adapter for 42.70 mm outer dia X 32 mm nominal threaded	each	576.00
8896	Female threaded Connector/Adapter for 42.70 mm outer dia X 40 mm nominal threaded	each	681.00
8897	Female threaded Connector/Adapter for 48.60 mm outer dia X 40 mm nominal threaded	each	838.00
8898	Female threaded Connector/Adapter for 48.60 mm outer dia X 50 mm nominal threaded	each	965.00
8899	Male threaded Connector/Adapter for 15.88 mm outer dia X 15 mm nominal threaded	each	193.00
8900	Male threaded Connector/Adapter for 22.22 mm outer dia X 15 mm nominal threaded	each	227.00
8901	Male threaded Connector/Adapter for 22.22 mm outer dia X 20 mm nominal threaded	each	248.00
8902	Male threaded Connector/Adapter for 28.58 mm outer dia X 20 mm nominal threaded	each	313.00
8903	Male threaded Connector/Adapter for 28.58 mm outer dia X 25 mm nominal threaded	each	320.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
8904	Male threaded Connector/Adapter for 34.00 mm outer dia X 25 mm nominal threaded	each	461.00
8905	Male threaded Connector/Adapter for 34.00 mm outer dia X 32 mm nominal threaded	each	565.00
8906	Male threaded Connector/Adapter for 42.70 mm outer dia X 32 mm nominal threaded	each	649.00
8907	Male threaded Connector/Adapter for 42.70 mm outer dia X 40 mm nominal threaded	each	726.00
8908	Male threaded Connector/Adapter for 48.60 mm outer dia X 40 mm nominal threaded	each	840.00
8909	Male threaded Connector/Adapter for 48.60 mm outer dia X 50 mm nominal threaded	each	1138.00
8910	Valve Connector for 15.88 mm outer dia X 15 mm nominal dia threaded	each	234.00
8911	Valve Connector for 22.22 mm outer dia X 15 mm nominal dia threaded	each	276.00
8912	Valve Connector for 22.22 mm outer dia X 20 mm nominal dia threaded	each	295.00
8913	Valve Connector for 28.58 mm outer dia X 25 mm nominal dia threaded	each	424.00
8914	Valve Connector for 34.00 mm outer dia X 32 mm nominal dia threaded	each	629.00
8915	Valve Connector for 42.70 mm outer dia X 40 mm nominal dia threaded	each	875.00
8916	Valve Connector for 48.60 mm outer dia X 50 mm nominal dia threaded	each	1176.00
8917	Female Threaded Elbow 90 <sup>0</sup> for 15.88 mm outer dia X 15 mm nominal dia threaded	each	205.00
8918	Female Threaded Elbow 90 <sup>0</sup> for 22.22 mm outer dia X 15 mm nominal dia threaded	each	275.00
8919	Female Threaded Elbow 90 <sup>0</sup> for 22.22 mm outer dia X 20 mm nominal dia threaded	each	284.00
8920	Female Threaded Elbow 90 <sup>0</sup> for 28.58 mm outer dia X 25 mm nominal dia threaded	each	421.00
8921	Female Threaded Elbow 90 <sup>0</sup> for 34.00 mm outer dia X 32 mm nominal dia threaded	each	733.00
8922	Female Threaded Elbow 90 <sup>0</sup> for 42.70 mm outer dia X 32 mm nominal dia threaded	each	920.00
8923	Female Threaded Elbow 90 <sup>0</sup> for 42.70 mm outer dia X 40 mm nominal dia threaded	each	995.00
8924	Female Threaded Elbow 90 <sup>0</sup> for 48.60 mm outer dia X 40 mm nominal dia threaded	each	1103.00
8925	Female Threaded Elbow 90 <sup>0</sup> for 48.60 mm outer dia X 50 mm nominal dia threaded	each	1286.00
8926	Male Threaded Elbow 90 <sup>0</sup> for 15.88 mm outer dia X 15 mm nominal dia threaded	each	216.00
8927	Male Threaded Elbow 90 <sup>0</sup> for 22.22 mm outer dia X 15 mm nominal dia threaded	each	273.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
8928	Male Threaded Elbow 90 <sup>0</sup> for 22.22 mm outer dia X 20 mm nominal dia threaded	each	288.00
8929	Male Threaded Elbow 90 <sup>0</sup> for 28.58 mm outer dia X 25 mm nominal dia threaded	each	377.00
8930	Male Threaded Elbow 90 <sup>0</sup> for 34.00 mm outer dia X 25 mm nominal dia threaded	each	605.00
8931	Male Threaded Elbow 90 <sup>0</sup> for 34.00 mm outer dia X 32 mm nominal dia threaded	each	736.00
8932	Male Threaded Elbow 90 <sup>0</sup> for 42.70 mm outer dia X 32 mm nominal dia threaded	each	934.00
8933	Male Threaded Elbow 90 <sup>0</sup> for 42.70 mm outer dia X 40 mm nominal dia threaded	each	1060.00
8934	Male Threaded Elbow 90 <sup>0</sup> for 48.60 mm outer dia X 40 mm nominal dia threaded	each	1190.00
8935	Male Threaded Elbow 90 <sup>0</sup> for 48.60 mm outer dia X 50 mm nominal dia threaded	each	1449.00
8936	Cap for 15.88 mm outer dia pipe	each	45.00
8937	Cap for 22.22 mm outer dia pipe	each	64.00
8938	Cap for 28.58 mm outer dia pipe	each	84.00
8939	Cap for 34.00 mm outer dia pipe	each	173.00
8940	Cap for 42.70 mm outer dia pipe	each	253.00
8941	Cap for 48.60 mm outer dia pipe	each	330.00
8942	Pipe Bridge for 15.88 mm outer dia pipe	each	214.00
8943	Pipe Bridge for 15.88 mm outer dia pipe	each	271.00
8944	Pipe Bridge for 28.58 mm outer dia pipe	each	407.00
8945	4 Point facade glass bracket	Nos	3318.00
8946	2 Point facade glass bracket	Nos	1659.00
8947	1 Point facade glass bracket	Nos	1404.00
8948	Flate head bolt	Nos	651.00
8949	400 fin plate at top	pair	5931.00
8953	Micro Silica	kg	32.00
8954	Stop end tubes for diaphragm wall 600 mm dia.	sqm	4.50
8955	Driving end tubes for diaphragm wall 600 mm dia.	sqm	72.00
9999	Sundries	L.S.	1.70

**BASIC RATES**  
**0.4 CARRIAGE CODES**

**(Carriage by Mechanical Transport including loading, Unloading and stacking)**

Note: - These rates are exclusive of contractor's profit and overhead charges.

Code No.	Description	Unit	Rate ₹
2200	Steam coal	tonne	121.88
2201	Bricks	1000 Nos	284.39
2202	Stone aggregate below 40 mm nominal size	cum	106.64
2203	Coarse sand	cum	106.64
2204	Timber	cum	121.88
2205	Steel	tonne	94.80
2206	Stone aggregate 40 mm nominal size and above	cum	115.92
2207	Brick tiles	1000 Nos	170.63
2208	Lime	cum	106.64
2209	Cement	tonne	94.80
2211	Tar / Bitumen	tonne	106.64
2215	Soling stone & masonry stone	cum	125.47
2216	Stone blocks white & red sand stone & kota stone slab	tonne	94.80
2224	S.W. pipes 100 mm dia	100 metre	142.19
2225	S.W. pipes 150 mm dia	100 metre	284.39
2226	S.W. pipes 200 mm dia	100 metre	473.98
2228	S.W. pipes 250 mm dia	100 metre	812.54
2229	S.W. pipes 300 mm dia	100 metre	1015.68
2241	Good earth	cum	133.30
2242	Dump manure	cum	115.92
2260	Brick aggregate	cum	115.92
2261	Fine sand (1 part badarpur sand: 2 parts jamuna sand)	cum	106.64
2262	Flyash	cum	106.64
2264	Rubbish	cum	106.64
2265	Moorum	cum	106.64
2266	Surkhi	cum	106.64
2267	Stone dust	cum	106.64
2268	Marble dust and/or marble chips	cum	106.64
2271	G.I. pipes below 100 mm dia	tonne	94.80
2272	Stainless Steel pipes below 100 mm dia	tonne	94.80
2273	A.C.sheet and accessories	tonne	94.80

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
2275	R.C.C. pipes 100 mm dia	100 metre	233.10
2281	R.C.C. pipes 150 mm dia	100 metre	388.51
2287	R.C.C. pipes 250 mm dia	100 metre	898.07
2290	R.C.C. pipes 300 mm dia	100 metre	1110.03
2299	R.C.C. pipes 450 & 500 mm dia	100 metre	2590.06
2302	G.I.sheet and accessories	tonne	94.80
2303	R.C.C. pipes 600,700,750 & 800 mm dia	100 metre	3885.10
2308	Plaster of paris	tonne	94.80
2309	Cast Iron fittings	tonne	94.80
2311	Red bajri	cum	106.64
2314	Barbed wire	tonne	94.80
2317	Sludge	cum	115.92
2319	Spun iron S & S pipes 100 mm dia	100 metre	233.10
2320	Spun iron S & S pipes 125 mm dia	100 metre	311.37
2321	Spun iron S & S pipes 150 mm dia	100 metre	388.51
2322	Spun iron S & S pipes 200 mm dia	100 metre	631.97
2323	Spun iron S & S pipes 250 mm dia	100 metre	898.07
2324	Spun iron S & S pipes 300 mm. dia	100 metre	1110.03
2325	Spun iron S & S pipes 350 mm dia	100 metre	1554.03
2326	Spun iron S & S pipes 400 mm dia	100 metre	2119.14
2327	Spun iron S & S pipes 450 mm dia	100 metre	2590.06
2328	Spun iron S & S pipes 500 mm dia	100 metre	2590.06
2329	Spun iron S & S pipes 600mm dia	100 metre	3885.10
2330	C.I. pipes 500 mm dia	100 metre	2590.06
2331	R.C.C. pipes 900 mm dia	100 metre	5827.64
2332	R.C.C. pipes 1000 mm dia	100 metre	7770.19
2333	R. C. C. pipes 1100 mm dia	100 metre	7770.19
2334	R.C.C. pipes 1200 mm dia	100 metre	7770.19
2335	Jamuna sand	cum	106.64
2336	R.C.C. pipe above 1200 mm dia and upto 1800 mm dia	100 metre	7339.87
2341	Pig lead	tonne	94.80
2342	Solvent / Diesel.	quintal	10.66
2343	Ductile Iron pipes (k7) 100 mm dia	100 metre	233.10
2344	Cast iron pipes 150 mm dia	100 metre	388.51
2345	Cast iron pipes 200 mm dia	100 metre	631.97

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
2346	Cast iron pipes 250 mm dia	100 metre	898.07
2347	Cast iron pipes 300 mm dia	100 metre	1110.03
2348	Cast iron pipes 350 mm dia	100 metre	1554.03
2349	Cast iron pipes 400 mm dia	100 metre	2119.14
2350	Cast iron pipes 450 mm dia	100 metre	2590.06
2351	Cast iron pipes 500 mm dia	100 metre	2590.06
2352	Cast iron pipes 600 mm dia	100 metre	3885.10
2353	Cast iron pipes 700 mm dia	100 metre	3885.10
2355	Cast iron pipes 800 mm dia	100 metre	3885.10
2356	Cast iron pipes 900 mm dia	100 metre	5827.64
2357	Cast iron pipes 1000 mm dia	100 metre	7770.19

**SUB HEAD : 1.0**

**CARRIAGE OF MATERIALS**



### BASIC RATES (SH: 1.0 CARRIAGE OF MATERIALS)

Code No.	Description	Unit	Rate ₹
0005	Hire charges of Diesel Truck - 9 tonne	day	1700.00
0114	Beldar	day	297.00
0115	Coolie	day	297.00
0128	Mate	day	328.00
1035	Bolts and nuts above 300 mm in length	quintal	5600.00
5001	Mobil oil	litre	200.00
9999	Sundries	L.S.	1.70

## 1.0 CARRIAGE OF MATERIALS

### 1.1 By Mechanical Transport including loading ,unloading and stacking

S.No.	Materials	Unit	Rate ( ₹ )								Remarks
			1 km	2 km	3 km	4 km	5 km	Beyond 5 km upto 10 km per km	Beyond 10 km upto 20 km per km	Beyond 20 km per addl. km	
1	2	3	4	5	6	7	8	9	10	11	12
1.1.1	Lime, moorum, building rubbish	cum	81.02	91.79	102.45	112.69	122.64	8.88	7.28	5.91	The rates will be applicable to net quantities after deduction of prescribed percentage for voids mentioned in the specification under subhead "Carriage of materials".
1.1.2	Earth	cum	101.27	114.74	128.06	140.86	153.30	11.09	9.10	7.39	
1.1.3	Manure or sludge	cum	88.06	99.77	111.36	122.49	133.31	9.65	7.91	6.42	
1.1.4	Excavated rock	cum	162.04	183.59	204.90	225.38	245.29	17.75	14.55	11.82	
1.1.5	Sand, stone aggregate below 40 mm nominal size	cum	81.02	91.79	102.45	112.69	122.64	8.88	7.28	5.91	
1.1.6	Stone aggregate 40 mm nominal size and above	cum	88.06	99.77	111.36	122.49	133.31	9.65	7.91	6.42	
1.1.7	Soling stone	cum	95.32	107.99	120.53	132.58	144.29	10.44	8.56	6.95	
1.1.8	Bricks	1,000 Nos.	216.05	244.78	273.20	300.51	327.05	23.67	19.40	15.76	
1.1.9	Brick Tiles	1,000 Nos.	129.63	146.87	163.92	180.31	196.23	14.20	11.64	9.45	
1.1.10	Cement, stone blocks, G.I., C.I., A.C., & C.C. pipes below 100 mm dia and other heavy materials	tonne	72.02	81.59	91.07	100.17	109.02	7.89	6.47	5.25	

S.No.	Materials	Unit	Rate ( ₹ )								Remarks
			1 km	2 km	3 km	4 km	5 km	Beyond 5 km upto 10 km per km	Beyond 10 km upto 20 km per km	Beyond 20 km per addl. km	
1	2	3	4	5	6	7	8	9	10	11	12
1.1.11	Steel	tonne	72.02	81.59	91.07	100.17	109.02	7.89	6.47	5.25	
1.1.12	Timber	cum	92.59	104.91	117.09	128.79	140.16	10.14	8.32	6.75	
1.1.13	Tar Bitumen	tonne	81.02	91.79	102.45	112.69	122.64	8.88	7.28	5.91	
1.1.14	Solvent	qtl	8.10	9.18	10.24	11.27	12.26	0.89	0.73	0.59	
1.1.15	Steam Coal	tonne	92.59	104.91	117.09	128.79	140.16	10.14	8.32	6.75	
1.1.16	S.W. pipe										
1.1.16.1	100 mm dia	100 m	108.03	122.39	136.60	150.25	163.52	11.83	9.70	7.88	
1.1.16.2	150 mm dia	100 m	216.05	244.78	273.20	300.51	327.05	23.67	19.40	15.76	
1.1.16.3	200 mm dia	100 m	360.08	407.97	455.33	500.85	545.08	39.45	32.34	26.26	
1.1.16.5	250 mm dia	100 m	617.29	699.37	780.57	858.60	934.42	67.62	55.44	45.02	
1.1.16.6	300 mm dia	100 m	771.61	874.22	975.71	1,073.25	1,168.03	84.53	69.30	56.28	
1.1.16.7	350 mm dia	100 m	1,080.25	1,223.90	1,366.00	1,502.55	1,635.24	118.34	97.02	78.79	
1.1.16.8	400 mm dia	100 m	1,543.22	1,748.43	1,951.43	2,146.50	2,336.05	169.05	138.60	112.56	
1.1.16.9	450 mm dia	100 m	1,964.09	2,225.28	2,483.63	2,731.91	2,973.16	215.16	176.40	143.25	
1.1.16.10	500 mm dia	100 m	2,160.50	2,447.81	2,732.00	3,005.10	3,270.47	236.68	194.04	157.58	
1.1.16.11	600 mm dia	100 m	2,700.63	3,059.76	3,415.00	3,756.37	4,088.09	295.85	242.55	196.97	
1.1.17	R.C.C. pipe, A.C. pipes, steel cylinder, R.C. pipes, C.I. pipes, C.I. pipes and unreinforced cement pipes										

S.No.	Materials	Unit	Rate ( ₹ )								Remarks
			1 km	2 km	3 km	4 km	5 km	Beyond 5 km upto 10 km per km	Beyond 10 km upto 20 km per km	Beyond 20 km per addl. km	
1	2	3	4	5	6	7	8	9	10	11	12
1.1.17.1	100 mm dia	100 m	177.09	200.64	223.93	246.32	268.07	19.40	15.91	12.92	
1.1.17.2	125 mm dia	100 m	236.55	268.01	299.12	329.03	358.08	25.91	21.25	17.25	
1.1.17.3	150 mm dia	100 m	295.15	334.40	373.22	410.53	446.79	32.33	26.51	21.53	
1.1.17.4	200 mm dia	100 m	480.11	543.96	607.11	667.80	726.77	52.59	43.12	35.02	
1.1.17.5	250 mm dia	100 m	682.26	772.99	862.74	948.98	1,032.78	74.74	61.28	49.76	
1.1.17.6	300 mm dia	100 m	843.29	955.43	1,066.35	1,172.95	1,276.53	92.38	75.74	61.51	
1.1.17.7	350 mm dia	100 m	1,180.60	1,337.60	1,492.89	1,642.13	1,787.14	129.33	106.03	86.11	
1.1.17.8	400 mm dia	100 m	1,609.91	1,824.00	2,035.76	2,239.27	2,437.01	176.36	144.59	117.42	
1.1.17.9	450 mm & 500 mm dia	100 m	1,967.67	2,229.33	2,488.16	2,736.88	2,978.57	215.55	176.72	143.51	
1.1.17.10	600, 700, 750 & 800 mm dia	100 m	2,951.51	3,344.00	3,732.24	4,105.32	4,467.86	323.33	265.09	215.27	
1.1.17.11	900 mm dia	100 m	4,427.26	5,016.00	5,598.35	6,157.98	6,701.79	484.99	397.63	322.91	
1.1.17.12	1000, 1100 & 1200 mm dia	100 m	5,903.02	6,688.00	7,464.47	8,210.65	8,935.72	646.66	530.17	430.54	

## 1.0 CARRIAGE OF MATERIALS

### 1.2 By Manual Labour including loading, unloading and stacking for lead less than 0.50 KM

S.No.	Material	Unit	Cost of carriage including loading, unloading & stacking for first 50 metres (₹)	Every additional lead of 50 metre or part thereof beyond 1 <sup>st</sup> 50 metre upto 9 such additional leads (₹)	Remarks
1	2	3	4	5	6
1.2.1	Lime, moorum, building rubbish	cum	74.85	16.30	The rates will be applicable to net quantities after deduction of prescribed percentage for voids mentioned in the specification under subhead "Carriage of materials".
1.2.2	Earth	cum	93.56	20.37	
1.2.3	Manure or sludge	cum	81.36	17.71	
1.2.4	Excavated rock	cum	149.70	32.59	
1.2.5	Sand, stone aggregate below 40 mm nominal size	cum	93.56	20.37	
1.2.6	Stone aggregate 40 mm nominal size and above	cum	101.15	22.02	
1.2.7	Soling stone	cum	110.07	23.97	
1.2.8	Bricks	1000 Nos.	174.65	38.03	
1.2.9	Brick Tiles	1000 Nos.	109.15	23.77	
1.2.10	Steam Coal	tonne	87.32	19.01	
1.2.11	Stone blocks ,G.I., C.I. , Stainless Steel pipes below 100 mm dia and other heavy materiall	tonne	56.81	10.02	
1.2.12	Cement	tonne	54.19	7.95	
1.2.13	Steel	tonne	116.38	17.08	
1.2.14	Timber	cum	74.82	10.98	
1.2.15	Tar, bitumen etc.	tonne	68.31	10.02	
1.2.16	S.W. pipe				The length of S.W. pipes will be measured exclusive of the internal depth of sockets.
1.2.16.1	100 mm dia	100 m	136.74	20.06	
1.2.16.2	150 mm dia	100 m	224.77	32.98	
1.2.16.3	200 mm dia	100 m	314.54	46.16	
1.2.16.5	250 mm dia	100 m	523.71	76.85	

1	2	3	4	5	6
1.2.16.6	300 mm dia	100 m	748.16	109.78	
1.2.16.7	350 mm dia	100 m	1047.42	153.70	
1.2.16.8	400 mm dia	100 m	1309.28	192.12	
1.2.16.9	450 mm dia	100 m	1587.00	232.88	
1.2.16.10	500 mm dia	100 m	1939.67	284.63	
1.2.16.11	600 mm dia	100 m	2380.50	349.31	
1.2.17	R.C.C. pipes, Steel cylinder, R.C. pipes, C.I. pipes, C.I. pipes and unreinforced cement pipes				The length of the flanged or plain ended concrete R.C.C. pipes, Steel cylinders, R.C. pipes and C.I. pipes shall be measured overall. The length of socketed pipes shall be measured exclusive of internal depth of sockets
1.2.17.1	100 mm dia	100 m	184.62	27.09	
1.2.17.2	125 mm dia	100 m	225.90	33.15	
1.2.17.3	150 mm dia	100 m	260.12	38.17	
1.2.17.4	200 mm dia	100 m	390.34	57.28	
1.2.17.5	250 mm dia	100 m	686.08	100.68	
1.2.17.6	300 mm dia	100 m	858.54	125.98	
1.2.17.7	350 mm dia	100 m	1227.45	180.11	
1.2.17.8	400 mm dia	100 m	1428.30	209.59	
1.2.17.9	450 mm & 500 mm dia	100 m	1904.40	279.45	
1.2.17.10	600, 700, 750 & 800 mm dia	100 m	2094.84	307.40	
1.2.18	Asbestos cement pipes				The length of asbestos cement pipes shall be measured exclusive of internal depth of sockets.
1.2.18.1	50 mm dia	100 m	31.22	4.58	
1.2.18.2	80 mm dia	100 m	85.85	12.60	
1.2.18.3	100 mm dia	100 m	122.65	18.00	
1.2.18.4	150 mm dia	100 m	171.71	25.20	

S.No.	Description	Unit	Rate ₹	Remarks
1	2	3	4	5
1.3	Loading in or unloading cement from the Railway wagon at siding and carrying the same from or into godowns adjacent to the siding, including stacking the same properly in rows upto any height as per the direction of Engineer-in-charge, sweeping the wagons and screening the swept cement and filling in bags complete.	Tonne	55.90	
1.4	Loading in or unloading from the Railway wagon as per the direction of Engineer-in-charge.			
1.4.1	Steel	Tonne	82.75	The rates will be applicable in all cases whether materials are unloaded or loaded from Railway siding or directly unloaded on or loaded from transport.
1.4.2	G.I., C.I., R.C.C or C.C. pipes upto 500 mm dia. And similar heavy materials.	Tonne	49.25	
1.4.3	Heavy materials where each piece made or bundle, crate or case weighs such more than one tonne and R.C.C, C.I. loading and concrete pipes above 500 mm dia.	Tonne	93.05	No deduction shall be from carriage rates for direct unloading or



**SUB HEAD : 2.0**

**EARTH WORK**



## BASIC RATES (SH: 2.0 EARTH WORK)

Code No.	Description	Unit	Rate ₹
0003	Hire charges of Diesel Road Roller - 8 to 10 tonne	day	1500.00
0017	Hire and running charges of tipper	day	1700.00
0018	Hire and running charges of loader	day	5000.00
0020	Hydraulic Excavator (3D) with driver and fuel	day	8000.00
0101	Bhisti	day	328.00
0103	Blacksmith 2nd class	day	361.00
0112	Carpenter 2nd class	day	361.00
0113	Chowkidar	day	297.00
0114	Beldar	day	297.00
0115	Coolie	day	297.00
0124	Mason (brick layer) 2nd class	day	361.00
0128	Mate	day	328.00
0132	Rock Excavator	day	297.00
0133	Rock Breaker	day	297.00
0134	Rock Hole Driller	day	297.00
0135	Stone Chiseller	day	328.00
0302	Safeda ballies 125 mm diameter	metre	42.00
0325	Blasting powder	kilogram	35.00
0771	Kerosene oil	litre	45.00
1197	Second class kail wood in scantling	10 cudm	260.00
1198	Second class kail wood in planks	10 cudm	260.00
1235	Diesel oil	litre	48.63
1980	Fly ash	cum	7.75
2204	Carriage of timber	cum	121.88
2262	Carriage of flyash	cum	106.64
2335	Carriage of Jamuna sand	cum	106.64
2342	Carriage of Solvent / Diesel.	quintal	10.66
6501	Sand zone V (Jamuna)	cum	550.00
7022	Chlorpyriphos 20% E.C. / Lindane 20% E.C.	litre	160.00
9999	Sundries	L.S.	1.70

## 2.0 EARTH WORK

Code No.	Description	Unit	Rate ₹
2.1	Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including disposal of excavated earth upto 50 m and lift upto 1.5 m, disposed soil to be levelled and neatly dressed :		
2.1.1	All kinds of soil	100 sqm	4,553.55
2.2	Earth work in rough excavation, banking excavated earth in layers not exceeding 20 cm in depth, breaking clods, watering, rolling each layer with ½ tonne roller or wooden or steel rammers, and rolling every 3rd and top-most layer with power roller of minimum 8 tonnes and dressing up in embankments for roads, flood banks, marginal banks and guide banks or filling up ground depressions, lead upto 50 m and lift upto 1.5 m :		
2.2.1	All kinds of soil	cum	346.00
2.3	Banking excavated earth in layers not exceeding 20 cm in depth, breaking clods, watering, rolling each layer with ½ tonne roller, or wooden or steel rammers, and rolling every 3rd and top-most layer with power roller of minimum 8 tonnes and dressing up, in embankments for roads, flood banks, marginal banks, and guide banks etc., lead upto 50 m and lift upto 1.5 m :		
2.3.1	All kinds of soil	cum	218.35
2.4	Deduct for not rolling with power roller of minimum 8 tonnes for banking excavated earth in layers not exceeding 20 cm in depth.	cum	2.85
2.5	Deduct for not watering the excavated earth for banking	cum	15.25
2.6	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.		
2.6.1	All kinds of soil	cum	146.50
2.7	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50 m and lift upto 1.5 m, disposed earth to be levelled and neatly dressed.		
2.7.1	Ordinary rock	cum	227.80
2.7.2	Hard rock (requiring blasting)	cum	393.60
2.7.3	Hard rock (blasting prohibited)	cum	571.90
2.8	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.		
2.8.1	All kinds of soil.	cum	148.25
2.9	Excavation work by mechanical means (Hydraulic excavator)/ manual means in foundation trenches or drains (not exceeding 1.5m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift		

Code No.	Description	Unit	Rate ₹
	upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soils as directed, within a lead of 50 m.		
2.9.1	Ordinary rock	cum	244.90
2.9.2	Hard rock (requiring blasting)	cum	427.75
2.9.3	Hard rock (blasting prohibited)	cum	574.15
2.10	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :		
2.10.1	All kinds of soil		
2.10.1.1	Pipes, cables etc, not exceeding 80 mm dia.	metre	118.00
2.10.1.2	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia	metre	192.75
2.10.1.3	Pipes, cables etc. exceeding 300 mm dia but not exceeding 600 mm	metre	300.90
2.11	Extra for excavating trenches for pipes, cables etc. in all kinds of soil for depth exceeding 1.5 m, but not exceeding 3 m. (Rate is over corresponding basic item for depth upto 1.5 metre).	metre	135 %
2.12	Extra for excavating trenches for pipes, cables, etc, in all kinds of soil for depth exceeding 3 m in depth, but not exceeding 4.5 m. (Rate is over corresponding basic item for depth upto 1.5 metre.)	metre	348%
2.13	Excavating trenches of required width for pipes, cables, etc, including excavation for sockets, depth upto 1.5 m, including getting out the excavated materials, returning the soil as required in layers not exceeding 20 cm in depth, including consolidating each deposited layers by ramming, watering etc., stacking serviceable material for measurements and disposal of unserviceable material as directed, within a lead of 50 m :		
2.13.1	Ordinary rock :		
2.13.1.1	Pipes, cables etc. not exceeding 80 mm dia	metre	167.50
2.13.1.2	Pipes, cables etc. exceeding 80 mm dia but not exceeding 300 mm dia	metre	414.75
2.13.1.3	Pipes, cables exceeding 300 mm dia but not exceeding 600 mm dia	metre	477.30
2.13.2	Hard rock (requiring blasting)		
2.13.2.1	Pipes, cables etc. not exceeding 80 mm dia	metre	254.85
2.13.2.2	Pipes, cables etc. exceeding 80 mm dia but not exceeding 300 mm dia	metre	631.10
2.13.2.3	Pipes, cables etc. exceeding 300 mm dia but not exceeding 600 mm dia	metre	726.15
2.13.3	Hard rock (blasting prohibited)		
2.13.3.1	Pipes, cables etc. not exceeding 80 mm dia	metre	324.05
2.13.3.2	Pipes, cables etc. exceeding 80 mm dia but not exceeding 300 mm dia	metre	802.35
2.13.3.3	Pipes, cables etc. exceeding 300 mm dia but not exceeding 600 mm dia	metre	923.30

Code No.	Description	Unit	Rate ₹
2.14	Extra for excavating trenches for pipes, cables, etc. in ordinary/hard rock exceeding 1.5 m in depth but not exceeding 3 m. (Rate is over corresponding basic item for depth upto 1.5 metre).	metre	105.00%
2.15	Extra for excavating trenches for pipes, cables, etc. in ordinary/hard rock exceeding 3m in depth but not exceeding 4.5 m. (Rate is over corresponding basic item for depth upto 1.5 metre).	metre	264.00%
2.16	Close timbering in trenches including strutting, shoring and packing cavities (wherever required) complete. (Measurements to be taken of the face area timbered).		
2.16.1	Depth not exceeding 1.5 m	sqm	107.45
2.16.2	Depth exceeding 1.5 m but not exceeding 3 m	sqm	112.75
2.16.3	Depth exceeding 3 m but not exceeding 4.5 m	sqm	124.75
2.17	Close timbering in case of shafts, wells, cesspits, manholes and the like including strutting, shoring and packing cavities (wherever required) etc. complete. (Measurements to be taken of the face area timbered).		
2.17.1	Depth not exceeding 1.5 m	sqm	111.40
2.17.2	Depth exceeding 1.5 m but not exceeding 3 m	sqm	122.80
2.17.3	Depth exceeding 3 m but not exceeding 4.5 m	sqm	134.85
2.18	Close timbering over areas including strutting, shoring and packing cavities (wherever required) etc. complete. (Measurements to be taken of the face area timbered) :		
2.18.1	Depth not exceeding 1.5 m	sqm	95.40
2.18.2	Depth exceeding 1.5 m but not exceeding 3 m	sqm	101.70
2.18.3	Depth exceeding 3 m but not exceeding 4.5 m	sqm	108.45
2.19	Extra for planking, strutting and packing materials for cavities (in close timbering) if required to be left permanently in position. (Face area of timber permanently left to be measured).	sqm	1384.85
2.20	Open timbering in trenches including strutting and shoring complete (measurements to be taken of the face area timbered):		
2.20.1	Depth not exceeding 1.5 m	sqm	55.50
2.20.2	Depth exceeding 1.5 m but not exceeding 3 m	sqm	58.85
2.20.3	Depth exceeding 3 m but not exceeding 4.5 m	sqm	64.35
2.21	Open timbering in case of shafts, wells, cesspits, manholes and the like including strutting and shoring complete (Measurements to be taken of the face area timbered):		
2.21.1	Depth not exceeding 1.5 m	sqm	48.00
2.21.2	Depth exceeding 1.5 m but not exceeding 3 m	sqm	53.30
2.21.3	Depth exceeding 3 m but not exceeding 4.5 m	sqm	60.30
2.22	Open timbering over areas including strutting, shoring etc. complete. (Measurements to be taken of the face area timbered):		
2.22.1	Depth not exceeding 1.5 m	sqm	32.90
2.22.2	Depth exceeding 1.5 m but not exceeding 3 m	sqm	36.60
2.22.3	Depth exceeding 3 m but not exceeding 4.5 m	sqm	42.50

Code No.	Description	Unit	Rate ₹
2.23	Extra for planking and strutting in open timbering if required to be left permanently in position. (Face area of the timber permanently left to be measured).	sqm	713.55
2.24	Extra rates for quantities of works, executed :		
2.24.1	In or under water and/or liquid mud, including pumping out water as required	metre depth	20.00%
2.24.2	In or under foul position, including pumping out water as required	metre depth	25.00%
	<b>Note for item no. 2.24:-</b> The extra percentage rate is applicable in respect of each item but limited to quantities of work executed in these difficult conditions. The unit, namely, metre depth, to be considered for payment, shall be the depth measured from the sub soil water level upto the centre of gravity of the quantity executed in difficult conditions. The depth shall be reckoned correct to 0.1 metre. 0.05 metre or more shall be taken as 0.1 metre and less than 0.05 metre ignored.		
2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	cum	101.50
2.26	Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials.		
2.26.1	All kinds of soil	cum	41.75
2.26.2	Ordinary or hard rock	cum	74.90
2.27	Supplying and filling in plinth with Jamuna sand under floors, including watering, ramming, consolidating and dressing complete.	cum	843.65
2.28	Surface dressing of the ground including removing vegetation and inequalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m.		
2.28.1	All kinds of soil	100sqm	1,124.60
2.29	Ploughing the existing ground to a depth of 15 cm to 25 cm and watering the same.		
2.29.1	All kinds of soil	100sqm	1,139.15
2.30	Excavating holes more than 0.10 cum & upto 0.5 cum including getting out the excavated soil, then returning the soil as required in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering etc, disposing of surplus excavated soil, as directed within a lead of 50 m and lift upto 1.5 m.		
2.30.1	All kinds of soil	each	47.15
2.30.2	Ordinary rock	each	76.15
2.30.3	Hard rock (requiring blasting)	each	131.00
2.30.4	Hard rock (blasting prohibited)	each	174.90
2.31	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 30 cm measured at a height of 1m above ground level and removal of rubbish upto a distance of 50 m outside the periphery of the area cleared.	100sqm	579.55
2.32	Clearing grass and removal of the rubbish upto a distance of 50 m outside the periphery of the area cleared.	100sqm	296.80

Code No.	Description	Unit	Rate ₹
2.33	Felling trees of the girth (measured at a height of 1 m above ground level), including cutting of trunks and branches, removing the roots and stacking of serviceable material and disposal of unserviceable material.		
2.33.1	Beyond 30 cm girth upto and including 60 cm girth	each	177.85
2.33.2	Beyond 60 cm girth upto and including 120 cm girth	each	786.95
2.33.3	Beyond 120 cm girth upto and including 240 cm girth	each	3,638.05
2.33.4	Above 240 cm girth	each	7,297.40
2.34	Supplying chemical emulsion in sealed containers including delivery as specified.		
2.34.1	Chlorpyrifos/ Lindane emulsifiable concentrate of 20%	litre	185.95
2.35	Diluting and injecting chemical emulsion for POST-CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion) :		
2.35.1	Along external wall where the apron is not provided using chemical emulsion @ 7.5 litres / sqm of the vertical surface of the substructure to a depth of 300 mm including excavation channel along the wall & rodding etc. complete:		
2.35.1.1	With Chlorpyrifos/ Lindane E.C. 20% with 1% concentration	metre	14.05
2.35.2	Along the external wall below concrete or masonry apron using chemical emulsion @ 2.25 litres per linear metre including drilling and plugging holes etc.:		
2.35.2.1	With Chlorpyrifos/ Lindane E.C. 20% with 1% concentration	metre	20.90
2.35.3	Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand) to match the existing floor :		
2.35.3.1	With Chlorpyrifos/Lindane E.C. 20% with 1% concentration	sqm	107.85
2.35.4	Treatment of existing masonry using chemical emulsion @ one litre per hole at 300 mm interval including drilling holes at 45 degree and plugging them with cement mortar 1:2 (1 cement : 2 coarse sand) to the full depth of the hole :		
2.35.4.1	With Chlorpyrifos/Lindane E.C. 20% with 1% concentration	metre	16.00
2.35.5	Treatment at points of contact of wood work by chemical emulsion Chlorpyrifos/ Lindane (in oil or kerosene based solution) @ 0.5 litres per hole by drilling 6 mm dia holes at downward angle of 45 degree at 150 mm centre to centre and sealing the same	metre	187.65
2.36	Deduct for disposed soil not levelled and neatly dressed.	cum	30.65
2.37	Supply and stacking of Fly ash conforming to IRC- 58 at site, including carriage, loading , unloading & stacking up to any lead (measured stacks will be reduced by 20% for payment).	cum	132.85
2.38	Filling with available fly ash and earth (excluding rock) in trenches or embankment in layers (each layer should not exceed 15 cm), with intermediate layer of compacted earth (Soil density of 98%) after every four layers of compacted depth of fly ash, sides & top layer of filling shall be done with earth having total minimum compacted thickness 30 cm or as decided by Engineer -in-charge, including compacting each layer by rolling/ ramming and watering, all complete as per drawing and direction of Engineer -in - charge.	cum	101.50

**SUB HEAD : 3.0**

**MORTARS**



### BASIC RATES (SH : 3.0 MORTAR)

Code No.	Description	Unit	Rate ₹
0101	Bhisti	day	328.00
0114	Beldar	day	297.00
0367	Portland Cement	tonne	5240.00
0368	White Cement	tonne	14000.00
0784	Marble dust/ powder	cum	1000.00
0811	Mud (dry)	cum	60.00
0982	Coarse sand (zone III)	cum	1120.00
0983	Fine sand (zone IV)	cum	650.00
1159	Stone dust	cum	1000.00
1182	Surkhi	cum	700.00
2203	Carriage of coarse sand	cum	106.64
2209	Carriage of cement	tonne	94.80
2261	Carriage of fine sand (1 part badarpur sand: 2 parts jamuna sand)	cum	106.64
2268	Carriage of marble dust and/or marble chips	cum	106.64
9999	Sundries	L.S.	1.70

### 3.0 MORTAR

Note : These rates are exclusive of water charges, overheads and contractor's profit.

Code No.	Description	Unit	Rate ₹
3.1	Cement mortar 1:1 (1 cement : 1 fine sand)	cum	6,295.20
3.2	Cement mortar 1:2 (1 cement : 2 fine sand).	cum	4,660.90
3.3	Cement mortar 1:3 (1 cement : 3 fine sand).	cum	3,844.80
3.4	Cement mortar 1:4 (1 cement : 4 fine sand).	cum	3,151.25
3.5	Cement mortar 1:5 (1 cement : 5 fine sand).	cum	2,777.85
3.6	Cement mortar 1:6 (1 cement : 6 fine sand).	cum	2,457.75
3.7	Cement mortar 1:2 (1 cement : 2 coarse sand).	cum	5,107.40
3.8	Cement mortar 1:3 (1 cement : 3 coarse sand).	cum	4,347.70
3.9	Cement mortar 1:4 (1 cement : 4 coarse sand).	cum	3,654.15
3.10	Cement mortar 1:5 (1 cement : 5 coarse sand).	cum	3,280.75
3.11	Cement mortar 1:6 (1 cement : 6 coarse sand).	cum	2,960.65
3.12	Cement mortar 1:2 (1 cement : 2 stone dust).	cum	4,993.40
3.13	Cement mortar 1:2 (1 cement : 2 marble dust).	cum	4,993.40
3.14	Cement mortar 1:5 (1 cement : 5 marble dust).	cum	3,152.35
3.15	White cement mortar 1:2 (1 white cement : 2 marble dust).	cum	10,950.20
3.16	White cement mortar 1:3 (1 white cement : 3 marble dust).	cum	8,686.90
3.17	White cement mortar 1:5 (1 white cement : 5 marble dust).	cum	5,867.95
3.18	Mud mortar	cum	366.20
3.19	Mortar in lime , surkhi ( 50% red and 50% light yellow) and marble dust 1:1.5:0.5	cum	2,429.65

**SUB HEAD : 4.0**

**CONCRETE WORK**



## BASIC RATES (SH: 4.0 CONCRETE WORK)

Code No.	Description	Unit	Rate ₹
0002	Hire charges of Concrete Mixer 0.25 to 0.40 cum with Hopper	day	800.00
0011	Hire charges of Pump set of capacity 4000 litres/hour	day	550.00
0012	Vibrator (Needle type 40 mm)	day	325.00
0029	Carriage of concrete by transit mixer	km/cum	30.00
0101	Bhisti	day	328.00
0114	Beldar	day	297.00
0115	Coolie	day	297.00
0116	Fitter (grade 1)	day	393.00
0123	Mason (brick layer) 1 st class	day	393.00
0124	Mason (brick layer) 2nd class	day	361.00
0131	Painter	day	361.00
0155*	Mason (average)	day	377.00
0287	Brick Aggregate (Single size) : 40 mm nominal size	cum	510.00
0293	Stone Aggregate (Single size) : 40 mm nominal size	cum	1000.00
0295	Stone Aggregate (Single size) : 20 mm nominal size	cum	1200.00
0296	Stone Aggregate (Single size) : 12.5 mm nominal size	cum	1050.00
0297	Stone Aggregate (Single size) : 10 mm nominal size	cum	1050.00
0309	Paving bitumen of grade VG-10 of approved quality	tonne	40000.00
0367	Portland Cement	tonne	5240.00
0370	Coal (steam)	quintal	400.00
0771	Kerosene oil	litre	45.00
0982	Coarse sand (zone III)	cum	1120.00
0983	Fine sand (zone IV)	cum	650.00
1213	Water proofing materials	kilogram	32.00
1980	Fly ash	cum	7.75
2202	Carriage of stone aggregate below 40 mm nominal size	cum	106.64
2203	Carriage of coarse sand	cum	106.64
2206	Carriage of stone aggregate 40 mm nominal size and above	cum	115.92
2209	Carriage of cement	tonne	94.80
2211	Carriage of tar / bitumen	tonne	106.64

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
2260	Carriage of brick aggregate	cum	115.92
2261	Carriage of fine sand (1 part badarpur sand: 2 parts jamuna sand)	cum	106.64
2262	Carriage of flyash	cum	106.64
7319	Wall form panel 1250x500 mm	each	1050.00
7326	Corner angle 45x45x5 mm 1.50 m long	each	300.00
7327	100 mm channel shoulder 2.5 m long	each	1160.00
7328	Double clip ( bridge clip)	each	97.00
7329	Single clip	each	77.00
7330	M.S. tube 40 mm dia	metre	280.00
7331	Wall form panel 1250x450 mm	each	1040.00
7332	Corner angle 45x45x5 mm 2.50 m long	each	340.00
7333	Column clamp 450x1070 mm	each	1220.00
7334	Prop 2 m ( 2-3.5 m)	each	830.00
8732	Synthetic ployster triangular fibre of length 12 mm, effective diameter 10-40 microns and specific gravity of 1.34 to 1.40	kg	365.00
9999	Sundries	L.S.	1.70

## 4.0 CONCRETE WORK

Code No.	Description	Unit	Rate ₹
<b>CEMENT CONCRETE (CAST -IN- SITU)</b>			
4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :		
4.1.1	1:1:2 (1 Cement : 1 coarse sand : 2 graded stone aggregate 20 mm nominal size)	cum	6,631.20
4.1.2	1:1½:3 (1 Cement: 1½ coarse sand: 3 graded stone aggregate 20 mm nominal size)	cum	5,317.75
4.1.3	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	4,921.70
4.1.4	1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size)	cum	4,763.45
4.1.5	1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	cum	4,408.55
4.1.6	1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size)	cum	4,230.50
4.1.7	1:3:6 (1 Cement : 3 fine sand : 6 graded stone aggregate 40 mm nominal size)	cum	3,973.90
4.1.8	1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size)	cum	3,920.65
4.1.9	1:4:8 (1 cement : 4 fine sand : 8 graded stone aggregate 40 mm nominal size)	cum	3,664.10
4.1.10	1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size)	cum	3,672.80
4.1.11	1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size)	cum	3,407.25
4.1.12	1:2:3½:9 (1 ordinary portland cement : 2 Fly ash : 3½ coarse sand : 9 graded stone aggregate 40 mm nominal size)	cum	3,807.65
4.1.13	1:2½:4:11 (1 ordinary portland cement : 2½ fly ash : 4 coarse sand : 11 graded stone aggregate 40 mm nominal size)	cum	3,517.05
4.2	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor, etc., up to floor five level, excluding the cost of centering, shuttering and finishing :		
4.2.1	1:1:2 (1 cement : 1 coarse sand : 2 graded stone aggregate 20 mm nominal size)	cum	7,531.60
4.2.2	1:1½:3 (1 cement:1½ coarse sand:3 graded stone aggregate 20 mm nominal size)	cum	6,218.20
4.2.3	1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	5,822.15

Code No.	Description	Unit	Rate ₹
4.2.4	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size)	cum	5,663.85
4.2.5	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	cum	5,309.00
4.2.6	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size)	cum	5,130.90
4.2.7	1:3:6 (1 cement : 3 fine sand : 6 graded stone aggregate 40 mm nominal size)	cum	4,874.35
4.2.8	1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size)	cum	4,567.90
4.3	Centering and shuttering including strutting, propping etc. and removal of form work for :		
4.3.1	Foundations, footings, bases for columns	sqm	186.40
4.3.2	Retaining walls, return walls, walls (any thickness) including attached pilasters, buttresses, plinth and string courses fillets, kerbs and steps etc.	sqm	334.50
4.3.3	Columns, piers, abutments, pillars, posts and struts	sqm	423.00
4.4	Providing and laying cement concrete in kerbs, steps and the like at or near ground level excluding the cost of centering, shuttering and finishing.		
4.4.1	1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	4,921.70
4.4.2	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	cum	4,408.55
<b>CEMENT CONCRETE (PRE-CAST)</b>			
4.5	Providing and fixing up to floor five level precast cement concrete string or lacing courses, copings, bed plates, anchor blocks, plain window sills, shelves, louvers, steps, stair cases, etc., including hoisting and setting in position with cement mortar 1:3 (1 Cement : 3 coarse sand), cost of required centering complete.		
4.5.1	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	cum	6,064.80
4.5.2	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	5,668.70
4.5.3	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	cum	5,155.60
4.6	Providing and fixing at or near ground level precast cement concrete in kerbs, edgings etc. as per approved pattern and setting in position with cement mortar 1:3 (1 Cement : 3 coarse sand), including the cost of required centering, shuttering complete.		
4.6.1	1:2:4 ( 1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size)	cum	5,160.60
4.7	Providing and fixing up to floor five level precast cement concrete solid block, including hoisting and setting in position with cement mortar 1:3		

Code No.	Description	Unit	Rate ₹
	(1 cement : 3 coarse sand), cost of required centering, shuttering complete :		
4.7.1	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	8,406.55
4.7.2	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	cum	7,893.40
4.8	Providing and fixing up to floor five level precast cement concrete hollow block, including hoisting and setting in position with cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centering, shuttering complete.		
4.8.1	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	6,476.40
4.8.2	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	cum	6,240.40
4.9	Precasting and placing in position 125 mm dia Bollards 600 mm high of required shape, including providing M.S. Pipe Sleeve 50 mm dia 300 mm long in the Bollard and M.S. Pipes 40 mm dia and 450 mm long with 150x150x6mm M.S. plate welded at bottom and embedded 150 mm in cement concrete 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size), including necessary excavation of size 250x250x450 mm deep for the same in bitumen/concrete pavement at specified spacing.	each	519.30
<b>DAMP- PROOF COURSE</b>			
4.10	Providing and laying damp-proof course 40 mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominal size).	sqm	220.60
4.11	Providing and laying damp-proof course 50 mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	sqm	283.80
4.12	Extra for providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacturer's specification.	per 50 kg cement	44.36
4.13	Applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7 kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	sqm	108.75
<b>MISCELLANEOUS</b>			
4.14	Extra for concrete work in superstructure above floor V level for each four floors or part thereof.	cum	517.45
4.15	Extra for laying concrete in or under water and/or liquid mud including cost of pumping or bailing out water and removing slush etc. complete.	cum per meter depth	385.60
	<b>Note for item No. 4.15 :-</b> The quantity will be calculated by multiplying the depth measured from the sub-soil water level up to centre of gravity of concrete under sub-soil water level with quantity of concrete in cum executed under sub-soil water. The depth of centre of gravity shall be reckoned correct to 0.1m. 0.05m or more shall be taken as 0.1m and less than 0.05m ignored.		

Code No.	Description	Unit	Rate ₹
4.16	Extra for laying concrete in or under foul positions.	cum	155.50
4.17	Making plinth protection 50 mm thick of cement concrete 1:3:6 (1 cement: 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including finishing the top smooth.	sqm	378.95
4.18	Extra for addition of synthetic Polyester triangular fibre of length 12mm, effective diameter 10-40 microns and specific gravity of 1.34 to 1.40 in cement concrete/RCC/Flooring/water retaining structures by using 125gms of synthetic Polyester triangular fibre for 50 Kg cement used as per directions of Engineer-in-Charge.	Per Bag of 50 Kg of cement	53.00
4.19	Providing and laying in position ready mixed plain cement concrete, using fly ash and cement content as per approved design mix and manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for plain cement concrete work, including pumping of R.M.C. from transit mixer to site of laying and curing, excluding the cost of centering, shuttering and finishing, including cost of curing, admixtures in recommended proportions as per IS : 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge.  Note : (1) Excess/less cement used than specified in this item is payable/ recoverable separately.  (2) Fly ash conforming to grade I of IS 3812 (Part-1) only be used as part replacement of OPC as per IS : 456. Uniform blending with cement is to be ensured in accordance with clauses 5.2 and 5.2.1 of IS: 456 -2000 in the items of BMC and RMC.		
	4.19.1 All works upto plinth level :		
	4.19.1.1 M-15 grade plain cement concrete (cement content considered @ 240 kg/cum)	cum	5,390.40
	4.19.1.2 M-10 grade plain cement concrete (cement content considered @ 220 kg/cum)	cum	5,262.10
	4.19.2 All works above plinth and upto floor V level :		
	4.19.2.1 M-15 grade plain cement concrete (cement content considered @ 240 kg. /cum)	cum	5,864.70
	4.19.2.2 M-10 grade plain cement concrete (cement content considered @ 220 kg/cum)	cum	5,736.40
	Note :- The above item shall be used judiciously where specified quality of Fly Ash is available for mixing in concrete. Also, the guidelines issued by CDO, CPWD, vide circular no. CDO/SE(RR)/Fly Ash (Main)/102 dated 9th April 2009 shall be followed in such cases.		
4.20	Providing and laying in position ready mixed plain cement concrete, with cement content as per approved design mix and manufactured in fully automatic batching plant and transported to site of work in transit		

Code No.	Description	Unit	Rate ₹
	<p>mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for plain cement concrete work, including pumping of R.M.C. from transit mixer to site of laying and curing, excluding the cost of centering, shuttering and finishing, including cost of curing, admixtures in recommended proportions as per IS : 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge.</p> <p>Note : 1) Excess/less cement used than specified in this item is payable/ recoverable separately.</p>		
4.20.1	All works upto plinth level :		
4.20.1.1	M-15 grade plain cement concrete (cement content considered @ 240 kg/cum)	cum	5,505.00
4.20.1.2	M-10 grade plain cement concrete (cement content considered @ 220 kg/cum)	cum	5,850.95
4.20.2	All works above plinth and upto floor V level :		
4.20.2.1	M-15 grade plain cement concrete. (cement content considered @ 240 kg. /cum)	cum	5,979.30
4.20.2.2	M-10 grade plain cement concrete (cement content considered @ 220 kg/cum)	cum	5,850.95



**SUB HEAD : 5.0**

**REINFORCED CEMENT  
CONCRETE**



## BASIC RATES (SH: 5.0 REINFORCED CEMENT CONCRETE)

Code No.	Description	Unit	Rate ₹
0002	Hire charges of Concrete Mixer 0.25 to 0.40 cum with Hopper	day	800.00
0004	Production cost of concrete by batch mix plant	cum	350.00
0009	Pumping charges of concrete including Hire charges of pump, piping work & accessories etc.	cum	150.00
0011	Hire charges of Pump set of capacity 4000 litres/hour	day	550.00
0012	Vibrator (Needle type 40 mm)	day	325.00
0025	Hire and running charges of light crane	day	2200.00
0029	Carriage of concrete by transit mixer	km/cum	30.00
0052	Front end loader 1 cum bucket capacity (incl POL)	hour	800.00
0066	Batching and Mixing Plant @ 75 cum per hour	hour	2500.00
0070	Generator 100 KVA/125 KVA	hour	700.00
0082	Excavation of Diaphragm wall by Mechanical Grab	sqm	1500.00
0101	Bhisti	day	328.00
0102	Blacksmith 1 st class	day	393.00
0103	Blacksmith 2nd class	day	361.00
0112	Carpenter 2nd class	day	361.00
0114	Beldar	day	297.00
0115	Coolie	day	297.00
0116	Fitter (grade 1)	day	393.00
0123	Mason (brick layer) 1 st class	day	393.00
0124	Mason (brick layer) 2nd class	day	361.00
0126	Mason (for ornamental stone work) 1 st class	day	393.00
0128	Mate	day	328.00
0155*	Mason (average)	day	377.00
0236	Non - Asbestos multi purpose fibre (high impact poly propelene reinforced) cement board 6 mm thick	sqm	200.00
0295	Stone Aggregate (Single size) : 20 mm nominal size	cum	1200.00
0297	Stone Aggregate (Single size) : 10 mm nominal size	cum	1050.00
0302	Safeda ballies 125 mm diameter	metre	42.00
0309	Paving bitumen of grade VG-10 of approved quality	tonne	40000.00
0313	Blown type petroleum bitumen of penetration 85/25 of approved quality	tonne	37000.00
0314	Bitumen hot sealing compound : grade A	kilogram	26.00
0316	Bitumen solution primer of approved quality	litre	45.00
0339	Flame retardant face insulating, Impregnated fibre board 12 mm thick	sqm	350.00
0367	Portland Cement	tonne	5240.00
0370	Coal (steam)	quintal	400.00

Code No.	Description	Unit	Rate ₹
0596	Bright finished or black enameled mild steel butt hinges 75x47x1.70 mm	10 Nos	60.00
0639	Bright finished or black enameled mild steel screws 25 mm	100 Nos	35.00
0768	Cement Concrete Jali 50 mm thick	sqm	210.00
0769	Cement Concrete Jali 40 mm thick	sqm	180.00
0770	Cement Concrete Jali 25 mm thick	sqm	150.00
0982	Coarse sand (zone III)	cum	1120.00
0983	Fine sand (zone IV)	cum	650.00
0992	Galvanised steel plain sheets	quintal	5200.00
1004	Average rate of Mild steel round bars for reinforcement	quintal	4500.00
1005	Twisted steel/ deformed bars	quintal	4800.00
1015	Mild steel expanded metal 20x60 mm strands	sqm	290.00
1021	Hard drawn steel wire fabric	sqm	430.00
1034	Bolts and nuts up to 300 mm in length	quintal	5600.00
1197	Second class kail wood in scantling	10 cudm	260.00
1198	Second class kail wood in planks	10 cudm	260.00
1224	Hard drawn steel wire	quintal	5500.00
1225	Mild steel flat strap fitting	quintal	4450.00
2200	Carriage of steam coal	tonne	121.88
2202	Carriage of stone aggregate below 40 mm nominal size	cum	106.64
2203	Carriage of coarse sand	cum	106.64
2204	Carriage of timber	cum	121.88
2205	Carriage of steel	tonne	94.80
2209	Carriage of cement	tonne	94.80
2211	Carriage of tar / bitumen	tonne	106.64
2261	Carriage of fine sand (1 part badarpur sand: 2 parts jamuna sand)	cum	106.64
2273	Carriage of A.C.sheet and accessories	tonne	94.80
2302	Carriage of G.I.sheet and accessories	tonne	94.80
2391	Strips-Aluminium fluted 3.15 mm thick and 150 mm wide	metre	228.00
2392	Strips Aluminium fluted 3.15 mm thick and 200 mm wide	metre	323.00
2393	1 mm thick Stainless Steel Cover plate grade 304	kg	275.00
2394	Coupler 16 mm dia	each	67.00
2395	Coupler 20 mm dia	each	88.00
2396	Coupler 25 mm dia	each	130.00
2397	Coupler 28 mm dia	each	192.00
2398	Coupler 32 mm dia	each	231.00
2399	Complete Roof Joint of 100 mm	metre	4500.00
2400	Complete Roof Joint of 150 mm	metre	4800.00

Code No.	Description	Unit	Rate ₹
2401	Complete Roof Joint of 200 mm	metre	5000.00
2402	Epoxy adhesive	kg	150.00
2403	Floor Joint of 100 mm	metre	4500.00
2404	Floor Joint of 150 mm	metre	5000.00
2405	Floor Joint of 200 mm	metre	5400.00
2409	Wall Joint of 100 mm	metre	3400.00
2410	Wall Joint of 150 mm	metre	3700.00
2411	Wall Joint of 200 mm	metre	4000.00
2447	Hollock ballies 125 mm diameter	metre	35.00
7178	Chemical ASTM C-type I	kg	110.00
7183	Bentonite	tonne	3100.00
7281	Chemical ASTM C-type II	kg	170.00
7318	Plasticizer / super plasticizer	kilogram	38.00
7319	Wall form panel 1250x500 mm	each	1050.00
7320	Tie bolt 12 mm dia 100 mm length	each	50.00
7321	Tie bolt 12 mm dia 150 mm length	each	60.00
7322	Tie bolt 20 mm dia 150 mm length	each	75.00
7323	Tie bolt 20 mm dia 225 mm length	each	90.00
7324	Spring coil 12 mm	each	16.00
7325	Plastic cone 12 mm dia	each	18.00
7326	Corner angle 45x45x5 mm 1.50 m long	each	300.00
7327	100 mm channel shoulder 2.5 m long	each	1160.00
7328	Double clip ( bridge clip)	each	97.00
7329	Single clip	each	77.00
7330	M.S. tube 40 mm dia	metre	280.00
7331	Wall form panel 1250x450 mm	each	1040.00
7332	Corner angle 45x45x5 mm 2.50 m long	each	340.00
7333	Column clamp 450x1070 mm	each	1220.00
7334	Prop 2 m ( 2-3.5 m)	each	830.00
7342	Adjustable span ESO+SI (2.35-3.40)	each	1900.00
7343	Adjustable telescopic prop 3 m (2.02-3.75 m)	each	1200.00
7344	Beam clamp 300-380 mm (450-1070 mm)	each set	422.00
7345	Prop 4 m	each	1170.00
7346	Double coupler	each	55.00
8659	Water proof ply 12 mm thick	sqm	650.00
8953	Micro Silica	kg	32.00
8954	Stop end tubes for diaphragm wall 600 mm dia.	sqm	4.50
8955	Driving end tubes for diaphragm wall 600 mm dia.	sqm	72.00
9999	Sundries	L.S.	1.70

## 5.0 REINFORCED CEMENT CONCRETE

Code No.	Description	Unit	Rate ₹
<b>CAST-IN-SITU</b>			
5.1	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :		
5.1.1	1:1:2 (1 cement : 1 coarse sand : 2 graded stone aggregate 20 mm nominal size)	cum	6,865.65
5.1.2	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	cum	5,552.25
5.1.3	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	5,156.20
5.2	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement :		
5.2.1	1:1:2 (1 cement : 1 coarse sand : 2 graded stone aggregate 20 mm nominal size)	cum	7,632.65
5.2.2	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	cum	6,319.20
5.2.3	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	5,923.15
5.3	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement, with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	6,107.15
5.4	Providing and laying up to floor five level reinforced cement concrete in kerbs, steps and the like, excluding the cost of centering, shuttering, finishing and reinforcement, with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	5,731.20
5.5	Reinforced cement concrete work in arches, archribs, domes, vaults, shells, folded plate and roofs having slope more than 15° up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement, with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	6,350.40
5.6	Reinforced cement concrete work in chimneys, shafts, up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement, with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	6,012.85
5.7	Reinforced cement concrete work in well-steining, excluding the cost of centering, shuttering, finishing and reinforcement, with 1:2:4 (1 cement: 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	4,949.30

Code No.	Description	Unit	Rate ₹
5.8	Reinforced cement concrete work in vertical and horizontal fins individually or forming box louvers, facias and eaves boards up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement, with 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size).	cum	5,973.75
	<b>FORM WORK</b>		
5.9	Centering and shuttering including strutting, propping etc. and removal of form for :		
5.9.1	Foundations, footings, bases of columns, etc. for mass concrete	sqm	186.40
5.9.2	Walls (any thickness) including attached pilasters, buttersesses, plinth and string courses etc.	sqm	334.50
5.9.3	Suspended floors, roofs, landings, balconies and access platform	sqm	371.80
5.9.4	Shelves (Cast in situ)	sqm	371.80
5.9.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers	sqm	309.80
5.9.6	Columns, Pillars, Piers, Abutments, Posts and Struts	sqm	423.00
5.9.7	Stairs, (excluding landings) except spiral-staircases	sqm	375.65
5.9.8	Spiral staircases (including landing)	sqm	339.85
5.9.9	Arches, domes, vaults up to 6 m span	sqm	1,006.65
5.9.10	Extra for arches, domes, vaults exceeding 6 m span	sqm	440.40
5.9.11	Chimneys and shafts	sqm	334.50
5.9.12	Well steining	sqm	214.55
5.9.13	Vertical and horizontal fins individually or forming box louvers band, facias and eaves boards	sqm	551.45
5.9.14	Extra for shuttering in circular work (20% of respective centering and shuttering items)	sqm	20.00%
5.9.15	Small lintels not exceeding 1.5 m clear span, moulding as in cornices, window sills, string courses, bands, copings, bed plates, anchor blocks and the like	sqm	186.40
5.9.16	Edges of slabs and breaks in floors and walls		
5.9.16.1	Under 20 cm wide	metre	111.70
5.9.16.2	Above 20 cm wide	sqm	490.40
5.9.17	Cornices and mouldings	sqm	536.20
5.9.18	Small surfaces such as cantilever ends, brackets and ends of steps, caps and bases to pilasters and columns and the like	sqm	457.85
5.9.19	Weather shade, Chajjas, corbels etc., including edges	sqm	468.20
5.9.20	Suspended floors, roofs, landings, balconies and access platform. with water proof ply 12 mm thick	sqm	462.85

Code No.	Description	Unit	Rate ₹
5.9.21	Lintels, beams, plinth beams, girders, bressumers and cantilevers. with water proof ply 12 mm thick	sqm	400.00
5.10	Providing and fixing tie bolt, spring coil and plastic cone in wall shuttering complete as per the direction of Engineer-in-charge.		
5.10.1	12 mm dia. & 100 mm length	each set	140.25
5.10.2	12 mm dia. & 150 mm length	each set	151.90
5.10.3	20 mm dia. & 150 mm length	each set	169.30
5.10.4	20 mm dia. & 225 mm length	each set	186.75
5.11	Extra for additional height in centering, shuttering where ever required with adequate bracing, propping etc., including cost of de-shuttering and decentering at all levels, over a height of 3.5 m, for every additional height of 1 metre or part thereof (Plan area to be measured).		
5.11.1	Suspended floors, roofs, landing, beams and balconies (Plan area to be measured)	sqm	145.60
<b>PRE - CAST R.C.C.</b>			
5.12	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete work in string courses, bands, copings, bed plates, anchor blocks, plain window sills and the like, including the cost of required centering, shuttering but excluding cost of reinforcement, with 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size).	cum	5,829.65
5.13	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in small lintels not exceeding 1.5 m clear span up to floor five level, including the cost of required centering, shuttering but excluding the cost of reinforcement, with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	8,042.40
5.14	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in mouldings as in cornices, windows sills etc., including setting in cement mortar 1:3 (1 cement : 3 coarse sand) cost of required centering, shuttering but excluding the cost of reinforcement, with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	9,044.00
5.15	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in lintels, beams and bressumers, including setting in cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centering and shuttering but excluding the cost of reinforcement, with 1:2:4 (1 cement: 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	7,484.20
5.16	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in shelves, including setting in cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centering, shuttering and finishing with neat cement punning on exposed surfaces but excluding the cost of reinforcement, with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominal size).	cum	11,104.30
5.17	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in vertical & horizontal fins, individually or forming box louvers, setting in cement mortar 1:2 (1 cement : 2 coarse sand), including the cost of required centering, shuttering but excluding the cost of reinforcement, with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	6,519.70

Code No.	Description	Unit	Rate ₹
5.18	Providing precast cement concrete Jali 1:2:4 (1 cement : 2 coarse sand: 4 graded stone aggregate 6 mm nominal size), reinforced with 1.6 mm dia mild steel wire, including centering and shuttering, roughening cleaning, fixing and finishing in cement mortar 1:3 (1 cement: 3 fine sand) etc. complete, excluding plastering of the jambs, sills and soffits.		
5.18.1	50 mm thick	sqm	683.80
5.18.2	40 mm thick	sqm	598.35
5.18.3	25 mm thick	sqm	563.45
<b>ENCASING ROLLED STEEL SECTION</b>			
5.19	Encasing rolled steel sections, in beams and columns, with cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 12.5 mm nominal size), including centering and shuttering complete but excluding cost of reinforcement.	cum	8,171.55
5.20	Encasing rolled steel section in grillages with cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 12.5 mm nominal size), including centering and shuttering but excluding cost of expanded metal and hangers.	cum	5,436.70
5.21	Extra for providing and fixing expanded metal mesh of size 20x60 mm and strands 3.25 mm wide 1.6 mm thick weighing 3.64 kg per sqm for encasing of rolled steel sections in beams, columns and grillages, excluding cost of hangers.	sqm	379.05
<b>STEEL REINFORCEMENT</b>			
5.22	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.		
5.22.1	Mild steel and Medium Tensile steel bars	kilogram	64.05
5.22.2	Hard drawn steel wire	kilogram	75.75
5.22.3	Cold twisted bars	kilogram	66.50
5.22.4	Hot rolled deformed bars	kilogram	66.50
5.22.5	Hard drawn steel wire fabric	kilogram	74.55
5.22.6	Thermo-Mechanically Treated bars	kilogram	66.50
5.22A	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.		
5.22A.1	Mild steel and Medium Tensile steel bars	kilogram	64.05
5.22A.2	Hard drawn steel wire	kilogram	75.75
5.22A.3	Cold twisted bars	kilogram	66.50
5.22A.4	Hot rolled deformed bars	kilogram	66.50
5.22A.5	Hard drawn steel wire fabric	kilogram	74.55
5.22A.6	Thermo-Mechanically Treated bars	kilogram	66.50

Code No.	Description	Unit	Rate ₹
<b>MISCELLANEOUS</b>			
5.23	Smooth finishing of the exposed surface of R.C.C. work with 6 mm thick cement mortar 1:3 (1 Cement : 3 fine sand).	sqm	120.35
5.24	Extra for rendering smooth the top of suspended floors, landings and staircases (treads and risers) with cement mortar 1:2 (1 cement : 2 coarse sand), including a floating coat of neat cement and protecting the surface with a layer of 7.5 cm of earth laid over 15 mm of fine sand in case of suspended floor and bricks laid in mud mortar in case of landings and steps, including subsequent removal and cleaning of the same.	sqm	79.60
5.25	Providing and fixing in position copper plate as per design for expansion joints.	kg	324.70
5.26	Providing and filling in position, blown bitumen in expansion joints.	per cm depth per cm width per 100 m	532.05
5.27	Providing and filling in position bitumen mix filler of Proportion 80 kg of hot bitumen, 1 kg. of cement and 0.25 cubicmetre of coarse sand for expansion joints.	per cm depth per cm width per 100 m	186.10
5.28	Providing and fixing in position 12 mm thick bitumen impregnated fibre board conforming to IS: 1838, including cost of primer, sealing compound in expansion joints.	per cm depth per 100 m	436.30
5.29	Providing and fixing sheet covering over expansion joints with iron screws as per design.		
5.29.1	Non-asbestos fibre cement board 6 mm thick as per IS: 14862.		
5.29.1.1	150mm wide	metre	114.05
5.29.1.2	200mm wide	metre	153.25
5.29.2	Aluminium fluted strips 3.15 mm thick.		
5.29.2.1	150 mm wide	metre	324.10
5.29.2.2	200 mm wide	metre	452.80
5.30	Add for plaster drip course/ groove in plastered surface or moulding to R.C.C. projections.	metre	27.85
5.31	Extra for laying reinforced cement concrete in or under water and/ or liquid mud, including cost of pumping or bailing out water and removing slush etc., complete.	cum	385.60
	<b>Note For Item No. 5.31:-</b> The quantity will be calculated by multiplying the depth measured from the subsoil water level up to the centre of gravity of the R.C.C. under subsoil water with the quantity of R.C.C. in cubic metre executed under subsoil water. The depth of centre of gravity shall be reckoned correct to 0.1 m. 0.05 m or more shall be taken as 0.1 m and less than 0.05 m ignored. No extra payment shall be made for placing reinforcement or centering & shuttering under sub - soil water conditions.		
5.32	Extra for laying reinforced cement concrete in or under foul positions.	cum	155.50

Code No.	Description	Unit	Rate ₹
<b>DESIGN MIX CONCRETE</b>			
5.33	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge.  (Note :- Cement content considered in this item is @ 330 kg/cum. Excess/less cement used as per design mix is payable/recoverable separately).		
5.33.1	All works upto plinth level	cum	5,704.45
5.33.2	All works above plinth level upto floor V level	cum	6,353.00
5.34	Extra for providing richer mixes at all floor levels.  Note:- Excess/less cement over the specified cement content used is payable /recoverable separately.		
5.34.1	Providing M-30 grade concrete instead of M-25 grade BMC/RMC. (Note:- Cement content considered in M-30 is @ 340 kg/cum)	cum	64.15
5.34.2	Providing M-35 grade concrete instead of M-25 grade BMC/RMC. (Note : Cement content considered in M-35 is @ 350 kg/cum)	cum	128.35
5.34.3	Providing M-40 grade concrete instead of M-25 grade BMC/RMC.(Note : Cement content considered in M-40 is @ 360 kg/cum)	cum	192.50
5.35	Add for using extra cement in the items of design mix over and above the specified cement content therein.	quintal	619.65
5.36	Providing and placing in position precast reinforced cement concrete waffle units, square or rectangular, as per design and shape for floors and roofs in 1:1½:3 (1 Cement : 1½ coarse sand : 3 graded stone aggregate 10 mm nominal size), including flush or deep ruled pointing at joints in Cement mortar 1:2 (1 Cement : 2 Fine sand), making necessary holes of required sizes for carrying through service lines etc., providing steel hooks for lifting etc, form work in precasting, handling, hoisting, centering and erection complete for all floor levels but excluding the cost of reinforcement.	cum	15,894.25
5.37	Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using cement content as per approved design mix, manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work, including pumping of R.M.C. from transit mixer to site of laying , excluding the cost of centering, shuttering finishing and reinforcement, including cost of admixtures in recommended proportions as per IS : 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge.		

Code No.	Description	Unit	Rate ₹
	(Note :- Cement content considered in this item is @ 330 kg/cum. Excess/less cement used as per design mix is payable/recoverable separately).		
	5.37.1 All works upto plinth level	cum	6,052.90
	5.37.2 All works above plinth level upto floor V level	cum	6,701.45
5.38	Extra for R.C.C./ B.M.C/ R.M.C. work above floor V level for each four floors or part thereof.	cum	174.20
5.40	Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using fly ash and cement content as per approved design mix, and manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work, including pumping of R.M.C. from transit mixer to site of laying, excluding the cost of centering, shuttering, finishing and reinforcement, including cost of admixtures in recommended proportions as per IS : 9103 to accelerate / retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge.		
	NOTE- (1) Cement content considered in this item is @ 330 kg/cum. Excess/ less cement used as per design mix is payable/ recoverable separately.		
	(2) Fly ash conforming to grade I of IS 3812 (Part-1) only be used as part replacement of OPC as per IS : 456. Uniform blending with cement to be ensured in accordance with clauses 5.2 and 5.2.1 of IS:456 -2000 in the items of BMC and RMC.		
	5.40.1 All works up to Plinth level.	cum	5,967.95
	5.40.2 All works above plinth & up to floor V level.	cum	6,616.50
	Note :- The above item shall be used judiciously where specified quality of Fly Ash is available for mixing in concrete. Also, the guidelines issued by CDO, CPWD, vide circular no. CDO/SE(RR)/Fly Ash (Main)/102 dated 9th April 2009 shall be followed in such cases.		
5.41	Supplying and applying pre tested and approved water based concrete curing compound to concrete/ masonry surface, all as per manufacturer's specification and direction of Engineer-in-charge.		
	5.41.1 Non pigmented wet curing compound	sqm	99.85
	5.41.2 Pigmented wet curing compound	sqm	113.80
5.42	Providing and fixing tapered / parallel threaded couplers conforming to IS code on "Reinforcement Couplers for Mechanical Splices of Bars for Concrete Reinforcement - Specification", to reinforcement bars including threading, enlargement at connection by forging, protecting the prepared reinforcement bars and related operations as required to complete the works per direction of Engineer-in-Charge. (The length of the bars in		

Code No.	Description	Unit	Rate ₹
	which coupler is to be provided should not be less than 4 metre, no deduction for labour and binding wire saved for not providing lap length shall be made).		
	5.42.1 Coupler for 16 mm diameter reinforcement bar	each	120.35
	5.42.2 Coupler for 20 mm diameter reinforcement bar	each	163.55
	5.42.3 Coupler for 25 mm diameter reinforcement bar	each	226.60
	5.42.4 Coupler for 28 mm diameter reinforcement bar	each	312.65
	5.42.5 Coupler for 32 mm diameter reinforcement bar	each	363.20
5.43	Providing and fixing in position Stainless steel Grade 304 plate-1.0 mm thick as per design for expansion joints.		
	5.43.1 200 mm wide.	metre	571.50
	5.43.2 300 mm wide.	metre	827.00
5.44	Providing and fixing of expansion joint system related with floor location as per drawings and direction of Engineer-In-Charge. The joints system will be of extruded aluminum base members, self aligning / self centering arrangement and support plates etc. as per ASTM B221-02. The system shall be such that it provides floor to floor /floor to wall expansion control system for various vertical location in load application areas that accommodates multi directional seismic movement without stress to it's components. System shall consist of metal profiles with a universal aluminum 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 by utilizing manufacturer's pre-engineered self-centering arrangement that freely rotates / moves in all directions. The Self – centering arrangement shall exhibit circular sphere ends that lock and slide inside the corresponding aluminum extrusion cavity to allow freedom of movement and flexure in all directions including vertical displacement. Provision of Moisture Barrier Membrane in the Joint System to have watertight joint is mandatory requirement all as per the manufactures design and as approved by Engineer -in-Charge . (Material shall confirm to ASTM 6063.)		
	5.44.1 Floor Joint of 100 mm gap	metre	6,334.05
	5.44.2 Floor Joint of 150 mm gap	metre	6,958.35
	5.44.3 Floor Joint of 200 mm gap	metre	7,466.50
5.45	Providing and fixing of expansion joint system related with wall joint (internal/external) location as per drawings and direction of Engineer-In-Charge. The joints shall be of extruded aluminum base members, self aligning / centering arrangement and support plates as per ASTM B221-02. The material shall be such that it provides an Expansion Joints System suitable for vertical wall to wall/ wall to corner application, both new and existing construction in office Buildings & complexes with no slipping down tendency amongst the components of the Joint System. The Joint System shall utilize light weight aluminum profiles exhibiting		

Code No.	Description	Unit	Rate ₹
	minimal exposed aluminum surfaces mechanically snap locking the multicellular to facilitate movement. (Material shall confirm to ASTM 6063.)		
	5.45.1 Wall Joint of 100 mm gap	metre	5,056.40
	5.45.2 Wall Joint of 150 mm gap	metre	5,448.40
	5.45.3 Wall Joint of 200 mm gap	metre	5,840.40
5.46	Providing and fixing of expansion joint system of approved make and manufactures for various roof locations as per approved drawings and direction of Engineer-In-Charge. The joints shall be of extruded aluminum base members with, self aligning and self centering arrangement support plates asper ASTM B221-02. The system shall be such that it provides watertight roof to roof/roof to corner joint cover expansion control system that is capable of accommodating multidirectional seismic movement without stress to its components. System shall consist of metal profile that incorporates a universal aluminum base member designed to accommodate various project conditions and roof treatments. The cover plate shall be designed of width and thickness required to satisfy movement and loading requirements and secured to base members by utilizing manufacturer's pre-engineered self-centering arrangement that freely rotates / moves in all directions. The Self centering arrangement shall exhibit circular sphere ends that lock and slide inside the corresponding aluminum extrusion cavity to allow freedom of movement and flexure in all directions including vertical displacement. The Joint System shall resists damage or deterioration from the impact of falling ice, exposure to UV, airborne contaminants and occasional foot traffic from maintenance personnel. Provision of Moisture Barrier Membrane in the Joint System to have water tight joint is mandatory requirement. Material shall confirm to ASTM 6063.		
	5.46.1 Roof Joint of 100 mm gap	metre	6,334.05
	5.46.2 Roof Joint of 150 mm gap	metre	6,726.05
	5.46.3 Roof Joint of 200 mm gap	metre	7,001.00
5.47	Providing and fixing in position factory made precast RCC M-40 doors and windows frames having excellent smooth finish as per IS: 6523 with reinforcement of 3 Nos, 6 mm dia main bars tied with 3 mm M.S stirrups placed @ 200 mm C/C and 6 numbers high strength polymer blocks of required size for fixing hinges including providing 6 no specially designed M.S. galvanised sleeves for accomodating 6 mm dia fully threaded bolts for fixing hold fast on vertical members, providing suitable arrangement for recieving sliding door bolts and tower bolt etc all complete, as per the direction of Engineer in charge. (The cost of hold fast and cc block of 1:3:6 mix is also included in the item.) The frame shall be measured in running meter correct to two places of decimal.		
	5.47.1 Door frame 125 mmx 60 mm	metre	412.80
	5.47.2 Door frame 100 mmx 60 mm	metre	378.55
	5.47.3 Door frame 85 mmx60 mm	metre	360.50

Code No.	Description	Unit	Rate ₹
5.48	<p>Providing and laying Reinforced cement concrete for construction of piers, abutments, portal frames, pier caps and bearing pedestals and seismic arresters over pier/ abutment caps at all locations with specified grade using Ordinary Portland Cement (conforming to strength requirement of IS:8112) including the cost of steel centering and shuttering etc. complete including testing of materials etc. for casting pier &amp; pier cap in one/two stage, necessary tools, plants, machinery and all related operations as required to complete the work as per drawings and Specifications with all leads, lifts and depths true to level and position but excluding the cost of providing reinforcement. Reinforcement shall be measured and paid separately .</p> <p>Note:- Cement content considered in this item is 480 Kg./ Cum. Excess/less cement used as per design mix is payable/ recoverable separately.</p>		
5.48.1	Reinforced Cement Concrete -M-50	cum	6113.45
5.48.2	Reinforced Cement Concrete -M-60	cum	7230.00
5.48.3	Extra for using M -50/ M60 Grade Self-compacting Reinforced Cement Concrete	cum	632.10
5.49	<p>Constructing cast-in situ RCC diaphragm wall by providing and laying machine batched, machine mixed, self compacting, ready mix reinforced cement concrete, tramie controlled, of M 30 grade using minimum 400 kg. cement per cum of concrete including providing and mixing required admixtures in recommended proportions as per IS : 9103, as approved by the Engineer-in-charge, for achieving 150- 200mm slump, for diaphragm wall having thickness as per approved structural design not exceeding 600 mm, in pannels of required depth and lengths as per approved drawing, including constructing necessary guide walls as required and as specified including boring in all kinds of soils and rocks, including working in or under water and / or liquid mud, in foul conditions and pumping or bailing out of water and removing slush, including disposal of earth/ rock / slush etc. for all leads and all lifts, including preparing, providing and re-circulating bentonite slurry in the trench as and when required for all depths, including agitating bentonite slurry during trenching etc., providing and fixing stop ends or form tubes, upto the required depth of diaphragm wall including extracting the same after casting, including chipping off the bentonite adulterated concrete or unsound concrete up to the cut off level for obtaining the sound concrete, dressing undulations on the exposed face of diaphragm wall after excavation by chipping / chiseling etc. including filling the depression/ cavities with sound concrete etc. complete and as directed by the Engineer-in-charge, including providing recess for bearing plates and fixing insert boxes for inclined rock anchors etc. complete as per the specifications and approved design and as directed by the Engineer-in- charge, .but excluding the cost of reinforcement and inserts. (rates include cost of all inputs of labour, material and T &amp; P, cost of handling, lifting &amp; placing in position the reinforcement cage in the trench, including the additional cost of welding the reinforcement bars etc. involved in the work and all</p>		

Code No.	Description	Unit	Rate ₹
	<p>other incidental expenditure for completing the work as directed by the Engineer-in-charge), However, the actual area of the diaphragm wall, correct to two places of decimal, from design bottom level to the design cut off level (including portion anchored in the rock upto the design bottom level) only shall be measured for payment.</p>		
	<p>Excess/less cement used for design mix including the extra cement required for under water concreting is payable / recoverable separately.</p>	cum	13,087.70

**SUB HEAD : 6.0**

**BRICK WORK**



### BASIC RATES (SH: 6.0 BRICK WORK)

Code No.	Description	Unit	Rate ₹
0011	Hire charges of Pump set of capacity 4000 litres/hour	day	550.00
0037	Mobile crane	day	6500.00
0101	Bhisti	day	328.00
0112	Carpenter 2nd class	day	361.00
0114	Beldar	day	297.00
0115	Coolie	day	297.00
0123	Mason (brick layer) 1 st class	day	393.00
0124	Mason (brick layer) 2nd class	day	361.00
0155*	Mason (average)	day	377.00
0322	Bitumen felt :Type 3 grade 1	sqm	60.00
1002	Mild steel round bar 12 mm dia and below	quintal	4500.00
1008	Flats up to 10 mm in thickness	quintal	4200.00
1034	Bolts and nuts up to 300 mm in length	quintal	5600.00
1197	Second class kail wood in scantling	10 cudm	260.00
1225	Mild steel flat strap fitting	quintal	4450.00
1235	Diesel oil	litre	48.63
1984	Common burnt clay F.P.S. bricks tile class designation 10	1000 Nos	4800.00
1986	Common burnt clay modular bricks class designation 12.5	1000 Nos	5250.00
2201	Carriage of bricks	1000 Nos	284.39
2204	Carriage of timber	cum	121.88
2205	Carriage of steel	tonne	94.80
2207	Carriage of brick tiles	1000 Nos	170.63
2208	Carriage of lime	cum	106.64
2302	Carriage of G.I.sheet and accessories	tonne	94.80
2602	Common burnt clay F.P.S. (non modular) bricks class designation 7.5	1000 Nos	3800.00
7008	F.P.S. (non modular) clay fly ash bricks class designation 7.5	1000 Nos	4600.00
7736	Extruded burnt flyash clay sewer bricks conforming to I.S 4885	1000 Nos	5400.00
7737	Fly ash lime bricks (FALG Bricks) conforming to I.S. 12894	1000 Nos	4700.00
7738	Calcium Silicate Bricks machine moulded conforming to I.S. 4139	1000 Nos	5000.00
7900	Modular common burnt clay bricks of class designation 7.5	1000 Nos	4500.00
7901	Machine moulded perforated common burnt clay FPS (non modular) bricks of class designation 12.5	1000 Nos	4600.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
7902	Machine moulded common burnt clay modular perforated bricks of class designation 12.5	1000 Nos	5350.00
7903	Machine moulded common burnt clay FPS (non modular) bricks of class designation 12.5	1000 Nos	5000.00
7904	Machine moulded common burnt clay tile bricks of class designation 12.5	1000 Nos	5250.00
8655	Autoclaved aerated cement (AAC) blocks	cum	2025.00
8656	Gypsum panel 666 X 500 X 100 mm size	sqm	480.00
8657	Bonding plaster for Gypsum panel	kg	55.00
9999	Sundries	L.S.	1.70

## 6.0 BRICK WORK

Code No.	Description	Unit	Rate ₹
6.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:		
6.1.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	4,847.85
6.1.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	4,646.50
6.2	Brick work with common burnt clay modular bricks of class designation 7.5 in foundation and plinth in:		
6.2.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	4,347.95
6.2.2	Cement Mortar 1:6 (1 cement : 6 coarse sand).	cum	4,170.75
6.3	Brick work with common burnt clay machine moulded perforated bricks of class designation 12.5 conforming to IS: 2222 in superstructure above plinth level up to floor five level in cement mortar 1:6 (1 cement : 6 coarse sand) :		
6.3.1	With F.P.S.(non modular) bricks	cum	5,210.35
6.3.2	With Modular bricks	cum	4,894.15
6.4	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in :		
6.4.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	5,526.50
6.4.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	5,325.10
6.5	Extra for brick work / AAC block masonry / Tile brick masonry in superstructure above floor V level, for each four floors or part thereof by mechanical means.	cum	263.30
6.6	Extra for forming cavity 5 cm to 7.5 cm wide in cavity walls with necessary weep and vent holes including use of cores and cost of providing and fixing bitumastic coated M .S. ties 300 mm long of 25x3 mm section at not less than 3 ties per sqm as per approved design.	sqm	94.10
6.7	Providing half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in cement mortar 1:3 (1 Cement : 3 coarse sand) in superstructure for closing cavity 5 to 7.5 cm wide in cavity wall complete with 10 cm / 11.4 cm wide bitumen felt type 3 grade 1.	metre	182.20
6.8	Brick work 7 cm thick with common burnt clay F.P.S. (non modular) brick of class designation 7.5 in cement mortar 1:3 (1 cement : 3 coarse sand) in superstructure above plinth level and upto floor five level.	sqm	497.45
6.9	Brick work in plain arches in superstructure above plinth level and upto floor five level including centering and shuttering complete for span up to 6 metres with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in cement mortar 1:3 (1 cement : 3 coarse sand).	cum	8,207.50
6.10	Brick work in gauged arches in superstructure above plinth level and upto floor five level in cement mortar 1:3 (1 cement : 3 coarse sand) including centering and shuttering complete, for span up to 6 meters with common burnt clay F.P.S. (non modular) bricks of class designation 7.5.	cum	9,727.55
6.11	Extra for additional cost of centering for arches exceeding 6m span including all shuttering, bolting, wedging and removal (Area of the soffit to be measured).	sqm	440.40

Code No.	Description	Unit	Rate ₹
<b>HALF BRICK MASONRY</b>			
6.12	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundations and plinth in :		
6.12.1	Cement mortar 1:3 (1 cement : 3 coarse sand)	sqm	597.25
6.12.2	cement mortar 1:4 (1 cement : 4 coarse sand)	sqm	574.70
6.13	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level.		
6.13.1	Cement mortar 1:3 (1 cement :3 coarse sand)	sqm	670.45
6.13.2	Cement mortar 1:4 (1 cement :4 coarse sand)	sqm	647.90
6.14	Extra for half brick masonry in superstructure, above floor V level for every four floors or part thereof by mechanical means.	sqm	23.35
6.15	Extra for providing and placing in position 2 Nos 6mm dia. M.S. bars at every third course of half brick masonry.	sqm	69.50
<b>BRICK TILE WORK</b>			
6.16	Tile brick masonry with common burnt clay F.P.S. (non modular) tile bricks of class designation 10 in foundation and plinth in:		
6.16.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	7,413.10
6.16.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	7,070.90
6.17	Tile brick masonry with common burnt clay machine moulded tile bricks of class designation 12.5 conforming to IS : 2690 (Part I) in foundation and plinth in cement mortar 1:6 (1 cement : 6 coarse sand).	cum	7,271.40
6.18	Tile brick masonry with common burnt clay F.P.S. (non modular) tile bricks of class designation 10 in superstructure above plinth level up to floor V level in cement mortar 1:6 (1 cement : 6 coarse sand).	cum	7,812.30
6.19	Deleted		
6.20	Tile brick masonry with common burnt clay F.P.S. (non modular) tile bricks of class designation 10 in plain arch work in superstructure above plinth and upto floor five level in cement mortar 1:4 (1 cement : 4 coarse sand) including centering and shuttering complete.	cum	10,549.60
6.21	Tile brick masonry with common burnt clay F.P.S. (non modular) tile bricks of class designation 10 in gauged arch work in superstructure above plinth and upto floor five level in cement mortar 1:4 (1 cement : 4 coarse sand) including centering and shuttering complete.	cum	11,983.55
6.22	Tile brick masonry work 5 cm thick with common burnt clay F.P.S. (non modular) tile bricks of class designation 10 in cement mortar 1:3 (1 cement : 3 coarse sand) in superstructure above plinth and upto floor five level.	sqm	499.25
<b>HONEY COMB WORK</b>			
6.23	Honey-comb brick work 10 / 11.4 cm thick with common burnt clay bricks of class designation 7.5 in super structure above plinth level upto floor V level with cement mortar 1:4 (1 cement : 4 coarse sand).	sqm	422.15
6.24	Extra for laying brick work in or under water and/or liquid mud including cost of pumping or bailing out water and removing slush etc. complete.	cum/mtr depth	385.60
<b>NOTE :-</b> The quantity will be calculated by multiplying the depth measured from sub - soil water level up to the centre of gravity of brick			

Code No.	Description	Unit	Rate ₹
	work under sub - water with the quantity of brick work in cum executed under the sub - soil water. The depth of centre of gravity shall be reckoned correct to 0.1 m. 0.05 m or more shall be taken as 0.1 m and less than 0.05 m ignored.		
6.25	Extra for laying brick work in or under foul position.	cum	155.50
	<b>EXPOSED BRICK WORK</b>		
6.26	Brick work with common burnt clay selected F.P.S. (non modular) bricks of class designation 7.5 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12 mm deep complete in cement mortar 1:6 (1 cement : 6 coarse sand)		
	6.26.1 From ground level upto plinth level	cum	4,733.70
	6.26.2 Above plinth level upto floor V level	cum	5,446.80
6.27	Brick work with common burnt clay modular bricks of class designation 7.5 in exposed brick work including making horizontal and vertical grooves 10mm wide 12 mm deep complete in cement mortar 1:6 (1 cement : 6 coarse sand).		
	6.27.1 From ground level upto plinth level	cum	4,197.70
	6.27.2 Above plinth level upto floor V level	cum	4,876.35
6.28	Brick work with common burnt clay machine moulded modular bricks of class designation 12.5 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12 mm deep complete in cement mortar 1:6 (1 cement : 6 coarse sand).		
	6.28.1 From ground level upto plinth level	cum	4,621.95
	6.28.2 Above plinth level upto floor V level	cum	5,300.60
6.29	Brick work with common burnt clay machine moulded F.P.S. (non modular) bricks of class designation 12.5 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12 mm deep complete in cement mortar 1:6 (1 cement : 6 coarse sand).		
	6.29.1 From ground level upto plinth level	cum	4,501.30
	6.29.2 Above plinth level upto floor V level	cum	5,153.65
6.30	Brick work with common burnt clay machine moulded perforated F.P.S. (non modular) bricks of class designation 12.5 conforming IS : 2222 in exposed brick work including making horizontal and vertical grooves 10mm wide 12 mm deep complete in cement mortar 1:6 (1 cement : 6 coarse sand).		
	6.30.1 From ground level upto plinth level	cum	4,558.70
	6.30.2 Above plinth level upto floor V level	cum	5,237.30
6.31	Brick work with common burnt clay machine moulded perforated modular bricks of class designation 12.5 conforming to IS : 2222 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12mm deep complete in cement mortar 1:6 (1 cement : 6 coarse sand).		
	6.31.1 From ground level upto plinth level	cum	4,254.30
	6.31.2 Above plinth level upto floor V level	cum	4,932.90

Code No.	Description	Unit	Rate ₹
6.32	Brick work with clay flyash F.P.S. (non modular) brick of class designation 7.5 in superstructure above plinth level up to floor five level in :		
6.32.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	5,385.30
6.32.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	5,183.90
6.33	Deleted		
6.34	Brick work with non modular fly ash lime bricks (FALG Bricks) conforming to IS:12894, class designation 10 average compressive strength in super structure above plinth level up to floor V level in :		
6.34.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	5,301.25
6.34.2	Cement mortar 1:6 (1 cement : 6 Coarse sand)	cum	5,124.05
6.35	Brick work with modular calcium silicate bricks machine moulded conforming to IS:4139, class designation 10 average compressive strength in super structure above plinth level up to floor V level in :		
6.35.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	5,470.95
6.35.2	Cement mortar 1:6 (1 cement : 6 Coarse sand)	cum	5,293.75
6.36	Brick work with modular extruded brunt fly ash clay sewer bricks (Conforming to IS: 4885 ) in foundation and plinth :		
6.36.1	Cement Mortar 1:4 ( 1 cement : 4 coarse sand)	cum	4,857.05
6.37	Brick work with modular extruded brunt fly ash clay sewer bricks (conforming to IS : 4885) in arches in foundation and plinth in cement mortar 1:3 ( 1 cement : 3 fine sand).	cum	7,687.80
6.38	Providing and laying autoclaved aerated cement blocks masonry with 100 mm thick AAC blocks in super structure above plinth level up to floor V level in cement mortar 1:4 (1 cement : 4 coarse sand ). The rate includes providing and placing in position 2 Nos 6 mm dia M.S. bars at every third course of masonry work.	cum	4,827.45
6.39	Deleted		
6.40	Providing and laying Gypsum panel partitions 100 mm thick with water proof Gypsum panels of size 666x500x100 mm, made of calcite phosphor Gypsum fixed with tongue and groove, jointed with bonding plaster as per manufacturer's specifications in superstructure above plinth level up to floor V level. Gypsum blocks will have a minimum compressive strength of 9.3 kg/cm <sup>2</sup>	sqm	777.20
6.41	Extra for Gypsum panel Partitions in superstructure above floor V level for every four floors or part thereof.	sqm	59.70
6.42	Deleted		
6.43	Deleted		
6.44	Brick edging 7cm wide 11.4 cm deep to plinth protection with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 including grouting with cement mortar 1:4 (1 cement : 4 fine sand).	metre	38.55
6.45	Half brick masonry with non modular fly ash lime Gypsum bricks (FALG bricks) of class designation 10, conforming to IS : 12894, in super structure above plinth and upto floor V level.		
6.45.1	Cement mortar 1 : 3 (1 cement : 3 coarse sand)	sqm	663.85
6.45.2	Cement mortar 1 : 4 (1 cement : 4 coarse sand)	sqm	641.30
6.46	Deleted		

**SUB HEAD : 7.0**

**STONE WORK**



### BASIC RATES (SH: 7.0 STONE WORK)

Code No.	Description	Unit	Rate ₹
0011	Hire charges of Pump set of capacity 4000 litres/hour	day	550.00
0100	Bandhani	day	328.00
0101	Bhisti	day	328.00
0102	Blacksmith 1 st class	day	393.00
0103	Blacksmith 2nd class	day	361.00
0112	Carpenter 2nd class	day	361.00
0114	Beldar	day	297.00
0115	Coolie	day	297.00
0116	Fitter (grade 1)	day	393.00
0123	Mason (brick layer) 1 st class	day	393.00
0124	Mason (brick layer) 2nd class	day	361.00
0125	Mason (for plain stone work) 2nd class	day	361.00
0126	Mason (for ornamental stone work) 1 st class	day	393.00
0139	Skilled Beldar (for floor rubbing etc.)	day	328.00
0367	Portland Cement	tonne	5240.00
0373	Cramp Gun metal 25x6x300 mm	each	80.00
0873	Copper pins 6 mm dia 7.5 cm long	each	10.00
1002	Mild steel round bar 12 mm dia and below	quintal	4500.00
1007	Structural steel such as tees, angles channels and R.S. joists	quintal	4926.00
1034	Bolts and nuts up to 300 mm in length	quintal	5600.00
1154	Through and bond stone	100 Nos	1200.00
1157	Stone for masonry work	cum	700.00
1160	Red sand stone block	10 cudm	65.00
1161	White sand stone block	10 cudm	70.00
1163	White sand stone slab 75 mm thick (un-dressed)	sqm	300.00
1164	Red sand stone slab 40 mm thick (un-dressed)	sqm	160.00
1165	White sand stone slab 40 mm thick (un-dressed)	sqm	180.00
1169	Kota stone slab 25mm thick (rough chiseled)	sqm	210.00
1197	Second class kail wood in scantling	10 cudm	260.00
1215	Welding by electric plant	cm	1.80
1225	Mild steel flat strap fitting	quintal	4450.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
1237	Cutting marble or sand stone slab up to 50 mm thick by mechanical device	metre	9.00
2204	Carriage of timber	cum	121.88
2215	Carriage of Soling stone & masonry stone	cum	125.47
2216	Carriage of stone blocks white & red sand stone & kota stone slab	tonne	94.80
2302	Carriage of G.I.sheet and accessories	tonne	94.80
2750	8 mm thick granite stone tiles (mirror polished of all shades)	sqm	700.00
4009	Mild steel tubes hot finished welded type	kilogram	52.00
7339	Stainless steel cramp	kilogram	340.00
7439	8mm thick (mirror polished tiles machine cut edge) Raj Nagar white	sqm	500.00
8683	Red sand stone gang saw cut 30 mm thick	sqm	460.00
8684	White sand stone gang saw cut 30 mm thick	sqm	480.00
8698	Stainless steel cramps(weight 260 grams) with nuts, bolts and washer for dry stone cladding	each	90.00
9999	Sundries	L.S.	1.70

## 7.0 STONE WORK

Code No.	Description	Unit	Rate ₹
<b>RANDOM RUBBLE MASONRY</b>			
7.1	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) upto plinth level with :		
7.1.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	3,410.50
7.2	Random rubble masonry with hard stone in superstructure above plinth level and upto floor five level, including leveling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) at window sills, ceiling level and the like.		
7.2.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	4,087.25
7.3	Deleted		
7.4	Extra for random rubble masonry with hard stone in :		
7.4.1	Square or rectangular pillars	cum	336.35
7.4.2	Circular pillars	cum	994.20
7.5	Extra for random rubble masonry with hard stone curved on plan for a mean radius not exceeding 6 m.	cum	391.90
<b>COURSED RUBBLE MASONRY</b>			
7.6	Coursed rubble masonry (first sort) with hard stone in foundation and plinth with :		
7.6.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	3,935.25
7.7	Coursed rubble masonry (second sort) with hard stone in foundation & plinth with :		
7.7.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	3,678.80
7.8	Coursed rubble masonry with hard stone (first or second sort) in superstructure above plinth level and upto floor five level.		
7.8.1	Masonry work (first sort) , in cement mortar 1:6 (1 cement : 6 coarse sand)	cum	4,602.55
7.8.2	Masonry work (second sort) , in cement mortar 1:6 (1 cement: 6 coarse sand)	cum	4,346.15
7.9	Deleted		
7.10	Extra for coursed rubble masonry with hard stone (first or second sort) in :		
7.10.1	Square or rectangular pillars	cum	374.05
7.10.2	Circular pillars	cum	1,127.80
7.11	Extra for coursed rubble masonry with hard stone (first or second sort) curved on plan for a mean radius not exceeding 6 m.	cum	426.65
<b>ASHLAR MASONRY</b>			
7.12	Stone work in plain ashlar in super structure upto floor five level in cement mortar 1:6 (1 cement : 6 coarse sand) including pointing with cement		

Code No.	Description	Unit	Rate ₹
	mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade :		
	7.12.1 One face dressed		
	7.12.1.1 Red sand stone	cum	26,283.00
	7.12.1.2 White sand stone	cum	27,057.00
	7.12.2 Both face dressed		
	7.12.2.1 Red sand stone	cum	34,201.00
	7.12.2.2 White sand stone	cum	34,975.00
7.13	Stone work plain ashlar in arches in super structure upto floor V level in cement mortar 1:3 (1 cement : 3 coarse sand) including centring, shuttering and pointing with white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade.		
	7.13.1 One face dressed		
	7.13.1.1 Red sand stone	cum	30,544.00
	7.13.1.2 White sand stone	cum	31,318.00
	7.13.2 Both face dressed		
	7.13.2.1 Red sand stone	cum	38,462.00
	7.13.2.2 White sand stone	cum	39,236.00
7.14	Stone work plain ashlar in domes , in super structure upto floor V level in cement mortar 1:3 (1 cement : 3 coarse sand) including centring, shuttering and pointing with white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade.		
	7.14.1 One face dressed		
	7.14.1.1 Red sand stone	cum	46,145.00
	7.14.1.2 White sand stone	cum	46,919.00
	7.14.2 Both face dressed		
	7.14.2.1 Red sand stone	cum	65,786.00
	7.14.2.2 White sand stone	cum	66,560.00
7.15	Stone work ashlar punched (ordinary) in superstructure upto floor five level in cement mortar 1:6 (1 white cement : 6 coarse sand) including pointing with cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade.		
	7.15.1 One face dressed		
	7.15.1.1 Red sand stone	cum	25,068.00
	7.15.1.2 White sand stone	cum	25,840.00
	7.15.2 Both faced punched		
	7.15.2.1 Red sand stone	cum	31,770.00
	7.15.2.2 White sand stone	cum	32,543.00
7.16	Extra for stone work, random rubble / coursed rubble masonry / ashlar masonry above floor V level for every four floors or part thereof.	cum	690.00

Code No.	Description	Unit	Rate ₹
7.17	Extra for plain ashlar or ashlar punched in :		
7.17.1	Square or rectangular pillars	cum	1,771.00
7.18	Extra for stone work; plain ashlar or ashlar punched curved on plan with a mean radius not exceeding 6 m.	cum	1,233.00
7.19	Extra for additional cost of centering for arches exceeding 6m span including all strutting, bolting, wedging etc. and removal (area of soffit to be measured).	sqm	440.40
<b>SUNK, MOULDED, CARVED ASHLAR MASONRY</b>			
7.20	Stone work ashlar sunk or moulded or sunk and moulded upto floor five level in cement mortar 1:6 (1 cement : 6 coarse sand) including pointing with white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade :		
7.20.1	Red sand stone	cum	36,386.00
7.20.2	White sand stone	cum	37,160.00
7.21	Extra for stone work ashlar sunk or moulded or sunk and moulded or carved in :		
7.21.1	Triangular or Square or rectangular pillars	cum	2,310.00
7.21.2	Circular or polygonal pillars	cum	6,546.00
7.22	Extra for stone work ashlar sunk or moulded in cornices.	per metre per cm girth	20.80
<b>MISCELLANEOUS STONE WORK</b>			
7.23	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12 mm thick cement mortar 1:3 (1 cement : 3 coarse sand) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade : (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) :		
7.23.1	Red sand stone - exposed face fine dressed with rough backing.		
7.23.1.1	70 mm thick	sqm	2,410.75
7.23.1.2	60 mm thick	sqm	2,306.70
7.23.1.3	50 mm thick	sqm	2,202.85
7.23.1.4	40 mm thick	sqm	2,098.60
7.23.1.5	30 mm thick	sqm	1,994.50
7.23.2	Red sand stone - Exposed face machine cut and table rubbed with rough backing.		
7.23.2.1	70 mm thick	sqm	3,192.65
7.23.2.2	60 mm thick	sqm	3,088.60
7.23.2.3	50 mm thick	sqm	2,984.80
7.23.2.4	40 mm thick	sqm	2,880.55
7.23.2.5	30 mm thick	sqm	2,776.40

Code No.	Description	Unit	Rate ₹
7.23.3	White sand stone - exposed face fine dressed with rough backing .		
7.23.3.1	70 mm thick	sqm	2,464.95
7.23.3.2	60 mm thick	sqm	2,353.15
7.23.3.3	50 mm thick	sqm	2,241.60
7.23.3.4	40 mm thick	sqm	2,129.35
7.23.3.5	30 mm thick	sqm	2,017.70
7.23.4	White sand stone - Exposed face machine cut and table rubbed with rough backing.		
7.23.4.1	70 mm thick	sqm	3,246.85
7.23.4.2	60 mm thick	sqm	3,135.05
7.23.4.3	50 mm thick	sqm	3,023.50
7.23.4.4	40 mm thick	sqm	2,911.25
7.23.4.5	30 mm thick	sqm	2,799.65
7.24	Extra for stone work (veneer work) curved on plan with a mean radius not exceeding 6 m.	cum	1,771.00
7.25	Providing and fixing stainless steel cramps of required size and shape for anchoring stone wall lining to the backing or securing adjacent stones in stone wall lining in cement mortar 1:2 (1 cement : 2 coarse sand), including making the necessary chases in stone and holes in walls wherever required.	kg	566.80
7.26	Providing and fixing stone dowels 10x5x2.50 cm cut to double wedge shape as per design in cement mortar 1:2 (1 cement : 2 coarse sand), including making the necessary chases.	each	34.45
7.27	Providing and fixing copper pins 7.5 cm long 6 mm diameter for securing adjacent stones in stone wall lining in cement mortar 1:2 (1 cement : 2 coarse sand), including making the necessary chases.	each	29.10
7.28	Providing and fixing sloping chajja of stone 40 mm thick and upto 80 cm wide beyond the wall as measured along the slope in cement mortar 1:4 (1 cement : 4 coarse sand) with 12 mm diameter anchoring steel bar, 45 cm long, fixed in each stone and supported on and including with bricks cove in cement mortar 1:4 (1 cement : 4 coarse sand), including pointing in cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade :		
7.28.1	Red sand stone :		
7.28.1.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	sqm	1,188.55
7.28.2	White sand stone :		
7.28.2.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	sqm	1,220.50
7.29	Providing and fixing horizontal chajja of stone 40 mm thick and upto 80 cm projection in cement mortar 1:4 (1 cement : 4 coarse sand), including		

Code No.	Description	Unit	Rate ₹
	pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade :		
	7.29.1 Red sand stone	sqm	724.15
	7.29.2 White sand stone	sqm	752.05
7.30	30 mm red sand stone sun-shade (chisel-dressed) supported on red sand stone brackets, fixed in walls with cement mortar 1:4 (1 cement : 4 coarse sand), including finishing complete.	sqm	783.20
7.31	Providing and fixing red sand stone brackets 55x22.5x45 cm sunk and moulded including providing and fixing with 4 Nos gun metal cramp 25x6 mm 30 cm long and dowel bars 7.5 cm long 6 mm dia as per design.	each	2,714.65
7.32	Stone work, plain in copings, cornices, string courses and plinth courses, upto 75 mm thick in Cement mortar 1:6 (1 cement : 6 coarse sand), including pointing with white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade.		
	7.32.1 Red sand stone	cum	35,767.40
	7.32.2 White sand stone	cum	36,540.75
7.33	Providing and fixing stone jali 40 mm thick throughout in cement mortar 1:3 (1 cement : 3 coarse sand), including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment, matching the stone shade, jali slab without any chamfers etc.		
	7.33.1 Red sand stone	sqm	8,615.05
	7.33.2 White sand stone	sqm	8,640.60
7.34	Extra for laying stone work in or under water and/or liquid mud including cost of pumping or bailing out water and removing slush etc. complete.	cum/ mtr depth	385.60
	NOTE :- The quantity will be calculated by multiplying the depth measured from sub - soil water level up to the centre of gravity of stone work under sub - water with the quantity of stone work in cum executed under the sub - soil water. The depth of centre of gravity shall be reckoned correct to 0.1 m. 0.05 m or more shall be taken as 0.1 m and less than 0.05 m ignored.		
7.35	Extra for laying stone work in or under foul position.	cum	155.50
7.36	Wall lining butch work upto 10m height with Dholpur stone 40 mm thick rough facing on the exposed surface with stone strips of minimum length 300 mm and required width, including embedding every tenth layer and bottom most layer in masonry or concrete after making necessary chases of size 75x75 mm and by providing layer of 75 mm thick strips i/c 12 mm thick bed of cement mortar 1:3 (1 Cement : 3 coarse sand) i/c ruled pointing in cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment to match the shade of stone complete as per direction of Engineer-in-charge.	sqm	1,380.90
7.37	Stone work (machine cut edges Veneer work) for wall lining upto 10 m height, backing filled with a grout of 12 mm thick cement mortar 1:3 (1 Cement : 3 coarse sand) and jointed with Cement mortar 1:2 (1 cement : 2 stone dust), including rubbing and polishing complete.		

Code No.	Description	Unit	Rate ₹
	(To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately).		
	7.37.1 Kota stone slabs exposed face dressed and rubbed.		
	7.37.1.1 25 mm thick	sqm	1,447.15
7.38	Stone tile work for wall lining upto 10 m height with special adhesive over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand), including pointing in white cement with an admixture of pigment to match the stone shade.		
	7.38.1 8mm thick (mirror polished and machine cut edge)		
	7.38.1.1 Granite stone of any colour and shade	sqm	1,639.45
	7.38.1.2 Raj Nagar plain white marble/ Udaipur green marble/ Zebra black marble	sqm	1,401.35
7.39	Extra for stone work for wall lining on exterior walls of height more than 10 m from ground level for every additional height of 3 m or part there of.	sqm	77.90
	<b>STONE WORK IN DRY CLADDING</b>		
7.40	Providing and fixing dry cladding upto 10 metre heights with 30 mm thick gang saw cut stone with (machine cut edges) of uniform colour and size upto 1mx1m, fixed to structural steel frame work and/ or with the help of cramps, pins etc. and sealing the joints with approved weather sealant as per Architectural drawing and direction of Engineer-in-charge. (The steel frame work, stainless steel cramps and pins etc. shall be paid for separately).		
	7.40.1 Red sand stone	sqm	2,351.40
	7.40.2 White sand stone	sqm	2,385.10
7.41	Providing and fixing structural steel frame (for dry cladding with 30 mm thick gang saw cut with machine cut edges sand stone) on walls at all heights using M.S. square/ rectangular tube in the required pattern as per architectural drawing, including cost of cutting, bending, welding etc. The frame work shall be fixed to the wall with the help of M.S. brackets/ lugs of angle iron/ flats etc. which shall be welded to the frame and embedded in brick wall with cement concrete block 1:2:4 (1 cement :2 coarse sand :4 graded stone aggregate 20 mm nominal size) of size 300x230x300 mm, including cost of necessary centring and shuttering and with approved expansion hold fasteners on CC/RCC surface, including drilling necessary holes. Approved cramps/ pins etc. shall be welded to the frame work to support stone cladding, the steel work will be given a priming coat of Zinc primer as approved by Engineer-in-charge and painted with two or more coats of epoxy paint (Shop drawings shall be submitted by the contractor to the Engineer-in-charge for approval before execution). The frame work shall be fixed in true horizontal & vertical lines/planes. (Only structural steel frame work shall be measured for the purpose of payment, stainless steel cramps shall be paid for separately and nothing extra shall be paid).	kg	134.50
7.42	Providing and fixing adjustable stainless steel cramps of approved quality, required shape and size, adjustable with stainless steel nuts, bolts and washer (total weight not less than 260 gms), for dry stone cladding fixed on frame work at suitable location, including making necessary recesses in stone slab, drilling required holes etc complete as per direction of the Engineer-in-charge.	each	196.80

**SUB HEAD : 8.0**

**MARBLE & GRANITE WORK**



## BASIC RATES (SH: 8.0 MARBLE & GRANITE WORK)

Code No.	Description	Unit	Rate ₹
0013	Machine for rubbing of floors	day	350.00
0019	Hand Grinder for mirror polish	day	230.00
0100	Bandhani	day	328.00
0101	Bhisti	day	328.00
0102	Blacksmith 1st class	day	393.00
0114	Beldar	day	297.00
0115	Coolie	day	297.00
0116	Fitter (grade 1)	day	393.00
0123	Mason (brick layer) 1st class	day	393.00
0126	Mason (for ornamental stone work) 1st class	day	393.00
0128	Mate	day	328.00
0139	Skilled Beldar (for floor rubbing etc.)	day	328.00
0367	Portland Cement	tonne	5240.00
0368	White Cement	tonne	14000.00
0874	Black colour dark shade pigment	kilogram	55.00
1034	Bolts and nuts up to 300 mm in length	quintal	5600.00
1239	18 mm thick Flamed finish granite stone slab	sqm	1695.00
1240	18 mm thick Italian Marble stone slab, Perlato (slab area up to 0.5 sqm).	sqm	3330.00
2209	Carriage of cement	tonne	94.80
2216	Carriage of stone blocks white & red sand stone & kota stone slab	tonne	94.80
2750	8 mm thick granite stone tiles (mirror polished of all shades)	sqm	700.00
2751	8 mm thick marble tiles (polished) Raj Nagar	sqm	360.00
7244	Table rubbed polished stone 18 mm thick (75x50cm) Agaria Marble stone - 18 mm thick	sqm	1750.00
7245	Table rubbed polished stone 18mm thick (75x50cm) Granite stone - 18 mm thick	sqm	1800.00
7295	Granite of any colour, 18 mm thick (slab area upto 0.50 sqm)	sqm	1900.00
7297	Granite of any colour, 18 mm thick (slab area above 0.50 sqm)	sqm	2000.00
7338	Gun metal cramp	kilogram	330.00
7339	Stainless steel cramp	kilogram	340.00
7430	Wedge expansion hold fastener 1/4" or 6 mm	each	14.00
7431	Wedge expansion hold fastener 3/8" or 10 mm	each	15.00
7432	Wedge expansion hold fastener 1/2" or 12 mm	each	28.00
7452	Raj nagar plain white marble (table rubbed and polished) 18 mm thick (slab area upto 0.50 sqm)	sqm	650.00
7453	Raj nagar plain white marble (table rubbed and polished) 18 mm thick (slab area more than 0.50 sqm)	sqm	750.00
9999	Sundries	L.S.	1.70

## 8.0 MARBLE & GRANITE WORK

Code No.	Description	Unit	Rate ₹
8.1	Marble work gang saw cut (polished and machine cut) of thickness 18 mm for wall lining (veneer work), backing filled with a grout of average 12 mm thick in cement mortar 1:3 (1 cement : 3 coarse sand), including pointing with white cement mortar 1:2 (1 white cement : 2 marble dust) with an admixture of pigment to match the marble shade (To be secured to the backing by means of cramps, which shall be paid for separately).		
8.1.1	Raj Nagar Plain white marble/ Udaipur green marble/ Zebra black marble.		
8.1.1.1	Area of slab upto 0.50 sqm	sqm	2,604.35
8.1.1.2	Area of slab over 0.50 sqm	sqm	2,737.20
8.2	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills , facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.		
8.2.1	Raj Nagar Plain white marble/ Udaipur green marble/ Zebra black marble		
8.2.1.1	Area of slab upto 0.50 sqm	sqm	2,200.25
8.2.1.2	Area of slab over 0.50 sqm	sqm	2,322.25
8.2.2	Granite of any colour and shade		
8.2.2.1	Area of slab upto 0.50 sqm	sqm	3,724.70
8.2.2.2	Area of slab over 0.50 sqm	sqm	3,769.70
8.3	Providing edge moulding to 18 mm thick marble stone counters, Vanities etc., including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge.		
8.3.1	Marble work	metre	124.45
8.3.2	Granite work	metre	210.65
8.4	Extra for fixing marble /granite stone, over and above corresponding basic item, in facia and drops of width upto 150 mm with epoxy resin based adhesive, including cleaning etc. complete.	metre	225.75
8.5	Extra for providing opening of required size & shape for wash basin/ kitchen sink in kitchen platform, vanity counter and similar location in marble/Granite/stone work, including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete.	each	350.80
8.6	Mirror polishing on marble work/Granite work/stone work where ever required to give high gloss finish complete.	sqm	196.85

Code No.	Description	Unit	Rate ₹
8.7	Providing and fixing cramps of required size & shape in RCC/ CC / Brick masonry backing with cement mortar 1:2 ( 1 cement :2 coarse sand), including drilling necessary hole in stones and embedding the cramp in the hole (fastener to be paid separately).		
8.7.1	Gunmetal cramps	kg	539.75
8.7.2	Stainless steel cramps	kg	566.80
8.8	Providing and fixing expansion hold fasteners on C.C. /R.C.C./Brick masonry surface backing including drilling necessary holes and the cost of bolt etc complete.		
8.8.1	Wedge expansion type		
8.8.1.1	Fastener with threaded dia 6 mm	each	26.05
8.8.1.2	Fastener with threaded dia 10 mm	each	27.55
8.8.1.3	Fastener with threaded dia 12 mm	each	42.95
8.9	Stone tile (polished) work for wall lining over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and cement slurry @ 3.3 kg/sqm including pointing in white cement complete.		
8.9.1	8mm thick		
8.9.1.1	Raj nagar plain white marble/ Udaipur green marble/ Zebra black marble	sqm	1,412.10
8.9.1.2	Granite of any colour and shade	sqm	1,816.90
8.10	Providing and fixing stone slab with table rubbed, edges rounded and polished, of size 75x50 cm deep and 1.8 cm thick, fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6 mm nominal size) as per direction of Engineer-in-charge and finished smooth.		
8.10.1	White Agaria Marble Stone	sqm	2,893.70
8.10.2	Granite Stone of approved shade	sqm	2,963.40
8.11	Providing and fixing machine cut, mirror / eggshell polished , Marble stone work for wall lining (veneer work) including dado, skirting, risers of steps etc., in required design and pattern wherever required, stones of different finished surface texture, on 12 mm (average) thick cement mortar 1:3 (1 cement : 3 coarse sand) laid and jointed with white cement slurry @ 3.3 kg/sqm including pointing with white cement slurry admixed with pigment of matching shade, including rubbing, curing, polishing etc. all complete as per Architectural drawings, and as directed by the Engineer-in-Charge.		
	a. 18 mm thick Italian Marble stone slab,Perlato, Rosso verona, Fire Red or Dark Emperadore etc.	sqm	6,463.35
8.12	Providing and laying flamed finish Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all		

Code No.	Description	Unit	Rate ₹
	<p>complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing , curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge :</p> <p>a. Flamed finish granite stone slab Jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.</p>	sqm	2782.15

**SUB HEAD : 9.0**

**WOOD  
&  
PVC WORK**



**BASIC RATES (SH: 9.0 WOOD AND P.V.C. WORK)**

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
0100	Bandhani	day	328.00
0102	Blacksmith 1st class	day	393.00
0103	Blacksmith 2nd class	day	361.00
0111	Carpenter 1st class	day	393.00
0112	Carpenter 2nd class	day	361.00
0114	Beldar	day	297.00
0119	Glazier	day	361.00
0123	Mason (brick layer) 1st class	day	393.00
0124	Mason (brick layer) 2nd class	day	361.00
0130	Mistry	day	393.00
0131	Painter	day	361.00
0156*	Carpenter (average)	day	377.00
0237	Non - Asbestos multi purpose fibre (high impact poly propelene reinforced) cement board 8 mm thick	sqm	250.00
0305	Bamboo 25 mm dia 2.5 metre long	score	350.00
0341	Flat pressed 3 layer particle board (medium density) Grade 1, 12 mm thick	sqm	325.00
0346	Extra for veneered particle board with Teak veneering on one side and commercial veneering on other side	sqm	260.00
0347	Extra for veneered particle board with Commercial veneering on both sides	sqm	170.00
0348	Extra for veneered particle board with Teak veneering both sides	sqm	500.00
0378	Brass butt hinges (light/ordinary type) : 125x70x4 mm	10 Nos	850.00
0379	Brass butt hinges (light/ordinary type) : 100x70x4 mm	10 Nos	700.00
0380	Brass butt hinges (light/ordinary type) : 75x40x2.5 mm	10 Nos	430.00
0381	Brass butt hinges (light/ordinary type) : 50x40x2.5 mm	10 Nos	180.00
0382	Brass butt hinges (heavy type) : 125x85x5.5 mm(0.70 kg)	10 Nos	3100.00
0383	Brass butt hinges (heavy type) : 100x85x5.5 mm(0.56 kg)	10 Nos	2750.00
0384	Brass butt hinges (heavy type) :75x65x4.0 mm(0.20 kg)	10 Nos	950.00
0385	Brass parliamentary hinges 150x125x27x5 mm	10 Nos	2850.00
0386	Brass parliamentary hinges 125x125x27x5 mm	10 Nos	2500.00
0387	Brass parliamentary hinges 100x125x27x5 mm	10 Nos	2300.00
0388	Brass parliamentary hinges 75x100x20x3.2 mm	10 Nos	1750.00
0400	Brass tower bolt (barrel type) 250x10 mm	each	230.00
0401	Brass tower bolt (barrel type) 200x10 mm	each	180.00

Code No.	Description	Unit	Rate ₹
0402	Brass tower bolt (barrel type) 150x10 mm	each	145.00
0403	Brass tower bolt (barrel type) 100x10 mm	each	95.00
0408	Brass handles 125 mm with plate 175x32 mm	each	140.00
0409	Brass handles 100 mm with plate 150x32 mm	each	130.00
0410	Brass handles 75 mm with plate 125x32 mm	each	100.00
0411	Brass door latch 300x16x5 mm (0.380 kg)	each	165.00
0412	Brass door latch 250x16x5 mm (0.350 kg)	each	160.00
0413	Brass mortice latch and lock 100x65 mm with 6 levers and a pair of brass lever handles	each	370.00
0414	Brass mortice latch 100x65mm with a pair of brass lever handles	each	320.00
0423	Brass casement window fastener	each	50.00
0424	Brass casement stays (straight peg type) 300 mm weighing not less than 0.33 kg	each	135.00
0425	Brass casement stays (straight peg type) 250 mm weighing not less than 0.28 kg	each	110.00
0426	Brass casement stays (straight peg type) 200 mm weighing not less than 0.24 kg	each	100.00
0431	Brass hasps and staples (safety type) 150 mm	10 Nos	775.00
0432	Brass hasps and staples (safety type) 115 mm	10 Nos	650.00
0433	Brass hasps and staples (safety type) 90 mm	10 Nos	560.00
0438	Brass night latch	each	495.00
0447	Brass cupboard knob or wardrobe knob 50 mm	each	35.00
0449	Brass screws 50 mm	100 Nos	210.00
0450	Brass screws 40 mm	100 Nos	170.00
0451	Brass screws 30 mm	100 Nos	135.00
0452	Brass screws 25 mm	100 Nos	95.00
0453	Brass screws 20 mm	100 Nos	90.00
0555	Chromium plated Brass handles 125 mm with plate 175 x32 mm	each	175.00
0556	Chromium plated Brass handles 100 mm with plate 150 x 32 mm	each	150.00
0557	Chromium plated Brass handles 75mm with plate 125x32 mm	each	130.00
0558	Chromium plated Brass mortice latch and lock 100x65 mm with 6 levers and a pair of brass lever handles	each	540.00
0568	Chromium plated brass casement window fastener	each	95.00
0569	Chromium plated Brass casement stays (straight peg type) 300 mm weighing not less than 0.33 kg	each	150.00
0570	Chromium plated Brass casement stays (straight peg type) 250 mm weighing not less than 0.28 kg	each	130.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
0571	Chromium plated Brass casement stays (straight peg type) 200 mm weighing not less than 0.24 kg	each	115.00
0583	Chromium plated Brass Night latch	each	530.00
0584	Chromium plated Brass Wardrobe Knob 50 mm	each	48.00
0585	Chromium plated Brass screws 50 mm	100 Nos	240.00
0586	Chromium plated Brass screws 40 mm	100 Nos	200.00
0587	Chromium plated Brass screws 30 mm	100 Nos	155.00
0588	Chromium plated Brass screws 25 mm	100 Nos	120.00
0589	Chromium plated Brass screws 20 mm	100 Nos	100.00
0590	Chromium plated Brass curtain rod 12 mm dia 1.25mm thick	metre	190.00
0591	Chromium plated Brass curtain rod 20 mm dia 1.25mm thick	metre	260.00
0592	Chromium plated Brass curtain rod 25 mm dia 1.25mm thick	metre	350.00
0594	Bright finished or black enameled mild steel butt hinges 125x65x 2.12 mm	10 Nos	140.00
0595	Bright finished or black enameled mild steel butt hinges 100x58x 1.90 mm	10 Nos	85.00
0596	Bright finished or black enameled mild steel butt hinges 75x47x 1.70 mm	10 Nos	60.00
0597	Bright finished or black enameled mild steel butt hinges 50x37x 1.50 mm	10 Nos	50.00
0608	Nickel plated bright finished mild steel piano hinges 1 mm thick 25 mm wide	metre	40.00
0635	Bright finished or black enameled mild steel screws 50 mm	100 Nos	65.00
0637	Bright finished or black enameled mild steel screws 40 mm	100 Nos	50.00
0638	Bright finished or black enameled mild steel screws 30 mm	100 Nos	40.00
0639	Bright finished or black enameled mild steel screws 25 mm	100 Nos	35.00
0640	Bright finished or black enameled mild steel screws 20 mm	100 Nos	30.00
0641	Bright finished or black enameled mild steel bolts and nuts 50x 6 mm	each	7.00
0642	Oxidised mild steel butt hinges 125x65x2.12 mm	10 Nos	140.00
0643	Oxidised mild steel butt hinges 100x58x1.90 mm	10 Nos	90.00
0644	Oxidised mild steel butt hinges 75x47x1.70 mm	10 Nos	65.00
0645	Oxidised mild steel butt hinges 50x37x1.50 mm	10 Nos	55.00
0646	Oxidised mild steel parliamentary hinges 150x125x27x2.8 mm	10 Nos	340.00
0647	Oxidised mild steel parliamentary hinges 125x125x27x2.8 mm	10 Nos	315.00
0648	Oxidised mild steel parliamentary hinges 100x125x27x2.8 mm	10 Nos	235.00
0649	Oxidised mild steel parliamentary hinges 75x100x20x2.24 mm	10 Nos	200.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
0650	Oxidised mild steel single acting spring hinges 150 mm	each	115.00
0651	Oxidised mild steel single acting spring hinges 125 mm	each	110.00
0652	Oxidised mild steel single acting spring hinges 100 mm	each	90.00
0653	Oxidised mild steel double acting spring hinges 150 mm	each	115.00
0654	Oxidised mild steel double acting spring hinges 125 mm	each	110.00
0655	Oxidised mild steel double acting spring hinges 100 mm	each	90.00
0656	Nickel plated mild steel piano hinges 1 mm thick 35 mm wide	metre	45.00
0660	Oxidised mild steel sliding door bolt 300x16 mm	each	95.00
0661	Oxidised mild steel sliding door bolt 250x16 mm	each	90.00
0662	Oxidised mild steel door latch 300x20x6 mm	each	48.00
0663	Oxidised mild steel door latch 250x20x6 mm	each	40.00
0664	Oxidised mild steel tower bolt (barrel type) 250x10 mm	each	45.00
0665	Oxidised mild steel tower bolt (barrel type) 200x10 mm	each	40.00
0666	Oxidised mild steel tower bolt (barrel type) 150x10 mm	each	30.00
0667	Oxidised mild steel tower bolt (barrel type) 100x10 mm	each	25.00
0668	Oxidised mild steel handles 125 mm	each	19.00
0669	Oxidised mild steel handles 100 mm	each	16.00
0670	Oxidised mild steel handles 75 mm	each	15.00
0679	Oxidised mild steel hasps and staples (safety type) 150 mm	10 Nos	125.00
0680	Oxidised mild steel hasps and staples (safety type) 115 mm	10 Nos	100.00
0681	Oxidised mild steel hasps and staples (safety type) 90 mm	10 Nos	75.00
0682	Oxidised mild steel screws 50 mm	100 Nos	75.00
0683	Oxidised mild steel screws 40 mm	100 Nos	60.00
0684	Oxidised mild steel screws 30 mm	100 Nos	55.00
0685	Oxidised mild steel screws 25 mm	100 Nos	45.00
0686	Oxidised mild steel screws 20 mm	100 Nos	35.00
0687	Anodised Aluminium butt hinges 125x75x4 mm	10 Nos	570.00
0688	Anodised Aluminium butt hinges 125x63x4 mm	10 Nos	530.00
0689	Anodised Aluminium butt hinges 100x75x4 mm	10 Nos	520.00
0690	Anodised Aluminium butt hinges 100x63x3.2 mm	10 Nos	500.00
0691	Anodised Aluminium butt hinges 100x63x4 mm	10 Nos	510.00
0692	Anodised Aluminium butt hinges 75x63x4 mm	10 Nos	500.00
0693	Anodised Aluminium butt hinges 75x63x3.2 mm	10 Nos	470.00
0694	Anodised Aluminium butt hinges 75x45x3.2 mm	10 Nos	390.00
0696	Anodised Aluminium sliding door bolt 300x16 mm	each	160.00

Code No.	Description	Unit	Rate ₹
0697	Anodised Aluminium sliding door bolt 250x16 mm	each	130.00
0698	Anodised Aluminium tower bolt (barrel type) 300x10 mm	10 Nos	750.00
0700	Anodised Aluminium tower bolt (barrel type) 200x10 mm	10 Nos	480.00
0701	Anodised Aluminium tower bolt (barrel type) 150x10 mm	10 Nos	380.00
0702	Anodised Aluminium tower bolt (barrel type) 100x10 mm	10 Nos	300.00
0703	Anodised Aluminium handles 125 mm with plate 175 x 32 mm	10 Nos	500.00
0704	Anodised Aluminium handles 100 mm with plate 150 x 32 mm	10 Nos	380.00
0705	Anodised Aluminium handles 75mm with plate 125 x 32 mm	10 Nos	320.00
0706	Anodised Aluminium kicking plate 50 cm long 100x3.15 mm	each	130.00
0713	Block board construction flush door with teak wood ply on both faces 35 mm thick	sqm	1700.00
0714	Block board construction flush door with teak wood ply on both faces 30 mm thick	sqm	1550.00
0715	Block board construction flush door with teak wood ply on both faces 25 mm thick	sqm	1400.00
0717	Block board construction flush door with commercial ply on both faces 35 mm thick	sqm	1150.00
0718	Block board construction flush door with commercial ply on both faces 30 mm thick	sqm	1000.00
0719	Block board construction flush door with commercial ply on both faces 25 mm thick	sqm	900.00
0752	Block board construction flush door lipping	sqm of door area	300.00
0753	Square vision panel in Block board construction flush door	sqm of door area	115.00
0754	Circular vision panel in Block board construction flush door	sqm of door area	180.00
0755	Decorative type louvers in Block board construction flush door	sqm of door area	310.00
0757	Rebate cutting in block board construction flush door	sqm of door area	85.00
0759	Decorative plywood 4 mm	sqm	420.00
0763	Glue	kilogram	68.00
0834	Synthetic enamel paint in all shades except black or chocolate shade	litre	140.00
0869	Plaster of Paris	kilogram	4.00
1003	Mild steel round bar above 12 mm dia	quintal	4300.00
1008	Flats up to 10 mm in thickness	quintal	4200.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
1015	Mild steel expanded metal 20x60 mm strands	sqm	290.00
1021	Hard drawn steel wire fabric	sqm	430.00
1022	Galvanised steel bolts & nuts 6 mm dia and 25 mm long round head with slots	10 Nos	25.00
1189	Second class teak wood in scantling	10 cudm	660.00
1190	Second class teak wood in planks	10 cudm	725.00
1199	Sal wood in scantling	10 cudm	520.00
1200	Kiln seasoned selected sheesham wood planks	10 cudm	650.00
1211	G.I. plain washer for seam bolts	100 Nos	30.00
1231	Extra for selected planks of second class teakwood	10 cudm	130.00
1238	Extra for selected planks of first class teakwood	10 cudm	140.00
2204	Carriage of timber	cum	121.88
2205	Carriage of steel	tonne	94.80
2406	Float glass sheet of nominal thickness 4 mm (weight not less than 10 kg/sqm)	sqm	330.00
2407	Float glass sheet of nominal thickness 5.5 mm (weight not less than 13.50 kg/sqm)	sqm	500.00
2412	Ply wood 5 ply with commercial ply on both faces 6 mm thick	sqm	360.00
2413	12 mm commercial ply	sqm	580.00
2414	18 mm thick block board with commercial ply veneering on both side	sqm	700.00
2449	Oxidised mild steel pull bolt lock (locking bolt) of size 85 mm x 42 mm with screws, bolts, nuts and washers complete	each	50.00
2451	Brass cupboard lock 6 levers of approved quality, 40 mm size	each	70.00
2452	Brass cupboard lock 6 levers of approved quality, 50 mm size	each	75.00
2453	Brass cupboard lock 6 levers of approved quality, 65 mm size	each	80.00
2454	Brass cupboard lock 6 levers of approved quality, 75 mm size	each	100.00
2455	Brass hanging type door stopper 150 mm	each	65.00
2456	Hydraulic door closer bottle type M.S. body with necessary accessories and screws complete	each	590.00
2459	Anodised Aluminium hanging type door stopper	each	25.00
2464	Anodised Aluminium pull bolt lock (locking bolt) of size 85 mm x 42 mm with screws, bolts, nuts and washers complete	each	50.00
2465	Anodised Aluminium Casement stay 250 mm	each	50.00
2466	Hollock wood in scantling	10 cudm	325.00
2468	Nickled Chromium Brass cupboard lock 40 mm size	each	65.00
2469	Nickled Chromium Brass cupboard lock 50 mm size	each	75.00
2470	Nickled Chromium Brass cupboard lock 65 mm size	each	85.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
2471	Nickled Chromium Brass cupboard lock 75 mm size	each	110.00
2480	Ply wood 5 ply with teak ply on both faces 9 mm thick	sqm	1030.00
2481	Ply wood 5 ply with teak ply on one face and commercial ply on another face 9 mm thick	sqm	840.00
2483	Ply wood 7 ply with teak ply on one face and commercial ply on another face 9 mm thick	sqm	920.00
2484	Pre-laminated with decorative lamination on both side exterior Grade - I MDF Board 12 mm thick confirming to IS:14587	sqm	691.90
2485	Pre-laminated with decorative lamination on both side exterior Grade - I MDF Board 18 mm thick confirming to IS:14587	sqm	922.50
2486	Pre-laminated with decorative lamination one side and other side balancing lamination exterior Grade - I MDF Board 25 mm thick confirming to IS:14587	sqm	1198.15
2487	Pre-laminated with decorative lamination one side and other side balancing lamination exterior Grade - I MDF Board 12 mm thick confirming to IS:14587	sqm	641.25
2488	Pre-laminated with decorative lamination one side and other side balancing lamination exterior Grade - I MDF Board 18 mm thick confirming to IS:14587	sqm	860.65
2489	PVC edge bending tape 2.00 mm thick	metre	28.55
2500	Extra for selected planks of second class deodar wood	10 cudm	100.00
2504	Kiln seasoning of timber	cum	730.00
2505	Hollock wood in planks	10 cudm	370.00
7001	Brass 100mm mortice latch and lock with 6 levers without pair of handles	each	260.00
7003	Pair of Anodised Aluminium lever handles for 100 mm mortice latch and lock	each	315.00
7018	Joint tape roll	roll	145.00
7019	Dash fastener / Chemical fastner	each	15.00
7021	Primer ( for gypsum board)	litre	85.00
7023	Chromium plated brackets ( curtain rods)	each	7.00
7029	Galvanised wire mesh of average width of aperture 1.4 mm and nominal dia of wire 0.63 mm	sqm	250.00
7032	Frosted glass sheet of nominal thickness 4 mm (weighing not less than 10 kg/sqm)	sqm	330.00
7033	Nickel plated M.S. pipe 25 mm dia	metre	80.00
7034	Nickel plated M.S. pipe 20 mm dia	metre	70.00
7035	Nickel plated M.S. Brackets for curtain rod 20 mm	each	7.00
7036	Nickel plated M.S - Brackets for curtain rod 25 mm	each	8.00

Code No.	Description	Unit	Rate ₹
7040	Oxidised mild steel screws 35 mm	100 Nos	50.00
7042	Mild steel conduit pipe (heavy type) ISI marked-20 mm dia	metre	60.00
7043	Mild steel conduit pipe (heavy type) ISI marked-25 mm dia	metre	70.00
7048	Rawl plug 50 mm (designation 10 nos)	each	10.00
7049	Teak wood lipping of size 25x3 mm in pelmets	metre	22.00
7055	Flat pressed 3 layer and graded particle board (medium density) Grade 1 conforming to IS : 3087 - 18 mm thick	sqm	420.00
7056	Aluminium tee channel (heavy duty) with rollers and stop end	metre	50.00
7059	Aluminium hanging floor door stopper with twin rubber & stopper	each	65.00
7060	Hydraulic door closer tubular type Aluminium section body	each	840.00
7063	Oxidised M.S.casement stay (straight peg type) 300 mm not less than 0.33 kg	each	22.00
7064	Oxidised M.S.casement stay (straight peg type) 250 mm not less than 0.28 kg	each	20.00
7065	Oxidised M.S. casement stay (straight peg type) 200 mm not less than 0.24 kg	each	18.00
7137	Factory made 35 mm thick shutters with laminated veneer lumber styles & rails as per TADS 15:1995 and panels of 12 mm thick plain type-I, medium density flat pressed three layer, graded particle board (FPT-I) as per IS:3087 bonded with BWP type synthetic resin adhesive, as per IS:848	sqm	1850.00
7139	Factory made 35 mm thick shutters with laminated veneer lumber styles & rails as per TADS 15:1995 and panels of 12 mm thick both sides prelaminate type-I, medium density flat pressed three layer, graded particle board (FPT-I) as per IS:3087 bonded with BWP type synthetic resin adhesive, as per IS:848	sqm	2030.00
7143	Factory made 35 mm thick shutters with laminated veneer lumber styles & rails as per TADS 15:1995 and panels of 12 mm thick one side prelaminate type-I, and other side balancing lamination, medium density flat pressed three layer, graded particle board (FPT-I) as per IS:3087 bonded with BWP type synthetic resin adhesive, as per IS:848	sqm	1950.00
7151	Factory made 30 mm thick shutters with laminated veneer lumber styles & rails as per TADS 15:1995 and panels of sheet glass using 10 kg/ sqm glass panes	sqm	1650.00
7154	Factory made 35 mm thick shutters with laminated veneer lumber styles & rails as per TADS 15:1995 and panels of galvanised wire gauge with average width of aperture 1.4 mm in both directions with wire of dia 0.63 mm	sqm	1630.00
7155	Factory made 30 mm thick shutters with laminated veneer lumber styles & rails as per TADS 15:1995 and panels of galvanised wire gauge with average width of aperture 1.4 mm in both directions with wire of dia 0.63 mm	sqm	1450.00

Code No.	Description	Unit	Rate ₹
7157	Laminated veneer lumber conforming to TADS 15:1995 manufactured in factory in frames of doors, windows	10 cudm	710.00
7184	Oxidised M.S. safety chain (weighing not less than 450 gms) for door	each	60.00
7269	25 mm thick particle board	sqm	480.00
7271	IIInd class teak wood lipping 25 mm wide x 12 mm thick	metre	40.00
7272	25 mm thick melamine faced prelaminated three layer particle board	sqm	940.00
7307	For flush door shutters Extra for providing teak veneering on one side instead of commercial veneering	sqm	340.00
7312	Expandable fastener with plastic sleeve and M.S. screws : 25 mm long	each	10.00
7313	Expandable fastener with plastic sleeve and M.S. screws : 32 mm long	each	11.00
7314	Expandable fastener with plastic sleeve and M.S. screws : 40 mm long	each	14.00
7315	Expandable fastener with plastic sleeve and M.S. screws : 50 mm long	each	15.00
7349	12 mm M.S. 'U' beading	metre	15.00
7366	Glass reinforced Gypsum ( GRG) board 12.5 mm thick	sqm	240.00
7367	Galvanised M.S. sheet 0.5 mm thick pressed channel section of size 50x32 mm	metre	60.00
7369	Galvanised M.S. sheet 0.50 mm thick pressed stud : 48x34x36 mm	metre	75.00
7388	Dash hold fastener 12.5 mm dia, 50 mm long with 6 mm dia bolt	each	50.00
7443	Aluminium single cleat of size 30x32x3 mm	each	14.00
7444	Aluminium grip strip of size 50x12x2 mm	each	11.00
7445	25 mm thick prelaminated flush door shutter both side decorative	sqm	830.00
7449	Aluminium U beading	kilogram	220.00
7451	Glass sheet (Pin headed) 4 mm thick	sqm	300.00
7468	Veneered particle board with commercial veneering on both sides 12 mm thick	sqm	500.00
7477	Prelaminated particle board with one side decorative and other side balancing lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade) 12 mm thick	sqm	740.00
7478	Prelaminated particle board with one side decorative and other side balancing lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade) 18 mm thick	sqm	850.00
7479	Prelaminated particle board with one side decorative and other side balancing lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade) 25 mm thick	sqm	930.00

Code No.	Description	Unit	Rate ₹
7480	Pre/aminated particle board with both sides decorative lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade) 12 mm thick	sqm	780.00
7485	Oxidised M. S. hinges finished with nickel plating 50 mm (Over all width)	metre	42.00
7486	Oxidised M. S. hinges finished with nickel plating 65 mm (Over all width)	metre	54.00
7512	PTMT handle 125x34x24 mm	each	33.00
7513	PTMT handle 150x34x24 mm	each	40.00
7514	PTMT butt hinges 75x60x10 mm	each	47.00
7515	PTMT butt hinges 100x75x10 mm	each	62.00
7516	PTMT Tower bolt 152x42x18 mm	each	70.00
7517	PTMT Tower bolt 202x42x18 mm	each	85.00
7518	PTMT door catcher 72x42 mm	each	30.00
7552	Coir veneered board 4 mm thick	sqm	290.00
7553	Coir veneered board 6 mm thick	sqm	390.00
7555	Coir veneered board 12 mm thick	sqm	650.00
7556	Coir veneered board 18 mm thick	sqm	1030.00
8001	24 mm thick Factory made shutters with style, rails and panels of PVC extruded sections in white, grey or wooden finish	sqm	2150.00
8002	30 mm thick Factory made shutters with style, rails and panels of PVC extruded sections in white, grey or wooden finish	sqm	2250.00
8003	Factory made PVC rigid foam panelled shutter i/c carriage	sqm	2150.00
8004	Factory made PVC rigid foam panelled shutter as per IS : 4020 i/c carriage	sqm	2550.00
8006	Factory made PVC rigid foam sheet 1 mm thick	sqm	185.00
8010	48mmX40mmX1.5mm thick Factory made door frame of PVC extruded sections in white, grey or wooden finish	metre	150.00
8011	Factory made door frame PVC extruded sheet i/c carriage	metre	350.00
8014	Factory made door frame of size 50x47 mm with wall thickness 5 mm made of single piece extruded profile	metre	490.00
8100	Powder coated M.S. butt hinges 100 mm X58 mmX1.9 mm	10 Nos	85.00
8210	Stainless steel screws 50 mm	100 Nos	250.00
8211	Stainless steel screws 40 mm	100 Nos	200.00
8212	Stainless steel screws 30 mm	100 Nos	150.00
8214	Stainless steel screws 20 mm	100 Nos	100.00
8215	Stainless steel butt hinges 125x64x1.9 mm IS : 12817 marked	10 Nos	250.00
8216	Stainless steel butt hinges 100x58x1.9 mm IS: 12817 marked	10 Nos	230.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
8217	Stainless steel butt hinges 75x47x1.8 mm IS : 12817 marked	10 Nos	150.00
8218	Stainless steel butt hinges 50x37x1.5 mm IS : 12817 marked	10 Nos	130.00
8219	Stainless steel butt hinges (heavy weight) 125x64x2.5 mm IS : 12817 marked	10 Nos	330.00
8220	Stainless steel butt hinges (heavyweight) 100x60x2.5 mm IS : 12817 marked	10 Nos	240.00
8221	Stainless steel butt hinges (heavy weight) 75x50x2.5 mm IS : 12817 marked	10 Nos	195.00
8222	M.S. heavy weight butt hinges 125x90x4.0 mm IS: 1341 marked.	10 Nos	330.00
8223	M.S. heavy weight butt hinges 100x75x3.5 mm IS: 1341 marked	10 Nos	170.00
8224	M.S. heavy weight butt hinges 75x60x3.1 mm IS: 1341 marked	10 Nos	90.00
8225	M.S. heavy weight butt hinges 50x40x2.5 mm IS : 1341 marked	10 Nos	75.00
8678	1 mm thick 35 mm wide bright finished stainless steel piano hinges	metre	40.00
8699	8 mm thick tapered edge calcium silicate board	sqm	368.00
8700	10 mm thick calcium silicate board	sqm	390.00
8703	Telescopic drawer channels 300 mm long	set	140.00
8704	Stainless steel roller for sliding arrangement in racks/ cupboards/ cabinets shutter	each	8.00
8705	50 mmX42 mmX2 mm thick Factory made door frame of PVC extruded sections in white, grey or wooden finish	metre	140.00
8706	25 mm thick factory made PVC flush door shutter i/c carriage	sqm	2150.00
8707	Factory made glass reinforced plastic door frame 90x45 mm i/c carriage	metre	380.00
8708	30 mm thick factory made glass fiber reinforced plastic panel door shutter i/c carriage	sqm	1850.00
8709	30 mm thick factory made solid PVC profile panelled door single piece extruded profile decorative finish (wood grain printed on both side)	sqm	2650.00
8710	Factory made solid PVC door frame 62 x 32 mm i/c carriage	metre	290.00
8711	28 mm factory made solid PVC panel door shutter i/c carriage	sqm	2250.00
8712	30 mm thick factory made solid PVC profile panelled door single piece extruded profile non decorative finish	sqm	2108.00
8713	Fiber glass reinforced plastic chajja	sqm	3600.00
8714	Magnetic catcher triple strip vertical type	each	20.00
8715	Magnetic catcher double strip horizontal type	each	15.00
8716	100 mm mortice lock with 6 levers for aluminium door	each	330.00
8717	12.5 mm thick Glass fibre reinforced Gypsum board	sqm	170.00

Code No.	Description	Unit	Rate ₹
8719	2nd class teak wood lipping / moulded beading or Taj beading of size 18X5 mm	metre	30.00
8720	Ceiling sections 0.55 mm thick having a knurled web of 51.55 mm and two flanges of 26 mm each with lips of 10.55 mm	metre	40.00
8721	Perimeter channel having one flange of 20 mm and another flange of 30 mm with thickness of 0.55 mm and web of length 27 mm	metre	25.00
8722	Nylon sleeves & wooden screws (40 mm)	each	2.00
8723	Counter sunk ribbed head screw 25 mm	100 Nos	75.00
8724	12 mm thick marine plywood conforming to IS: 710	sqm	850.00
8725	12 mm thick fire retardant plywood conforming to IS: 5509	sqm	880.00
8726	1.5 mm thick decorative laminated sheet	sqm	490.00
8727	1.0 mm thick decorative laminated sheet	sqm	380.00
8730	30 mm thick factory made glass fiber reinforced plastic flush door shutter i/c carriage	sqm	2150.00
8734	P.V.C. Single piece extruded door frame of profile size 50 mm x 47 mm with wall thickness of 5 mm	metre	350.00
8735	35 mm thick factory made solid panel PVC door shutter of single piece extruded profile non decorative finished (Matt finished)	sqm	2100.00
8736	35 mm thick factory made solid panel PVC door shutter of single piece extruded profile decorative finished (wood grain finished)	sqm	2600.00
8737	Stainless steel wire guage (Grade-304) aperture 1.4 mm and 0.50 mm dia wire	sqm	830.00
8738	Factory made door frame fire rated ( 60 minutes) made with 16 SWG G.I. Sheet of section 143 mm x 57 mm duly filled with vermiculite based concrete mix	metre	1000.00
8739	Fire rated door shuttere made with 16 SWG G.I. sheet( 60 minutes) without panel	sqm	5250.00
8740	Fire seal Putty	kg	700.00
8741	Clear fire resistant glass panes 6mm thick (60 minutes)	sqm	21000.00
8742	G.I. U beading of 16 SWG G.I. sheet (zinc coating >120gm/ m <sup>2</sup> ) with ceramic tape of suitable thickness and fire resistant primer coating	metre	260.00
8743	Matrix Mineral Board	metre	65.00
8744	Panic Bar / latch (Double point)	each	5000.00
8745	65 mm x 55 mm x 2 mm thick Factory made door frame of PVC extruded section in white,grey or wooden finish	metre	330.00
8746	37 mm thick Factory made shutter with style,rails and panels of PVC extruded section in white or grey finish i/c carriage	sqm	2350.00
8747	75 mm x 53 mm x 2.0 mm thick Factory made door frame of PVC extruded section in white,grey or wooden finish	metre	350.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
8748	37 mm thick Factory made fusion welded shutter with style, rails and panels of PVC extruded section in wooden finish	sqm	2450.00
8750	Zinc alloy (white powder coated) casement handle for uPVC windows	each	160.00
8751	Zinc alloy (white powder coated) Touch Lock for uPVC windows	each	110.00
8752	Zinc alloy rollers for uPVC windows	each	50.00
8753	Zinc alloy rollers for uPVC door	each	85.00
8754	Zinc alloy (white powder coated) casement lock for uPVC windows	each	100.00
8755	Stainless steel friction hinge of size 200 mm x 19 x 1.9 mm for uPVC windows	each	230.00
8756	Stainless steel friction hinge of size 250 mm x 19 x 1.9 mm for uPVC windows	each	290.00
8757	Stainless steel friction hinge of size 300 mm x 19 x 1.9 mm for uPVC windows	each	370.00
8758	Stainless steel friction hinge of size 350 mm x 19 x 1.9 mm for uPVC windows	each	420.00
8759	Stainless steel friction hinge of size 400 mm x 19 x 1.9 mm for uPVC windows	each	530.00
8760	uPVC extruded profile casement window Frame (50 mm x 50 mm)	metre	165.00
8761	uPVC extruded profile casement window sash (Style and Rail) (62 mm x 34 mm)	metre	150.00
8762	uPVC extruded profile casement window mullion (intermediate section) (66 mm x 50 mm)	metre	185.00
8763	uPVC extruded profile casement window 'T' profile (one vertical length in between two shutters) (24 mm x 34.5 mm)	metre	50.00
8764	uPVC extruded profile casement window glazing bead (12 mm x 18 mm)	metre	50.00
8765	uPVC extruded profile casement window Frame ( 67 mm x 62 mm)	metre	235.00
8766	uPVC extruded profile casement Window Sash/Mullion ( 67 mm x 75 mm)(Style,rail and intermediate section)	metre	265.00
8767	uPVC extruded profile casement window glazing bead (35 mm x 18 mm)	metre	85.00
8768	uPVC extruded profile Two Track Sliding frame (67 mm x 52 mm)	metre	245.00
8769	uPVC extruded profile Sliding window Sash (60 mm x 44 mm)	metre	230.00
8770	uPVC extruded profile Sliding Interlock for Window (one vertical length in each shutter) (45.5 mm x 28 mm)	metre	50.00
8771	uPVC extruded profile Sliding Door Sash (80 mm x 44 mm)	metre	290.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
8772	Aluminium Track on bottom rail for uPVC window	metre	25.00
8773	Wool Pine for uPVC window	metre	18.00
8775	Steel Galvanised tubular reinforcement for uPVC door/ window	metre	50.00
9999	Sundries	L.S.	1.70

## 9.0 WOOD AND P. V. C. WORK

Code No.	Description	Unit	Rate ₹
	<b>Note :- Wood work items may be substituted with available species of wood as per direction of Engineer-in-charge for which rates shall be derived from the relevant items.</b>		
	<b>FRAMES AND TRUSSES</b>		
9.1	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length ( hold fast lugs or dash fastener shall be paid for separately).		
9.1.1	Second class teak wood	cum	90,495.80
9.1.2	Sal wood	cum	73,331.40
9.1.3	Kiln seasoned and chemically treated hollock wood	cum	50,810.85
9.2	Providing laminated veneer lumber conforming to IS:14616 and TAD -15: 2001( Part B) in factory made frames of doors, windows, clerestory windows and other frames, wrought framed and fixing in position with hold fast lugs or with dash fasteners of required dia & length ( hold fast lugs or dash fastener shall be paid for separately).	cum	93,979.20
9.3	Providing wood work in frames of false ceiling, partitions etc. sawn and fixed in position :		
9.3.1	Sal wood	cum	69,114.60
9.3.2	Kiln seasoned and chemically treated hollock wood	cum	46,436.80
9.4	Extra for additional labour for circular works, such as in frames of fan light :		
9.4.1	Second class teak wood	cum	9,049.15
9.4.2	Sal wood	cum	7,332.80
9.4.3	Kiln seasoned and chemically treated hollock wood	cum	5,080.85
9.5	Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows, including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws, excluding panelling which will be paid for separately, all complete as per direction of Engineer-in-charge.		
9.5.1	Second class teak wood		
9.5.1.1	35 mm thick shutters	sqm	2,563.75
9.5.1.2	30 mm thick shutters	sqm	2,290.40
9.5.2	Kiln seasoned and chemically treated hollock wood		
9.5.2.1	35 mm thick shutters	sqm	1,618.55
9.5.2.2	30 mm thick shutters	sqm	1,476.05
9.5.3	Kiln seasoned selected planks of sheesham wood		
9.5.3.1	35 mm thick shutters	sqm	2,378.10
9.5.3.2	30 mm thick shutters	sqm	2,115.50
9.6	Providing and fixing 35 mm thick factory made laminated veneer lumber door shutter conforming to IS : 14616 and TADS 15:2001 (Part B), including ISI marked M.S. pressed butt hinges bright finished of required		

Code No.	Description	Unit	Rate ₹
	size with necessary screws, all complete as per directions of Engineer-in-charge and panelling with panels of :		
9.6.1	12 mm thick plain grade - 1, medium density flat pressed three layer particle board FPT - I or graded wood particle board FPT-I, IS : 3087 marked, bonded with BWP type synthetic resin adhesive as per IS : 848 :	sqm	2,428.45
9.6.2	12 mm thick pre-laminated particle board (decorative lamination on both sides) grade - 1, medium density flat pressed, three layer particle board FPT - I or graded wood particle board FPT-I, conforming to IS : 3087, bonded with BWP type synthetic resin adhesive as per IS : 848 and pre-laminated conforming to IS : 12823, Grade 1, Type - II marked :	sqm	2,637.50
9.6.3	12 mm thick one side Pre-laminated particle board (decorative lamination on one side and other sides balancing lamination) grade - 1 medium density flat pressed, three layer particle board FPT - I or graded wood particle board FPT-1 conforming to IS : 3087 bonded with BWP type synthetic resin adhesive as per IS : 848 and pre-laminated conforming to IS : 12823, Grade -1, Type II marked :	sqm	2,544.60
9.7	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick :		
9.7.1	Second class teak wood	sqm	2,056.10
9.7.2	Kiln seasoned and chemically treated hollock wood	sqm	1,293.60
9.7.3	Ply wood 5 ply, 9 mm thick		
9.7.3.1	Decorative plywood both side decorative veneer (Type - I) conforming to IS 1328 BWR type	sqm	1,863.00
9.7.3.2	Decorative plywood one side decorative veneer and commercial veneer on other face (Type 1) conforming to IS 1328 BWR Type	sqm	1,595.50
9.7.4	Ply wood 7 ply, 9 mm thick		
9.7.4.1	Decorative plywood one side decorative veneer and commercial veneer on other face (Type 1) conforming to IS 1328 BWR Type	sqm	1,708.15
9.7.5	Particle Board 12 mm thick		
9.7.5.1	Plain particle board flat pressed, 3 layer or graded wood particle board medium density Grade I, IS : 3087 marked	sqm	870.45
9.7.5.2	Veneered flat pressed three layer or graded wood particle board with commercial veneering on both sides conforming to IS:3097, grade I	sqm	1,116.80
9.7.5.3	Pre-laminated particle board with decorative lamination on one side and balancing lamination on other side, Grade I, Type II IS: 12823 marked	sqm	1,454.70
9.7.5.4	Pre-laminated particle board with decorative lamination on both sides, Grade I, Type II, IS:12823 marked	sqm	1,511.05

Code No.	Description	Unit	Rate ₹
9.7.6	Coir Veneer Board (conforming to IS 14842)		
9.7.6.1	12 mm thick	sqm	1,328.00
9.7.7	Float glass panes		
9.7.7.1	4 mm thick glass pane	sqm	1,098.10
9.7.7.2	5.5 mm thick glass panes	sqm	1,317.50
9.7.8	Fly proof stainless steel grade 304 wire gauge with 0.5 mm dia. wire and 1.4 mm wide aperture with matching wood beading	sqm	1,549.30
9.8	Deleted.		
9.9	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes, including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws.		
9.9.1	Second class teak wood		
9.9.1.1	35 mm thick	sqm	3,112.90
9.9.1.2	30 mm thick	sqm	2,800.50
9.9.2	Kiln seasoned and chemically treated hollock wood		
9.9.2.1	35 mm thick	sqm	2,036.80
9.9.2.2	30 mm thick	sqm	1,873.95
9.9.3	Kiln seasoned selected planks of sheesham wood		
9.9.3.1	35 mm thick	sqm	2,901.75
9.9.3.2	30 mm thick	sqm	2,618.45
9.10	Providing and fixing factory made laminated veneer lumber glazed shutter conforming to IS: 14616 and TADS 15:2001 (Part B), using 4 mm thick float glass panes for doors, windows and clerestory windows, including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws, all as per directions of Engineer-in-charge.		
9.10.1	30 mm thick shutters	sqm	2,196.15
9.11	Extra for providing heavy sheet float glass panes instead of ordinary float glass in glazed doors, windows and clerestory window shutters. (Area of opening for glass panes excluding portion inside rebate shall be measured)		
9.11.1	5.5 mm thick instead of 4 mm thick.	sqm	197.45
9.12	Extra for providing frosted glass panes 4 mm thick instead of ordinary float glass panes 4 mm thick in doors, windows and clerestory window shutters. (Area of opening for glass panes excluding portion inside rebate shall be measured).	sqm	5.80
9.13	Deduct for providing pin headed glass panes instead of ordinary float glass panes weighing 4 mm thick in doors, windows and clerestory windows shutters (Area of opening for glass panes excluding portion inside rebate shall be measured).	sqm	34.85
9.14	Extra for providing ISI marked Stainless Steel butt hinges instead of M.S. pressed butt hinges bright finished of required size with necessary screws. (Shutter area to be measured).	sqm	100.35
9.15	Deduct for not providing hinges in doors, windows or clerestory window shutters with :		
9.15.1	Stainless steel butt hinges with stainless steel screws :		

Code No.	Description	Unit	Rate ₹
	9.15.1.1 For 2nd class teak wood and other class of wood shutters	sqm	147.35
	9.15.2 ISI marked M.S. pressed butt hinges bright finished of required size		
	9.15.2.1 For 2nd class teak wood and other class of wood shutters	sqm	47.00
9.16	Providing and fixing 25 mm thick shutters for cup board etc. :		
	9.16.1 Panelled or panelled & glazed shutters :		
	9.16.1.1 Second class teak wood including ISI marked anodised aluminium butt hinges with necessary screws	sqm	2,617.25
	9.16.1.2 Second class teak wood including ISI marked nickel plated bright finished M.S. piano hinges with necessary screws	sqm	2,648.40
	9.16.2 Glazed shutters :		
	9.16.2.1 Second class teak wood including ISI marked anodized aluminium butt hinges with necessary screws	sqm	2,615.00
	9.16.2.2 Second class teak wood including ISI marked nickel plated bright finished M.S. piano hinges with necessary screws	sqm	2,587.60
9.17	Providing and fixing flat pressed 3 layer particle board medium density exterior grade (Grade I) or graded wood particle board IS : 3087 marked, to frame, backing or studding with screws etc. complete (Frames, backing or studding to be paid separately) :		
	9.17.1 12 mm thick	sqm	510.95
	9.17.2 18 mm thick	sqm	628.60
9.18	Providing and fixing Pre-laminated flat pressed 3 layer (medium density) particle board or graded wood particle board IS : 3087 marked, with one side decorative and other side balancing lamination Grade I, Type II exterior grade IS : 12823 marked, in shelves with screws and fittings wherever required, edges to be painted with polyurethane primer (fittings to be paid separately).		
	9.18.1 18 mm thick	sqm	1,176.70
	9.18.2 25 mm thick	sqm	1,277.25
9.19	Deleted		
9.20	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.		
	9.20.1 35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	sqm	2,323.55
	9.20.2 30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	sqm	2,149.35
	9.20.3 25 mm thick (for cupboard) including ISI marked nickel plated bright finished M.S. Piano hinges IS : 3818 marked with necessary screws	sqm	1,964.45
9.21	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply		

Code No.	Description	Unit	Rate ₹
	veneering with vertical grains or cross bands and face veneers on both faces of shutters :		
9.21.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	sqm	1,684.75
9.21.2	30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	sqm	1,510.55
9.21.3	25 mm thick (for cupboard) including ISI marked nickel plated bright finished M.S. piano hinges with necessary screws	sqm	1,383.70
9.22	Extra for Providing and fixing flush doors with decorative veneering instead of non decorative ISI marked flush door shutters conforming to IS: 2202 (Part I)		
9.22.1	On one side only	sqm	394.90
9.23	Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of flush door shutters (over all area of door shutter to be measured).	sqm	348.45
9.24	Extra for providing vision panel not exceeding 0.1 sqm in all type of flush doors (cost of glass excluded) (overall area of door shutter to be measured) :		
9.24.1	Rectangular or square	sqm	133.55
9.24.2	Circular	sqm	209.05
9.25	Extra if louvers (not exceeding 0.2 sqm) are provided in flush door shutters (overall area of door shutters to be measured).		
9.25.1	Decorative type door	sqm	360.05
9.26	Extra for cutting rebate in flush door shutters (Total area of the shutter to be measured).	sqm	98.75
9.27	Providing and fixing wire gauge shutters using galvanized M.S. wire gauge of average width of aperture 1.4 mm in both directions with wire of dia 0.63 mm, for doors, windows and clerestory windows with hinges and necessary screws :		
	<b>9.27.1 35 mm thick shutters</b>		
9.27.1.1	with ISI marked M.S. pressed butt hinges bright finished of required size		
9.27.1.1.1	Second class teak wood	sqm	2,914.00
9.27.1.1.2	Kiln seasoned and chemically treated hollock wood	sqm	1,961.15
9.27.1.1.3	Kiln seasoned selected class of sheesham wood	sqm	2,726.85
9.27.1.2	With ISI marked stainless steel butt hinges of required size		
9.27.1.2.1	Second class teak wood	sqm	3,014.30
9.27.1.2.2	Kiln seasoned and chemically treated hollock wood	sqm	2,061.50
9.27.1.2.3	Kiln seasoned selected class of sheesham wood	sqm	2,827.20
	<b>9.27.2 30 mm thick shutters</b>		
9.27.2.1	with ISI marked M.S. pressed butt hinges bright finished of required size		
9.27.2.1.1	Second class teak wood	sqm	2,575.40
9.27.2.1.2	Kiln seasoned and chemically treated hollock wood	sqm	1,761.05

Code No.	Description	Unit	Rate ₹
	9.27.2.1.3 Kiln seasoned selected class of sheesham wood	sqm	2,415.25
	9.27.2.2 With ISI marked stainless steel butt hinges of required size		
	9.27.2.2.1 Second class teak wood	sqm	2,675.75
	9.27.2.2.2 Kiln seasoned and chemically treated hollock wood	sqm	1,861.30
	9.27.2.2.3 Kiln seasoned selected class of sheesham wood	sqm	2,515.60
9.28	Deleted.		
9.29	Deleted.		
9.30	Deleted.		
9.31	Providing and fixing wire gauge laminated veneer lumber shutters conforming to IS : 14616, and as per TADS 15 :2001 (Part B) using galvanised wire gauge with average width of aperture 1.4 mm in both directions with wire of dia 0.63 mm as per IS :1568, for doors, windows and clerestory windows, including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws, as per directions of Engineer-in-charge:		
	9.31.1 35 mm thick shutters	sqm	2,172.90
	9.31.2 30 mm thick shutters	sqm	1,963.85
	<b>MISCELLANEOUS - WOOD WORK</b>		
9.32	Providing 50x50x50 mm 2nd class teak wood plugs including cutting brick work and fixing in cement mortar 1:3 (1 cement : 3 fine sand) and making good the walls etc.	each	19.70
9.33	Providing and fixing expandable fasteners of specified size with necessary plastic sleeves and galvanised M.S. screws including drilling holes in masonry work /CC/ R.C.C. and making good etc. complete.		
	9.33.1 25 mm long	each	15.70
	9.33.2 32 mm long	each	17.90
	9.33.3 40 mm long	each	21.40
	9.33.4 50 mm long	each	22.55
9.34	Providing and fixing 2nd class teak wood plain lining tongued and grooved, including wooden plugs complete with necessary screws and priming coat on unexposed surface.		
	9.34.1 40 mm thick	sqm	4,730.65
	9.34.2 25 mm thick	sqm	3,070.55
	9.34.3 20 mm thick	sqm	2,483.25
	9.34.4 12 mm thick	sqm	1,597.90
9.35	Providing and fixing in wall lining flat pressed three layer (medium density) particle board or graded wood Pre-laminated one side decorative lamination and other side balancing lamination Grade I, Type II, IS : 12823 marked, including priming coat on unexposed surface, with necessary fixing arrangement and screws etc. complete :		
	9.35.1 12 mm thick	sqm	1,151.10
	9.35.2 18 mm thick	sqm	1,291.60
	9.35.3 25 mm thick	sqm	1,393.85

Code No.	Description	Unit	Rate ₹
9.36	Providing and fixing specified wood frame work consisting of battens 50x25 mm fixed with rawl plug and drilling necessary holes for rawl plug etc. including priming coat complete.		
9.36.1	Kiln seasoned and chemically treated hollock wood	cum	91,975.40
9.37	Providing and fixing plywood 4 mm thick, one side decorative veneer conforming to IS: 1328 (type-1), for plain lining / cladding with necessary screws, including priming coat on unexposed surface with :		
9.37.1	Decorative veneer facings of approved manufacture	sqm	1,095.75
9.38	Providing and fixing 4mm thick coir veneer board, ISI marked IS : 14842, plain lining with necessary screws, priming coat on unexposed surface etc., complete.	sqm	914.55
9.39	Providing and fixing skirting with Pre-laminated (one side decorative and other side balancing lamination) flat pressed 3 layer or graded particle board (medium density) Grade I, Type II, IS :12823 marked, with necessary fixing arrangements and screws, including drilling necessary holes for rawl plugs etc. and priming coat on unexposed surface complete :		
9.39.1	18 mm thick	sqm	1,480.65
9.39.2	25 mm thick	sqm	1,582.85
9.40	Providing and fixing wooden moulded beading to door and window frames with iron screws, plugs and priming coat on unexposed surface etc. complete :		
9.40.1	2nd class teak wood		
9.40.1.1	50x12 mm	metre	110.50
9.40.1.2	50 x 20 mm	metre	148.10
9.40.2	Kiln seasoned and chemically treated hollock wood		
9.40.2.1	50x12 mm	metre	83.30
9.40.2.2	50x20 mm	metre	102.75
9.41	Providing and fixing plain jaffri of 35x10 mm laths placed 35 mm apart (frames to be paid separately), including fixing 50x12 mm beading complete with :		
9.41.1	Second class teak wood	sqm	1,702.60
9.42	Providing and fixing 18 mm thick, 150 mm wide pelmet of flat pressed 3 layer or graded wood particle board medium density grade I, IS : 3087 marked, including top cover of 6 mm commercial ply wood conforming to IS: 303 BWR grade, nickel plated M.S. pipe 20 mm dia ( heavy type) curtain rod with nickel plated brackets, including fixing with 25x3 mm M.S. flat 10 cm long fixed to pelmet with hollock wood cleats of size 100 mm x 40 mm x 40 mm on both inner side of pelmet and rawl plugs 75 mm long etc. all complete.	metre	333.25
9.43	Providing and fixing 18 mm thick, 150 mm wide pelmet of coir veneer board ISI marked IS : 14842, including top cover of 6 mm coir veneer board, nickle plated M.S. Pipe 20 mm dia. (heavy type) curtain rod with nickel plated brackets, including fixing with 25x3 mm M.S. Flat 10 cm long fixed to pelmet with hollock wood cleats of size 100 mm x 40 mm x 40 mm on both inner side of pelmet and rawl plugs 75 mm long etc. all complete.	metre	451.30

Code No.	Description	Unit	Rate ₹
9.44	Extra for using veneered particle board conforming to IS 3097 Grade I, in item of pelmet 18mm thick 150mm wide.		
9.44.1	Non decorative veneer on both sides	metre	31.60
9.44.2	Particle board with decorative veneering on both sides	metre	92.90
9.45	Providing and fixing teak wood lipping of size 25x3 mm in pelmet.	metre	44.65
9.46	Providing and fixing curtain rods of 1.25 mm thick chromium plated brass plate, with two chromium plated brass brackets fixed with C.P. brass screws and wooden plugs, etc., wherever necessary complete :		
9.46.1	12 mm dia	metre	258.25
9.46.2	20 mm dia	metre	339.55
9.46.3	25 mm dia	metre	444.10
9.47	Providing and fixing nickel plated M.S. pipe curtain rods with nickel plated brackets :		
9.47.1	20 mm dia (heavy type)	metre	113.25
9.47.2	25 mm dia (heavy type)	metre	126.00
9.48	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.		
9.48.1	Fixed to steel windows by welding	kg	103.15
9.48.2	Fixed to openings /wooden frames with rawl plugs screws etc.	kg	110.95
9.49	Providing and fixing expanded metal 20x60 mm strands 3.25 mm wide and 1.6 mm thick for windows etc. including 62 x19 mm beading of II nd class teak wood and priming coat with approved steel primer all complete.	sqm	905.90
9.50	Providing and fixing hard drawn steel wire fabric 75x25 mm mesh of weight not less than 7.75 Kg per sqm to window frames etc. including 62x19 mm beading of second class teak wood and priming coat with approved steel primer all complete.	sqm	1,075.20
9.51	Providing and fixing fly proof galvanized M.S. wire gauge to windows and clerestory windows using wire gauge with average width of aperture 1.4 mm in both directions with wire of dia 0.63 mm all complete.		
9.51.1	With 2nd class teak wood beading 62X19 mm	sqm	820.80
9.51.2	With 12 mm mild steel U beading	sqm	548.75
9.52	Deduct for fixing 75x25 mm hard drawn steel wire fabric of weight not less than 7.75 Kg per sqm in panelled and glazed door and window shutter instead of glass sheet 4 mm thick.	sqm	116.15
9.53	Providing 40x5 mm flat iron hold fast 40 cm long including fixing to frame with 10 mm diameter bolts, nuts and wooden plugs and embedding in cement concrete block 30x10x15cm 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size).	each	110.20
9.54	Providing beams including hoisting, fixing in position and applying wood preservative for the unexposed surfaces, etc. complete with :		
9.54.1	Sal wood	cum	67,307.30
9.54.2	Hollock wood	cum	44,200.60

Code No.	Description	Unit	Rate ₹
	<b>BRIGHT FINISHED M.S. FITTINGS</b>		
9.55	Providing and fixing ISI marked M.S. pressed butt hinges bright finished with necessary screws etc. complete :		
9.55.1	125x65x2.12 mm	each	31.80
9.55.2	100x58x1.90 mm	each	24.05
9.55.3	75x47x1.70 mm	each	19.10
9.55.4	50x37x1.50 mm	each	10.75
9.56	Providing and fixing ISI marked, IS : 1341, M.S. heavy weight butt hinges with necessary screws etc. complete :		
9.56.1	125x90x4.00 mm	each	53.90
9.56.2	100x75x3.50 mm	each	33.90
9.56.3	75x60x3.10 mm	each	22.55
9.56.4	50x40x2.50 mm	each	13.65
	<b>Note: - In coastal areas, M.S. heavy weight butt hinges or stainless steel hinges shall be used.</b>		
	<b>COPER OXIDISED MILD STEEL FITTINGS (COPPER OXIDISED AS PER IS: 1378)</b>		
9.57	Providing and fixing ISI marked oxidised M.S. pressed butt hinges with necessary screws etc. complete.		
9.57.1	125x65x2.12 mm	each	32.90
9.57.2	100x58x1.90 mm	each	25.55
9.57.3	75x47x1.70 mm	each	20.70
9.57.4	50x37x1.50 mm	each	11.55
9.58	Providing and fixing ISI marked oxidised M.S. pressed Parliamentary hinges with necessary screws etc. complete :		
9.58.1	150x125x27x2.80 mm	each	56.30
9.58.2	125x125x27x2.80 mm	each	53.40
9.58.3	100x125x27x2.80 mm	each	44.10
9.58.4	75x100x20x2.24 mm	each	38.30
9.59	Providing and fixing ISI marked oxidised M.S. single acting spring hinges with necessary screws etc. complete :		
9.59.1	150 mm	each	164.75
9.59.2	125 mm	each	158.95
9.59.3	100 mm	each	134.30
9.60	Providing and fixing oxidised M.S. double acting spring hinges with necessary screws etc. complete.		
9.60.1	150 mm	each	164.75
9.60.2	125 mm	each	158.95
9.60.3	100 mm	each	134.30
9.61	Providing M.S. Piano hinges ISI marked IS : 3818 finished with nickel plating and fixing with necessary screws etc., complete.		
9.61.1	Overall width 35 mm	metre	157.80

Code No.	Description	Unit	Rate ₹
	9.61.2 Overall width 50 mm	metre	154.30
	9.61.3 Overall width 65 mm	metre	168.25
9.62	Providing and fixing ISI marked oxidised M.S. sliding door bolts with nuts and screws etc. complete :		
	9.62.1 300x16 mm	each	161.55
	9.62.2 250x16 mm	each	154.60
9.63	Providing and fixing ISI marked oxidised M.S. tower bolt black finish, (Barrel type) with necessary screws etc. complete :		
	9.63.1 250x10 mm	each	63.55
	9.63.2 200x10 mm	each	56.30
	9.63.3 150x10 mm	each	43.40
	9.63.4 100x10 mm	each	36.75
9.64	Providing and fixing ISI marked 85x42 mm oxidised M.S. pull bolt lock conforming to IS : 7534 with necessary screws bolts, nut and washers etc. complete.	each	69.80
9.65	Providing and fixing ISI marked oxidised M.S. door latches conforming to IS:5930 with screws etc. complete :		
	9.65.1 300x20x6 mm	each	66.20
	9.65.2 250x20x6 mm	each	56.90
9.66	Providing and fixing ISI marked oxidised M.S. handles conforming to IS:4992 with necessary screws etc. complete :		
	9.66.1 125 mm	each	27.20
	9.66.2 100 mm	each	23.55
	9.66.3 75 mm	each	22.40
9.67	Providing and fixing oxidised M.S. hasp and staple (safety type) conforming to IS : 363 with necessary screws etc. complete :		
	9.67.1 150 mm	each	22.40
	9.67.2 115 mm	each	19.00
	9.67.3 90 mm	each	16.10
9.68	Providing and fixing oxidised M.S. casement stays (straight peg type) with necessary screws etc. complete.		
	9.68.1 300 mm weighing not less than 200 gms	each	32.50
	9.68.2 250 mm weighing not less than 150 gms	each	29.70
	9.68.3 200 mm weighing not less than 120 gms	each	27.35
9.69	Providing and fixing oxidised M.S. Safety chain with necessary fixtures for doors, (weighting not less than 450 gms).	each	77.20
	<b>STAINLESS STEEL FITTINGS</b>		
9.70	Providing and fixing IS : 12817 marked stainless steel butt hinges with stainless steel screws etc. complete :		
	9.70.1 125x64x1.90 mm	each	61.80
	9.70.2 100X58X1.90 mm	each	54.80
	9.70.3 75x47x1.80 mm	each	37.20
	9.70.4 50x37x1.50 mm	each	23.30

Code No.	Description	Unit	Rate ₹
9.71	Providing and fixing IS : 12817 marked stainless steel butt hinges (heavy weight) with stainless steel screws etc. complete :		
9.71.1	125x64x2.50 mm	each	71.05
9.71.2	100x60x2.50 mm	each	55.95
9.71.3	75x50x2.50 mm	each	42.45
	<b>BRASS FITTINGS</b>		
9.72	Providing and fixing bright finished brass butt hinges with necessary screws etc. complete :		
9.72.1	125x85x5.5 mm (heavy type)	each	395.00
9.72.2	125x70x4 mm (ordinary type)	each	133.70
9.72.3	100x85x5.5 mm (heavy type)	each	345.60
9.72.4	100x70x4 mm (ordinary type)	each	107.50
9.72.5	75x65x4 mm (heavy type)	each	130.15
9.72.6	75x40x2.5 mm (ordinary type)	each	69.75
9.72.7	50x40x2.5 mm (ordinary type)	each	29.10
9.73	Providing and fixing bright finished brass parliamentary hinges with necessary screws etc. complete :		
9.73.1	150x125x27x5 mm	each	358.60
9.73.2	125x125x27x5 mm	each	317.95
9.73.3	100x125x27x5 mm	each	294.70
9.73.4	75x100x20x3.2 mm	each	224.45
9.74	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete :		
9.74.1	250x10 mm	each	288.30
9.74.2	200x10 mm	each	226.70
9.74.3	150x10 mm	each	186.05
9.74.4	100x10 mm	each	124.85
9.75	Providing and fixing bright finished brass door latch with necessary screws etc. complete :		
9.75.1	300x16x5 mm	each	207.80
9.75.2	250x16x5 mm	each	201.95
9.76	Providing and fixing bright finished brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles of approved quality with necessary screws etc. complete.	each	514.55
9.77	Providing and fixing bright finished brass 100 mm mortice latch with one dead bolt and a pair of lever handles of approved quality with necessary screws etc. complete.	each	456.45
9.78	Providing and fixing bright finished brass night latch of approved quality including necessary screws etc. complete.	each	659.75
9.79	Providing and fixing special quality bright finished brass cupboard or ward robe locks with four levers of approved quality including necessary screws etc. complete.		
9.79.1	40 mm	each	166.10

Code No.	Description	Unit	Rate ₹
	9.79.2 50 mm	each	171.90
	9.79.3 65 mm	each	177.70
	9.79.4 75 mm	each	200.95
9.80	Providing and fixing 50 mm bright finished brass cup board or wardrobe knob of approved quality with necessary screws.	each	47.60
9.81	Providing and fixing bright finished brass handles with screws etc. complete :		
	9.81.1 125 mm	each	170.30
	9.81.2 100 mm	each	158.35
	9.81.3 75 mm	each	123.50
9.82	Providing and fixing bright finished brass hanging type floor door stopper with necessary screws, etc. complete.	each	79.60
9.83	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm), with necessary accessories and screws etc. complete.	each	737.35
9.84	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete.	each	1,027.20
9.85	Providing and fixing bright finished brass casement window fastener with necessary screws etc. complete.	each	67.25
9.86	Providing and fixing bright finished brass casement stays (straight peg type) with necessary screws etc. complete :		
	9.86.1 300 mm weighing not less than 330 gms	each	167.80
	9.86.2 250 mm weighing not less than 280 gms	each	136.90
	9.86.3 200 mm weighing not less than 240 gms	each	125.30
9.87	Providing and fixing bright finished brass hasp and staple (safety type) with necessary screws etc. complete :		
	9.87.1 150 mm	each	102.85
	9.87.2 115 mm	each	86.85
	9.87.3 90 mm	each	76.35
<b>CHROMIUM PLATED BRASS FITTINGS</b>			
9.88	Providing and fixing chromium plated brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles of approved quality with necessary screws etc. complete.	each	712.00
9.89	Providing and fixing chromium plated brass night latch of approved quality including necessary screws etc. complete.	each	700.40
9.90	Providing and fixing special quality chromium plated brass cupboard locks with six levers of approved quality including necessary screws etc. complete.		
	9.90.1 Size 40 mm	each	160.30
	9.90.2 Size 50 mm	each	171.90
	9.90.3 Size 65 mm	each	183.50
	9.90.4 Size 75 mm	each	212.55

Code No.	Description	Unit	Rate ₹
9.91	Providing and fixing chromium plated brass 50 mm cupboard or wardrobe knobs with nuts complete.	each	62.70
9.92	Providing and fixing chromium plated brass handles with necessary screws etc. complete:		
9.92.1	125 mm	each	210.95
9.92.2	100 mm	each	181.55
9.92.3	75 mm	each	158.35
9.93	Providing and fixing chromium plated brass casement window fastener with necessary screws etc. complete.	each	120.65
9.94	Providing and fixing chromium plated brass casement stays (straight peg type) with necessary screws etc. complete :		
9.94.1	300 mm weighing not less than 330 gms	each	184.55
9.94.2	250 mm weighing not less than 280 gms	each	161.30
9.94.3	200 mm weighing not less than 240 gms	each	143.90
<b>ANODISED ALUMINIUM FITTINGS (ALL FITTINGS SHALL BE ISI MARKED)</b>			
9.95	Providing and fixing ISI marked aluminium butt hinges anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete:		
9.95.1	125x75x4 mm	each	104.30
9.95.2	125x63x4 mm	each	99.65
9.95.3	100x75x4 mm	each	89.00
9.95.4	100x63x4 mm	each	87.85
9.95.5	100x63x3.2 mm	each	86.70
9.95.6	75x63x4 mm	each	78.75
9.95.7	75x63x3.2 mm	each	75.25
9.95.8	75x45x3.2 mm	each	65.95
<b>Note :- Aluminum hinges shall not be used in wooden shutters, stainless steel hinges shall be preferred.</b>			
9.96	Providing and fixing aluminium sliding door bolts, ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete :		
9.96.1	300x16 mm	each	215.30
9.96.2	250x16 mm	each	180.45
9.97	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868 ) transparent or dyed to required colour or shade, with necessary screws etc. complete :		
9.97.1	300x10 mm	each	108.10
9.97.2	250x10 mm	each	90.65
9.97.3	200x10 mm	each	76.40
9.97.4	150x10 mm	each	62.75
9.97.5	100x10 mm	each	49.85
9.98	Providing and fixing aluminium pull bolt lock, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed		

Code No.	Description	Unit	Rate ₹
	to required colour and shade, with necessary screws bolts, nut and washers etc. complete.	each	69.80
9.99	Providing and fixing 50 cm long aluminium kicking plate of size 100x3.15 mm, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete.	each	162.55
9.100	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :		
	9.100.1 125 mm	each	66.95
	9.100.2 100 mm	each	52.80
	9.100.3 75 mm	each	44.90
9.101	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.		
	9.101.1 Single rubber stopper	each	33.75
	9.101.2 Twin rubber stopper	each	80.20
9.102	Providing and fixing aluminium casement stays, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.	each	68.40
9.103	Providing and fixing bright finished brass 100 mm mortice latch and lock, ISI marked, with six levers and a pair of anodised (anodic coating not less than grade AC 10 as per IS : 1868) aluminium lever handles of approved quality with necessary screws etc. complete.	each	754.45
9.104	Providing and fixing aluminium tee channels (heavy duty) with rollers & stop end in pelmets as curtain rod.	metre	62.20
<b>GYPSUM BOARD PARTITIONS</b>			
9.105	Providing and fixing partition upto ceiling height consisting of G.I. frame and required board, including providing and fixing of frame work made of special section power pressed/ roll form G.I. sheet with zinc coating of 120 gms/sqm(both side inclusive), consisting of floor and ceiling channel 50mm wide having equal flanges of 32 mm and 0.50 mm thick, fixed to the floor and ceiling at the spacing of 610 mm centre to centre with dash fastener of 12.5 mm dia meter 50 mm length or suitable anchor fastener or metal screws with nylon plugs and the studs 48 mm wide having one flange of 34 mm and other flange 36 mm and 0.50 mm thick fixed vertically within flanges of floor and ceiling channel and placed at a spacing of 610 mm centre to centre by 6 mm dia bolts and nuts, including fixing of studs along both ends of partition fixed flush to wall with suitable anchor fastener or metal screws with nylon plugs at spacing of 450 mm centre to centre, and fixing of boards to both side of frame work by 25 mm long dry wall screws on studs, floor and ceiling channels at the spacing of 300 mm centre to centre. The boards are to be fixed to the frame work with joints staggered to avoid through cracks, M.S. fixing channel of 99 mm width (0.9 mm thick having two flanges of 9.5 mm each) to be provided at the horizontal joints of two boards, fixed to the studs using metal to metal flat head screws, including jointing and finishing to a flush finish with recommended jointing compound, jointing tape, angle beads at corners (25 mm x 25 mm x 0.5 mm), joint finisher		

Code No.	Description	Unit	Rate ₹
	and two coats of primer suitable for board as per manufacture's specification and direction of engineer in charge all complete.		
9.105.1	75 mm overall thickness partition with 12.5 mm thick double skin fire rated board conforming to IS: 2095: part I	sqm	1,253.35
9.105.2	75mm overall thickness partition with 12.5 mm thick double skin tapered edged plain Gypsum board conforming to IS: 2095: part I	sqm	1,090.75
9.105.3	66mm overall thickness Partition with 8mm thick double skin Calcium Silicate Board made with Calcareous & Siliceous materials reinforced with cellulose fiber manufactured through autoclaving process with Compressive Strength 225 kg/sq.cm, Bending Strength 100 kg./ sq.cm	sqm	1,550.70
9.105.4	66mm overall thickness partition using 8mm thick double skin non- asbestos multipurpose cement board reinforced with cellulose fibre manufactured through autoclaving process (High pressure steam cured) as per IS: 14862 with suitable fibre cement screws	sqm	1,276.60
9.106	Providing and fixing PTMT handles with necessary screws etc. complete.		
9.106.1	125x34x24 mm weighing not less than 23 gms	each	39.55
9.106.2	150x34x24 mm weighing not less than 26 gms	each	44.15
9.107	Providing and fixing PTMT Butt hinges with necessary screws etc. complete.		
9.107.1	75x60x10 mm fitted with 5.5 mm dia M.S. Bright Bar Rod weighing not less than 34 gms	each	60.90
9.107.2	100x75x10 mm fitted with 5.5 mm dia MS Bright Bar Rod weighing not less than 53 gms	each	79.20
9.108	Providing and fixing PTMT Tower Bolts with 12 mm one piece rod inside and necessary screws etc., complete.		
9.108.1	152x42x18 mm weighing not less than 60 gms	each	82.20
9.108.2	202x42x18 mm weighing not less than 78 gms	each	101.35
9.109	Providing and fixing PTMT door catcher of length 72 mm and dia. of 42 mm with suitable washers weighing not less than 33 gms	each	34.10
9.110	Providing and fixing Bamboo jaffery/ fencing consisting of superior quality 25 mm dia (Average) half cut bamboo placed vertically and fixed together with three numbers horizontal running members of hollock wood in scantling of section 50X25 mm, fixed with nails and G.I wire on existing support complete as per direction of Engineer-in-charge.	sqm	382.10
9.111	Providing and fixing wooden moulded corner beading of triangular shape to the junction of panelling etc. with iron screws, plugs and priming coat on unexposed surface etc. complete 2nd class teak wood.		
9.111.1	50x50 mm (base and height)	metre	188.30
9.112	Providing and fixing 2nd class teak wood lipping/ moulded beading or taj beading of size 18X5 mm fixed with wooden adhesive of approved quality and screws/ nails on the edges of the Pre-laminated particle board as per direction of Engineer-in-charge.	metre	53.95
9.113	Providing and fixing bright finished 100 mm mortice lock with 6 levers without pair of handles of approved quality for aluminium door, with necessary screws etc complete as per direction of Engineer-in-charge.	each	447.80

Code No.	Description	Unit	Rate ₹
9.114	Providing and fixing magnetic catcher of approved quality in cupboard / ward robe shutters, including fixing with necessary screws etc. complete.		
9.114.1	Triple strip vertical type	each	28.35
9.114.2	Double strip (horizontal type)	each	22.55
9.115	Providing and fixing powder coated telescopic drawer channels 300 mm long with necessary screws etc. complete as per directions of Engineer-in-charge.	one set	186.20
9.116	Providing and fixing sliding arrangement in racks/ cupboards/cabinets shutter by with stainless steel rollers to run inside C or E aluminium channel section (The payment of C or E channel shall be made separately)	each	11.35
9.117	Providing and fixing factory made uPVC door frame made of uPVC extruded sections having an overall dimension as below (tolerance $\pm 1$ mm), with wall thickness 2.0 mm ( $\pm 0.2$ mm), corners of the door frame to be Jointed with galvanized brackets and stainless steel screws, joints mitred and Plastic welded. The hinge side vertical of the frames reinforced by galvanized M.S. tube of size 19 X 19 mm and 1 mm ( $\pm 0.1$ mm) wall thickness and 3 nos. stainless steel hinges fixed to the frame complete as per manufacturer's specification and direction of Engineer-in-charge		
9.117.1	Extruded section profile size 48x40 mm	metre	199.55
9.117.2	Extruded section profile size 42x50 mm	metre	187.95
9.118	Providing and fixing to existing door frames.		
9.118.1	24 mm thick factory made PVC door shutters made of styles and rails of a uPVC hollow section of size 59x24 mm and wall thickness 2 mm ( $\pm 0.2$ mm) with inbuilt edging on both sides. The styles and rails mitred and joint at the corners by means of M.S. galvanised/plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 20x20 mm and 1 mm ( $\pm 0.1$ mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x24 mm and 2 mm ( $\pm 0.2$ mm) wall thickness, fixed to the shutter styles by means of plastic/galvanised M.S. 'U' cleats. The shutter frame filled with a uPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm ( $\pm 0.1$ mm) wall thickness. The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge. (For W.C. and bathroom door shutter).	sqm	2,645.70
9.118.2	30 mm thick factory made Polyvinyl Chloride (PVC) door shutter made of styles and rails of a uPVC hollow section of size 60x30 mm and wall thickness 2 mm ( $\pm 0.2$ mm), with inbuilt decorative moulding edging on one side. The styles and rails mitred and joint at the corners by means of M.S. galvanised/plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 25x20 mm and 1 mm ( $\pm 0.1$ mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x30 mm and 2 mm ( $\pm 0.2$ mm) wall thickness fixed to the shutter styles by means of plastic/ galvanised M.S. 'U' cleats. The shutter		

Code No.	Description	Unit	Rate ₹
	frame filled with a uPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm ( $\pm 0.1$ mm) wall thickness . The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge.	sqm	2,761.85
9.118.3	25 mm thick PVC flush door shutters made out of a one piece Multi chamber extruded PVC section of the size of 762 mm X 25 mm or less as per requirement with an average wall thickness of 1 mm ( $\pm 0.3$ mm). PVC foam end cap of size 23x10 mm are provided on both vertical edges to ensure the overall thickness of 25 mm. M.S. tube having dimensions 19 mm x 19 mm and 1.0 mm ( $\pm 0.1$ mm) is inserted along the hinge side of the door. Core of the door shutter should be filled with High Density Polyurethane foam. The Top & Bottom edges of the shutter are covered with an end-cap of the size 25 mm X 11 mm. Door shutter shall be reinforced with special polymeric reinforcements as per manufacturer's specification and direction of Engineer-in-charge to take up necessary hardware and fixtures. Stickers indicating the locations of hardware will be pasted at appropriate places	sqm	2,645.70
9.119	Providing and fixing factory made P.V.C. door frame of size 50x47 mm with a wall thickness of 5 mm, made out of extruded 5mm rigid PVC foam sheet, mitred at corners and joined with 2 Nos of 150 mm long brackets of 15x15 mm M.S. square tube, the vertical door frame profiles to be reinforced with 19x19 mm M.S. square tube of 19 gauge, EPDM rubber gasket weather seal to be provided through out the frame. The door frame to be fixed to the wall using M.S. screws of 65/100 mm size, complete as per manufacturer's specification and direction of Engineer-in-Charge.	metre	433.10
9.120	Providing and fixing factory made panel PVC door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19 mm x 19 mm for styles and 15x15 mm for top & bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture . M.S. frame covered with 5 mm thick heat moulded PVC 'C' channel of size 30 mm thickness, 70 mm width out of which 50 mm shall be flat and 20 mm shall be tapered in 45 degree angle on both side forming styles and 5 mm thick, 95 mm wide PVC sheet out of which 75 mm shall be flat and 20 mm shall be tapered in 45 degree on the inner side to form top and bottom rail and 115 mm wide PVC sheet out of which 75 mm shall be flat and 20 mm shall be tapered on both sides to form lock rail. Top, bottom and lock rails shall be provided both side of the panel. 10 mm (5 mm x 2 ) thick, 20 mm wide cross PVC sheet be provided as gap insert for top rail & bottom rail, paneling of 5 mm thick both side PVC sheet to be fitted in the M.S. frame welded/ sealed to the styles & rails with 7 mm (5 mm+2 mm) thick x 15 mm wide PVC sheet beading on inner side, and joined together with solvent cement adhesive. An additional 5 mm thick PVC strip of 20 mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent adhesive etc. complete as per direction of Engineer-in-charge, manufacturer's specification & drawing.		
9.120.1	30 mm thick plain PVC door shutters	sqm	2,675.15
9.120.2	30 mm thick pre laminated PVC door shutters	sqm	3,139.75

Code No.	Description	Unit	Rate ₹
9.121	Providing and fixing Fiber Glass Reinforced plastic (FRP) Door Frames of cross-section 90 mm x 45 mm having single rebate of 32 mm x 15 mm to receive shutter of 30 mm thickness .The laminate shall be moulded with fire resistant grade unsaturated polyester resin and chopped mat . Door frame laminate shall be 2 mm thick and shall be filled with suitable wooden block in all the three legs. The frame shall be covered with fiber glass from all sides. M.S. stay shall be provided at the bottom to steady the frame.	metre	467.95
9.122	Providing and fixing to existing door frames.		
9.122.1	30 mm thick Glass Fibre Reinforced Plastic (FRP) panelled door shutter of required colour and approved brand and manufacture, made with fire - retardant grade unsaturated polyester resin, moulded to 3 mm thick FRP laminate for forming hollow rails and styles, with wooden frame and suitable blocks of seasoned wood inside at required places for fixing of fittings, cast monolithically with 5 mm thick FRP laminate for panels conforming to IS: 14856, including fixing to frames.	sqm	2,326.70
9.122.2	30 mm thick Fiberglass Reinforced Plastic (F.R.P.) flush door shutter in different plain and wood finish made with fire retardant grade unsaturated polyester resin, moulded to 3 mm thick FRP laminate all around, with suitable wooden blocks inside at required places for fixing of fittings and polyurethane foam (PUF)/ Polystyrene foam to be used as filler material throughout the hollow panel, casted monolithically with testing parameters of F.R.P. laminate conforming to table - 3 of IS: 14856, complete as per direction of Engineer-in-charge.	sqm	2,675.15
9.123	Providing and fixing factory made door frame (single rebate) made out of single piece extruded solid PVC foam profile with homogenous fine cellular structure having smooth outer integral skin having 62 mm width & 32 mm thickness, frame will be mitred & Jointed with self driven self tapping screws of size 38 mm x 4 mm & PVC solvent cement , including fixing the frame to wall with suitable dia & length anchor fastener as per manufacturer's specification and direction of Engineer-in-charge.	metre	363.40
9.124	Providing and fixing factory made 30 mm thick door shutter made of solid PVC foam profile. The styles & rails shall be of size 75 mm x 30 mm having wall thickness 5 mm. The styles, top & bottom rails shall have one side wall thickness of 15 mm integrally extruded on the hinge side of the profile for better screw holding power. The styles and rails shall be reinforced with M.S. tubes of size 33 mm x 17 mm x 1 mm, painted with primer , all four corners of reinforcement to be welded or sealed. Solid PVC extruded bidding (push fit type) will be set inside the styles and the rails with a cavity, to receive single piece extruded 5 mm PVC sheet as panel. The styles and rails will be mitred cut and joint with the help of PVC solvent cement & self driven self tapping screws. Single piece extruded solid PVC lock rail of size 100 mm x 30 mm with wall thickness 5 mm & 15 mm integrally extruded in the middle of the lock rail & fixed with styles with the help of PVC solvent cement & self driven self tapping screws of size 100 mm x 8 mm complete as per manufacturer's specifications and direction of Engineer-in-charge.		
	9.124.1 Non decorative finish	sqm	2,626.40
	9.124.2 Decorative finish (both side wood grained finish)	sqm	3,255.90
9.125	Providing and fixing PVC rigid foam sheet 1 mm thick on existing door shutters (bathroom and W.C. doors) using synthetic rubber based adhesive.	sqm	738.90

Code No.	Description	Unit	Rate ₹
9.126	Providing and fixing 12 mm thick panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick.		
9.126.1	Marine plywood conforming to IS: 710	sqm	1,585.55
9.126.2	Fire retardant plywood conforming to IS: 5509	sqm	1,627.15
9.127	Providing & Fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt / suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S, including cost of adhesive of approved quality.		
9.127.1	1.5 mm thick	sqm	803.75
9.127.2	1.0 mm thick	sqm	663.20
9.128	Providing and fixing factory made Fiberglass Reinforced plastics (F.R.P.) chajja 4 mm thick of required colour, size and design made by Resin Transfer Moulding (RTM) Machine Technology, resulting in void free compact laminate in single piece, having smooth gradual slope curvature for easy drainage of water and duly reinforced by 2nos vertically and 1nos horizontally 50x2 mm thick M.S. flat with 12 mm in built hole for grouting on the existing wall along with the 50 mm flanges duly inserted and sealed in the wall complete in one single piece casted monolithically, including all necessary fittings . The FRP Chajja should be manufactured using unsaturated Polyester resin as per IS: 6746, duly reinforced with fibre glass chopped strand mat (CSM) as per IS: 11551 complete with protective Gel coat U/V coating on Top for complete resistance from the extreme of temperature, weather & sunlight.	sqm	4,799.35
9.129	Providing and fixing cup board shutters 25 mm thick, with Pre-laminated flat pressed three layer particle board or graded wood particle board IS: 12823 marked, exterior grade (Grade I Type II), having one side decorative lamination and other side balancing lamination, including IIInd class teak wood lipping of 25 mm wide x12 mm thick with necessary screws and bright finished stainless steel piano hinges, complete as per direction of the Engineer-in-Charge	sqm	1,585.55
9.130	Providing and fixing cup board shutters with 25 mm thick veneered particle board IS : 3097 marked, exterior grade (Grade I), of approved make, including IIInd class teak wood lipping of 25 mm wide x 12 mm thick with necessary screws and bright finished stainless steel piano hinges, complete as per direction of Engineer-in-Charge.		
9.130.1	With decorative veneering on one side and commercial veneering on other side	sqm	1,353.25
9.130.2	With non decorative veneering on both sides	sqm	1,248.70
9.131	Providing and fixing factory made shutters of Pre-laminated particle board flat pressed three layer or graded wood particle board with one side decorative finish and other side balancing lamination conforming to IS: 12823 Grade I Type II, of approved design, and edges sealed with water resistant paint and lipped with aluminium 'U' type edge beading all-round the shutter, including fixing with angle cleat, grip strip, cadmium plated steel screws, including fixing of aluminium hinges 100x63x4 mm etc. complete as per architectural drawing and direction of Engineer-in-Charge (Cost of 'U' beading and hinges will be paid for separately).		
9.131.1	25 mm thick	sqm	1,264.00

Code No.	Description	Unit	Rate ₹
9.132	Providing and fixing aluminum U beading of required size to Pre-laminated/ flush door shutter, including fixing etc. complete as per direction of Engineer-in-charge.	kg	435.10
9.133	Providing and fixing, in position concealed G.I. section for wall paneling using board of required thickness fixed on the 'W' profile (0.55 mm thick) having a knurled web of 51.55 mm and two flanges of 26 mm each with lips of 10.55 mm, placed @ 610 mm C/C in perimeter channel having one flange of 20 mm and another flange of 30 mm with thickness of 0.55 mm and web of length 27 mm. Perimeter channel is fixed on the floor and the ceiling with the nylon sleeves @ 610 mm C/C with fully threaded self-tapping dry wall screws. Board is fixed to the 'W' profile with 25 mm countersunk ribbed head screws @ 200 mm C/C., all complete as per the drawing & directions of engineer-in-charge, the joints of the boards are finished with specially formulated jointing compound and 48 mm wide jointing tape to provide seamless finish.		
9.133.1	Tapered edge calcium silicate board made with calcareous & siliceous materials reinforced with cellulose fiber manufactured through autoclaving process to give stable crystalline structure with compressive strength 225 kg/sq.cm, Bending strength 100 kg/sq.cm.		
9.133.1.1	10mm thick	sqm	945.70
9.133.2	Non-asbestos multipurpose cement board reinforced with cellulose fibre manufactured through autoclaving process (high pressure steam cured) as per IS : 14862 with suitable fibre cement screw.		
9.133.2.1	8 mm thick	sqm	766.80
9.133.3	Gypsum board conforming to IS: 2095 Part - I .		
9.133.3.1	12.5 mm thick	sqm	664.55
9.134	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws :		
9.134.1	35 mm thick shutters		
9. 134.1.1	with ISI marked M.S. pressed butt hinges bright finished of required size		
9. 134.1.1.1	Second class teak wood	sqm	3,353.75
9. 134.1.1.2	Kiln seasoned and chemically treated hollock wood	sqm	2,400.90
9. 134.1.1.3	Kiln seasoned selected class of sheesham wood	sqm	3,166.60
9. 134.1.2	With ISI marked stainless steel butt hinges of required size		
9. 134.1.2.1	Second class teak wood	sqm	3,454.10
9. 134.1.2.2	Kiln seasoned and chemically treated hollock wood	sqm	2,501.25
9. 134.1.2.3	Kiln seasoned selected class of sheesham wood	sqm	3,266.95
9. 134.2	30 mm thick shutters		
9.134.2.1	with ISI marked M.S. pressed butt hinges bright finished of required size		
9. 134.2.1.1	Second class teak wood	sqm	3,015.20

Code No.	Description	Unit	Rate ₹
	9. 134.2.1.2 Kiln seasoned and chemically treated hollock wood	sqm	2,200.70
	9. 134.2.1.3 Kiln seasoned selected class of sheesham wood	sqm	2,855.00
	9. 134.2.2 With ISI marked stainless steel butt hinges of required size		
	9. 134.2.2.1 Second class teak wood	sqm	3,115.50
	9.134.2.2.2 Kiln seasoned and chemically treated hollock wood	sqm	2,301.05
	9.134.2.2.3 Kiln seasoned selected class of sheesham wood	sqm	2,955.35
9.135	Providing and fixing fly proof stainless steel grade 304 wire gauge, to windows and clerestory windows using wire gauge with average width of aperture 1.4 mm in both directions with wire of dia. 0.50 mm all complete.		
	9.135.1 With 2nd class teak wood beading 62X19 mm	sqm	1,560.10
	9.135.2 With 12 mm mild steel U beading	sqm	1,288.05
9.136	Providing and fixing fire resistant door frame of section 143 x 57 mm having built in rebate made out of 16 SWG G.I. sheet (zinc coating not less than 120 gm/sqm) duly filled with vermiculite based concrete mix, suitable for mounting 60 minutes fire rated door shutters. The frame is fitted with intumescent fire seal strip of size 10x4 mm (minimum) around the frame and fixing with dash fastener of approved size and make, including applying a coat of approved brand fire resistant primer etc. complete as per direction of Engineer-in-charge (Dash fastener to be paid for separately).	metre	1,190.65
9.137	Providing and fixing 50 mm thick glazed fire resistant door shutters of 60 minutes fire rating conforming to IS:3614 (Part-II), tested and certified as per laboratory approved by Engineer-in-charge, with suitable mounting on door frame, consisting of vertical styles, lock rail, top rail 100 mm wide, bottom rail 200 mm wide, made out of 16 SWG G.I.sheet (zinc coating not less than 120 gm/m <sup>2</sup> ) duly filled FR insulation material and fixing with necessary stainless steel ball bearing hinges of approved make, including applying a coat of approved fire resistant primer etc. all complete as per direction of Engineer-in-charge (panneling to be paid for separately).	sqm	6,205.05
9.138	Providing and fixing glazing in fire resistant door shutters, fixed panels, ventilators and partitions etc., with G.I. beading of appropriate size, made out of 20 SWG G.I.sheet (zinc coating not less than 120 gm/m <sup>2</sup> ), fire resistant sealant, including applying a coat of approved fire resistant primer on G.I. beading etc., complete all as per direction of Engineer-in-charge.		
	9.138.1 With clear fire resistant glass panes 6mm thick of approved brand, having minimum 60 minutes fire resistance	sqm	26,954.60
9.139	Providing and fixing panic bar / latch (Double point) fitted with a single body, Trim Latch & Lock on back side of the Panic Latch of reputed brand and manufacture to be approved by the Engineer- in- charge, all complete.	nos.	5,892.30
9.140	Providing and fixing plain lining with necessary screws/nuts & bolts/ nails, including a coat of approved primer on one face, and fixed on wooden /steel frame work, complete as per direction of Engineer-in-charge (Frame work shall be paid for separately).		
	9.140.1 12mm thick commercial ply conforming to IS : 1328 BWR type	sqm	891.70

Code No.	Description	Unit	Rate ₹
9.141	Providing and fixing PVC Door Frame of size 50x47 mm with a wall thickness of 5 mm ( $\pm 0.2$ mm), made out of single piece extruded PVC profile, with mitred cut joints and joint with 2 nos of PVC bracket of size 190 mm x 100 mm long arms of cross section size 35 x 15 mm & self driven self tapping screws, the vertical door profiles to be reinforced with 40x20 mm M.S. rectangular tube of 0.8 mm , including providing EPDM rubber gasket weather seal throughout the frame, including jointing 5 mm PVC frame strip with PVC solvent cement on the back of the profile. The door frame to be fixed to the wall using 8 x100 mm long anchor fasteners complete, all as per manufacturer's specification and direction of Engineer -in- charge.	metre	597.20
9.142	35 mm thick factory made Solid panel PVC Door shutter, made out of single piece extruded solid PVC profiles, 5 mm ( $\pm 0.2$ mm) thick, having styles & rails (except lock rail) of size 95 mmx 35 mm x 5 mm, out of which 75 mm shall be flat and 20 mm shall be tapered (on both side), having one side thickness of 15 mm integrally extruded on the hinge side of the profile for better screw holding power, including reinforcing with MS tube of size 40 mm X 20 mm x 1 mm, joints of styles & rails to be mitred cut & joint with the help of PVC solvent cement, self driven self tapping screws & M.S. rectangular pipes bracket of size 190 mm X 100 mm of cross section size 35 mm x 17 mm x 1 mm at each corner. Single piece extruded 5 mm thick solid PVC Lock rail of size 115 mm x 35 mm, out of which 75 mm to be flat and 20 mm to be tapered at both ends, having 15 mm solid core in middle of rail section integrally extruded, fixing the styles & rails with the help of solvent and self driven self tapping screws of 125 mm x 11 mm, including providing 5 mm Single piece solid PVC extruded sheet inserted in the door as panel, all complete as per manufacturer's specification and direction of Engineer-in-charge.		
	9.142.1 Non decorative finish (matt finish)	sqm	2,625.40
	9.142.2 Decorative finish (wood grained finish)	sqm	3,206.15
9.143	Providing and Fixing factory made uPVC door frame, made of uPVC extruded sections , of size 65 mm x 55 mm with wall thickness 2.0 mm ( $\pm 0.2$ mm) , corners of the door frame to be mitred cut and jointed with plastic brackets and stainless steel screws, reinforcing hinge side vertical of the frames with PVC profile of Size 28 mm x 30 mm having wall thickness 2 mm ( $\pm 0.2$ mm), including providing & fixing 3 nos of 125 mm long stainless steel hinges to the frame, fixing the frame with jamb with required number & size of anchor dash fastners, all complete as per manufacturer's specification and direction of Engineer-in-charge.	metre	408.65
9.144	Providing and fixing 37 mm thick factory made PVC door shutter, styles and rails made of PVC hollow section of size 100 mm x 37 mm with wall thickness 2 mm ( $\pm 0.2$ mm), with inbuilt bead on one side, styles and rails mitred cut and joint at the corners by means of 2 nos of plastic brackets of size 75 mm x 220 mm at each corner and stainless		

Code No.	Description	Unit	Rate ₹
	steel screws, reinforcing the hinge side of style by inserting PVC profile of size 28 mm x 30 mm, with wall thickness 2 mm ( $\pm 0.2$ mm). Lockrail of size 100 mm x 37 mm, wall thickness 2 mm ( $\pm 0.2$ mm) will be fixed to the vertical styles. Providing with PVC snapfit beads and panel of size 100 mm x 20 mm, and inserting 2 nos tie bar of 6 mm dia and fastening with nuts and washers complete, all as per manufacturer's specification and direction of Engineer-in-charge.	sqm	2,878.00
9.145	Providing and Fixing factory made PVC door frame made of PVC extruded sections of size 75 mm x 53 mm, having wall thickness 2.0 mm ( $\pm 0.2$ mm). Both verticals sides of the frame reinforced with PVC profile of cross section size 28 mm x 30 mm x 2 mm thickness ( $\pm 0.2$ mm) and 75 mm x 200 mm long, including reinforcing both ends of the top frame with PVC profile. PVC Door Frame and PVC reinforcement profile to be mitred cut, jointed and fusion welded together, including providing and fixing 3 nos of 125 mm long stainless steel hinges to frame, fixing the frame with jamb with required nos & sizes of anchor dash fastener, all complete as per manufacturer's specification and direction of engineer-in-charge.	metre	431.85
9.146	Providing and fixing 37 mm thick factory made PVC Door shutter, styles and rails made of PVC hollow extruded printed and laminated section having overall dimension 115 mm x 37 mm with wall thickness 2 mm ( $\pm 0.2$ mm) with inbuilt beading on one side, the styles and rails mitred cut and joint at corners by inserting 2 nos PVC profile reinforcement of size 75 mm x 200 mm long with cross section size of 28 mm x 30 mm having wall thickness 2 mm ( $\pm 0.2$ mm). Styles, rails and reinforcements to be fusion welded together. Only hinge side vertical style to be reinforced with PVC profile reinforcement in full length. Printed and laminated PVC lock rail of size 110 mm x 37 mm having wall thickness 2 mm ( $\pm 0.2$ mm) to be welded horizontally with the vertical styles after inserting PVC profile reinforcement as in styles and rails, providing with PVC snap fit beading, panels of 100 x 20 mm printed & laminated and inserting 2 nos 6 mm dia bright steel rod horizontally with both side threaded and tightened with check nuts and washers complete, all as per manufacturer's specification and direction of engineer-in-charge.	sqm	2,994.15
9.147	Providing and Fixing factory made uPVC white colour casement/sliding window / door, made of extruded profiles. Profiles of frames and sash will be mitred cut and fusion welded at all corners, including drilling of holes for fixing hardware and drainage of water etc., making arrangement for fixing of hardware, EPDM gasket, 1.2 $\pm$ 0.2 mm thick galvanised steel profile to be inserted in required profile, frame will be fixed to the wall with 8 mm x 100 mm long fasteners, all complete as per direction of Engineer-in-charge. (Glazing, hardware hinges and fitting etc. to be paid separately.)  Note :- Each member of window to be measured separately with clear length.		

Code No.	Description	Unit	Rate ₹
<b>9.147.1</b>	<b>Casement Window (Outward/Inward opening) with hinge System</b>		
9.147.1.1	Frame (50 mm x 50 mm)	metre	402.45
9.147.1.2	Sash (Style and Rail) (62 mm x 34 mm)	metre	384.15
9.147.1.3	Mullion (intermediate Section) (66 mm x 50 mm)	metre	426.85
9.147.1.4	'T' Profile (one vertical length in between two shutters) (24 mm x 34.5 mm)	metre	92.80
9.147.1.5	Glazing bead (12 mm x 18 mm)	metre	123.30
<b>9.147.2</b>	<b>Casement Window (With friction hinge &amp; outward opening)</b>		
9.147.2.1	Casement Frame (67 mm x 62 mm)	metre	457.35
9.147.2.2	Casement Window Sash / Mullion (67 mm x 75 mm ) (style, rail and intermediate section)	metre	493.90
9.147.2.3	Casement Glazing bead (35 mm x 18 mm)	metre	166.00
<b>9.147.3</b>	<b>Sliding Window (Two Track, 2/4 Shutters)</b>		
9.147.3.1	Two Track Sliding Frame (67 mm x 52 mm)	metre	540.40
9.147.3.2	Sliding window Sash (60 mm x 44 mm)	metre	505.00
9.147.3.3	Sliding Interlock for Window (one vertical length in each shutter)( 45.5 mm x 28 mm)	metre	138.80
9.147.3.4	Sliding Glazing bead (35 mm x 18 mm)	metre	166.00
<b>9.147.4</b>	<b>Sliding Door (Two Track, 2/4 Shutters)</b>		
9.147.4.1	Two Track Sliding Frame (67 mm x 52 mm)	metre	519.80
9.147.4.2	Sliding Door Sash (80 mm x 44 mm)	metre	640.75
9.147.4.3	Sliding Interlock for Door (one vertical length in each shutter) (45.5 mm x 28 mm)	metre	138.80
9.147.4.4	Sliding Glazing bead (35 mm x 18 mm)	metre	166.00
9.148	Providing and fixing stainless steel (SS-304 grade) friction hinges to the side/ top hung uPVC windows, of approved quality, with necessary stainless steel screws etc. as per direction of Engineer-in-charge.		
9.148.1	200 x 19 x 1.9 mm	each	279.75
9.148.2	250 x 19 x 1.9 mm	each	349.40
9.148.3	300 x 19 x 1.9 mm	each	442.35
9.148.4	350 x 19 x 1.9 mm	each	500.40
9.148.5	400 x 19 x 1.9 mm	each	628.20
9.149	Providing and fixing casement handle made of zinc alloyed (white powder coated) for uPVC casement window with necessary screws etc. complete.	each	192.80
9.150	Providing and fixing zinc alloyed (white powder coated) touch lock for uPVC sliding window with necessary screws etc. complete.	each	134.70

Code No.	Description	Unit	Rate ₹
9.151	Providing and fixing steel roller for uPVC sliding window with necessary screws etc. complete.	each	65.00
9.152	Providing and fixing steel roller for uPVC sliding door with necessary screws etc. complete.	each	105.65
9.153	Providing and fixing steel (white power coated) crescent lock for uPVC sliding window/ door with necessary screws etc. complete.	each	123.10
9.154	Providing and fixing frame work for partitions/ wall lining etc. made of 50x50x1.6 mm hollow MS tube, placed along the walls, ceiling and floor in a grid pattern with spacing @ 60 cm centre to centre both ways (vertically & horizontally) or at required spacing near opening, with necessary welding at junctions and fixing the frame to wall/ ceiling/ floors with steel dash fasteners of 8 mm dia, 75 mm long bolt, including making provision for opening for doors, windows, electrical conduits, switch boards etc., including providing with two coats of approved steel primer etc. complete, all as per direction of Engineer-in-charge.	kg	89.15
9.155	Providing and fixing panelling or paneling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows ( area of opening for panel inserts excluding portion inside grooves or rebated to be measured). Panelling for panelled and glazed shutters 25mm to 40mm thick: Pre-laminated with decorative lamination on both side exterior Grade - I MDF Board 12 mm thick confirming to IS:14587	sqm	1,387.00
9.156	Providing and fixing Pre -laminated medium density fibre board exterior grade (Grade-I) IS:14587:1998 marked, to frame, backing or studding with screws etc. complete ( Frames, backing or studding to be paid separately).		
9.156.1	Pre-laminated with decorative lamination on both side exterior Grade - I MDF Board 12 mm thick confirming to IS:14587	sqm	958.40
9.156.2	Pre-laminated with decorative lamination on both side exterior Grade - I MDF Board 18 mm thick confirming to IS:14587	sqm	1,241.40
9.157	Providing and fixing Pre-laminated medium density fibre board IS: 14587:1998 marked, with one side decorative lamination other side balancing lamination Grade-I(exterior grade) in shelves with screws and fittings wherever required, edges to be sealed with PVC edge bending tape 2.00 mm thick of approved brand (fittings to be paid separately).		
9.157.1	Pre-laminated with decorative lamination one side and other side balancing lamination exterior Grade - I MDF Board 18 mm thick confirming to IS:14587	sqm	1,355.45
9.157.2	Pre-laminated with decorative lamination one side and other side balancing lamination exterior Grade - I MDF Board 25 mm thick confirming to IS:14587	sqm	1,770.05
9.158	Providing and fixing in wall lining medium density fibre board IS: 14587:1998 marked, Pre-laminated one side decorative lamination and other side balancing lamination, with necessary fixing arrangement and screws etc. complete.		
9.158.1	12 mm thick.	sqm	994.15

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
	9.158.2 18 mm thick.	sqm	1,274.50
	9.158.3 25 mm thick.	sqm	1,705.70
9.159	Providing and fixing 25mm thick pre-laminated medium density fibre board exterior grade ( Grade-I) IS:14587:1998 marked one side decorative and other side balancing lamination for cupboard shutters edges to be sealed with PVC edge bending tape 2.00 mm thick of approved brand including ISI marked nicked plated bright finishing M.S. piano hinges IS:3818 marked with necessary screwed complete.	sqm	1,824.05
9.160	Providing and fixing skirting with Pre-laminated medium density fibre board exterior grade (Grade-I) IS: 14587:1998 marked, (one side decorative and other side balancing lamination) with necessary fixing arrangements and screws, including drilling necessary holes for rawl plugs etc. and edges to be sealed with PVC edge bending tape 2.00 mm thick of approved brand complete.		
	9.160.1 18 mm thick.	sqm	1,629.30
	9.160.2 25 mm thick.	sqm	2,060.50

**SUB HEAD : 10.0**

**STEEL WORK**



## BASIC RATES (10.0 STEEL WORK)

Code No.	Description	Unit	Rate ₹
0100	Bandhani	day	328.00
0101	Bhisti	day	328.00
0102	Blacksmith 1 st class	day	393.00
0103	Blacksmith 2nd class	day	361.00
0112	Carpenter 2nd class	day	361.00
0114	Beldar	day	297.00
0116	Fitter (grade 1)	day	393.00
0119	Glazier	day	361.00
0123	Mason (brick layer) 1 st class	day	393.00
0124	Mason (brick layer) 2nd class	day	361.00
0139	Skilled Beldar (for floor rubbing etc.)	day	328.00
0595	Bright finished or black enameled mild steel butt hinges 100x58x1.90 mm	10 Nos	85.00
0969	Pulley 25 mm dia	each	35.00
0973	Rolling shutter made of 80x1.25 mm machine rolled laths	sqm	1250.00
0974	Top cover for rolling shutters 1.25 mm thick	metre	600.00
0975	27.5 cm long wire spring grade No. 2 for rolling shutters	each	280.00
0976	Ball bearing for rolling shutters	each	330.00
0977	Extra for mechanical devices chain and cranked operation for operating rolling shutters: exceeding 10.00 sqm and up to 16.80 sqm area of door	sqm	550.00
0978	Extra for mechanical devices chain and cranked operation for operating rolling shutters: exceeding 16.80 sqm area of door	sqm	580.00
1002	Mild steel round bar 12 mm dia and below	quintal	4500.00
1003	Mild steel round bar above 12 mm dia	quintal	4300.00
1007	Structural steel such as tees, angles channels and R.S. joists	quintal	4926.00
1008	Flats up to 10 mm in thickness	quintal	4200.00
1009	Flats exceeding 10 mm in thickness	quintal	4500.00
1010	Mild steel plates	quintal	4800.00
1011	Steel glazed door, window/ ventilator, all members viz. F7D, F4B, K11 and K12B etc.	kg	48.00
1013	Mild steel sheets for tanks	quintal	4900.00
1019	Mild steel hooks	each	35.00
1020	Mild steel rivets	quintal	5000.00
1034	Bolts and nuts up to 300 mm in length	quintal	5600.00
1035	Bolts and nuts above 300 mm in length	quintal	5600.00
1036	Iron pintels including welded pin	each	40.00
1143	Steel beading	metre	25.00
1214	Welding by gas plant	cm	2.00
1215	Welding by electric plant	cm	1.80

Code No.	Description	Unit	Rate ₹
1221	20 mm dia holding down bolts	quintal	5800.00
1222	Mild steel sheets with bolts and nuts to rest on pintels	each	130.00
1549	G.I. pipes 40 mm dia	metre	220.00
2205	Carriage of steel	tonne	94.80
2271	Carriage of G.I. pipes below 100 mm dia	tonne	94.80
2406	Float glass sheet of nominal thickness 4 mm (weight not less than 10 kg/sqm)	sqm	330.00
2407	Float glass sheet of nominal thickness 5.5 mm (weight not less than 13.50 kg/sqm)	sqm	500.00
2506	Carben Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10 mm x 60 mm	10 Nos	250.00
2507	Carben Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10 mm x 80 mm	10 Nos	293.00
2508	Carben Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10 mm x 120 mm	10 Nos	364.00
2509	Carben Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10 mm x 140 mm	10 Nos	450.00
2510	Carben Steel galvanised dash fastner (min 5 micron) of 10 mm dia double threaded 6.8 grade counter sunk head screw comprising of 10 mm dia polyamide PA 6 grade sleeve. Size 10 mm x 160 mm	10 Nos	570.00
4001	Stainless steel (Grade-304)hollow section round/square tubes	kg	350.00
4002	Stainless steel bolts/square bar and plates	kg	130.00
4006	Pressed steel door frames (mild steel sheet 1.60 mm) Profile "B"	metre	220.00
4007	Pressed steel door frames (mild steel sheet 1.60 mm) Profile "C"	metre	240.00
4008	Pressed steel door frames (mild steel sheet 1.60 mm) Profile "E"	metre	270.00
4009	Mild steel tubes hot finished welded type	kilogram	52.00
4010	Mild steel tubes hot finished seamless type	kilogram	65.00
4011	Mild steel tubes electric resistant or induction butt welded	kilogram	70.00
4012	Circular C.I. Box for ceiling fan	each	60.00
4013	Pulley 40 mm dia	each	30.00
7029	Galvanised wire mesh of average width of aperture 1.4 mm and nominal dia of wire 0.63 mm	sqm	250.00
7044	Rolling shutters of 80x0.90 mm laths	sqm	1080.00
7045	Rolling shutters of 80x1.2 mm laths	sqm	1150.00
7046	Top cover of Rolling shutters 0.90 mm thick	metre	320.00
7047	Top cover of Rolling shutters 1.20 mm thick	metre	350.00
7068	Extra for providing grilled rolling shutters with 8 mm dia M.S. rod	sqm	270.00
8737	Stainless steel wire guage (Grade-304) aperture 1.4 mm and 0.50 mm dia wire	sqm	830.00
9999	Sundries	L.S.	1.70

## 10.0 STEEL WORK

Code No.	Description	Unit	Rate ₹
10.1	Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	kg	66.85
10.2	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	kg	73.65
10.3	Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2 mm and braced with flat iron diagonals 20x5 mm size, with top and bottom rail of T-iron 40x40x6 mm, with 40 mm dia steel pulleys, complete with bolts, nuts, locking arrangement, stoppers, handles, including applying a priming coat of approved steel primer.	sqm	4,977.95
10.4	Providing and fixing 1 mm thick M.S. sheet sliding-shutters, with frame and diagonal braces of 40x40x6 mm angle iron, 3 mm M.S. gusset plates at the junctions and corners, 25 mm dia pulley, 40x40x6 mm angle and T-iron guide at the top and bottom respectively, including applying a priming coat of approved steel primer.	sqm	3,419.25
10.5	Providing and fixing 1mm thick M.S. sheet door with frame of 40x40x6 mm angle iron and 3 mm M.S. gusset plates at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer.		
	10.5.1 Using M.S. angels 40x40x6 mm for diagonal braces	sqm	2,942.00
	10.5.2 Using flats 30x6mm for diagonal braces and central cross piece	sqm	2,785.45
10.6	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters.		
	10.6.1 80x1.25 mm M.S. laths with 1.25 mm thick top cover	sqm	2,044.15
	10.6.2 80x1.20 mm M.S. laths with 1.20 mm thick top cover	sqm	1,831.20
	10.6.3 80x0.90 mm M.S. laths with 0.90 mm thick top cover	sqm	1,738.30
10.7	Providing and fixing ball bearing for rolling shutters.	each	436.45
10.8	Extra for providing mechanical device chain and crank operation for operating rolling shutters.		
	10.8.1 Exceeding 10.00 sqm and upto 16.80 sqm in the area	sqm	665.50
	10.8.2 Exceeding 16.80 sqm in area	sqm	700.35
10.9	Extra for providing grilled rolling shutters manufactured out of 8 mm dia M.S. bar instead of laths as per design approved by Engineer-in- charge, (area of grill to be measured).	sqm	313.60

Code No.	Description	Unit	Rate ₹
10.10	Fixing standard steel glazed doors, windows and ventilators in walls, including fixing of float glass panes with glazing clips and special metal-sash putty of approved make, or metal beading with screws, (only steel windows, glass panes cut to size and glazing clips or metal beading with screws, shall be supplied by department free of cost.		
10.10.1	Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	kg	33.40
10.10.2	Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately)	kg	17.95
10.11	Providing and fixing factory made ISI marked steel glazed doors, windows and ventilators, side /top /centre hung, with beading and all members such as F7D, F4B, K11 B and K12 B etc. complete of standard rolled steel sections, joints mitred and flash butt welded and sash bars tenoned and riveted, including providing and fixing of hinges, pivots, including priming coat of approved steel primer, but excluding the cost of other fittings, complete all as per approved design, (sectional weight of only steel members shall be measured for payment).		
10.11.1	Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	kg	105.10
10.11.2	Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately)	kg	71.70
10.12	Extra for providing and fixing steel beading of size 10 x 10 x 1.6 mm (box type), approved shape and section with screws instead of glazing clips and metal sash putty, in steel doors, windows, ventilators and composite units.	metre	35.90
10.13	Providing and fixing T-iron frames for doors, windows and ventilators of mild steel Tee-sections, joints mitred and welded, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.		
10.13.1	Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	kg	81.95
10.13.2	Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately)	kg	78.65
10.14	Providing and fixing pressed steel door frames conforming to IS: 4351, manufactured from commercial mild steel sheet of 1.60 mm thickness, including hinges, jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25 mm, or base ties of 1.60 mm, pressed mild steel welded or rigidly fixed together by mechanical means, including M.S. pressed butt hinges 2.5 mm thick with mortar guards, lock strike-plate and shock absorbers as specified and applying a coat of approved steel primer after pre-treatment of the surface as directed by Engineer-in-charge:		
10.14.1	Profile B		
10.14.1.1	Fixing with adjustable lugs with split end tail to each jamb	metre	360.50
10.14.1.2	Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately)	metre	352.60

Code No.	Description	Unit	Rate ₹
10.14.2	Profile C		
10.14.2.1	Fixing with adjustable lugs with split end tail to each jamb	metre	383.75
10.14.2.2	Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately)	metre	375.85
10.14.3	Profile E		
10.14.3.1	Fixing with adjustable lugs with split end tail to each jamb	metre	418.60
10.14.3.2	Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately)	metre	410.70
10.15	Providing and fixing M.S. Tubular frames for doors, windows, ventilators and cupboard with rectangular/ L-Type sections, made of 1.60 mm thick M.S. Sheet, joints mitred, welded and grinded finish, with profiles of required size, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.		
10.15.1	Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	kg	133.65
10.15.2	Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately)	kg	125.55
10.16	Steel work in built up tubular ( round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.		
10.16.1	Hot finished welded type tubes	kg	95.85
10.16.2	Hot finished seamless type tubes	kg	111.70
10.16.3	Electric resistance or induction butt welded tubes	kg	117.80
10.17	Providing and fixing M.S. fan clamp type I or II of 16 mm dia M.S. bar, bent to shape with hooked ends in R.C.C. slabs or beams during laying, including painting the exposed portion of loop, all as per standard design complete.	each	119.05
10.18	Providing and fixing circular/ Hexagonal cast iron or M.S. sheet box for ceiling fan clamp, of internal dia 140 mm, 73 mm height, top lid of 1.5 mm thick M.S. sheet with its top surface hacked for proper bonding, top lid shall be screwed into the cast iron/ M.S. sheet box by means of 3.3 mm dia round headed screws, one lock at the corners. Clamp shall be made of 12 mm dia M.S. bar bent to shape as per standard drawing.	each	138.00
10.19	Providing and fixing mild steel round holding down bolts with nuts and washer plates complete.	kg	71.85
10.20	Providing and fixing bolts including nuts and washers complete.	kg	95.10
10.21	Providing and fixing M.S. rivets of sizes in position.	kg	129.80
10.22	Welding by gas or electric plant including transportation of plant at site etc. complete.	cm	2.85
10.23	Item Shifted to Sub head 14 as item 14.73.		
10.24	Item Shifted to Sub head 14 as item 14.74.		

Code No.	Description	Unit	Rate ₹
10.25	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.		
10.25.1	In stringers, treads, landings etc. of stair cases, including use of chequered plate wherever required, all complete	kg	74.30
10.25.2	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	kg	86.50
10.26	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approved steel primer.		
10.26.1	M.S. tube	kg	97.45
10.26.2	E.R.W. tubes	kg	122.80
10.26.3	G.I. pipes	kg	105.15
10.27	Providing and fixing carbon steel galvanised ( minimum coating 5 micron) dash fastener of 10 mm dia double threaded 6.8 grade (yield strength 480 N/mm <sup>2</sup> ), counter sunk head, comprising of 10 m dia polyamide PA 6 grade sleeve, including drilling of hole in frame , concrete/ masonry, etc. as per direction of Engineer-in-charge.		
10.27.1	10 x 60 mm	each	61.60
10.27.2	10 x 80 mm	each	66.60
10.27.3	10 x 120 mm	each	82.45
10.27.4	10 x 140 mm	each	92.45
10.27.5	10 x 160 mm	each	114.05
10.28	Providing and fixing stainless steel ( Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, ( for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	kg	611.10
10.29	Providing & fixing fly proof wire gauze to windows, clerestory windows & doors with M.S. Flat 15x3 mm and nuts & bolts complete.		
10.29.1	Galvanised M.S. Wire gauze with 0.63 mm dia wire and 1.4 mm aperture on both sides	sqm	512.95
10.29.2	Stainless steel (grade 304) wire gauze of 0.5 mm dia wire and 1.4 mm aperture on both sides	sqm	1,252.25
10.30	Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows, all complete with :		
10.30.1	4.0 mm thick glass panes	sqm	727.70
10.30.2	5.5 mm thick glass panes	sqm	944.90

**SUB HEAD : 11.0**

**FLOORING**



### BASIC RATES (SH: 11.0 FLOORING)

Code No.	Description	Unit	Rate ₹
0002	Hire charges of Concrete Mixer 0.25 to 0.40 cum with Hopper	day	800.00
0013	Machine for rubbing of floors	day	350.00
0100	Bandhani	day	328.00
0101	Bhisti	day	328.00
0103	Blacksmith 2nd class	day	361.00
0111	Carpenter 1 st class	day	393.00
0114	Beldar	day	297.00
0115	Coolie	day	297.00
0123	Mason (brick layer) 1 st class	day	393.00
0124	Mason (brick layer) 2nd class	day	361.00
0126	Mason (for ornamental stone work) 1 st class	day	393.00
0127	Driver (for Road Roller, Concrete Mixer, Truck etc.)	day	393.00
0130	Mistry	day	393.00
0139	Skilled Beldar (for floor rubbing etc.)	day	328.00
0295	Stone Aggregate (Single size) : 20 mm nominal size	cum	1200.00
0296	Stone Aggregate (Single size) : 12.5 mm nominal size	cum	1050.00
0297	Stone Aggregate (Single size) : 10 mm nominal size	cum	1050.00
0298	Stone Aggregate (Single size) : 06 mm nominal size	cum	1100.00
0313	Blown type petroleum bitumen of penetration 85/25 of approved quality	tonne	37000.00
0367	Portland Cement	tonne	5240.00
0368	White Cement	tonne	14000.00
0682	Oxidised mild steel screws 50 mm	100 Nos	75.00
0784	Marble dust/ powder	cum	1000.00
0785	Marble chips up to 4 mm and down size White & black	quintal	200.00
0788	Marble chips large size above 4 mm White & black	quintal	200.00
0874	Black colour dark shade pigment	kilogram	55.00
0875	Red, chocolate, orange, buff or yellow (red oxide of iron) light shade pigment	kilogram	75.00
0876	Green or blue medium shade pigment	kilogram	65.00
0982	Coarse sand (zone III)	cum	1120.00
0983	Fine sand (zone IV)	cum	650.00
1007	Structural steel such as tees, angles channels and R.S. joists	quintal	4926.00
1008	Flats up to 10 mm in thickness	quintal	4200.00
1149	Glass strip 4 mm thick 40 mm deep	metre	9.00
1164	Red sand stone slab 40 mm thick (un-dressed)	sqm	160.00
1165	White sand stone slab 40 mm thick (un-dressed)	sqm	180.00

Code No.	Description	Unit	Rate ₹
1168	Kota stone slab 20 mm to 25 mm thick (semi-polished)	sqm	290.00
1187	First class teak wood in scantling	10 cudm	800.00
1190	Second class teak wood in planks	10 cudm	725.00
1194	Second class deodar wood in planks	10 cudm	500.00
1201	Precast terrazzo tiles 22 mm thick (light shade)	sqm	260.00
1202	Precast terrazzo tiles 22 mm thick (medium shade)	sqm	240.00
1203	Precast terrazzo tiles 22 mm thick (dark shade)	sqm	220.00
1215	Welding by electric plant	cm	1.80
1227	Chequered terrazzo tiles 22 mm thick (light shade)	sqm	325.00
1228	Chequered terrazzo tiles 22 mm thick (medium shade)	sqm	285.00
1229	Chequered terrazzo tiles 22 mm thick (dark shade)	sqm	250.00
1231	Extra for selected planks of second class teakwood	10 cudm	130.00
1240	18 mm thick Italian Marble stone slab, Perlato (slab area up to 0.5 sqm).	sqm	3330.00
1241	Commercial LPG in cylinder	kg	70.00
1242	Glass mosaic tiles (20 mm x 20 mm x 4 mm).	sqm	1050.00
1243	Tile fixing chemical adhesive	kg	34.00
1244	Cement Polymer Grout Compound	kg	34.00
1245	Acid for cleaning tiles	litre	16.00
2201	Carriage of bricks	1000 Nos	284.39
2202	Carriage of stone aggregate below 40 mm nominal size	cum	106.64
2203	Carriage of coarse sand	cum	106.64
2204	Carriage of timber	cum	121.88
2205	Carriage of steel	tonne	94.80
2209	Carriage of cement	tonne	94.80
2211	Carriage of tar / bitumen	tonne	106.64
2216	Carriage of stone blocks white & red sand stone & kota stone slab	tonne	94.80
2261	Carriage of fine sand (1 part badarpur sand: 2 parts jamuna sand)	cum	106.64
2268	Carriage of marble dust and/or marble chips	cum	106.64
2500	Extra for selected planks of second class deodar wood	10 cudm	100.00
2602	Common burnt clay F.P.S. (non modular) bricks class designation 7.5	1000 Nos	3800.00
2708	Truf Paver (500 x 500 x 40 mm)	sqm	1090.00
2709	Ceramic Tiles Pieces for Crazy Flooring	quintal	135.00
2710	White marble makrana second quality plain veined stone pieces for crazy flooring	quintal	140.00
2711	FS800H Grade Flooring Panel ( Size 600 mm x 600 mm x 32 mm)	each	750.00
2712	Zinc Electroplated Pedestals - 300 mm	each	140.00
2713	Zinc Electroplated Pedestals - 450 mm	each	150.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
2714	Zinc Electroplated Tube Stinger	each	70.00
2715	Machine Screw for Fixing	each	2.00
2750	8 mm thick granite stone tiles (mirror polished of all shades)	sqm	700.00
2751	8 mm thick marble tiles (polished) Raj Nagar	sqm	360.00
6001	White marble slab Makrana second quality plain veined 18 mm thick	sqm	1870.00
6007	Pink marble slab plain 18 mm thick	sqm	645.00
6010	Udaypur green marble slab plain 18 mm thick	sqm	690.00
6019	Black Zebra marble slab plain 18 mm thick	sqm	500.00
7024	Acid Proof cement	tonne	8150.00
7070	Chequered precast cement concrete tiles 22 mm thick using marble chips of size 6mm - Light shade using white cement	sqm	470.00
7071	White marble Raj Nagar plain 18 mm thick upto 0.50 sqm area	sqm	600.00
7077	Acid and alkali resistant tiles 300x300 mm size, 10 mm thick	10 Nos	570.00
7236	Precast chequered cement tiles 22 mm thick Dark shade using ordinary cement	sqm	230.00
7237	Precast chequered cement tiles 22 mm thick medium shade using 50% white cement 50% ordinary cement	sqm	370.00
7254	Hardening compound	litre	40.00
7388	Dash hold fastener 12.5 mm dia, 50 mm long with 6 mm dia bolt	each	50.00
7801	Ceramic Glazed Tiles 1st quality 300 x 300 mm in all shades and designs of White, Ivory, grey, Fume Red brown etc.	sqm	365.00
7802	Ceramic Glazed Tiles 1st quality 300 x 300 in all shades designs except White, Ivory, Grey, Fume Red Brown etc.	sqm	375.00
7803	Rectified Ceramic Glazed Tiles 1st quality 300 x 300 mm or more in all shades designs White, Ivory, Grey, Fume Red Brown etc.	sqm	515.00
7804	Rectified Ceramic Glazed Tiles 1st quality 300 x 300 mm or more in all shades designs except White, Ivory, Grey, Fume Red Brown etc.	sqm	545.00
7850	Agaria White marble slab plain 18 mm thick	sqm	1120.00
8620	Vitrified floor tile 50x50 cm	sqm	745.00
8621	Vitrified floor tile 60x60 cm	sqm	880.00
8622	Vitrified floor tile 80x80 cm	sqm	1085.00
8623	Vitrified floor tile 100x100 cm	sqm	1650.00
8682	Epoxy Grout	kg	510.00
8731	High polymer modified quickset tile adhesive	per kg	17.00
9999	Sundries	L.S.	1.70

## 11.0 FLOORING

Code No.	Description	Unit	Rate ₹
11.1	Brick on edge flooring with bricks of class designation 7.5 on a bed of 12 mm cement mortar, including filling the joints with same mortar, with common burnt clay non modular bricks:		
11.1.1	1:4 (1 cement : 4 coarse sand)	sqm	650.35
11.1.2	1:6 (1cement : 6 coarse sand)	sqm	615.40
11.2	Dry brick on edge flooring in required pattern with bricks of class designation 7.5 on a bed of 12 mm mud mortar, including filling joints with Jamuna sand, with common burnt clay non modular bricks.	sqm	508.40
11.3	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.		
11.3.1	40 mm thick with 20 mm nominal size stone aggregate	sqm	316.80
11.4	52 mm thick cement concrete flooring with concrete hardener topping, under layer 40 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6 mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per manufacturer's specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.	sqm	480.10
11.5	62 mm thick cement concrete flooring with concrete hardener topping, under layer 50 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) and top layer 12mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate, 6mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per manufacture's specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.	sqm	528.25
11.6	Cement plaster skirting up to 30 cm height, with cement mortar 1:3 (1 cement : 3 coarse sand), finished with a floating coat of neat cement.		
11.6.1	18 mm thick	sqm	299.20
11.7	Cement concrete pavement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including finishing complete.	cum	5,188.60
11.8	Extra for making chequers of approved pattern on cement concrete floors, steps, landing, pavements etc.	sqm	30.20
<b>TERRAZO FLOORING</b>			
11.9	40 mm thick marble chips flooring rubbed and polished to granolithic finish, under layer 34 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominal size) and top layer 6mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from 1 mm to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume, including cement slurry etc. complete :		
11.9.1	Dark shade pigment with ordinary cement	sqm	530.30

Code No.	Description	Unit	Rate ₹
	11.9.2 Light shade pigment with white cement	sqm	578.10
	11.9.3 Medium shade pigment with 50% white cement and 50% ordinary cement	sqm	554.25
	11.9.4 White cement without any pigment	sqm	554.70
	11.9.5 Light shade pigment with ordinary cement	sqm	536.90
	11.9.6 Ordinary cement without any pigment	sqm	510.70
11.10	40 mm thick marble chips flooring, rubbed and polished to granolithic finish, under layer 31 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominal size) and top layer 9 mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from 4 mm to 7 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder : 7 marble chips) by volume, including cement slurry etc. complete.		
	11.10.1 Dark shade pigment with Ordinary cement	sqm	547.10
	11.10.2 Light shade pigment with white cement	sqm	615.30
	11.10.3 Medium shade pigment with 50% white cement and 50% ordinary cement	sqm	581.20
	11.10.4 White cement without any pigment	sqm	584.30
	11.10.5 Light shade pigment with ordinary cement	sqm	553.70
	11.10.6 Ordinary cement without any pigment	sqm	520.15
11.11	40 mm thick marble chips flooring, rubbed and polished to granolithic finish, under layer 28 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominal size) and top layer 12 mm thick with white, black, chocolate, grey yellow or green marble chips of sizes from 7 mm to 10 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 2:3 (2 cement marble powder mix : 3 marble chips) by volume, including cement slurry etc. complete :		
	11.11.1 Dark shade pigment with ordinary cement	sqm	572.00
	11.11.2 Light shade pigment with white cement	sqm	667.60
	11.11.3 Medium shade pigment with 50% white cement and 50% ordinary cement	sqm	619.80
	11.11.4 White cement without any pigment	sqm	617.05
	11.11.5 Light shade pigment with ordinary cement	sqm	585.15
	11.11.6 Ordinary cement without any pigment	sqm	534.65
11.12	Marble chips skirting up to 30 cm height, rubbed and polished to granolithic finish, top layer 6 mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from smallest to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume :		
	11.12.1 18 mm thick with under layer 12 mm thick in cement plaster 1:3 (1 cement : 3 coarse sand) :		
	11.12.1.1 Dark shade pigment with ordinary cement	sqm	727.45

Code No.	Description	Unit	Rate ₹
	11.12.1.2 Light shade pigment with white cement	sqm	775.25
	11.12.1.3 Medium shade pigment with 50% white cement and 50% ordinary cement	sqm	751.40
	11.12.1.4 White cement without any pigment	sqm	751.85
	11.12.1.5 Light shade pigment with ordinary cement	sqm	734.05
	11.12.1.6 Ordinary cement without any pigment	sqm	708.70
11.13	Providing and fixing glass strips in joints of terrazo/ cement concrete floors.		
	11.13.1 40 mm wide and 4 mm thick	metre	33.80
11.14	Extra for laying terrazo flooring on staircase treads not exceeding 30 cm in width, including cost of forming, nosing etc.	sqm	33.30
11.15	Crazy marble stone flooring, including filling the gaps with light shade pigment with white cement marble powder mixture (3 parts of white cement : 1 part of marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 white, black or white and black marble chips of sizes from 1 mm to 4 mm nominal size by volume), with under layer 25 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominal size), including rubbing, polishing and cement slurry etc. complete :		
	11.15.1 18 mm thick crazy marble stone white, black or as specified	sqm	850.90
<b>TILE FLOORING</b>			
11.16	Precast terrazo tiles 22 mm thick with graded marble chips of size upto 12 mm, laid in floors, and landings, jointed with neat cement slurry mixed with pigment to match the shade of the tiles, including rubbing and polishing complete, on 20 mm thick bed of cement mortar 1:4 (1 cement:4 coarse sand) :		
	11.16.1 Light shade pigment using white cement	sqm	870.70
	11.16.2 Medium shade pigment using 50% white cement and 50% ordinary cement	sqm	819.15
	11.16.3 Dark shade pigment using ordinary cement	sqm	767.65
	11.16.4 Ordinary cement without any pigment	sqm	729.85
11.17	Extra if terrazo tiles are laid in treads of steps not exceeding 30 cm in width.	sqm	41.60
11.18	Precast terrazo tiles 22 mm thick with graded marble chips of sizes upto 12 mm, in skirting and risers of steps not exceeding 30 cm in height, on 12 mm thick cement plaster 1:3 (1 cement : 3 coarse sand), jointed with neat cement slurry mixed with pigment to match the shade of the tiles, including rubbing and polishing complete with tiles of :		
	11.18.1 Light shade pigment using white cement	sqm	1,131.00
	11.18.2 Medium shades pigment using 50% white cement and 50% ordinary cement	sqm	1,066.50
	11.18.3 Dark shade pigment using ordinary cement	sqm	1,002.00
	11.18.4 Ordinary cement without any pigment	sqm	954.35
11.19	Chequered terrazo tiles 22 mm thick with graded marble chips of size up to 6 mm in floors, jointed with neat cement slurry mixed with pigment		

Code No.	Description	Unit	Rate ₹
	to match the shade of the tiles, including rubbing and polishing complete, on 20 mm thick bed of cement mortar 1:4 (1 cement :4 coarse sand) :		
11.19.1	Light shade pigment using white cement	sqm	953.70
11.19.2	Medium shade pigment using 50% white cement, 50% ordinary cement	sqm	876.65
11.19.3	Dark shade pigment using ordinary cement	sqm	806.00
11.19.4	Ordinary cement without any pigment	sqm	768.30
11.20	Chequerred precast cement concrete tiles 22 mm thick in footpath & courtyard, jointed with neat cement slurry mixed with pigment to match the shade of tiles, including rubbing and cleaning etc. complete, on 20 mm thick bed of cement mortar 1:4 (1 cement: 4 coarse sand).		
11.20.1	Light shade pigment using white cement	sqm	1008.70
11.20.2	Medium shade pigment using 50% white cement 50% Grey cement	sqm	852.95
11.20.3	Dark shade pigment using ordinary cement	sqm	646.10
11.20.4	Ordinary cement without any pigment	sqm	608.25
11.21	Providing and fixing 10 mm thick acid and/or alkali resistant tiles of approved make and colour using acid and/or alkali resisting mortar bedding, and joints filled with acid and/or alkali resisting cement as per IS : 4457, complete as per the direction of Engineer-in- Charge.		
11.21.1	In flooring on a bed of 10 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand)		
11.21.1.1	Acid and alkali resistant tile	sqm	1,197.75
11.21.2	In dado/skirting on 12 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand)		
11.21.2.1	Acid and alkali resistant tile	sqm	1,259.85
11.22	Tile work in skirting, risers of steps and dado up to 2 m height over 12 mm thick bed of cement mortar 1:3 (1 cement :3 coarse sand) and jointed with grey cement slurry @ 3.3 kg/sqm, including pointing in white cement mixed with pigment of matching shade complete.		
11.22.1	Marble tiles (polished) Raj Nagar		
11.22.1.1	8 mm thick	sqm	830.05
<b>STONE FLOORING</b>			
11.23	Marble stone flooring with 18 mm thick marble stone, as per sample of marble approved by Engineer-in-charge, over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with grey cement slurry, including rubbing and polishing complete with :		
11.23.1	Makrana white second quality	sqm	3,132.05
11.23.2	Raj Nagar plain	sqm	1,435.70
11.23.3	Agaria White	sqm	2,130.25
11.23.4	Black Zebra	sqm	1,302.10
11.23.5	Udaipur green marble	sqm	1,555.90
11.23.6	Pink plain marble	sqm	1,495.80
11.24	Extra for pre finished nosing to treads of steps of marble stone.	metre	248.90

Code No.	Description	Unit	Rate ₹
11.25	Extra for marble stone flooring in treads of steps and risers using single length up to 2.00 metre .	sqm	289.65
	<b>KOTA STONE FLOORING</b>		
11.26	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :		
	11.26.1 25 mm thick	sqm	1,071.70
11.27	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.	sqm	1,100.85
	<b>SAND STONE FLOORING</b>		
11.28	40 mm thick fine dressed stone flooring over 20 mm (average) thick base of cement mortar 1:5 ( 1 cement : 5 coarse sand) with joints finished flush.		
	11.28.1 Red sand stone	sqm	521.20
	11.28.2 White sand stone	sqm	546.75
11.29	40 mm thick fine dressed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement : 5 coarse sand), including pointing with cement mortar 1:2 (1 cement : 2 stone dust) with an admixture of pigment to match the shade of stone.		
	11.29.1 Red sand stone	sqm	614.25
	11.29.2 White sand stone	sqm	639.80
11.30	40 mm thick rubbed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement :5 coarse sand) with joints 3 mm thick, side buttered with cement mortar 1:2 (1 cement : 2 stone dust) admixed with pigment to match the shade of stone and pointing with same mortar.		
	11.30.1 Red sand stone	sqm	677.95
	11.30.2 White sand stone	sqm	703.50
11.31	Extra for pre finished nosing in treads of steps of Kota stone/ sand stone slab.	metre	68.45
11.32	Extra for Kota stone/ sand stone in treads of steps and risers using single length up to 1.05 metre .	sqm	15.30
	<b>WOODEN FLOORING</b>		
11.33	25 mm wooden planking, tongued and grooved in flooring, including fixing with iron screws complete with :		
	11.33.1 Second class teak wood	sqm	3,192.10
	11.33.2 Second class deodar wood	sqm	2,240.25
11.34	38 mm thick wood block flooring of first class teak wood laid over 25 mm thick leveling layer of cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 10 mm nominal size) to be paid separately, coated with a thin layer of hot bitumen penetration 80/25 (blown type) @ 2.45 kg per sqm, including fixing blocks in position after dipping in hot bitumen (blown type) up to half depth, planed, levelled smooth and finished complete.	sqm	6,377.10

Code No.	Description	Unit	Rate ₹
11.35	Providing and fixing M.S. angle 50x50x5 mm to act as nosing with lugs of M.S. flat 10x5 mm, 10 cm long, forked at end 60cm apart (minimum three lugs to be provided), including necessary welding and applying a priming coat of approved primer on exposed surface etc. complete.	kg	89.05
<b>CERAMIC GLAZED TILES</b>			
11.36	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	sqm	793.60
11.37	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand), including pointing the joints with white cement and matching pigment etc., complete.	sqm	822.10
11.38	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick bed of cement mortar 1:4 (1 Cement : 4 Coarse sand), including pointing the joints with white cement and matching pigments etc., complete.	sqm	834.05
11.39	Providing and laying rectified Glazed Ceramic floor tiles of size 300x300 mm or more (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in colours White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement: 4 Coarse sand), including grouting the joints with white cement and matching pigments etc., complete.	sqm	987.40
11.40	Providing and laying rectified Glazed Ceramic floor tiles of size 300x300 mm or more (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick Cement Mortar 1:4 (1 Cement : 4 Coarse sand), including pointing the joints with white cement and matching pigments etc., complete.	sqm	1023.15
<b>VITRIFIED FLOOR TILES</b>			
11.41	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS : 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), including grouting the joints with white cement and matching pigments etc., complete.		
11.41.1	Size of Tile 500x500 mm	sqm	1,241.85
11.41.2	Size of Tile 600x600 mm	sqm	1,402.55
11.41.3	Size of Tile 800x800 mm	sqm	1,644.55
11.41.4	Size of Tile 1000x1000 mm	sqm	2,317.20
11.42	Deduct for not using 20 mm thick cement mortar 1:4 (1 cement : 4 coarse sand) bedding in laying of floor tiles.	sqm	415.20

Code No.	Description	Unit	Rate ₹
11.43	Fixing glazed/ Ceramic/ Vitrified floor tiles with cement based high polymer modified quick-set tile adhesive (Water based) conforming to IS: 15477, in average 3mm thickness.	sqm	392.00
11.44	Crazy ceramic tile flooring, with under layer 12 mm thick cement mortar 1:4 (1 cement: 4 coarse sand), with joints not exceeding 5 mm, including filling the gaps with ordinary cement mixture & mixing with synthetic polyester fibre, triangular in shape having specific gravity of 1.34 to 1.40, cross section size ranging from 10 to 40 micron & length upto 6 mm , mixing fibre @ 125 grams per 50 kg of cement in cement mortar, including providing and mixing water proofing material in mortar @ 1 kg per 50 kg of cement , all complete as per direction of Engineer-in-charge.	sqm	407.15
11.45	Providing and laying 500x500x40 mm thick Turf paver (Turf pave XD) on 150 mm thick sub grade of compacted bed of 20 mm thick nominal size stone aggregate and base course and filling with 150 mm thick jamuna sand, including spreading, well ramming, consolidating and finishing smooth etc. all complete as per direction of Engineer-in-charge.	sqm	1,743.20
11.46	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), including grouting the joint with white cement & matching pigments etc. complete.		
11.46.1	Size of Tile 500x500 mm	sqm	1,250.75
11.46.2	Size of Tile 600x600 mm	sqm	1,411.45
11.46.3	Size of Tile 800x800 mm	sqm	1,655.50
11.46.4	Size of Tile 1000x1000 mm	sqm	2,328.20
11.47	Providing and laying Vitrified tiles in different sizes (thickness to be specified by the manufacturer), with water absorption less than 0.08% and conforming to IS: 15622, of approved brand & manufacturer, in all colours and shade, in skirting, riser of steps, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).		
11.47.1	Size of Tile 500x500 mm	sqm	1,436.45
11.47.2	Size of Tile 600x600 mm	sqm	1,597.20
11.47.3	Size of Tile 800x800 mm	sqm	1,841.25
11.47.4	Size of Tile 1000x1000 mm	sqm	2,513.90
11.48	Grouting the joints of flooring tiles having joints of 3 mm width, using epoxy grout mix of 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg), including filling / grouting and finishing complete as per direction of Engineer-in-charge.		
11.48.1	Size of Tile 500x500 mm	sqm	214.40
11.48.2	Size of Tile 600x600 mm	sqm	180.60

Code No.	Description	Unit	Rate ₹
	11.48.3 Size of Tile 800x800 mm	sqm	146.80
	11.48.4 Size of Tile 1000x1000 mm	sqm	107.10
11.49	Providing and laying Vitrified tiles in floor with different sizes (thickness to be specified by the manufacturer), with water absorption less than 0.08% and conforming to IS:15622 , of approved brand & manufacturer, in all colours and shade, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS : 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).		
	11.49.1 Size of Tile 500x500 mm	sqm	1,379.15
	11.49.2 Size of Tile 600x600 mm	sqm	1,539.85
	11.49.3 Size of Tile 800x800 mm	sqm	1,783.95
	11.49.4 Size of Tile 1000x1000 mm	sqm	2,456.60
11.50	Deduct for not grouting the joints with white cement and matching pigment in the items of fixing of vitrified tiles.	sqm	8.15
11.51	Providing and laying machine cut, mirror polished, Italian Marble stone flooring laid in required pattern in linear portion of the building all complete as per architectural drawings, with 18 mm thick stone slab laid over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with white cement slurry @ 4.4 kg/sqm including pointing with white cement slurry admixed with pigment to match the marble shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge. a. 18 mm thick Italian Marble stone slab,Perlato, Rosso verona, Fire Red or Dark Emperadore etc.	sqm	5,112.15
11.52	Providing and laying machine cut, mirror polished Marble stone flooring, in required design (Simple geometrical, abstract etc.) and in patterns in combination with Italian marble stones of different colours, shades and finished surface texture etc., in linear portions of the building, all complete as per the architectural drawings, with 18 mm thick stone slab laid over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with white cement slurry @ 4.4 kg/sqm including pointing with white cement slurry admixed with pigment to match the marble shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge. a. 18 mm thick Italian Marble stone slab,Perlato, Rosso verona, Fire Red or Dark Emperadore etc.	sqm	5,339.25
11.53	Providing and fixing Glass mosaic tiles at finished plain wall surface of size 20 mm x 20 mm x 4 mm in all colour, design , fixing in customize design as per direction of Engineer-in- Charge. The glass mosaic tiles to be fixed on the wall surface with the help of approved adhesive applied at the rate of 2.5 kg per sqm and grouting of the same. The rate is inclusive of all operation, material and required pattern approved by Engineer-in-Charge:	sqm	1,586.70
11.54	Providing and fixing removable raised/false access flooring with system and its components of approved make for different plenum height with possible height adjustment upto 50 mm, comprising of modular load		

Code No.	Description	Unit	Rate ₹
	<p>bearing floor panels supported on G.I. rectangular stinger frame work and G.I. Pedestal etc. all complete, as per the architectural drawings, as specified and as directed by Engineer-in-charge consisting of :</p> <p>a) Providing at required spacing to form modular framework, pedestals made out of GI tube of thickness minimum 2 mm and 25 mm outer diameter, fully welded on to the G.I. Base plate of size 100mmx100mmx3mm at the bottom of the pedestal tube, G.I. pedestal head of size 75mmx75mmx3.5 mm welded with GI fully threaded stud 16mm outer diameter with two GI Check nuts screwed on the stud for level adjustment upto 50mm, locking and stabilizing the pedestal head in position at the required level. The pedestals shall be fixed to the subfloor (base) through base plate using epoxy based adhesive of approved make or the machine screw with rawl plug.</p> <p>b) Stringers system in all steel construction hot dipped galvanized of rectangular size 570x20x30x0.80mm thick having holes at both ends for securing the stringers on to the pedestal head using fully threaded screws ensuring maximum lateral stability in all directions, the grid formed by the pedestal and stringer assembly shall receive the floor panel, this system shall provide adequate solid, rigid support for access floor panel, the system shall provide a minimum clear uninterrupted clearance between the bottom of the floor for electrical conduits and wiring etc. all complete as per the architectural drawings, as specified and as directed by the Engineer-in-charge.</p> <p>c) Providing and fixing Access Floor panel of 600x600x32 mm medium grade Filled Steel anti static high pressure Lamination of 800H grade (FS800H). Access Floor panel shall be steel welded construction with an enclosed bottom pan with uniform pattern of 64 hemispherical cones. The top and bottom plates of Steel Gauges: top 0.6 mm and bottom 0.7 mm fused spot welded together (minimum 64 welds in each dome and 20 welds along each flange). The panel should be Corroresist epoxy coated for lifetime rust protection and cavity formed by the top and bottom plate is filled with Pyrogrip noncombustible Portland cementitious core mixed with lightweight foaming compound. The access floor shall be factory finished with Anti-static High Pressure laminate with Non Warp technology upto 1mm thickness for superior adhesion and Surface flatness within 0.75mm. The panel is to withstand a Concentrated Load of 363 kgs applied on area 25mm x 25mm without collapse in the centre of the panel which is placed on four steel blocks. The panel will withstand and Uniformly Distributed Load (UDL) minimum 1250 kg/sqm and an impact load of 50kg all complete as per the approved manufacturers specification and as per the direction of Engineer-in-charge. All specification must be printed on the side of the panel to ensure the quality of the product.</p>		
11.54.1	300 mm Finished Floor Height (FFH)	sqm	4,002.80
11.54.2	450 mm Finished Floor Height (FFH).	sqm	4,044.60

**SUB HEAD : 12.0**

**ROOFING**



### BASIC RATES (SH: 12.0 ROOFING)

Code No.	Description	Unit	Rate ₹
0013	Machine for rubbing of floors	day	350.00
0100	Bandhani	day	328.00
0101	Bhisti	day	328.00
0102	Blacksmith 1 st class	day	393.00
0103	Blacksmith 2nd class	day	361.00
0111	Carpenter 1 st class	day	393.00
0112	Carpenter 2nd class	day	361.00
0114	Beldar	day	297.00
0115	Coolie	day	297.00
0116	Fitter (grade 1)	day	393.00
0117	Assistant Fitter or 2nd class Fitter	day	361.00
0122	Mason (for plaster of paris work) 1st class	day	393.00
0123	Mason (brick layer) 1st class	day	393.00
0124	Mason (brick layer) 2nd class	day	361.00
0128	Mate	day	328.00
0130	Mistry	day	393.00
0131	Painter	day	361.00
0139	Skilled Beldar (for floor rubbing etc.)	day	328.00
0222	Seam bolts and nuts 6 mm dia and 25 mm long	10 Nos	40.00
0223	Non - Asbestos fibre (high impact poly propelene reinforced) cement corrugated sheet 6 mm thick	sqm	250.00
0224	Non - Asbestos fibre (high impact poly propelene reinforced) cement close fitting adjustable ridge	metre	210.00
0225	Non - Asbestos fibre (high impact poly propelene reinforced) cement corrugate serrated adjustable ridge	metre	210.00
0226	Non - Asbestos fibre (high impact poly propelene reinforced) cement plain wing adjustable ridge	metre	200.00
0227	Non - Asbestos fibre (high impact poly propelene reinforced) cement unserrated adjustable ridge for hips	metre	300.00
0228	Non - Asbestos fibre (high impact poly propelene reinforced) cement corrugated apron piece	metre	225.00
0229	Non - Asbestos fibre (high impact poly propelene reinforced) cement eaves filler piece	each	175.00
0230	Non - Asbestos fibre (high impact poly propelene reinforced) cement north light curves	metre	310.00

Code No.	Description	Unit	Rate ₹
0231	Non - Asbestos fibre (high impact poly propelene reinforced) cement ventilator curves	each	410.00
0232	Non - Asbestos fibre (high impact poly propelene reinforced) cement barge boards 6 mm thick	metre	410.00
0233	Non - Asbestos fibre (high impact poly propelene reinforced) cement ridge finial	pair	160.00
0234	Non - Asbestos fibre (high impact poly propelene reinforced) cement special north light curves	each	550.00
0235	Non - Asbestos fibre (high impact poly propelene reinforced) cement S type louvers	each	250.00
0236	Non - Asbestos multi purpose fibre (high impact poly propelene reinforced) cement board 6 mm thick	sqm	200.00
0295	Stone Aggregate (Single size) : 20 mm nominal size	cum	1200.00
0297	Stone Aggregate (Single size) : 10 mm nominal size	cum	1050.00
0308	Bhusa	quintal	400.00
0309	Paving bitumen of grade VG-10 of approved quality	tonne	40000.00
0314	Bitumen hot sealing compound : grade A	kilogram	26.00
0328	White face insulating board:12 mm thick	sqm	360.00
0332	Natural colour insulating board:12 mm thick	sqm	270.00
0336	Flame retardant face insulating board: 12 mm thick	sqm	315.00
0341	Flat pressed 3 layer particle board (medium density) Grade 1, 12 mm thick	sqm	325.00
0367	Portland Cement	tonne	5240.00
0368	White Cement	tonne	14000.00
0370	Coal (steam)	quintal	400.00
0452	Brass screws 25 mm	100 Nos	95.00
0637	Bright finished or black enameled mild steel screws 40 mm	100 Nos	50.00
0765	Hessian cloth	sqm	25.00
0771	Kerosene oil	litre	45.00
0811	Mud (dry)	cum	60.00
0845	Roofing paint for iron sheets in red colour	litre	120.00
0865	Pig lead	kilogram	125.00
0869	Plaster of Paris	kilogram	4.00
0870	Plug	each	10.00
0875	Red, chocolate, orange, buff or yellow (red oxide of iron) light shade pigment	kilogram	75.00

Code No.	Description	Unit	Rate ₹
0886	Standard holder bat clamps for sand cast iron or cast iron pipes 150 mm dia	each	25.00
0966	Sand Cast iron plain shoe 150 mm dia	each	325.00
0982	Coarse sand (zone III)	cum	1120.00
0992	Galvanised steel plain sheets	quintal	5200.00
0994	Standard quality hard board sheet 3 mm thick	sqm	125.00
0996	Standard quality hard board sheet 4.5 mm thick	sqm	150.00
1001	Spun yarn	kilogram	40.00
1008	Flats up to 10 mm in thickness	quintal	4200.00
1015	Mild steel expanded metal 20x60 mm strands	sqm	290.00
1022	Galvanised steel bolts & nuts 6 mm dia and 25 mm long round head with slots	10 Nos	25.00
1023	Galvanised steel J or L hooks 8 mm dia	10 Nos	110.00
1024	Galvanised steel bolts & nuts 10 mm dia and 125 mm long round head with slots	each	12.00
1025	Mild steel bolts 6 mm dia and 25 mm long with hexagonal head	10 Nos	30.00
1031	Galvanised steel bolts & nuts 10 mm dia and 27 cm long both sides threaded with 4 galvanised steel nuts	each	25.00
1032	Galvanised steel bolts 10 mm dia and 7 cm long with nuts	each	20.00
1174	Red sand stone slab 45 mm to 50 mm thick (un-dressed)	sqm	172.00
1175	White sand stone slab 45 mm to 50 mm thick (un-dressed)	sqm	225.00
1190	Second class teak wood in planks	10 cudm	725.00
1196	First class kail wood in planks	10 cudm	310.00
1204	Precast heat resistant terrace tiles (size 300x300 mm) and 20 mm thick	sqm	482.00
1207	G.I. Limpet washer	100 Nos	35.00
1208	Bitumen washer	100 Nos	30.00
1209	G.I. plain washer thick	100 Nos	35.00
1210	G.I. plain washer thin	100 Nos	32.00
1211	G.I. plain washer for seam bolts	100 Nos	30.00
1213	Water proofing materials	kilogram	32.00
1219	Wire nails	kilogram	60.00
1220	Wire mesh (rabbit)	sqm	45.00
1331	M.S. Holder bat clamp of approved design for 100 mm S.C.I. pipe	each	20.00
1984	Common burnt clay F.P.S. bricks tile class designation 10	1000 Nos	4800.00
2202	Carriage of stone aggregate below 40 mm nominal size	cum	106.64

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
2203	Carriage of coarse sand	cum	106.64
2204	Carriage of timber	cum	121.88
2205	Carriage of steel	tonne	94.80
2207	Carriage of brick tiles	1000 Nos	170.63
2209	Carriage of cement	tonne	94.80
2211	Carriage of tar / bitumen	tonne	106.64
2216	Carriage of stone blocks white & red sand stone & kota stone slab	tonne	94.80
2273	Carriage of A.C.sheet and accessories	tonne	94.80
2302	Carriage of G.I.sheet and accessories	tonne	94.80
2308	Carriage of plaster of paris	tonne	94.80
3002	Polyvinyle chloride sheet 400 micron thick	sqm	35.00
3004	Stone ware spouts 100 mm dia 60 cm long	each	35.00
3050	Galvanised steel corrugated sheets	quintal	5400.00
4009	Mild steel tubes hot finished welded type	kilogram	52.00
4202	Red oxide Zinc chromate primer	litre	70.00
7009	12.5 mm thick tapered edge gypsum plain borad	sqm	200.00
7010	Galvanised Steel ceiling section (size 80x26x0.50 mm)	metre	39.00
7011	Galvanised Steel perimetre Channel (Size 20x27x30x0.50 mm)	metre	27.00
7012	Galvanised Steel intermediate Channel (Size 15x45x15x0.90 mm)	metre	42.00
7013	Galvanised Steel angle hanger (Celling angle) (Size 25x10x0.50 mm)	metre	19.00
7014	Galvanised Steel connecting clips (2.64 mm dia and 230 mm long GI wire)	each	6.20
7015	Galvanised Steel soffit cleat (Size 27x37x25x0.60 mm)	each	4.00
7016	Joint filler	kilogram	22.00
7017	Joint finisher	kilogram	24.00
7018	Joint tape roll	roll	145.00
7019	Dash fastener / Chemical fastner	each	15.00
7020	All drive screws ( for gypsum board)	100 Nos	60.00
7021	Primer ( for gypsum board)	litre	85.00
7028	12.5 mm thick Fully Perforated gypsum board	sqm	927.00
7030	12.5 mm thick tapered edge gypsum fire resistant board	sqm	237.00
7031	12.5 mm thick tapered edge gypsum moisture resistant board	sqm	271.00
7050	PU Primer	sqm	41.00
7051	40 mm (average) PU spray having 40-45 kg/m3 density	sqm	421.00
7052	GI wire netting 3/4" x 24 G	sqm	27.00

Code No.	Description	Unit	Rate ₹
7053	400 G polythene sheet	sqm	15.00
7090	Expanded polystyrene type N- Normal	sqm	130.00
7091	Expanded polystyrene type - SE	sqm	155.00
7187	C.I. grating 150 mm dia, weighing not less than 440 gm	each	25.00
7188	uPVC pipes (working pressure 4 kg / cm 2 ) Single socketed pipe 75 mm dia	metre	67.00
7189	uPVC pipes (working pressure 4 kg / cm 2 ) Single socketed pipe 110 mm dia	metre	129.00
7190	uPVC pipes (working pressure 4 kg / cm 2 ) Rubber (Seal) Ring 75 mm dia	each	16.00
7191	uPVC pipes (working pressure 4 kg / cm 2 ) Rubber (Seal) Ring 110 mm dia	each	20.00
7192	UPVC coupler for UPVC drainage pipes 75 mm	each	34.00
7193	UPVC coupler for UPVC drainage pipes 110 mm	each	52.00
7194	UPVC pushfit coupler (single) 75 mm thick	each	50.00
7195	UPVC pushfit coupler (single) 110 mm thick	each	81.00
7196	UPVC single equal Tee (without door) 75x75x75 mm	each	95.00
7197	UPVC single equal Tee (without door) 110x110x110 mm	each	128.00
7198	UPVC single equal Tee (with door) 75x75x75 mm	each	115.00
7199	UPVC single equal Tee (with door) 110x110x110 mm	each	180.00
7208	uPVC bend 87.5° 75 mm bend	each	56.00
7209	uPVC bend 87.5° 110 mm bend	each	95.00
7212	UPVC plain shoe 75 mm bend	each	107.00
7213	UPVC plain shoe 110 mm bend	each	207.00
7214	UPVC pipe clip 75 mm bend	each	16.00
7215	UPVC pipe clip 110 mm bend	each	31.00
7231	Resin Bonded Glass wool 16 kg/ m3: 50 mm thick	sqm	145.00
7232	Resin Bonded Glass wool 24 kg/ m3: 50 mm thick	sqm	204.00
7238	High Albedo paint	kg	246.00
7266	Pressed clay tiles 20mm thick 250x250 mm size	1000 Nos	12150.00
7267	Plain ceiling tiles (BWP type phenol formaldehyde synthetic resin bonded) (600x600x12 mm)	each	120.00
7268	Semi perforated ceiling tiles (600x600x12 mm)	each	120.00
7273	Resin Bonded Rockwool 48 kg/m3	sqm	211.00
7385	3 mm thick translucent white acrylic plastic sheet	sqm	570.00
7386	12 mm thick particle board ceiling tile	sqm	260.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
7388	Dash hold fastener 12.5 mm dia, 50 mm long with 6 mm dia bolt	each	50.00
7857	P.T.M.T. Grating square slit 150 mm	each	77.00
7904	Machine moulded common burnt clay tile bricks of class designation 12.5	1000 Nos	5250.00
8589	Calcium Silicate tegular edged ceiling tiles 595x595 mm and 15 mm thick	sqm	858.00
8590	Galvanised Steel main Tee ceiling section Size 24x38x0.33 mm (3 metre long)	each	192.00
8591	Galvanised Steel perimeter wall Angle Size 24 x 24 x 0.40 mm (3.00 metre long)	each	125.00
8592	Galvanised Steel intermediate cross T section Size 24 x 25 x 0.33 mm (1.2 metre long)	each	77.00
8593	Galvanised Steel intermediate cross T section Size 24 x 25 x 0.33 mm ( 0.6 metre long)	each	39.00
8594	Galvanised Steel soffit cleat size 25x35x1.60 mm	each	3.00
8595	Wooden screws with plastic rawl plugs 35x8 mm	each	0.60
8597	GI Metal Tile Clip in Plain Beveled edge global white colour tiles of size 600x600 mm and 0.5 mm thick	sqm	895.00
8598	GI Metal Tile Clip in Perforated Beveled edge global white colour tiles of size 600x600 mm and 0.5 mm thick	sqm	1000.00
8599	GI Metal Tile Lay-in Plain Tegular edge global white color tiles of Size 595x595 mm and 0.5 mm thick	sqm	809.00
8600	GI Metal Tile Lay-in Perforated Tegular edge global white color tiles of Size 595x595 mm and 0.5 mm thick	sqm	906.00
8601	PVC Laminated Gypsum Tiles (Square edge) of Size 595x595 mm and 12.5 mm thick	sqm	468.00
8602	Gypsum Tiles Fully Perforated Square edge of Size 595x595 mm and 12.5 mm thick	sqm	484.00
8604	Spring T-section 24x34x0.45 mm (3.00 meter long)	metre	180.00
8605	C Wall angle section 20x30x20x0.50 mm (3.00 meter long)	metre	155.00
8606	Main C Carrier Size 10x38x10x0.70 mm (3.00 meter long)	metre	164.00
8607	Spring T-connector	each	5.00
8608	C Carrier Connector	each	11.00
8609	C Suspension Clip	each	11.00
8610	Wire Coupling Clip	each	9.00
8611	Main T ceiling sections 24x38x0.3 mm (3 metre long)	each	187.00
8612	Perimeter wall angle 24 x 24 x 0.3 mm (3 metre long)	each	118.00
8613	Intermediate cross T-Section 24x25x0.3 mm (1.2 m long)	each	72.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
8614	Intermediate cross T-Section 24x25x0.3 mm (0.6 m long)	each	34.00
8615	Hanger rod 4 mm thick	each	8.00
8616	Adjustment clip 85x30x0.8 mm	each	6.00
8617	Soffit cleat (Size 27x37x25x1.60 mm)	each	3.00
8618	Dash fastener 6 mm dia 50 mm long	each	11.00
8667	UV stabilised 2 mm thick plain FRP sheet	sqm	465.00
8668	UV stabilised 2 mm thick corrugated FRP sheet	sqm	538.00
8669	Mangalore ridge tiles 20 mm thick	each	29.00
8670	Mangalore tiles 20 mm thick	each	10.50
8671	Precoated galvanised iron profile sheet 0.50 mm TCT	sqm	435.00
8672	Precoated galvanised steel plain ridges	metre	440.00
8673	Precoated galvanised steel flashings/aprons	metre	440.00
8674	Precoated galvanised steel gutter	metre	455.00
8675	Precoated galvanised steel north light curves	metre	455.00
8676	Precoated galvanised steel barge board	metre	445.00
8677	Precoated galvanised steel crimp curve	sqm	475.00
8699	8 mm thick tapered edge calcium silicate board	sqm	368.00
8784	8 mm thick Calcium silicate perforated tiles of size 595 x595 mm	sqm	688.00
9999	Sundries	L.S.	1.70

## 12.0 ROOFING

Code No.	Description	Unit	Rate ₹
12.1	Providing corrugated G.S. sheet roofing including vertical / curved surface fixed with polymer coated J or L hooks, bolts and nuts 8 mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead, including a coat of approved steel primer and two coats of approved paint on overlapping of sheets complete (up to any pitch in horizontal/ vertical or curved surfaces), excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.		
12.1.1	1.00 mm thick with zinc coating not less than 275 gm/m <sup>2</sup>	sqm	957.70
12.1.2	0.80 mm thick with zinc coating not less than 275 gm/m <sup>2</sup>	sqm	813.35
12.1.3	0.63 mm thick with zinc coating not less than 275 gm/ m <sup>2</sup>	sqm	690.40
12.2	Extra for straight cutting in C.G.S. sheet roofing for making opening of area exceeding 40 sq. decimeter for chimney stacks, sky light etc. :		
12.2.1	1.00 mm thick	metre	40.05
12.2.2	0.80 mm thick	metre	32.05
12.2.3	0.63 mm thick	metre	32.05
12.3	Extra for circular cutting in C.G.S. sheet roofing for making opening of area exceeding 40 sq. decimeter :		
12.3.1	1.00 mm thick	metre	228.40
12.3.2	0.80 mm thick	metre	182.45
12.3.3	0.63 mm thick	metre	182.45
12.4	Providing ridges or hips of width 60 cm overall width plain G.S. sheet fixed with polymer coated J. or L hooks, bolts and nuts 8 mm dia G.I. limpet and bitumen washers complete.		
12.4.1	0.80 mm thick with zinc coating not less than 275 gm/m <sup>2</sup>	metre	539.45
12.4.2	0.63 mm thick with zinc coating not less than 275 gm/m <sup>2</sup>	metre	475.10
12.5	Providing valleys of 90 cm wide overall in plain G.S. sheet fixed with polymer coated J, or L hooks, bolts and nuts 8 mm dia G.I. limpet and bitumen washers complete :		
12.5.1	1.60 mm thick with zinc coating not less than 350 gm/m <sup>2</sup>	metre	1,005.90
12.6	Providing and fixing of 40 cm overall width plain G.S. sheet fixed with polymer coated J, or L hooks, bolts and nuts, G.I. limpet and bitumen washer complete, bent to shape and fixed in wall with cement mortar 1:3 (1cement : 3 coarse sand).		
12.6.1	1.00 mm thick with zinc coating not less than 275 gm/m <sup>2</sup>	metre	409.10
12.7	Providing and fixing 15 cm wide, 45 cm overall semi-circular plain G.S. sheet gutter with iron brackets 40x3mm size, bolts, nuts and washers etc., including making necessary connections with rain water pipes complete.		
12.7.1	0.80 mm thick with zinc coating not less than 275 gm/m <sup>2</sup>	metre	507.55
12.7.2	0.63 mm thick with zinc coating not less than 275 gm/m <sup>2</sup>	metre	454.00

Code No.	Description	Unit	Rate ₹
<b>NON AC SHEET ROOFING</b>			
12.8	Providing non-asbestos high impact Polypropylene reinforced cement 6 mm thick corrugated sheets (as per IS: 14871) roofing up to any pitch and fixing with polymer coated J, or L hooks, bolts and nuts 8 mm dia. G.I. plain and bitumen washers or with self drilling fastener and EPDM washers etc. complete (excluding the cost of purlins, rafters and trusses), including cutting sheets to size and shape wherever required.	sqm	389.45
12.9	Extra for straight cutting in non- asbestos polypropylene reinforced cement corrugated, semi-corrugated 6 mm thick sheet roofing for making openings of area exceeding 40 square decimeter for chimney stacks, skylights etc.	metre	32.05
12.10	Extra for circular cutting in non-asbestos polypropylene reinforced cement corrugated/semi-corrugated 6 mm thick sheet roofing for making openings of area exceeding 40 square decimeter.	metre	88.55
12.11	Extra for providing and fixing wind ties of 40x 6 mm flat iron section.	metre	112.25
12.12	Providing and fixing ridges and hips in non-asbestos fibre cement high impact polypropylene reinforced roofing with suitable fixing accessories or self drilling fastener and EPDM washer etc. complete.		
12.12.1	Corrugated serrated adjustable ridges	metre	338.45
12.12.2	Plain wing adjustable ridges	metre	324.45
12.12.3	Close fitting adjustable ridges	metre	385.15
12.12.4	Unserrated adjustable hips	metre	463.75
<b>NON AC ACCESSORIES</b>			
12.13	Providing and fixing non-asbestos fibre cement high impact polypropylene reinforced roofing accessories in all colours with polymer coated J or L hooks, bolts and nuts and or G.I. seam bolts and nuts, G.I. plain and bitumen washers or with self drilling fastener and EPDM washer etc. complete:		
12.13.1	Corrugated apron pieces	metre	326.30
12.13.2	Eave's filler pieces	metre	233.35
12.13.3	North light curves	metre	434.25
12.13.4	Ventilator curves	metre	556.95
12.13.5	Barge boards	metre	540.40
12.13.6	Ridge finials	pair	216.45
12.13.7	Special north light curves	each	725.25
12.13.8	S type louvers	metre	316.60
12.14	Providing flat iron brackets 50x3 mm size with necessary bolts, nuts and washers etc. for fixing asbestos cement / G.S. sheets gutters with purlins.	metre	50.65
12.15	Painting top of roofs with bitumen of approved quality @ 17kg per 10 sqm impregnated with a coat of coarse sand at 60 cudm per 10 sqm, including cleaning the slab surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil complete :		
12.15.1	With residual type petroleum bitumen of grade VG - 10	sqm	117.80

Code No.	Description	Unit	Rate ₹
12.16	10 cm thick (average) mud phaska of damped brick earth on roofs laid to slope consolidated and plastered with 25 mm thick mud mortar mixed with bhusha @ 35 kg per cum of earth and gobri leaping with mix 1:1 (1 clay : 1 cow dung) and covered with flat tile bricks, grouted with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% of integral water proofing compound by weight of cement and finished neat :		
12.16.1	With common burnt clay F.P.S.(non modular) brick tile of class designation 10	sqm	501.55
12.17	10cm thick (average) mud phaska of damped brick earth on roofs laid to slope consolidated and plastered with 25 mm thick mud mortar with bhusha @ 35 kg per cum of earth and gobri leaping with mix 1:1 (1 clay : 1 cow-dung) and covered with machine moulded tile bricks, grouted with cement mortar 1:3 ( 1 cement : 3 fine sand) mixed with 2% of integral water proofing compound by weight of cement and finished neat.		
12.17.1	With machine moulded common burnt clay F.P.S. (non modular) brick tiles of class designation 12.5, conforming to IS 2690	sqm	510.35
12.18	Extra for every additional 1 cm thickness of mud phaska.	sqm	10.15
12.19	Providing and laying brick tiles over mumty roofs, grouted with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% of integral water proofing compound by weight of cement, over 12 mm layer of cement mortar 1:3 (1 cement : 3 fine sand) and finished neat :		
12.19.1	With common burnt clay F.P.S. (non modular) brick tiles of class designation 10	sqm	381.20
12.20	Providing and laying pressed clay tiles (as per approved pattern 20 mm nominal thickness of approved size) on roofs jointed with cement mortar 1:4 (1 cement : 4 coarse sand) mixed with 2% integral water proofing compound, laid over a bed of 20 mm thick cement mortar 1:4 (1 cement : 4 coarse sand) and finished neat complete.	sqm	459.40
12.21	Providing gola 75x75 mm in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 stone aggregate 10 mm and down gauge), including finishing with cement mortar 1:3 (1 cement : 3 fine sand) as per standard design :		
12.21.1	In 75x75 mm deep chase	metre	127.95
12.22	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1 m x1 m x 400 micron, finished with 12 mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete.	each	167.45
12.23	Providing sand stone slab for roofing and laying them in cement mortar 1 : 4 (1 cement : 4 coarse sand) over wooden karries or R.C.C. battens or structural steel sections (Karries or battens or structural steel sections to be paid separately), including pointing the ceiling joints with cement mortar 1:3 (1 cement : 3 fine sand ) complete :		
12.23.1	Red sand stone slab		

Code No.	Description	Unit	Rate ₹
	12.23.1.1 40 to 50 mm thick	sqm	444.05
	12.23.2 White sand stone slab		
	12.23.2.1 40 to 50 mm thick	sqm	511.80
	<b>CEILING</b>		
12.24	Providing and fixing insulating board ceiling of approved quality with necessary nails etc. complete (frame work to be paid separately) :		
	12.24.1 Natural colour insulating board		
	12.24.1.1 12 mm thick	sqm	549.15
	12.24.2 White face insulating board		
	12.24.2.1 12 mm thick	sqm	664.10
	12.24.3 Flame retardant face insulating board		
	12.24.3.1 12 mm thick	sqm	606.60
12.25	Providing and fixing flat pressed 3 layer medium density particle board or graded particle board (Grade I) IS: 3087 marked, in ceiling with necessary nails etc. complete (frame work to be paid separately) :		
	12.25.1 12 mm thick	sqm	618.90
12.26	Providing and fixing plain Multipurpose Cement board ( High Pressure steam cured ) as per IS : 14862, with suitable screws for fibre cement board in ceiling etc. complete (frame work to be paid separately) :		
	12.26.1 6 mm thick cement board	sqm	459.20
12.27	Extra for Circular cutting including wastages in ceiling with:		
	12.27.1 2nd class teak wood planks 20 mm thick	metre	377.00
	12.27.2 Natural colour insulating board		
	12.27.2.1 12 mm thick	metre	197.25
	12.27.3 White face insulating board:		
	12.27.3.1 12 mm thick	metre	211.55
	12.27.4 Flame retardant face insulating board:		
	12.27.4.1 12 mm thick	metre	204.40
	12.27.5 Standard quality hard board sheet:		
	12.27.5.1 3 mm thick	metre	174.10
	12.27.5.2 4.5 mm thick	metre	178.10
12.28	Extra for providing and fixing ceiling to curved surfaces in narrow widths	sqm	156.55
12.29	Providing and fixing false ceiling with 12 mm thick plain/ semi perforated or with design ceiling tiles of BWP type phenol formaldehyde synthetic resin bonded pressed particle board conforming to IS:3087, finished with a coat of aluminium primer on both sides & edges, including two coats of synthetic enamel paint of approved quality on exposed face, fixed to a grid made out of anodised aluminium (with 15 micron anodic coating) T-sections 35 x15x1.5 mm size main runners, cross runners 23.5x19x1.5 mm fixed to		

Code No.	Description	Unit	Rate ₹
	main runners placed 600 mm centre to centre both ways so as to form a grid of 600 mm square. The frame work shall be suspended from ceiling by level adjusting hangers of 6 mm dia M.S rod fixed to roof slab by means of ceiling cleats and dash fastener. The suspenders shall be placed 600 x 1200 mm centre to centre including fixing to the frame with C.P brass screws and applying a priming coat of zinc chromate yellow primer (aluminium frame work shall be paid separately).	sqm	629.55
12.30	Extra for providing 3 mm thick translucent white acrylic plastic sheets of approved quality in false ceiling instead of 12 mm thick plain or design particle board ceiling tiles.	sqm	360.05
12.31	Providing 10 mm thick plaster of Paris (gypsum anhydrous) ceiling up to a height of 5 m above floor level, over first class kail wood strips 25x6 mm with 10 mm gap in between and reinforced with rabbit wire mesh fixed to wooden frame (frame work to be paid separately) :		
	12.31.1 Flat surfaces	sqm	770.25
	12.31.2 Curved surfaces	sqm	890.45
12.32	Extra for sunk or raised mouldings in the plaster of Paris (Gypsum anhydrous) ceiling.	sqm	224.75
12.33	Extra for providing plaster of Paris (Gypsum anhydrous) ceiling above 5metres height from floor level.	sqm per metre height	92.35
12.34	Providing fixing thermal insulation of ceiling (under deck insulation) with Resin Bonded Fibre glass wool conforming to IS : 8183, density 24kg / m <sup>3</sup> , 50mm thick, wrapped in 200 G Virgin Polythene bags, fixed to ceiling with metallic cleats (50x50x3 mm) @ 60 cm and wire mesh of 12.5 mm x 24 gauge wire mesh, for top most ceiling of building.	sqm	465.10
12.35	Providing and fixing thermal insulation with Resin Bonded Fibre glass wool conforming to IS: 8183. Density 16 kg/m <sup>3</sup> , 50 mm thick, wrapped in 200G Virgin Polythene bags placed over existing false ceiling and held in position by criss-crossing GI wire.	sqm.	235.60
12.36	Thermal Insulation of roofing with Expanded polystyrene fixed with suitable adhesive to the false ceiling as per the directions of the Engineer-in-charge :		
	12.36.1 With Type N - Normal 50 mm thick	sqm	209.50
	12.36.2 With Type SE - Self Extinguishing type 50 mm thick	sqm	241.45
<b>RAIN WATER SPOUT AND PIPE</b>			
12.37	Providing and fixing 100 mm diameter and 60 cm long rain water spout in cement mortar 1:4 (1 cement : 4 fine sand).		
	12.37.1 Stone ware spout	each	77.60
12.38.	Providing and fixing M.S. holder bat clamps of approved design to C.I. or S.C.I. rain water pipes embedded in and including cement concrete blocks 10x10x10 cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and cost of cutting holes and making good the walls etc. :		
	12.38.1 100 mm diameter	each	140.65
	12.38.2 150 mm diameter	each	146.45

Code No.	Description	Unit	Rate ₹
12.39	Providing lead caulked joints to sand cast iron rain water pipes and fittings :		
12.39.1	100 mm dia Pipe	each	270.85
12.39.2	150 mm dia Pipe	each	376.65
12.40	Providing, fixing and embedding sand cast iron accessories for rain water pipes in the masonry surrounded with 12 mm thick cement mortar of the same mix, as that of masonry (lead caulking will be paid for separately) :		
12.40.1	Sand cast iron plain shoes :		
12.40.1.1	150 mm diameter	each	412.15
12.41	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.		
12.41.1	75 mm diameter	metre	134.50
12.41.2	110 mm diameter	metre	218.60
12.42	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion.		
12.42.1	Coupler		
12.42.1.1	75 mm	each	100.55
12.42.1.2	110 mm	each	133.55
12.42.2	Single pushfit Coupler		
12.42.2.1	75 mm	each	119.10
12.42.2.2	110 mm	each	167.25
12.42.3	Single tee with door		
12.42.3.1	75x75x75 mm	each	210.55
12.42.3.2	110x110x110 mm	each	305.35
12.42.4	Single tee without door		
12.42.4.1	75x75x75 mm	each	187.35
12.42.4.2	110x110x110 mm	each	244.95
12.42.5	Bend 87.5°		
12.42.5.1	75 mm bend	each	107.50
12.42.5.2	110 mm bend	each	160.25
12.42.6	Shoe (Plain)		
12.42.6.1	75 mm Shoe	each	166.75
12.42.6.2	110 mm Shoe	each	290.35
12.43	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length,		

Code No.	Description	Unit	Rate ₹
	including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.		
	12.43.1 75 mm	each	156.30
	12.43.2 110 mm	each	173.75
12.44	Providing and fixing to the inlet mouth of rain water pipe cast iron grating 15 cm diameter and weighing not less than 440 grams.	each	37.25
12.45	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound , jointing tapes , finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with :		
	12.45.1 12.5 mm thick tapered edge gypsum plain board conforming to IS: 2095- Part I	sqm	804.80
	12.45.2 12.5 mm thick tapered edge gypsum fire resistant board conforming to IS: 2095- Part I	sqm	849.95
	12.45.3 12.5 mm thick tapered edge gypsum moisture resistant board	sqm	891.40
	12.45.4 Fully Perforated Gypsum Plaster Board of size 1200 x 2400x12.5 mm having approx. 15 % perforated area with perforation size and pattern as approved by the Engineer-in-charge and as per manufacturer's specification, with all 4 side tapered and backed by acoustical tissue with NRC value not less than 0.60	sqm	1,691.40

Code No.	Description	Unit	Rate ₹
12.46	Providing and fixing to the inlet mouth of rain water pipe PTMT (an Engineering Thermoplastic) grating square (Slit) 150 mm square with a height of 8 mm and weighing not less than 100 gms.	each	97.65
12.47	Providing & fixing UV stabilised fiberglass reinforced plastic sheet roofing up to any pitch, including fixing with polymer coated 'J' or 'L' hooks, bolts & nuts 8mm dia. G.I plain/bitumen washers complete but excluding the cost of purlins, rafters, trusses etc. The sheets shall be manufactured out of 2400 TEX panel rovigs incorporating minimum 0.3% ultra-violet stabiliser in resin system under approximately 2400 psi and hot cured. They shall be of uniform pigmentation and thickness without air pockets and shall conform to IS 10192 and IS 12866. The sheets shall be opaque or translucent, clear or pigmented, textured or smooth as specified.		
12.47.1	2mm thick corrugated (2.5" or 4.2" or 6") or step-down (2" or 3" or 6" ) as specified	sqm	960.50
12.47.2	2mm thick flat	sqm	850.00
12.48	Providing & fixing on roof pressed clay tile (Mangalore tile) of 20 mm nominal thickness and of approved size and as per approved pattern on steel frame work complete (steel frame work to be paid separately).	sqm	268.40
12.49	Providing & laying on roof pressed clay tile ridge (Mangalore tile) of 20mm thickness and of approved pattern on steel frame work complete (steel frame work to be paid separately).	sqm	130.00
12.50	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	sqm	615.35
12.51	Providing and fixing precoated galvanised steel sheet roofing accessories 0.50 mm (+ 0.05 %) total coated thickness, Zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete :		
12.51.1	Ridges plain (500 - 600mm)	metre	629.25
12.51.2	Flashings/ Aprons.( Upto 600 mm)	metre	606.70
12.51.3	North light curves	metre	658.55
12.51.4	Barge board (Upto 300 mm)	metre	572.00
12.51.5	Crimp curve	sqm	630.20
12.51.6	Gutter .(600 mm over all girth)	metre	796.05

Code No.	Description	Unit	Rate ₹
12.52	Providing and fixing tiled false ceiling of approved materials of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections ( galvanized @ 120 grams/sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanised butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer-in-charge.		
12.52.1	GI Metal Ceiling Lay in plain Tegular edge Global white color tiles of size 595x595 mm, and 0.5 mm thick with 8 mm drop; made of G I sheet having galvanizing of 100 gms/sqm (both sides inclusive) and electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending.	sqm	1,518.85
12.52.2	GI Metal Ceiling Lay in perforated Tegular edge global white color tiles of size 595x595 mm and 0.5 mm thick with 8 mm drop; made of GI sheet having galvanizing of 100 gms/sqm (both sides inclusive) and 20% perforation area with 1.8 mm dia holes and having NRC (Noise Reduction Coefficient ) of 0.5, electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending and perforation, and backed with a black Glass fiber acoustical fleece.	sqm	1,637.15
12.52.3	12.5 mm thick square edge PVC Laminated Gypsum Tile of size 595x595 mm, made of Gypsum plasterboard, manufactured from natural gypsum as per IS 2095 part I and laminated with white 0.16mm thick fire retardant PVC film on the face side and 12micron metalized polyester on the back side with all edges sealed with the face side PVC film which goes around and wraps the edges and is bonded to the edges and the back side metalized polyester film so as to make the tile a completely sealed unit.	sqm	1,103.00
12.52.4	12.5 mm thick fully Perforated Gypsum Board tile made from plasterboard having glass fibre conforming to IS: 2095 part I , of size 595x595 mm, having perforation of 9.7x9.7 mm at 19.4 mm c/c with center borders of 48		

Code No.	Description	Unit	Rate ₹
	mm and the side borders of 30 mm, backed with non woven tissue on the back side, having an NRC ( Noise Reduction Coefficient) of 0.79, with 50 mm resin bonded glass wool backing.	sqm	1,122.50
12.53	<p>Providing and Fixing 15 mm thick densified tegular edged eco friendly light weight calcium silicate false ceiling tiles of approved texture spintone/cosmos / Hexa or equivalent of size 595 x 595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanised steel sections (galvanising @ 120 grams per sqm including both side) consisting of main 'T' runner suitably spaced at joints to get required length and of size 24x38 mm made from 0.33 mm thick (minimum) sheet, spaced 1200 mm centre to centre, and cross "T" of size 24x28 mm made out of 0.33 mm (Minimum) sheet, 1200 mm long spaced between main'T' at 600 mm centre to centre to form a grid of 1200x600 mm and secondary cross 'T' of length 600 mm and size 24 x28 mm made of 0.33 mm thick (Minimum) sheet to be inter locked at middle of the 1200x 600 mm panel to from grid of size 600x600 mm, resting on periphery walls /partitions on a Perimeter wall angle pre-coated steel of size(24x24X3000 mm made of 0.40 mm thick (minimum) sheet with the help of rawl plugs at 450 mm centre to centre with 25 mm long dry wall screws @ 230 mm interval and laying 15 mm thick densified edges calicum silicate ceiling tiles of approved texture (Spintone / Cosmos/hexa) in the grid, including, cutting/ making opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc., wherever required. Main 'T' runners to be suspended from ceiling using G.I. slotted cleats of size 25x35x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm G.I. adjustable rods with galvanised steel level clips of size 85 x 30 x 0.8 mm, spaced at 1200 mm centre to centre along main 'T' , bottom exposed with 24 mm of all T-sections shall be pre-painted with polyster baked paint, for all heights, as per specifications, drawings and as directed by engineer-in-charge.</p> <p>Note :- Only calcium silicate false ceiling area will be measured from wall to wall. No deduction shall be made for exposed frames/opening (cut outs) having area less than 0.30 sqm.The calcium silicate ceiling tile shall have NRC value of 0.50 (Minimum), light reflection &gt; 85%, non - combustible as per B.S. 476 part IV, 100% humidity resistance and also having thermal conductivity &lt;0.043 w/m 0 KC.</p>	sqm	1,614.40
12.54	<p>Providing and fixing GI Clip in Metal Ceiling System of 600x600 mm module which includes providing and fixing 'C' wall angle of size 20x30x20 mm made of 0.5 mm thick pre painted steel along the perimeter of the room with help of nylon sleeves and wooden screws at 300 mm center to centre, suspending the main C carrier of size 10x38x10 mm made of G.I steel 0.7 mm thick from the soffit with help of soffit cleat 37x27x25x1.6 mm, rawl plugs of size 38x12 mm and C carrier suspension clip and main carrier bracket at 1000 mm c/c. Inverted triangle shaped Spring Tee having height of 24 mm and width of 34 mm made of GI steel 0.45 mm thick is then fixed to the main C carrier and in direction perpendicular to it at 600 mm centers with help of suspension brackets. Wherever the main C carrier and</p>		

Code No.	Description	Unit	Rate ₹
	spring T have to join, C carrier and spring T connectors have to be used. All sections to be galvanized @ 120 gms/sqm (both side inclusive), fixing with clip in tiles into spring 'T' with :		
12.54.1	GI Metal Ceiling Clip in plain Beveled edge global white color tiles of size 600x600 and 0.5 mm thick with 25 mm height, made of G I sheet having galvanizing of 100 gms/sqm (both sides inclusive) and electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending.	sqm	1,658.80
12.54.2	GI Metal Ceiling Clip in plain Beveled edge global white color tiles of size 600x600 and 0.5 mm thick with 25 mm height, made of G I sheet having galvanizing of 100 gms/sqm (both sides inclusive) and 20% perforation area with 1.8 mm dia holes and having NRC of 0.5, electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending and perforation.	sqm	1,786.90
12.55	Providing and fixing Heat Resistant Terrace Tiles (300 mm x 300 mm x 20 mm) with SRI (solar refractive index) > 78, solar reflection > 0.70 and initial emittance > 0.75 on waterproof and sloped surface of terrace, laid on 20 mm thick cement sand mortar in the ratio of 1:4 (1 cement : 4 coarse sand) and grouting the joints with mix of white cement & marble powder in ratio of 1:1, including rubbing and polishing of the surface upto 3 cuts complete, including providing skirting upto 150 mm height along the parapet walls in the same manner.	sqm	1,108.70
12.56	Providing and laying roof insulation with 40 mm thick impervious sprayed, closed cell free Rigid Polyurethane foam over deck insulation conforming to IS - 12432 Pt. III (density of foam being 40-45 kg/cum), over a coat of polyurethane primer applied @ 6-8 sqm per litre, laying 400 G polythene sheet over PUF spray and providing a wearing course of 40 mm thick cement screed 1: 2 : 4 (1 cement : 2 coarse sand : 4 stone aggregate 20 mm nominal size) in chequered rough finish, in panels of 2.5 m x 2.5 m and embedding with 24 G wire netting and sealing the joints with polymerized mastic, all complete as per direction of Engineer-in-Charge.	sqm	1,143.25
12.57	Providing and fixing thermal insulation with Resin Bonded Fibre glass wool conforming to IS: 8183 having density 24 kg/m <sup>3</sup> , 50 mm thick, wrapped in 200G Virgin Polythene Bags fixed to wall with screw, rawel plug & washers and held in position by criss crossing GI wire etc. complete as per directions of Engineer-in-Charge.	sqm	314.95
12.58	Providing and fixing tiled false ceiling of approved materials of size 595x595 mm in true horizontal level, suspended on interlocking metal grid of hot dipped galvanized steel sections (galvanized @ 120 grams/sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600		

Code No.	Description	Unit	Rate ₹
	mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanized butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer-in-charge.		
12.58.1	8 mm thick fully perforated calcium silicate board made with Calcareous & Siliceous materials reinforced with cellulose fiber manufactured through autoclaving process to give stable crystalline structure with minimum compressive strength 225 kg/ sq. cm, bending strength 100 kg/sq. cm , of size 595x595 mm, having perforation of dia. 10 mm with minimum perforated area 18 % with non woven tissue on the back side, having an NRC ( Noise Reduction Coefficient) of 0.85, with 50 mm thick rockwool of 48 kg /cum backing.	sqm	1,331.75
12.59	Providing & fixing false ceiling at all height including providing & fixing of framework made of special section, power pressed from M.S. sheets and galvanised with zinc coating of 120 gms/ sqm ( both side inclusive) as per IS : 277 and consisting of angle cleat of size 25mm wide x 1.6mm thick with flanges of 27mm and 37mm, at 1200mm c/c, one flange fixed to the ceiling with dash fastener 12.5mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25 x10 x0.50mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I channels 45 x15 x 0.90mm running at the spacing of 1200 mm c/c, to which the ceiling section 0.5mm thick bottom wedge of 80mm with tapered flanges of 26 mm each having lips of 10.5mm, at 450mm c/c, shall be fixed in a direction perpendicular to G.I intermediate channel with connecting clip made out of 2.64mm dia x 230mm long G.I wire at every junction, including fixing perimeter channels 0.50mm thick 27mm high having flanges of 20mm and 30mm long, the perimeter of ceiling fixed to wall/ partitions with the help of Rawl plugs at 450mm centre, with 25mm long dry wall screws @ 230mm interval, including fixing of Calcium Silicate Board to ceiling section and perimeter channels with the help of dry wall screws of size 3.5 x25mm at 230mm c/c, including jointing & finishing to a flush finish of tapered and square edges of the board with recommended jointing compounds, jointing tapes,finishing with jointing compounds in three layers covering up to 150mm on both sides of joints and two coats of primer suitable for boards, all as per manufacture's specification and also including the cost of making		

Code No.	Description	Unit	Rate ₹
	opening for light fittings, grills, diffusers, cut outs made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in charge but excluding the cost of painting with:		
12.59.1	a. 8 mm thick Calcium Silicate Board made with Calcareous & Siliceous materials reinforced with cellulose fiber manufactured through autoclaving process.	sqm	1,008.85
12.60	Providing and fixing thermal insulation of ceiling (under deck insulation) with Resin Bonded Rockwool conforming to IS: 8183, density 48 kg/m <sup>3</sup> , 50 mm thick, wrapped in 200 G Virgin Polythene bags fixed to ceiling with metallic cleats (50x50x3 mm) @ 60 cm and wire mesh of 12.5mm x 24 gauge wire mesh, for top most ceiling of building.	sqm	474.05
12.61	Providing and fixing thermal insulation with Resin bonded rock wool conforming to IS: 8183, density 48 kg/m <sup>3</sup> , 50 mm thick, wrapped in 200 G virgin Polythene bags placed over existing false ceiling and held in position by criss- crossing GI wire.	sqm	319.90
12.62	Providing and fixing thermal insulation with Resin Bonded rock wool conforming to IS: 8183, having density 48 kg/m <sup>3</sup> , 50 mm thick, wrapped in 200 G Virgin Polythene Bags fixed to wall with screw, rawel plug & washers and held in position by criss crossing GI wire etc. complete as per directions of Engineer-in-Charge.	sqm	323.85
12.63	Providing and applying two coats of High Albedo paint having minimum Solar Reflective Index (SRI) 108 (with solar reflectance & thermal emittance tested as per ASTM) C 1549 and ASTM C 1371 respectively), VOC less than 10 cc/gm. The coating thickness and the methodology of application shall strictly as per manufacturer's specifications and as approved by engineer In charge. Surface preparation includes cleaning with metal wire brush to remove all dust, fungus etc., washing with water all complete. The contractor shall give guarantee for the performance of SRI and also the durability of coating, all complete as per direction of Engineer-in-charge.	sqm	249.70

**SUB HEAD : 13.0**

**FINISHING**



### BASIC RATES (SH: 13.0 FINISHING)

Code No.	Description	Unit	Rate ₹
0101	Bhisti	day	328.00
0112	Carpenter 2nd class	day	361.00
0114	Beldar	day	297.00
0115	Coolie	day	297.00
0122	Mason (for plaster of paris work) 1 st class	day	393.00
0123	Mason (brick layer) 1 st class	day	393.00
0131	Painter	day	361.00
0141	White Washer	day	328.00
0155*	Mason (average)	day	377.00
0156*	Carpenter (average)	day	377.00
0324	Coal Tar	litre	30.00
0367	Portland Cement	tonne	5240.00
0368	White Cement	tonne	14000.00
0763	Glue	kilogram	68.00
0771	Kerosene oil	litre	45.00
0775	Dehradun white lime	quintal	480.00
0776	Satna lime	quintal	300.00
0777	Dry hydrated lime (factory made)	quintal	230.00
0801	Silicon and acrylic emulsion	litre	200.00
0802	Acrylic distemper 1st quality , having VOC content less than 50 grams/ litre	Kg	38.00
0803	Acrylic emulsion , having VOC content less than 50 grams/ litre	litre	250.00
0804	Premium acrylic emulsion of interior grade, having VOC content less than 50 grams/ litre	litre	350.00
0805	Synthetic enamel paint , having VOC (Volatile Organic Compound) content less than 150 grams/ litre	litre	220.00
0806	Ready mixed pink or grey primer on wood work (hard and soft wood) having VOC content less than 50 grams/ litre	litre	120.00
0807	Ready mixed red oxide zinc chromatic on steel/ iron work, having VOC content less than 250 grams/ litre	litre	130.00
0808	Water thinnable cement primer for interior wall surface, having VOC content less than 50 grams/ litre	litre	60.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
0815	Dry distemper	kilogram	36.00
0816	Oil bound washable distemper/ Acrylic distemper	kilogram	45.00
0818	Linseed oil (double boiled)	litre	110.00
0820	Cement primer	litre	90.00
0821	Distemper primer	litre	90.00
0823	Pink primer (for wood)	litre	90.00
0826	Aluminium paint	litre	130.00
0827	Acid proof paint (chocolate or black)	litre	150.00
0828	Anticorrosive bituminous paint (black)	litre	90.00
0829	Black Japan paint	litre	95.00
0830	Enamel paint	litre	160.00
0831	Floor enamel paint in all shades except green	litre	120.00
0833	Synthetic enamel paint in black or chocolate shade	litre	130.00
0834	Synthetic enamel paint in all shades except black or chocolate shade	litre	140.00
0835	Plastic emulsion paint	litre	180.00
0850	White lead	kilogram	90.00
0851	Water proofing cement paint	kilogram	45.00
0855	Wax polish (ready made)	kilogram	200.00
0856	Ordinary varnish	litre	75.00
0857	Superior copal varnish	litre	125.00
0858	Superior spar varnish	litre	125.00
0859	Oil type wood preservative	litre	80.00
0868	Premixed super white gypsum plaster.	kg	7.00
0869	Plaster of Paris	kilogram	4.00
0982	Coarse sand (zone III)	cum	1120.00
0999	Shellac	kilogram	210.00
1000	Spirit	litre	70.00
1179	Crushed stone 2.36 mm to 12.5 mm size	cum	950.00
1198	Second class kail wood in planks	10 cudm	260.00
1213	Water proofing materials	kilogram	32.00
1216	Whiting	quintal	500.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
2202	Carriage of stone aggregate below 40 mm nominal size	cum	106.64
2203	Carriage of coarse sand	cum	106.64
2209	Carriage of cement	tonne	94.80
2911	Stone chippings/ screenings 10/ 11.2 mm nominal size	cum	1100.00
4201	Aluminium primer	litre	100.00
4202	Red oxide Zinc chromate primer	litre	70.00
4203	Copper acetate	kilogram	300.00
4204	Hydrochloric acid	kilogram	35.00
4205	Copper chloride	kilogram	300.00
4206	Copper nitrate	kilogram	220.00
4207	Ammonium chloride	kilogram	20.00
7239	Epoxy paint	litre	250.00
7240	Fire retardant paint	litre	260.00
7306	Aluminium T or L sections	kilogram	200.00
8504	Multi surface paint	litre	275.00
8505	Acrylic exterior paint	litre	140.00
8506	Premium Acrylic exterior paint	litre	235.00
8507	Textured exterior paint	litre	200.00
8509	Special Primer (C.W.)	litre	83.00
8510	Metal Primer (U.G.)	litre	120.00
8733	Synthetic ployster triangular fibre of length 6 mm, effective diameter 10-40 microns and specific gravity of 1.34 to 1.40	kg	365.00
9999	Sundries	L.S.	1.70

## 13.0 FINISHING

Code No.	Description	Unit	Rate ₹
	<b>Note :- Rates for external plaster are for height upto 10m from ground level unless otherwise stated.</b>		
	<b>CEMENT PLASTER (IN FINE SAND)</b>		
13.1	12 mm cement plaster of mix :		
13.1.1	1:4 (1 cement: 4 fine sand)	sqm	145.40
13.1.2	1:6 (1 cement: 6 fine sand)	sqm	133.85
13.2	15 mm cement plaster on the rough side of single or half brick wall of mix :		
13.2.1	1:4 (1 cement: 4 fine sand)	sqm	168.55
13.2.2	1:6 (1 cement: 6 fine sand)	sqm	154.70
13.3	20 mm cement plaster of mix :		
13.3.1	1:4 (1 cement: 4 fine sand)	sqm	202.75
13.3.2	1:6 (1 cement: 6 fine sand)	sqm	184.70
	<b>CEMENT PLASTER (IN COARSE SAND)</b>		
13.4	12 mm cement plaster of mix :		
13.4.1	1:4 (1 cement: 4 coarse sand)	sqm	153.85
13.4.2	1:6 (1 cement: 6 coarse sand)	sqm	142.25
13.5	15 mm cement plaster on rough side of single or half brick wall of mix :		
13.5.1	1:4 (1 cement: 4 coarse sand)	sqm	178.60
13.5.2	1:6 (1 cement: 6 coarse sand)	sqm	164.75
13.6	20 mm cement plaster of mix :		
13.6.1	1:4 (1 cement: 4 coarse sand)	sqm	215.80
13.6.2	1:6 (1 cement: 6 coarse sand)	sqm	197.80
	<b>CEMENT PLASTER WITH A FLOATING COAT OF NEAT CEMENT</b>		
13.7	12 mm cement plaster finished with a floating coat of neat cement of mix :		
13.7.1	1:3 (1 cement: 3 fine sand)	sqm	192.20
13.7.2	1:4 (1 cement: 4 fine sand)	sqm	180.60
13.8	15 mm cement plaster on rough side of single or half brick wall finished with a floating coat of neat cement of mix :		
13.8.1	1:3 (1 cement: 3 fine sand)	sqm	217.55
13.8.2	1:4 (1 cement: 4 fine sand)	sqm	203.65
13.9	Cement plaster 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement.		
13.9.1	12 mm cement plaster	sqm	200.60
13.9.2	20 mm cement plaster	sqm	269.00
13.10	15 mm cement plaster 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement on the rough side of single or half brick wall.	sqm	227.55

Code No.	Description	Unit	Rate ₹
<b>CEMENT PLASTER IN TWO COATS</b>			
13.11	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement : 5 coarse sand) finished with a top layer 6 mm thick cement plaster 1:6 (1 cement : 6 fine sand).	sqm	215.40
13.12	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement: 5 coarse sand) and a top layer 6 mm thick cement plaster 1:3 (1 cement : 3 coarse sand) finished rough with sponge.	sqm	231.20
13.13	12 mm cement plaster 1:2 (1 cement : 2 stone dust).	sqm	176.25
13.14	15 mm cement plaster 1:2 (1 cement : 2 stone dust) on the rough side of single or half brick wall.	sqm	205.35
13.15	20 mm cement plaster 1:2 (1 cement : 2 stone dust).	sqm	250.65
<b>6 MM CEMENT PLASTER</b>			
13.16	6 mm cement plaster of mix :		
	13.16.1 1:3 (1 cement : 3 fine sand)	sqm	120.35
13.17	6 mm cement plaster 1:3 (1 cement : 3 fine sand) finished with a floating coat of neat cement and thick coat of Lime wash on top of walls when dry for bearing of R.C.C. slabs and beams.	sqm	161.95
13.18	Neat cement punning.	sqm	36.35
<b>ROUGH CAST PLASTER</b>			
13.19	Rough cast plaster upto 10 m height above ground level with a mixture of sand and gravel or crushed stone from 6 mm to 10 mm nominal size, dashed over and including the fresh plaster in two layers, under layer 12 mm cement plaster 1:4 (1 cement : 4 coarse sand) and top layer 10 mm cement plaster 1:3 (1 cement : 3 fine sand) mixed with 10% finely grounded hydrated lime by volume of cement.		
	13.19.1 Ordinary cement finish using ordinary cement	sqm	371.25
<b>PEBBLE DASH PLASTER</b>			
13.20	Pebble dash plaster upto 10 m height above ground level with a mixture of washed pebble or crushed stone 6 mm to 12.5 mm nominal size, dashed over and including fresh plaster in two layers under layer 12 mm cement plaster 1:4 (1 cement : 4 coarse sand) and top layer 10 mm cement plaster with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 10% finely grounded hydrated lime by volume of cement.	sqm	352.10
13.21	Extra for providing and mixing water proofing material in cement plaster work in proportion recommended by the manufacturers.	Per bag of 50 kg cement used in the mix	46.70
13.22	Extra for plastering exterior walls of height more than 10 m from ground level for every additional height of 3 m or part thereof.	sqm	34.95
13.23	Extra for plastering on circular work not exceeding 6 m in radius:		
	13.23.1 In one coat	sqm	17.05
	13.23.2 In two coats	sqm	26.15

Code No.	Description	Unit	Rate ₹
13.24	Extra for plastering done on moulding, cornices or architraves including neat finish to line and level :		
13.24.1	In one coat	sqm	247.00
13.24.2	In two coats	sqm	406.65
13.25	Extra for plastering :		
13.25.1	Spherical ceiling	sqm	63.70
13.25.2	Groined ceiling	sqm	69.35
13.25.3	Flewing soffits	sqm	41.80
13.26	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	sqm	100.95
	<b>ARTIFICIAL STONE PLASTER</b>		
13.27	Extra for lining out plaster to imitate stone or concrete blocks walling.	sqm	39.50
	<b>PLAIN CEMENT MORTAR BANDS</b>		
13.28	12 mm thick plain cement mortar bands in cement mortar 1:4 (1 cement : 4 fine sand) :		
13.28.1	Flush Band	cm per metre	2.85
13.28.2	Sunk Band	cm per metre	3.10
13.28.3	Raised Band	cm per metre	3.50
13.28.4	Moulded Band	cm per metre	5.80
13.29	18 mm thick plain cement mortar band in cement mortar 1:4 (1 cement : 4 fine sand):		
13.29.1	Flush Band	cm per metre	3.50
13.29.2	Sunk Band	cm per metre	3.85
13.29.3	Raised Band	cm per metre	4.35
13.29.4	Moulded Band	cm per metre	7.85
13.30	18 mm thick moulded cement mortar band in two coats under layer 12 mm thick with cement mortar 1:5 (1 cement : 5 coarse sand) top layer 6 mm thick with cement mortar 1:4 (1 cement : 4 fine sand).	cm per metre	7.90
	<b>POINTING OF BRICK WORK</b>		
13.31	Pointing on brick work or brick flooring with cement mortar 1:3 (1 cement : 3 fine sand) :		
13.31.1	Flush / Ruled/ Struck or weathered pointing	sqm	95.65
13.31.2	Raised and cut pointing	sqm	155.30
	<b>POINTING ON TILE BRICK WORK</b>		
13.32	Pointing on tile brick work with cement mortar 1:3 (1 cement : 3 fine sand) :		
13.32.1	Flush/ Ruled/ Struck or weathered pointing	sqm	130.85
	<b>POINTING ON STONE WORK</b>		
13.33	Pointing on stone work with cement mortar 1:3 (1 cement : 3 fine sand) :		
13.33.1	Flush/ Ruled pointing	sqm	137.85
13.33.2	Raised and cut pointing	sqm	249.35

Code No.	Description	Unit	Rate ₹
13.34	Raised and cut pointing on stone work in white cement mortar 1:3 (1 white cement : 3 marble dust).	sqm	270.70
13.35	Pointing on stone slab ceiling with cement mortar 1:2 (1 cement : 2 fine sand) :		
13.35.1	Flush/ Ruled pointing	sqm	78.15
13.36	Extra for pointing on walls on the outside at height more than 10 m from ground level for every additional height of 3 m or part there of.	sqm	5.30
<b>INTERIOR FINISHING</b>			
13.37	White washing with lime to give an even shade :		
13.37.1	New work (three or more coats)	sqm	14.35
13.38	Satna lime wash on walls with one coat.	sqm	5.85
13.39	Colour washing such as green, blue or buff to give an even shade :		
13.39.1	New work (two or more coats) with a base coat of white washing with lime	sqm	19.75
13.39.2	New work (two or more coats) with a base coat of whiting	sqm	19.40
13.40	Distempering with dry distemper of approved brand and manufacture (two or more coats) of required shade on new work, over and including water thinnable priming coat to give an even shade.	sqm	61.80
13.41	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade :		
13.41.1	New work (two or more coats) over and including water thinnable priming coat with cement primer	sqm	79.65
13.42	Distempering with 1st quality acrylic distemper (ready mixed) of approved manufacturer, of required shade and colour complete, as per manufacturer's specification.		
13.42.1	Two or more coats on new work	sqm	45.25
13.43	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface :		
13.43.1	Water thinnable cement primer	sqm	31.55
<b>EXTERIOR FINISHING</b>			
13.44	Finishing walls with water proofing cement paint of required shade :		
13.44.1	New work (Two or more coats applied @ 3.84 kg/10 sqm)	sqm	54.40
13.45	Finishing walls with textured exterior paint of required shade :		
13.45.1	New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including priming coat of exterior primer applied @ 2.20kg/10 sqm	sqm	127.10
13.46	Finishing walls with Acrylic Smooth exterior paint of required shade :		
13.46.1	New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm)	sqm	78.10

Code No.	Description	Unit	Rate ₹
13.47	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade :		
13.47.1	New work (Two or more coats applied @ 1.43 ltr/ 10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm)	sqm	90.00
13.48	Finishing with Deluxe Multi surface paint system for interiors and exteriors using Primer as per manufacturers specifications :		
13.48.1	Two or more coats applied on walls @ 1.25 ltr/10 sqm over and including one coat of Special primer applied @ 0.75 ltr / 10 sqm	sqm	87.85
13.48.2	Painting wood work with Deluxe Multi Surface Paint of required shade. Two or more coat applied @ 0.90 ltr/10 sqm over an under coat of primer applied @0.75 ltr/ 10 sqm of approved brand and manufacture	sqm	76.65
13.48.3	Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two or more coat applied @ 0.90 ltr/ 10 sqm over an under coat of primer applied @ 0.80 ltr/ 10 sqm of approved brand and manufacture	sqm	80.60
13.49	Deleted		
13.50	Applying priming coat :		
13.50.1	With ready mixed pink or Grey primer of approved brand and manufacture on wood work (hard and soft wood)	sqm	30.75
13.50.2	With ready mixed aluminium primer of approved brand and manufacture on resinous wood and plywood	sqm	31.60
13.50.3	With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron/ steel works	sqm	24.95
13.50.4	With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel work (second coat)	sqm	13.60
13.51	Painting with silicon & acrylic emulsion based water thinnable sealer of approved brand and manufacture on wet or patchy portion of plastered surfaces :		
13.51.1	One coat	sqm	66.25
13.51.2	Two coats	sqm	105.50
13.52	Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete.		
13.52.1	On steel work	sqm	109.80
13.52.2	On concrete work	sqm	114.30
13.53	Painting on G.S. sheet with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :		
13.53.1	New work (two or more coats) including a coat of approved steel primer but excluding a coat of mordant solution	sqm	71.10

Code No.	Description	Unit	Rate ₹
13.54	Applying a coat of mordant solution on G.S. sheet :		
13.54.1	With a solution of 38 gms of copper acetate in a litre of soft water	sqm	24.75
13.54.2	With a solution made of 13 gms of hydrochloric acid in a solution of 13 gms each of copper chloride, copper nitrate and ammonium chloride dissolved in a litre of soft water	sqm	24.55
13.55	Painting (two or more coats) on rain water, soil, waste and vent pipes and fittings with black anticorrosive bitumastic paint of approved brand and manufacture, over and including a priming of ready mixed zinc chromate yellow primer on new work :		
13.55.1	100 mm diameter pipes	metre	30.75
13.55.2	150 mm diameter pipes	metre	45.90
13.56	Painting (two or more coats) on rain water, soil, waste and vent pipes and fittings with synthetic enamel paint of approved brand and manufacture and required colour over a priming coat of approved steel primer on new work.		
13.56.1	100 mm diameter pipes	metre	33.95
13.56.2	150 mm diameter pipes	metre	50.65
13.57	Painting with oil type wood preservative of approved brand and manufacture :		
13.57.1	New work (two or more coats)	sqm	22.45
13.58	Providing and applying two coats of fire retardant paint on cleaned wood / ply surface @ 3.5 sqm per litre per coat including preparation of base surface as per recommendations of manufacturer to make the surface fire retardant.	sqm	216.60
13.59	Coal tarring two coats on new work using 0.16 Litre and 0.12 litre coal tar per sqm in the first coat and second coat respectively.	sqm	29.85
13.60	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade :		
13.60.1	Two or more coats on new work	sqm	71.65
13.61	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :		
13.61.1	Two or more coats on new work	sqm	63.05
13.62	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :		
13.62.1	Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture	sqm	92.75
13.63	Painting with aluminium paint of approved brand and manufacture to give an even shade .		
13.63.1	Two or more coats on new work	sqm	58.40
13.64	Painting with acid proof paint of approved brand and manufacture of required colour to give an even shade :		
13.64.1	Two or more coats on new work	sqm	65.75

Code No.	Description	Unit	Rate ₹
13.65	Painting with black anti-corrosive bitumastic paint of approved brand and manufacture to give an even shade :		
13.65.1	Two or more coats on new work	sqm	54.15
13.66	Floor painting with floor enamel paint of approved brand and manufacture of required colour to give an even shade :		
13.66.1	Two or more coats on new work	sqm	66.15
13.67	Varnishing with varnish of approved brand and manufacture :		
13.67.1	Two or more coats of glue sizing with copal varnish over an under coat of flattening varnish	sqm	96.35
13.67.2	Two or more coats glue sizing with spar varnish or an under coat of flattening varnish	sqm	97.30
13.68	French spirit polishing :		
13.68.1	Two or more coats on new works including a coat of wood filler	sqm	175.50
13.69	Polishing on wood work with ready mixed wax polish of approved brand and manufacture :		
13.69.1	New work	sqm	75.05
13.70	Floor polishing on masonry or concrete floors with wax polish of approved brand and manufacture.	sqm	35.55
13.71	Lettering with black Japan paint of approved brand and manufacture	per letter per cm height	2.20
13.72	Washed stone grit plaster on exterior walls height upto 10 metre above ground level, in two layers, under layer 12 mm cement plaster 1:4 (1 cement : 4 coarse sand ), furrowing the under layer with scratching tool, applying cement slurry on the under layer @ 2 Kg of cement per square metre, top layer 15 mm cement plaster 1:1/2:2 (1 cement: 1/2 coarse sand : 2 stone chipping 10 mm nominal size), in panels with groove all around as per approved pattern, including scrubbing and washing the top layer with brushes and water to expose the stone chippings ,complete as per specification and direction of Engineer-in- charge (payment for providing grooves shall be made separately).	sqm	492.45
13.73	Forming groove of uniform size in the top layer of washed stone grit plaster as per approved pattern using wooden battens, nailed to the under layer, including removal of wooden battens, repair to the edges of panels and finishing the groove complete as per specifications and direction of the Engineer-in-charge :		
13.73.1	15 mm wide and 15 mm deep groove	metre	28.95
13.73.2	20 mm wide and 15 mm deep groove	metre	29.45
13.74	Extra for washed grit plaster on exterior walls of height more than 10 m from ground level for every additional height of 3 m or part thereof.	sqm	77.90
13.75	Extra for washed stone grit plaster on circular work not exceeding 6 m in radius (in two coats).	sqm	50.70

Code No.	Description	Unit	Rate ₹
13.76	Forming groove of uniform size from 12x12 mm and upto 25x15 mm in the top layer of washed stone grit plastered surface as per approved pattern, including providing and fixing aluminum channels of appropriate size and thickness (not less than 2 mm), nailed to the under layer with rust proof screws and nails and finishing the groove complete as per specifications and direction of the Engineer-in-Charge.	metre	69.50
13.77	Extra for using white cement in place of ordinary cement in the top layer of the item of washed stone grit plaster.	sqm	101.75
13.78	Providing and applying 12 mm thick (average) premixed formulated one coat gypsum lightweight plaster having additives and light weight aggregates as vermiculite/ perlite respectively conforming to IS: 2547 (Part - 1 & II) 1976, applied on hacked / uneven background such as bare brick/ block/ RCC work on walls & ceiling at all floors and locations, finished in smooth line and level etc. complete.	sqm	234.20
13.79	Extra for addition of synthetic Polyester triangular fibre of length 6 mm, effective diameter 10-40 microns and specific gravity of 1.34 to 1.40 in cement plaster/mortar by using 125 gms. of synthetic Polyester triangular fibre for 50 Kgs. cement used in cement mortar as per directions of Engineer-in-Charge.	Per Bag of 50 Kg of cement	53.00
13.80	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	sqm	85.40
13.81	Distempering with 1st quality acrylic distemper, having VOC (Volatile Organic Compound ) content less than 50 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and colour.		
13.81.1	One coat	sqm	26.10
13.81.2	Two coats	sqm	41.75
13.82	Wall painting with acrylic emulsion paint, having VOC (Volatile Organic Compound ) content less than 50 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and colour.		
13.82.1	One coat	sqm	47.00
13.82.2	Two coats	Sqm	70.75
13.83	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound ) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour.		
13.83.1	One coat	sqm	46.15
13.83.2	Two coats	Sqm	70.75

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
13.84	Painting with synthetic enamel paint, having VOC (Volatile Organic Compound) content less than 150 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour.		
13.84.1	One coat	sqm	44.35
13.84.2	Two coats	Sqm	67.00
13.85	Applying priming coats with primer of approved brand and manufacture, having low VOC (Volatile Organic Compound ) content.		
13.85.1	With ready mixed pink or grey primer on wood work (hard and soft wood) having VOC content less than 50 grams/ litre	sqm	33.40
13.85.2	With ready mixed red oxide zinc chromatic on steel / iron works having VOC content less than 250 grams/ litre	sqm	28.75
13.85.3	With water thinnable cement primer on wall surface having VOC content less than 50 grams/litre	sqm	31.55

**SUB HEAD : 14.0**

**REPAIRS TO BUILDING**



## BASIC RATES (SH: 14.0 REPAIRS TO BUILDING)

Code No.	Description	Unit	Rate ₹
0006	Hire charges of Spraying machine including electric charges	day	250.00
0011	Hire charges of Pump set of capacity 4000 litres/hour	day	550.00
0100	Bandhani	day	328.00
0101	Bhisti	day	328.00
0102	Blacksmith 1 st class	day	393.00
0103	Blacksmith 2nd class	day	361.00
0111	Carpenter 1 st class	day	393.00
0112	Carpenter 2nd class	day	361.00
0114	Beldar	day	297.00
0115	Coolie	day	297.00
0117	Assistant Fitter or 2nd class Fitter	day	361.00
0119	Glazier	day	361.00
0123	Mason (brick layer) 1 st class	day	393.00
0124	Mason (brick layer) 2nd class	day	361.00
0128	Mate	day	328.00
0130	Mistry	day	393.00
0131	Painter	day	361.00
0141	White Washer	day	328.00
0155*	Mason (average)	day	377.00
0156*	Carpenter (average)	day	377.00
0295	Stone Aggregate (Single size) : 20 mm nominal size	cum	1200.00
0297	Stone Aggregate (Single size) : 10 mm nominal size	cum	1050.00
0302	Safeda ballies 125 mm diameter	metre	42.00
0308	Bhusa	quintal	400.00
0367	Portland Cement	tonne	5240.00
0389	Brass single acting spring hinges 150 mm	each	310.00
0390	Brass single acting spring hinges 125 mm	each	270.00
0391	Brass single acting spring hinges 100 mm	each	170.00
0392	Brass double acting spring hinges 150 mm	each	500.00
0393	Brass double acting spring hinges 125 mm	each	370.00
0394	Brass double acting spring hinges 100 mm	each	320.00
0404	Brass flush bolt 250 mm	each	150.00
0405	Brass flush bolt 150 mm	each	130.00
0406	Brass flush bolt 100 mm	each	90.00
0417	Brass 150 mm floor door stopper (0.357kg)	each	170.00
0418	Brass hard drawn hooks and eyes 300 mm	10 Nos	750.00

Code No.	Description	Unit	Rate ₹
0419	Brass hard drawn hooks and eyes 250 mm	10 Nos	700.00
0420	Brass hard drawn hooks and eyes 200 mm	10 Nos	645.00
0421	Brass hard drawn hooks and eyes 150 mm	10 Nos	620.00
0422	Brass hard drawn hooks and eyes 100 mm	10 Nos	525.00
0423	Brass casement window fastener	each	50.00
0427	Brass quadrant stays 300 mm	each	125.00
0428	Brass fanlight catch	10 Nos	175.00
0429	Brass fanlight pivot	10 Nos	195.00
0430	Brass chain with hook for fan light catch	each	40.00
0442	Brass helical spring 150 mm	each	310.00
0444	Brass curtain rod 20 mm dia 1.25 mm thick	metre	115.00
0445	Brass curtain rod 25 mm dia 1.25 mm thick	metre	135.00
0446	Brass brackets (curtain rods) 20 mm	each	42.00
0449	Brass screws 50 mm	100 Nos	210.00
0450	Brass screws 40 mm	100 Nos	170.00
0452	Brass screws 25 mm	100 Nos	95.00
0524	Chromium plated Brass butt hinges (heavy) type 75x65x4 mm (200gms)	10 Nos	1000.00
0525	Chromium plated Brass butt hinges (light/ordinary) type 125x70x4 mm	10 Nos	850.00
0526	Chromium plated Brass butt hinges (light/ordinary) type 100x70x4 mm	10 Nos	700.00
0527	Chromium plated Brass butt hinges (light/ordinary) type 75x40x2.5 mm	10 Nos	460.00
0528	Chromium plated Brass butt hinges (light/ordinary) type 50x40x2.5 mm	10 Nos	200.00
0585	Chromium plated Brass screws 50 mm	100 Nos	240.00
0586	Chromium plated Brass screws 40 mm	100 Nos	200.00
0587	Chromium plated Brass screws 30 mm	100 Nos	155.00
0589	Chromium plated Brass screws 20 mm	100 Nos	100.00
0595	Bright finished or black enameled mild steel butt hinges 100x58x1.90 mm	10 Nos	85.00
0597	Bright finished or black enameled mild steel butt hinges 50x37x1.50 mm	10 Nos	50.00
0608	Nickel plated bright finished mild steel piano hinges 1 mm thick 25 mm wide	metre	40.00
0637	Bright finished or black enameled mild steel screws 40 mm	100 Nos	50.00
0639	Bright finished or black enameled mild steel screws 25 mm	100 Nos	35.00
0640	Bright finished or black enameled mild steel screws 20 mm	100 Nos	30.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
0761	Fuel wood	quintal	500.00
0771	Kerosene oil	litre	45.00
0775	Dehradun white lime	quintal	480.00
0811	Mud (dry)	cum	60.00
0815	Dry distemper	kilogram	36.00
0816	Oil bound washable distemper/ Acrylic distemper	kilogram	45.00
0826	Aluminium paint	litre	130.00
0827	Acid proof paint (chocolate or black)	litre	150.00
0828	Anticorrosive bituminous paint (black)	litre	90.00
0829	Black Japan paint	litre	95.00
0833	Synthetic enamel paint in black or chocolate shade	litre	130.00
0835	Plastic emulsion paint	litre	180.00
0845	Roofing paint for iron sheets in red colour	litre	120.00
0851	Water proofing cement paint	kilogram	45.00
0855	Wax polish (ready made)	kilogram	200.00
0856	Ordinary varnish	litre	75.00
0857	Superior copal varnish	litre	125.00
0858	Superior spar varnish	litre	125.00
0859	Oil type wood preservative	litre	80.00
0863	Putty for wood work	kilogram	30.00
0982	Coarse sand (zone III)	cum	1120.00
0999	Shellac	kilogram	210.00
1000	Spirit	litre	70.00
1003	Mild steel round bar above 12 mm dia	quintal	4300.00
1007	Structural steel such as tees, angles channels and R.S. joists	quintal	4926.00
1008	Flats up to 10 mm in thickness	quintal	4200.00
1023	Galvanised steel J or L hooks 8 mm dia	10 Nos	110.00
1034	Bolts and nuts up to 300 mm in length	quintal	5600.00
1174	Red sand stone slab 45 mm to 50 mm thick (un-dressed)	sqm	172.00
1186	Superior class teak wood such as Dandeli, Balarshah or Malabar in planks	10 cudm	1100.00
1189	Second class teak wood in scantling	10 cudm	660.00
1190	Second class teak wood in planks	10 cudm	725.00
1194	Second class deodar wood in planks	10 cudm	500.00
1196	First class kail wood in planks	10 cudm	310.00
1199	Sal wood in scantling	10 cudm	520.00
1208	Bitumen washer	100 Nos	30.00

Code No.	Description	Unit	Rate ₹
1209	G.I. plain washer thick	100 Nos	35.00
1213	Water proofing materials	kilogram	32.00
1215	Welding by electric plant	cm	1.80
1314	C.P.brass chain with 32 mm dia rubber plug	each	40.00
1315	C.P.brass chain with 40 mm dia rubber plug	each	40.00
2201	Carriage of bricks	1000 Nos	284.39
2202	Carriage of stone aggregate below 40 mm nominal size	cum	106.64
2203	Carriage of coarse sand	cum	106.64
2204	Carriage of timber	cum	121.88
2205	Carriage of steel	tonne	94.80
2209	Carriage of cement	tonne	94.80
2216	Carriage of stone blocks white & red sand stone & kota stone slab	tonne	94.80
2264	Carriage of rubbish	cum	106.64
2406	Float glass sheet of nominal thickness 4 mm (weight not less than 10 kg/sqm)	sqm	330.00
2407	Float glass sheet of nominal thickness 5.5 mm (weight not less than 13.50 kg/sqm)	sqm	500.00
2466	Hollock wood in scantling	10 cudm	325.00
2467	Chromium plated Brass pull bolt lock (locking bolt) of size 85 mm x 42 mm with screws, bolts, nuts and washers complete	each	165.00
2602	Common burnt clay F.P.S. (non modular) bricks class designation 7.5	1000 Nos	3800.00
4009	Mild steel tubes hot finished welded type	kilogram	52.00
4202	Red oxide Zinc chromate primer	litre	70.00
7019	Dash fastener / Chemical fastner	each	15.00
7241	Melamine polish	litre	300.00
7340	Stainless steel pin.	kg	190.00
7346	Double coupler	each	55.00
7387	Spigot for standard jointing	kilogram	45.00
7397	Base Jack	each	180.00
7398	Challies	each	800.00
7399	Cup locks	each	80.00
7442	Wheel 75 mm dia. 40 mm wide	each	65.00
8505	Acrylic exterior paint	litre	140.00
8506	Premium Acrylic exterior paint	litre	235.00
8507	Textured exterior paint	litre	200.00
8508	Primer for cement paint	litre	78.00
9999	Sundries	L.S.	1.70

## 14.0 REPAIRS TO BUILDING

Code No.	Description	Unit	Rate ₹
14.1	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq. meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground within 50 metres lead :		
14.1.1	With cement mortar 1:4 (1 cement : 4 fine sand)	sqm	221.15
14.1.2	With cement mortar 1:4 (1cement: 4 coarse sand)	sqm	231.85
14.2	Fixing chowkhats in existing opening including embedding chowkhats in floors or walls cutting masonry for holdfasts, embedding hold fasts in cement concrete blocks of size 15 x 10 x 10 cm with cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size), painting two coats of approved wood preservative to sides of chowkhats and making good the damages to walls and floors as required complete, including disposal of rubbish to the dumping ground within 50 meters lead :		
14.2.1	Door chowkhats	each	719.20
14.2.2	Window chowkhats	each	441.70
14.2.3	Clerestory window chowkhats	each	321.85
14.3	Fixing chowkhat in existing opening in brick / RCC wall with dash fasteners/ Chemical fasteners of appropriate size (3 nos on each vertical member of door chowkhat and 2 nos on each vertical member of window chowkhats), including Cost of dash fasteners/ chemical fastener.	each	152.55
14.4	Making the opening in brick masonry including dismantling in floor or walls by cutting masonry and making good the damages to walls, flooring and jambs complete, to match existing surface i/c disposal of mulba/ rubbish to the nearest municipal dumping ground.		
14.4.1	For door/ window/ clerestory window	sqm	447.40
14.5	Renewing glass panes, with putty and nails wherever necessary including racking out the old putty:		
14.5.1	Float glass panes of thickness 4 mm	sqm	651.40
14.5.2	Float glass panes of thickness 5.5 mm	sqm	868.60
14.6	Renewing glass panes, with wooden fillets wherever necessary:		
14.6.1	Float glass panes of thickness 4 mm	sqm	825.95
14.6.2	Float glass panes of thickness 5.5 mm	sqm	1,043.15
14.7	Renewing glass panes and refixing existing wooden fillets:		
14.7.1	Float glass panes of thickness 4 mm	sqm	689.15
14.7.2	Float glass panes of thickness 5.5 mm	sqm	906.35
14.8	Supplying and fixing new wooden fillets wherever necessary:		
14.8.1	2nd class teak wood fillets	metre	34.65
14.8.2	Hollock wood fillets	metre	29.30
14.9	Renewal of old putty of glass panes (length)	metre	21.20

Code No.	Description	Unit	Rate ₹
14.10	Refixing old glass panes with putty and nails	sqm	275.30
14.11	Fixing old glass panes with wooden fillets (excluding cost of fillets)	sqm	239.80
14.12	Providing and fixing 16 mm M.S. Fan clamps of standard shape and size in existing R.C.C. slab, including cutting chase, anchoring clamp to reinforcement bar, including cleaning, refilling, making good the chase with matching concrete, plastering and painting the exposed portion of the clamps complete.	each	228.00
14.13	Regrading terracing of mud phaska covered with tiles or brick, in cement by dismantling tiles or bricks, removing mud plaster, preparing the surface of mud phaska to proper slope, relaying mud plaster gobri leaping and tiles or bricks, grouted in cement mortar 1:3 (1 cement : 3 fine sand), including replacing unserviceable tiles or bricks with new ones and disposal of unserviceable material to the dumping ground (the cost of the new tiles or brick excluded) within 50 metres lead.	sqm	253.15
14.14	Replacing sand stone slabs in roofing, laid in cement mortar 1:4 (1 cement : 4 coarse sand), including necessary repairs and cement pointing with same mortar complete, including disposal of rubbish to dumping ground within 50 metres of lead :		
14.14.1	Red/ white sand stone slabs 30 to 50 mm thick	sqm	527.30
14.15	Renewing wooden battens in roofs, including making good the holes in wall and painting with oil type wood preservative of approved brand and manufacture complete, including removal of rubbish to the dumping ground within 50 metres lead :		
14.15.1	Sal wood battens	cum	66,229.65
14.16	Renewing wooden beams in roofs including making good the holes in walls and painting with oil type wood preservative of approved brand and manufacture complete, including removal of rubbish to the dumping ground within 50 metres lead :		
14.16.1	Not exceeding 4.00 metres in length.		
14.16.1.1	Sal wood beams	cum	68,477.60
14.16.1.2	Hollock wood beams	cum	45,139.40
14.16.2	Above 4.00 metres and upto 5.00 metres length.		
14.16.2.1	Sal wood beams	cum	69,428.80
14.16.2.2	Hollock wood beams	cum	46,065.20
14.17	Raking out joints in lime or cement mortar and preparing the surface for re-pointing or replastering, including disposal of rubbish to the dumping ground within 50 metres lead.	sqm	24.00
14.18	Flush pointing with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% of integral water proofing compound by weight of cement for flat tile bricks on top of mud phaska :		
14.18.1	With F.P.S. brick tiles	sqm	52.20
14.18.2	With modular brick tiles	sqm	53.20

Code No.	Description	Unit	Rate ₹
14.19	Taking out wind ties from roof including cutting out rusted bolts, nuts etc. and removing materials to any distance within compound and stacking.	kg	1.85
14.20	Fixing of old wind tie with new fittings including painting two or more coats with anticorrosive bitumastic paint of approved brand & manufacturer over and including priming coat of ready mixed zinc chromate yellow primer of approved brand.	metre	67.80
14.21	Renewing bottom rail and/or top runner of collapsible gate including making good all damages and applying priming coat of zinc chromate yellow primer of approved brand and manufacturer.	kg	139.75
14.22	Renewing Wrought iron or M.S. Wheel or roller of steel door or gate and fitting and fixing the same with necessary clamps, nuts and bolts/welding and erection etc. complete.		
14.22.1	Wheel 50 mm dia and below	per wheel	121.45
14.22.2	Wheel above 50 mm dia	per wheel	185.65
<b>EARTH WORK</b>			
14.23	Pumping out water caused by springs, tidal or river seepage, broken water mains or drains and the like.	kilo litre	85.20
14.24	Mud mortar made with local clay good earth.	cum	366.20
<b>BRICK WORK</b>			
14.25	Brick work with common burnt clay bricks of class designation 7.5 in mud mortar	cum	3,893.15
<b>WOOD WORK</b>			
14.26	Providing and fixing 25 mm thick shutters for cup board etc. :		
14.26.1	Panelled or panelled & glazed shutters :		
14.26.1.1	Superior class teak wood including nickel plated bright finished M.S. piano hinges with necessary screws.	sqm	3,355.00
14.26.1.2	Ist class teak wood including nickel plated bright finished M.S. piano hinges with necessary screws.	sqm	2,817.25
14.26.2	Glazed shutters :		
14.26.2.1	Superior class teak wood including nickel plated bright finished M.S. piano hinges with necessary screws.	sqm	3,462.50
14.26.2.2	Ist class teak wood including nickel plated bright finished M.S. piano hinges with necessary screws.	sqm	2,884.45
14.27	Providing and fixing plain jaffri door and window shutters including bright or/and black enamelled M.S. butt hinges with necessary screws 35x10 mm laths placed 35 mm apart (frames to be paid separately), including fixing 50x12 mm beading complete with :		
14.27.1	Second class teak wood	sqm	2,858.65
14.28	Providing and fixing curtain rods of 1.25 mm thick brass plates with two brass brackets fixed with brass screws and wooden plugs etc. wherever necessary complete.		
14.28.1	20 mm diameter.	metre	210.50
14.28.2	25 mm diameter.	metre	233.75

Code No.	Description	Unit	Rate ₹
14.29	Providing and fixing M.S. round or square bars with M.S. flats at required spacing in wooden frames of windows and clerestory windows.	kg	67.85
14.30	Providing joists (karries) including hoisting, fixing in position and applying wood preservative on unexposed surface etc. complete with :		
14.30.1	Sal wood	cum	65,522.00
14.30.2	Hollock wood	cum	42,419.80
14.31	Providing and fixing bright finished brass single acting spring hinges with necessary brass screws etc. complete :		
14.31.1	150 mm	each	405.45
14.31.2	125 mm	each	359.00
14.31.3	100 mm	each	239.15
14.32	Providing and fixing bright finished brass double acting spring hinges with necessary brass screws etc. complete :		
14.32.1	150 mm	each	626.15
14.32.2	125 mm	each	475.15
14.32.3	100 mm	each	413.35
14.33	Providing and fixing bright finished brass flush bolts with necessary brass screws etc. complete :		
14.33.1	250 mm	each	190.70
14.33.2	150 mm	each	165.90
14.33.3	100 mm	each	119.45
14.34	Providing and fixing 150 mm bright finished floor brass door stopper with rubber cushion, necessary brass screws etc. to suit shutter thickness complete	each	210.35
14.35	Providing and fixing bright finished brass hard drawn hooks and eyes :		
14.35.1	300 mm	each	90.05
14.35.2	250 mm	each	84.20
14.35.3	200 mm	each	77.85
14.35.4	150 mm	each	74.95
14.35.5	100 mm	each	63.90
14.36	Providing and fixing bright finished brass fan light pivot with necessary brass screws etc. complete.	each	34.40
14.37	Providing and fixing 300 mm long bright finished brass chain with hook for fan light including necessary brass screws etc. complete.	each	55.60
14.38	Providing and fixing bright finished brass quadrant stay 300 mm long with necessary brass screws etc. complete.	each	154.35
14.39	Providing and fixing bright finished brass helical door spring (superior quality).	each	397.95

Code No.	Description	Unit	Rate ₹
14.40	Providing and fixing chromium plated brass butt hinges with necessary chromium plated brass screws etc. complete.		
14.40.1	125x70x4 mm (ordinary type)	each	137.15
14.40.2	100x70x4 mm (ordinary type)	each	110.45
14.40.3	75x65x4 mm (heavy type)	each	137.15
14.40.4	75x40x2.5 mm (ordinary type)	each	74.45
14.40.5	50x40x2.5 mm (ordinary type)	each	31.70
14.41	Providing and fixing 85x42 mm chromium plated brass pull bolt lock with necessary chromium plated brass screws, nuts, bolts and washers etc. complete.	each	203.40
	<b>FINISHING</b>		
14.42	White washing with lime to give an even shade :		
14.42.1	Old work (two or more coats)	sqm	8.55
14.42.2	Old work (one or more coats)	sqm	5.30
14.43	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	sqm	6.90
14.44	Distempering with dry distemper of approved brand and manufacture (one or more coats) and of required shade on old work to give an even shade.	sqm	26.00
14.45	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade :		
14.45.1	Old work (one or more coats)	sqm	28.55
14.46	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	sqm	9.00
14.47	Painting on G.S. sheet with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :		
14.47.1	Old work (one or more coats)	sqm	36.95
14.48	Painting (two or more coats) on rain water, soil, waste and vent pipes and fittings with black anticorrosive bitumastic paint of approved brand and manufacture over and including a priming coat of ready mixed zinc chromate yellow primer on new work :		
14.48.1	75 mm diameter pipes	metre	22.95
14.49	Painting (one or more coats) on rain water, soil, waste and vent pipes and fittings with black anticorrosive bitumastic paint of approved brand and manufacture on old work :		
14.49.1	75 mm diameter pipes	metre	11.15
14.49.2	100 mm diameter pipes	metre	14.65
14.49.3	150 mm diameter pipes	metre	20.95
14.50	Painting (two or more coats) on rain water, soil, waste and vent pipes and fittings with aluminium paint of approved brand and		

Code No.	Description	Unit	Rate ₹
	manufacture over a priming coat of ready mixed zinc chromate yellow primer on new work :		
14.50.1	75 mm diameter pipes	metre	24.00
14.50.2	100 mm diameter pipes	metre	33.95
14.50.3	150 mm diameter pipes	metre	50.65
14.51	Painting (one or more coats) on rain water, soil, waste and vent pipes and fittings with synthetic enamel paint of approved brand and manufacture and required colour on old work :		
14.51.1	75 mm diameter pipes	metre	11.80
14.51.2	100 mm diameter pipes	metre	15.15
14.51.3	150 mm diameter pipes	metre	21.65
14.52	Painting with oil type wood preservative of approved brand and manufacture :		
14.52.1	Old work (one or more coats)	sqm	17.10
14.53	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade :		
14.53.1	One or more coats on old work	sqm	46.85
14.54	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :		
14.54.1	One or more coats on old work	sqm	41.35
14.55	Painting with aluminium paint of approved brand and manufacture to give an even shade :		
14.55.1	One or more coats on old work	sqm	37.75
14.56	Painting with acid proof paint of approved brand and manufacture of required colour to give an even shade :		
14.56.1	One or more coats on old work	sqm	43.00
14.57	Painting with black anti-corrosive bitumastic paint of approved brand and manufacture to give an even shade :		
14.57.1	One or more coats on old work	sqm	36.20
14.58	French spirit polishing :		
14.58.1	One or more coats on old work	sqm	88.95
14.59	Polishing on wood work with ready made wax polish of approved brand and manufacture :		
14.59.1	Old work	sqm	38.15
14.60	Re-lettering with black Japan paint of approved brand and manufacture.	Per letter per cm height	1.40
14.61	Painting (one or more coats) with black Japan paint of approved brand and manufacture to give an even shade.	sqm	38.50

Code No.	Description	Unit	Rate ₹
14.62	Providing and fixing C.P. brass chain and rubber plug complete for sink or wash basin :		
14.62.1	32 mm dia	each	62.40
14.62.2	40 mm dia	each	62.40
14.63	Distempering with 1st quality acrylic washable distemper (ready made) of approved manufacturer and of required shade and colour complete. as per manufacturer's specification.		
14.63.1	One or more coats on old work	sqm	25.70
14.64	Finishing walls with water proofing cement paint of required shade :		
14.64.1	Old work (one or more coats applied @ 2.20 kg/10 sqm) over priming coat of primer applied @ 0.80 ltrs/10 sqm complete including cost of Priming coat.	sqm	51.20
14.64.2	Old work (one or more coats @ 2.20 kg/10 sqm) complete.	sqm	34.65
14.65	Finishing walls with textured exterior paint of required shade :		
14.65.1	Old work (Two or more coats on existing cement paint surface applied @ 3.28 ltr/10 sqm.	sqm	106.75
14.65.2	Old work (One or more coats) applied @ 1.82 ltr/10 sqm.	sqm	65.10
14.66	Finishing walls with Acrylic Smooth exterior paint of required shade :		
14.66.1	Old work (Two or more coat applied @ 1.67 ltr/ 10 sqm) on existing cement paint surface	sqm	56.55
14.66.2	Old work (One or more coat applied @ 0.90 ltr/10 sqm).	sqm	37.45
14.67	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade		
14.67.1	Old work (Two or more coats applied @ 1.43 ltr/ 10 sqm) over existing cement paint surface	sqm	69.45
14.67.2	Old work (one or more coats applied @ 0.83 ltr/10 sqm).	sqm	45.55
14.68	Deleted.		
14.69	Varnishing with varnish of approved brand and manufacture:		
14.69.1	One or more coats with copal varnish	sqm	39.90
14.69.2	One or more coats with spar varnish	sqm	40.40
14.70	Melamine polishing on wood work (one or more coat).	sqm	73.80
14.71	Varnishing with flatting varnish of approved brand and manufacture one or more coats on old work.	sqm	39.30
14.72	Providing and fixing double scaffolding system (cup lock type) on the exterior side, up to seven story height made with 40 mm dia M.S. tube 1.5 m centre to centre, horizontal & vertical tubes joining with cup & lock system with M.S. tubes, M.S. tube challies, M.S. clamps and M.S. staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for the		

Code No.	Description	Unit	Rate ₹
	required duration as approved and removing it there after .The scaffolding system shall be stiffened with bracings, runners, connection with the building etc wherever required for inspection of work at required locations with essential safety features for the workmen etc. complete as per directions and approval of Engineer-in-charge .The elevational area of the scaffolding shall be measured for payment purpose .The payment will be made once irrespective of duration of scaffolding.	sqm	148.65
	<b>Note:</b> - This item to be used for maintenance work judicially, necessary deduction for scaffolding in the existing item to be done.		
14.73	Providing and fixing bright finished brass casement window fasteners or peg stays to windows/ ventilators with necessary welding and machine screws etc. complete.	kg	417.95
14.74	Providing and fixing 14 mm bright finished brass spring catch to steel centre hung ventilators with necessary welding and machine screws etc. complete.	each	45.85
Note :- Item no. 14.73 & 14.74 are brought from Sub head 10 Steel work (Item no. 10.23 & 10.24).			

**SUB HEAD : 15.0**

**DISMANTLING  
AND  
DEMOLISHING**



## BASIC RATES (SH:15.0 DISMANTLING AND DEMOLISHING)

Code No.	Description	Unit	Rate ₹
0038	Tractor with ripper attachment	day	1350.00
0039	Tractor with trolley	day	1500.00
0040	Air compressor 250 cfm with two leads for pneumatic cutters / hammers	day	1900.00
0041	Joint cutting machine with 2-3 blades	day	1000.00
0100	Bandhani	day	328.00
0101	Bhisti	day	328.00
0103	Blacksmith 2nd class	day	361.00
0112	Carpenter 2nd class	day	361.00
0114	Beldar	day	297.00
0115	Coolie	day	297.00
0116	Fitter (grade 1)	day	393.00
0117	Assistant Fitter or 2nd class Fitter	day	361.00
0123	Mason (brick layer) 1 st class	day	393.00
0124	Mason (brick layer) 2nd class	day	361.00
0128	Mate	day	328.00
0130	Mistry	day	393.00
0139	Skilled Beldar (for floor rubbing etc.)	day	328.00
0761	Fuel wood	quintal	500.00
0771	Kerosene oil	litre	45.00
2264	Carriage of rubbish	cum	106.64
9999	Sundries	L.S.	1.70

## 15.0 DISMANTLING AND DEMOLISHING

Code No.	Description	Unit	Rate ₹
15.1	Demolishing lime concrete manually/ by mechanical means and disposal of material within 50 metres lead as per direction of Engineer-in-charge.	cum	281.45
15.2	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.		
15.2.1	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	cum	806.35
15.2.2	Nominal concrete 1:4:8 or leaner mix (i/c equivalent design mix)	cum	497.15
15.3	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in- charge.	cum	1,176.40
15.4	Demolishing R.B. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in- charge.	cum	1,051.05
15.5	Extra for cutting reinforcement bars manually/ by mechanical means in R.C.C. or R.B. work (Payment shall be made on the cross sectional area of R.C.C. or R.B. work) as per direction of Engineer - in -charge.	sqm	408.55
15.6	Extra for scrapping, cleaning and straightening reinforcement from R.C.C. or R.B. work.	kg	3.20
15.7	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.		
15.7.1	In mud mortar	cum	233.20
15.7.2	In lime mortar with old mughal bricks	cum	588.50
15.7.3	In lime mortar	cum	281.45
15.7.4	In cement mortar	cum	681.00
15.8	Removing mortar from bricks and cleaning bricks including stacking within a lead of 50 m (stacks of cleaned bricks shall be measured) :		
15.8.1	From brick work in mud mortar	1000 nos	1,551.15
15.8.2	From brick work in lime mortar	1000 nos	1,802.00
15.8.3	From brick work in cement mortar	1000 nos	2,260.65
15.9	Demolishing stone rubble masonry manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge :		
15.9.1	In lime mortar	cum	383.30
15.9.2	In cement mortar	cum	812.60
15.10	Dismantling dressed stone work ashlar face stone work, marble work or precast concrete work manually/ by mechanical means		

Code No.	Description	Unit	Rate ₹
	including stacking of serviceable and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge :		
	15.10.1 In lime mortar	cum	484.90
	15.10.2 In cement mortar	cum	950.60
15.11	Removing mortar from and cleaning stones and concrete articles (net quantity of stacks of cleaned materials will be measured) :		
	15.11.1 In lime mortar	cum	160.00
	15.11.2 In cement mortar	cum	229.75
15.12	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :		
	15.12.1 Of area 3 sq. metres and below	each	127.80
	15.12.2 Of area beyond 3 sq. metres	each	175.50
15.13	Taking out doors, windows and clerestory window shutters (steel or wood) including stacking within 50 metres lead :		
	15.13.1 Of area 3 sq. metres and below	each	49.60
	15.13.2 Of area beyond 3 sq. metres	each	65.65
15.14	Dismantling wood work in frames, trusses, purlins and rafters up to 10 metres span and 5 metres height including stacking the material within 50 metres lead :		
	15.14.1 Of sectional area 40 square centimetres and above	cum	1,554.95
	15.14.2 Of sectional area below 40 square centimetres	metre	6.20
15.15	Extra for dismantling trusses, rafters, purlins etc. of wood work for every additional span of one metre or part thereof beyond 10 metres :		
	15.15.1 Of sectional area 40 square centimetres and above	Cum per metre span	213.80
	15.15.2 Of sectional area below 40 square centimetres	Metre per metre span	0.60
15.16	Extra for dismantling trusses, rafters, purlins etc. of wood work for every additional height of one metre or part thereof beyond 5 metres :		
	15.16.1 Of sectional area 40 square centimetres and above	Cum per metre height	303.75
	15.16.2 Of sectional area below 40 square centimetres	Metre per metre height	1.20
15.17	Dismantling steel work in single sections including dismembering and stacking within 50 metres lead in:		
	15.17.1 R.S. Joists	kg	1.15
	15.17.2 Channels, angles, tees and flats	kg	0.80
15.18	Dismantling steel work in built up sections in angles, tees, flats and channels including all gusset plates, bolts, nuts, cutting rivets, welding etc. including dismembering and stacking within 50metres lead.	kg	1.95

Code No.	Description	Unit	Rate ₹
15.19	Dismantling steel work manually/ by mechanical means in built up sections without dismembering and stacking within 50 metres lead as per direction of Engineer-in-charge.	kg	1.30
15.20	Extra for dismantling trusses, rafters, purlins etc. of steel work for every additional span of one metre or part thereof beyond 10 metres	Kg per metre span	0.30
15.21	Extra for dismantling trusses, rafters, purlins etc. of steel work for every additional height of one metre or part thereof beyond 5 metres.	Kg per metre height	0.30
15.22	Extra for marking of structural steel work required to be re-erected.	kg	1.60
15.23	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead.		
15.23.1	For thickness of tiles 10 mm to 25 mm	sqm	25.55
15.23.2	For thickness of tiles above 25 mm and up to 40 mm	sqm	39.75
15.24	Demolishing dry brick pitching in floors, drains etc. including stacking serviceable material and disposal of unserviceable material within 50 metres lead :	cum	436.60
15.25	Dismantling stone slab flooring laid in cement mortar including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	sqm	88.50
15.26	Demolishing brick tile covering in terracing including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	sqm	36.95
15.27	Demolishing mud phaska in terracing and disposal of material within 50 metres lead.	cum	302.15
15.28	Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material within 50 metres lead of :		
15.28.1	G.S. Sheet	sqm	56.80
15.28.2	Asbestos sheet	sqm	26.70
15.29	Dismantling stone slab roofing over wooden karries or R.C.C. battens (dismantling karries and battens to be paid for separately), including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	cum	885.20
15.30	Dismantling jack arch roofing and floors including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	sqm	84.40
15.31	Dismantling tiled roofing with battens, boarding etc. complete including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	sqm	69.90
15.32	Demolishing thatch roofing including mats, bamboo, jaffari etc. complete including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	sqm	19.35
15.33	Dismantling wooden ballies in posts and struts including stacking within 50 metres lead.	metre	6.90

Code No.	Description	Unit	Rate ₹
15.34	Dismantling and stacking within 50 metres lead, fencing posts or struts including all earth work and dismantling of concrete etc. in base of :		
15.34.1	T' or 'L' iron or pipe	each	89.80
15.34.2	R.C.C.	each	102.40
15.35	Cutting ballies or wooden posts of fencing at the point of projection above the concrete or ground and stacking the same within 50 metres lead.	each	8.20
15.36	Dismantling barbed wire or flexible wire rope in fencing including making rolls and stacking within 50 metres lead.	kg	12.20
15.37	Dismantling wooden trellis work excluding frames but including stacking the serviceable material within 50 metres lead.	sqm	22.00
15.38	Dismantling expanded metal or I.R.C. fabrics with necessary battens and beading including stacking the serviceable material within 50 metres lead.	sqm	25.70
15.39	Dismantling wooden boardings in lining of walls and partitions, excluding supporting members but including stacking within 50 metres lead :		
15.39.1	Up to 10 mm thick	sqm	21.15
15.39.2	Thickness above 10 mm up to 25 mm	sqm	26.95
15.39.3	Thickness above 25 mm up to 40 mm	sqm	31.75
15.40	Dismantling precast concrete or stone slabs in walls, partition walls etc. including stacking within 50 metres lead :		
15.40.1	Thickness up to 40 mm	sqm	97.25
15.40.2	Thickness above 40 mm up to 75 mm	sqm	145.65
15.41	Dismantling cement asbestos or other hard board ceiling or partition walls including stacking of serviceable materials and disposal of unserviceable materials within 50 metres lead.	sqm	19.80
15.42	Dismantling C.I. or asbestos rain water pipe with fittings and clamps including stacking the material within 50 metres lead :		
15.42.1	75 to 80 mm dia pipe	metre	25.00
15.42.2	100 mm dia pipe	metre	25.85
15.42.3	150 mm dia pipe	metre	26.65
15.43	Dismantling manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge :		
15.43.1	Water bound macadam road	sqm	73.90
15.43.2	bituminous road	sqm	143.90
15.44	Dismantling G.I. pipes (external work) including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means including stacking of pipes within 50 metres lead as per direction of Engineer-in-charge :		
15.44.1	15 mm to 40 mm nominal bore	metre	52.60
15.44.2	Above 40 mm nominal bore	metre	59.70

Code No.	Description	Unit	Rate ₹
15.45	Dismantling C.I. pipes including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes & lead at site within 50 metre lead as per direction of Engineer-in-charge:		
15.45.1	Up to 150 mm diameter	metre	155.20
15.45.2	Above 150 mm dia up to 300 mm dia	metre	205.15
15.45.3	Above 300 mm diameter	metre	265.75
15.46	Dismantling steel cylinder R.C. pipes including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes & lead at site within 50 metres lead as per direction of Engineer-in-charge :		
15.46.1	Up to 600 mm diameter	metre	247.00
15.46.2	Above 600 mm diameter	metre	618.85
15.47	Dismantling asbestos cement pressure pipes including excavation and refilling trenches after taking out the pipes manually/ by mechanical means and stacking the pipes within 50 metres lead as per direction of Engineer-in-charge :		
15.47.1	Up to 150 mm diameter	metre	109.55
15.47.2	Above 150 mm diameter	metre	133.10
15.48	Taking out C.I. cover with frame from R.C.C. top slab of manholes of various sizes including demolishing of R.C.C. work manually/ by mechanical means and stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead as per direction of Engineer-in-charge.	each	237.45
15.49	Taking out C.I. cover with frame from R.C.C. top slab of inspection chambers of various sizes including demolishing of R.C.C. work manually/ by mechanical means and stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead as per direction of Engineer-in-charge.	each	139.45
15.50	Dismantling of R.C.C. spun vent shaft including excavating the cement concrete pit completely, taking out the shaft, refilling the excavated gap, stacking the useful materials near the site and disposal of unserviceable materials within 50 metres lead.	each	1,590.75
15.51	Dismantling of road gully chamber of various sizes including C.I. grating with frame including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead including refilling the excavated gap.	each	323.45
15.52	Dismantling of flushing cistern of all types (C.I./PVC/Vitrious China) including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead.	each	322.00
15.53	Dismantling of C.I. sluice valve including stacking of useful materials within a lead of 50 metres		
15.53.1	Up to 150 mm diameter	each	117.05
15.53.2	Above 150 mm diameter	each	412.60

Code No.	Description	Unit	Rate ₹
15.54	Dismantling of spindle fire hydrant including stacking of useful materials within 50 metres lead.	each	248.40
15.55	Dismantling of cement concrete platform along with curtain walls and base concrete etc. including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead :		
15.55.1	120 x 120 cm (outside to outside)	each	365.05
15.55.2	210 x 120 cm (outside to outside)	each	560.00
15.55.3	320 x 120 cm (outside to outside)	each	792.40
15.56	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	sqm	18.15
15.57	Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable surplus material and stacking of serviceable material with in 50 meters lead as directed by Engineer-in-charge.	sqm	19.80
15.58	Demolishing R.C.C. work by mechanical means and stockpiling at designated locations and disposal of dismantled materials up to a lead of 1 kilometre, stacking serviceable and unserviceable material separately including cutting reinforcement bars.	cum	1,264.70
15.59	Dismantling of flexible pavement (bituminous courses) by mechanical means and disposal of dismantled material up to a lead of 1 kilometre, as per direction of Engineer-in-charge.	cum	193.20
15.60	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	cum	123.85



**SUB HEAD : 16.0**

**ROAD WORK**



## BASIC RATES (SH: 16.0 ROAD WORK)

Code No.	Description	Unit	Rate ₹
0001	Hire charges of Coaltar Boiler 900 to 1400 litres	day	830.00
0002	Hire charges of Concrete Mixer 0.25 to 0.40 cum with Hopper	day	800.00
0003	Hire charges of Diesel Road Roller - 8 to 10 tonne	day	1500.00
0004	Production cost of concrete by batch mix plant	cum	350.00
0005	Hire charges of Diesel Truck - 9 tonne	day	1700.00
0007	Hire charges of Coaltar Sprayer	day	300.00
0008	Hire charges of Barber green, drying, mixing and Asphalt Plant, with accessories, capacity 30/45 tonne	day	7700.00
0009	Pumping charges of concrete including Hire charges of pump, piping work & accessories etc.	cum	150.00
0013	Machine for rubbing of floors	day	350.00
0014	Front end loader capacity 1.00 cum	day	5000.00
0016	Mastic Cooker	day	750.00
0017	Hire and running charges of tipper	day	1700.00
0018	Hire and running charges of loader	day	5000.00
0021	Pin vibrator	day	325.00
0022	Surface Vibrator	day	400.00
0029	Carriage of concrete by transit mixer	km/cum	30.00
0030	Generator 250 KVA	day	2200.00
0033	Paint applicator	day	750.00
0038	Tractor with ripper attachment	day	1350.00
0041	Joint cutting machine with 2-3 blades	day	1000.00
0042	C.C .batch mix plant	day	10000.00
0043	Road sweeper	day	550.00
0045	Slip form paver with sensor	day	13000.00
0046	Water tanker 5000 litre	day	1000.00
0047	Concrete joint cutting machine	day	900.00
0048	Texturing machine	day	925.00
0049	Dozer D-80-A 12	hour	3800.00
0050	Motor Grader 3.35 metre blade	hour	2450.00
0051	Hydraulic Excavator of 1 cum bucket	hour	1300.00
0052	Front end loader 1 cum bucket capacity (incl POL)	hour	800.00
0053	Tipper -5 Cum	tonne km	3.00
0054	Vibratory roller 8 to 10 tonne	hour	1500.00
0055	Smooth Wheeled Roller 8 to 10 tonne	hour	460.00
0056	Tandem Road Roller	hour	1150.00
0057	Water Tanker 5 to 6 KL capacity	hour	150.00
0058	Air compressor	hour	325.00

Code No.	Description	Unit	Rate ₹
0059	Wet Mix Plant 60 TPH	hour	1200.00
0060	Mechanical Broom Hydraulic	hour	360.00
0061	Emulsion Pressure Distributor @ 1750 sqm per hour	hour	800.00
0062	Hot mix Plant -120 TPH capacity	hour	23700.00
0063	Hot mix Plant 100 TPH Capacity	hour	17500.00
0064	Paver finisher Hydrostatic with sensor control 100 TPH	hour	2700.00
0065	Paver finisher Mechanical 100 TPH	hour	1000.00
0066	Batching and Mixing Plant @ 75 cum per hour	hour	2500.00
0068	Concrete Paver finisher with 40 HP Motor and sensor	hour	2900.00
0069	Generator 250 KVA	hour	900.00
0070	Generator 100 KVA/125 KVA	hour	700.00
0071	Truck 5.5 cum/ 10 tonnes	tonne km	3.00
0075	Road sweeper (Mechanical Broom) @ 1250 sqm per hour	hour	360.00
0076	Drum Type HMP of 60-90 TPH capacity @ 75 tonne per hour actual output	hour	14000.00
0100	Bandhani	day	328.00
0101	Bhisti	day	328.00
0102	Blacksmith 1 st class	day	393.00
0103	Blacksmith 2nd class	day	361.00
0113	Chowkidar	day	297.00
0114	Beldar	day	297.00
0115	Coolie	day	297.00
0123	Mason (brick layer) 1 st class	day	393.00
0124	Mason (brick layer) 2nd class	day	361.00
0126	Mason (for ornamental stone work) 1 st class	day	393.00
0128	Mate	day	328.00
0130	Mistry	day	393.00
0131	Painter	day	361.00
0138	Sprayer (for bitumen, tar etc.)	day	328.00
0139	Skilled Beldar (for floor rubbing etc.)	day	328.00
0155*	Mason (average)	day	377.00
0157	Operator (Pile/ Special machine)	day	350.00
0286	Brick Aggregate (Single size) : 50 mm nominal size	cum	500.00
0287	Brick Aggregate (Single size) : 40 mm nominal size	cum	510.00
0291	Stone Aggregate (Single size) : 63 mm nominal size	cum	1000.00
0292	Stone Aggregate (Single size) : 50 mm nominal size	cum	1000.00
0293	Stone Aggregate (Single size) : 40 mm nominal size	cum	1000.00
0294	Stone Aggregate (Single size) : 25 mm nominal size	cum	1050.00
0295	Stone Aggregate (Single size) : 20 mm nominal size	cum	1200.00

Code No.	Description	Unit	Rate ₹
0296	Stone Aggregate (Single size) : 12.5 mm nominal size	cum	1050.00
0297	Stone Aggregate (Single size) : 10 mm nominal size	cum	1050.00
0298	Stone Aggregate (Single size) : 06 mm nominal size	cum	1100.00
0304	Bajri	cum	1000.00
0309	Paving bitumen of grade VG-10 of approved quality	tonne	40000.00
0310	Bitumen emulsion	tonne	30000.00
0312	Bitumen grade PMB - 40	tonne	41400.00
0313	Blown type petroleum bitumen of penetration 85/25 of approved quality	tonne	37000.00
0314	Bitumen hot sealing compound : grade A	kilogram	26.00
0317	Premoulded joint filler 12 mm thick	sqm	350.00
0323	Separation Membrane of impermeable plastic sheeting 125 micron thick	sqm	12.00
0349	Curing compound	litre	50.00
0364	Wire brush	each	20.00
0365	Soft brush	each	18.00
0367	Portland Cement	tonne	5240.00
0369	Plastic sheath, 1.25 mm thick for dowel bars	sqm	30.00
0370	Coal (steam)	quintal	400.00
0371	Sealant primer	kg	125.00
0374	Pre moulded Joint filler, 25 mm thick for expansion joint.	sqm	500.00
0588	Chromium plated Brass screws 25 mm	100 Nos	120.00
0777	Dry hydrated lime (factory made)	quintal	230.00
0784	Marble dust/ powder	cum	1000.00
0810	Moorum	cum	450.00
0979	Royalty for good earth	cum	30.00
0982	Coarse sand (zone III)	cum	1120.00
0983	Fine sand (zone IV)	cum	650.00
1003	Mild steel round bar above 12 mm dia	quintal	4300.00
1005	Twisted steel/ deformed bars	quintal	4800.00
1007	Structural steel such as tees, angles channels and R.S. joists	quintal	4926.00
1008	Flats up to 10 mm in thickness	quintal	4200.00
1013	Mild steel sheets for tanks	quintal	4900.00
1021	Hard drawn steel wire fabric	sqm	430.00
1028	Straining bolts	each	70.00
1029	Galvanised steel barbed wire	quintal	5200.00
1030	Galvanised steel turn buckles	each	17.00
1151	Boundary stone top chisel dressed 15x15x90 cm	each	60.00
1158	Stone for pitching 15 cm x 22.5 cm	cum	450.00

Code No.	Description	Unit	Rate ₹
1159	Stone dust	cum	1000.00
1179	Crushed stone 2.36 mm to 12.5 mm size	cum	950.00
1235	Diesel oil	litre	48.63
1241	Commercial LPG in cylinder	kg	70.00
1980	Fly ash	cum	7.75
2200	Carriage of steam coal	tonne	121.88
2201	Carriage of bricks	1000 Nos	284.39
2202	Carriage of stone aggregate below 40 mm nominal size	cum	106.64
2203	Carriage of coarse sand	cum	106.64
2205	Carriage of steel	tonne	94.80
2206	Carriage of stone aggregate 40 mm nominal size and above	cum	115.92
2208	Carriage of lime	cum	106.64
2209	Carriage of cement	tonne	94.80
2211	Carriage of tar / bitumen	tonne	106.64
2215	Carriage of Soling stone & masonry stone	cum	125.47
2216	Carriage of stone blocks white & red sand stone & kota stone slab	tonne	94.80
2241	Carriage of good earth	cum	133.30
2260	Carriage of brick aggregate	cum	115.92
2261	Carriage of fine sand (1 part badarpur sand: 2 parts jamuna sand)	cum	106.64
2265	Carriage of moorum	cum	106.64
2267	Carriage of stone dust	cum	106.64
2302	Carriage of G.I.sheet and accessories	tonne	94.80
2311	Carriage of red bajri	cum	106.64
2314	Carriage of barbed wire	tonne	94.80
2335	Carriage of Jamuna sand	cum	106.64
2342	Carriage of Solvent / Diesel.	quintal	10.66
2602	Common burnt clay F.P.S. (non modular) bricks class designation 7.5	1000 Nos	3800.00
2704	Aluminium Strip 40 mm wide and 2 mm thick	kilogram	220.00
2901	Stone Aggregate (Single size) : 100 mm nominal size	cum	800.00
2902	Stone Aggregate (Single size) : 80 mm nominal size	cum	800.00
2903	Stone chippings/ screenings 4.75 mm nominal size	cum	1150.00
2904	Stone chippings/ screenings 150 micron nominal size	cum	1150.00
2908	Over burnt (Jhama) Brick Aggregate: 120 mm to 40 mm size	cum	380.00
2909	Over burnt (Jhama) Brick Aggregate: 90 mm to 40 mm size	cum	400.00
2910	Stone chippings/ screenings 12.5/ 13.2 mm nominal size	cum	1100.00
2911	Stone chippings/ screenings 10/ 11.2 mm nominal size	cum	1100.00
2914	Solvent	kilogram	25.00
2916	Paving Asphalt VG 10 of approved quality	tonne	40000.00

Code No.	Description	Unit	Rate ₹
5001	Mobil oil	litre	200.00
6501	Sand zone V (Jamuna)	cum	550.00
7254	Hardening compound	litre	40.00
7255	Road marking paint (spirit based)	litre	120.00
7256	Superior quality road marking paint ( water based )	litre	170.00
7280	Waste plastic additive	tonne	40000.00
7295	Granite of any colour, 18 mm thick (slab area upto 0.50 sqm)	sqm	1900.00
7296	Granite of any colour, 30 mm thick (slab area upto 0.50 sqm)	sqm	2300.00
7297	Granite of any colour, 18 mm thick (slab area above 0.50 sqm)	sqm	2000.00
7309	Paving Asphalt of grade VG-30 of approved quality	tonne	41000.00
7318	Plasticizer / super plasticizer	kilogram	38.00
7382	Bitumen emulsion rapid setting (R.S.) confirming to IS : 8887	tonne	29800.00
7426	Cat's eye	each	180.00
7739	Modified Bitumen Refinery produced CRMB - 55	tonne	40900.00
7741	Modified Bitumen Refinery produced CRMB - 60	tonne	40800.00
7742	Bitumen emulsion medium setting (M.S.) confirming to IS : 8887	tonne	30000.00
7773	Coloured inter locking C.C. paver Block	sqm	500.00
7774	Stone size 10x10x7.50cm	each	9.00
7893	Tactile tile	sqm	868.00
7895	Matt finished vitrified tile 100x100 x16 mm	sqm	930.00
7896	Vitrified tile	sqm	510.00
8685	Delineator	each	310.00
8686	Precast C.C. Kerb stone M - 25	cum	4100.00
8687	Thermoplastic paint	kg	63.00
8688	Glass beads	kg	62.00
8689	Interlocking C.C. paver block ( 60 mm thick, M-30)	sqm	325.00
8690	High intensity retro - reflective sheet	sqm	1525.00
8691	Punched tape concertina coil 600 m dia 10 m openable length (Total length 90 m)	bundle	750.00
8692	RBT reinforced barbed wire	metre	9.00
8693	Turn buckle and strengthening bolt	each set	40.00
8694	Precast pavement slab 450 x 450 x 50 mm (M - 30)	each	60.00
8695	Chain link fabric fencing mesh of size 50x50 mm made of G.I. wire of dia 4 mm	sqm	258.00
8696	Chain link fabric fencing mesh of size 50x50 mm made of G.I. wire of dia 4 mm, PVC coated to outer dia 5 mm	sqm	285.00
8697	Chain link fabric fencing mesh of size 25x25 mm made of G.I. wire of dia 3 mm	sqm	340.00
9999	Sundries	L.S.	1.70

## 16.0 ROAD WORK

Code No.	Description	Unit	Rate ₹
<b>ROADS</b>			
16.1	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earth with lead upto 50 metres.	sqm	73.55
16.2	Extra for compaction of earth work in embankment under optimum moisture conditions to give at least 95% of the maximum dry density (proctor density).	cum	9.30
16.3	Supplying and stacking at site.		
16.3.1	90 mm to 45 mm size stone aggregate	cum	1,121.90
16.3.2	63 mm to 45 mm size stone aggregate	cum	1,272.90
16.3.3	53 mm to 22.4 mm size stone aggregate	cum	1,296.15
16.3.4	Over burnt (Jhama) brick aggregate 120 mm to 40 mm	cum	576.00
16.3.5	Over burnt (Jhama) brick aggregate 90 mm to 45 mm	cum	599.25
16.3.6	Stone screening 13.2 mm nominal size (Type A)	cum	1,410.20
16.3.7	Stone screening 11.2 mm nominal size (Type B)	cum	1,453.80
16.3.8	Red bajri	cum	1,285.35
16.3.9	Good earth	cum	308.35
16.3.10	Moorum	cum	646.55
16.4	Laying, spreading and compacting stone aggregate of specified sizes to WBM specifications in uniform thickness, hand picking, rolling with 3 wheeled road / vibratory roller 8-10 tonne capacity in stages to proper grade and camber, applying and brooming requisite type of screening / binding material to fill up interstices of coarse aggregate, watering and compacting to the required density .	cum	388.85
16.5	Laying water bound macadam sub-base with brick aggregate and blinding material, earth etc. including screening, sorting and spreading to template and consolidation with light power road-roller etc. complete.(payment for brick aggregate and moorum etc. to be made separately)		
16.5.1	Over burnt (Jhama) brick aggregate 120 mm to 40 mm	cum	297.55
16.5.2	Over burnt (Jhama) brick aggregate 90 mm to 45 mm	cum	297.55
16.6	Supplying, stacking and Spreading 6 mm thick red bajri, watering and rolling complete including preparation of the surface and rolling.		
16.6.1	With road roller/ hand roller	sqm	13.35
16.7	Brick edging in full brick width and half brick depth including excavation, refilling and disposal of surplus earth lead upto 50 metres.		
16.7.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	metre	126.75

Code No.	Description	Unit	Rate ₹
16.8	Brick edging laid lengthwise with half brick depth including excavation, refilling and disposal of surplus earth lead upto 50 metres :		
16.8.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	metre	36.35
16.9	Scarifying metalled (water-bound) road surface including disposal of rubbish, lead upto 50 m and consolidation of the aggregate received from scarifying with power road roller of 8 to 10 tonne capacity.	sqm	12.60
16.10	Making bajri path including preparation of subgrade, supplying and laying brick aggregate of 50 mm nominal size 7.5 cm deep with blinding material consisting of 12 mm moorum and 12 mm red bajri consolidated with road roller.	sqm	115.25
16.11	Dry stone pitching 22.5 cm thick including supply of stones and preparing surface complete.	sqm	398.85
16.12	Dry brick pitching half brick thick in drains including supply of bricks and preparing the surface complete :		
16.12.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	sqm	453.20
16.13	Cutting road and making good the same including supply of extra quantities of materials i.e. aggregate, moorum screening, red bajri and labour required.		
16.13.1	bituminous portion	cum	2,151.60
16.13.2	Water bound macadam	cum	1,166.60
16.14	Cutting bajri paths and making good the same including supply of extra quantities of brick aggregate, moorum and red bajri required.	sqm	108.00
<b>FENCING</b>			
16.15	Supplying at site :		
16.15.1	R.C.C. Standards post/ struts/rails/ pales of mix 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 12.5 mm nominal size) with wooden plugs or 6mm bar nibs wherever required as per direction of Engineer-in-charge (cost of earth works in excavation, concrete works in foundation to be paid separately).	cum	19,081.45
16.15.2	Welded steel wire fabric of required width having rectangular mesh painted with two or more coats of enamel paint of approved shade over a coat of primer (Priming & Painting to be paid for separately).	kg	64.55
16.16	Supplying and fixing turn buckles and straining bolts for barbed wire fencing.	each set	148.35
16.17	Fencing with R.C.C. post placed at required distance, embedded in cement concrete blocks, every 15th post, last but one end post and corner post shall be strutted on both sides and end post one side only, provided with horizontal lines and two diagonals of barbed wire weighing 9.38 kg per 100 metres (minimum), between the two posts fitted and fixed with G.I. staples on wooden plugs or G.I. binding wire tied to 6 mm bar nibs fixed while casting the post (cost of R.C.C. posts, struts, earth		

Code No.	Description	Unit	Rate ₹
	work and concrete to be paid for separately) :- Payment to be made per metre cost of total length of barbed wire used.		
16.17.1	With G.I. barbed wire	metre	8.15
16.18	Fencing with angle iron post placed at required distance embedded in cement concrete blocks, every 15th post, last but one end post and corner post shall be strutted on both sides and end post on one side only and provided with horizontal lines and two diagonals interwoven with horizontal wires, of barbed wire weighing 9.38 kg per 100 m (minimum), between the two posts fitted and fixed with G.I. staples, turn buckles etc. complete. (Cost of posts, struts, earth work and concrete work to be paid for separately). Payment to be made per metre cost of total length of barbed wire used.		
16.18.1	With G.I. barbed wire	metre	12.50
16.19	Supplying at site Angle iron post & strut of required size including bottom to be split and bent at right angle in opposite direction for 10 cm length and drilling holes upto 10 mm dia. etc. complete.	Kg.	69.75
16.20	Welded steel wire fabric fencing with posts of specified material and of standard design placed and embedded in cement concrete blocks 45x45x 60 cm of mix 1:5:10 (1 cement:5 fine sand : 10 graded stone aggregate 40 mm nominal size), every 15th post, last but one end post and corner post shall be strutted on both sides and end post on one side only and struts embedded in cement concrete blocks 70x45x50 cm of the same mix, provided with welded steel wire fabric fixed between the posts fitted and fixed with G.I. staples on wooden plugs or tied to 6 mm bar nibs with G.I. binding wire (cost of posts, welded steel wire fabric, painting, earth work in excavation and concrete to be paid for separately).	sqm	25.80
<b>ROAD SIGNS</b>			
16.21	Engraving letters in hard stone	per cm height per letter	3.90
16.22	Providing and fixing 15x15x90 cm boundary stone of hard stone with top 30 cm chisel dressed on all four sides including top (cost of excavation, refilling and concrete etc. to be paid for separately).	each	119.30
16.23	Providing and fixing 15 cm dia at top, 20 cm at bottom and 90 cm high precast reinforced cement concrete 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size) boundary stone as per standard design, including finishing smooth with cement mortar 1:3 (1 cement : 3 fine sand) (cost of excavation, refilling and concreting to be paid for separately).	each	427.75
16.24	Providing and fixing precast reinforced cement concrete 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size) kilometre stone as per standard design, including finishing smooth in 1:3 cement mortar (1 cement : 3 fine sand) but excluding the cost of earth work, concrete in foundation, painting and lettering etc. which shall be paid for separately.		
16.24.1	35x111x25 cm size	each	1,632.85
16.24.2	50x152.5x25 cm size	each	3,000.15
16.24.3	35x93.5x18 cm size	each	1,097.30

Code No.	Description	Unit	Rate ₹
<b>SURFACE DRESSING</b>			
16.25	Surface dressing on new surface with paving bitumen of grade VG - 10 of approved quality using 2.25 kg of bitumen per sqm with 1.65 cum of stone chippings 13.2 mm nominal size per 100 sqm of road surface, including consolidation with road roller of 6 to 8 tonne capacity etc. complete:	sqm	159.50
16.26	Surface dressing on new surface in two coats with bitumen of grade VG -10 of approved quality using 1.8 kg of bitumen per sqm with 1.5 cum of stone chippings 13.2 mm nominal size per 100 sqm of road surface for first coat and 1.1 kg. of bitumen per sqm with 1.00 cu. metre of stone chippings 11.2 mm nominal size per 100 sqm of road surface for second coat, including consolidation of each coat separately with road roller of 6 to 8 tonne capacity etc. complete.	sqm	216.10
16.27	Surface dressing on old surface with hot bitumen of grade VG - 10 of approved quality using 1.95 kg of bitumen per sqm with 1.50 cum of stone chippings 11.2 mm nominal size per 100 sqm of road surface, including consolidation with road roller of 6 to 8 tonne capacity, etc. complete.	sqm	131.30
16.28	Surface dressing one coat on new surface with bitumen of specified grade at a rate of 1.95 kg/sqm of surface area with 1.5 cum of stone chippings 13.2 mm nominal size per 100 sqm of road surface, including consolidation with road roller of 6 to 8 tonne capacity , etc. complete :		
	16.28.1 Using bitumen emulsion (minimum 50% bitumen content- RS grade conforming to IS : 8887)	sqm	115.55
16.29	Surface dressing one coat on old surface with bitumen of specified grade at the rate of 1.22 kg/ sqm of surface area with 1.10 cum of stone chippings 11.2 mm nominal size per 100 sqm of road surface, including consolidation with road roller of 6 to 8 tonne capacity etc. complete :		
	16.29.1 Using bitumen emulsion (minimum 50% bitumen content- RS grade conforming to IS : 8887)	sqm	73.75
<b>PREMIX CARPET</b>			
16.30	Providing and applying tack coat using hot straight run bitumen of grade VG - 10, including heating the bitumen, spraying the bitumen with mechanically operated spray unit fitted on bitumen boiler, cleaning and preparing the existing road surface as per specifications :		
	16.30.1 On W.B.M. @ 0.75 Kg / sqm	sqm	43.65
	16.30.2 On bituminous surface @ 0.50 Kg / sqm	sqm	31.75
16.31	Providing and applying tack coat using bitumen emulsion conforming to IS: 8887, using emulsion pressure distributor including preparing the surface & cleaning with mechanical broom.		
	16.31.1 With rapid setting bitumen emulsion		
	16.31.1.1 On W.B.M / W.M.M. @ 0.4kg/sqm	sqm	15.25
	16.31.1.2 On bituminous surface @ 0.25kg/sqm	sqm	10.05

Code No.	Description	Unit	Rate ₹
16.31.2	With medium setting bitumen emulsion		
16.31.2.1	On W.B.M / W.M.M. @ 0.4kg/sqm	sqm	15.35
16.31.2.2	On bituminous surface @ 0.25kg/sqm	sqm	10.10
	<b>Note : Use of item no. 16.31.1 shall be restricted only for sites at sub zero temperature or for emergency applications.</b>		
16.32	2 cm premix carpet surfacing with 1.8 cum and 0.90 cum of stone chippings of 13.2 mm size and 11.2 mm size respectively per 100 sqm and 52 kg and 56 kg of hot bitumen per cum of stone chippings of 13.2 mm and 11.2 mm size respectively, including a tack coat with hot straight run bitumen, including consolidation with road roller of 6 to 9 tonne capacity etc. complete (tack coat to be paid for separately).		
16.32.1	With paving Asphalt grade VG - 10 heated and then mixed with solvent at the rate of 70 grams per kg of asphalt	sqm	147.25
16.32.2	With paving Asphalt grade VG - 30 with no solvent	sqm	146.00
16.32.3	With Refinery Modified Bitumen CRMB 55 conforming to IRC: SP: 53	sqm	148.75
16.33	2.5 cm premix carpet surfacing with 2.25 cum and 1.12 cum of stone chippings of 13.2 mm and 11.2 mm size respectively per 100 sqm and 52 kg and 56 kg of hot bitumen per cum of stone chippings of 13.2 mm and 11.2 mm size respectively, including a tack coat with hot straight run bitumen, including consolidation with road roller of 6 to 9 tonne capacity etc. complete (tack coat to be paid for separately).		
16.33.1	With paving Asphalt grade VG - 10 heated and then mixed with solvent at the rate of 70 grams per kg of asphalt	sqm	179.50
16.33.2	With paving Asphalt grade VG - 30 with no solvent	sqm	177.90
16.33.3	With Refinery Modified Bitumen CRMB 55 conforming to IRC: SP: 53	sqm	181.35
16.34	2 cm premix carpet surfacing with 2.4 cum of stone chippings 11.2 mm nominal size per 100 sqm and bitumen emulsion (medium setting min. 65% bitumen content) complying with IS : 8887, using 96 kg per cum of chippings, including consolidation with road roller of 6 to 9 tonne capacity etc. complete.	sqm	133.65
16.35	2.5 cm premix carpet surfacing with 3 cum of stone chippings 10 mm nominal size per 100 sqm and bitumen emulsion (medium setting min. 65% bitumen contents) complying with IS : 8887, using 96 kg per cum of chippings of road surface, including consolidation with road roller etc complete .	sqm	162.40
16.36	Providing and laying Bitumen Penetration Macadam with hard stone aggregate of quality, size and grading as specified, with bitumen of suitable penetration grade, including required key aggregate as specified, spreading coarse aggregate with the help of self propelled/ tipper tail mounted aggregate spreader and applying bitumen by a pressure distributor and then spreading key aggregate with the help of aggregate spreader complete, including consolidation with road		

Code No.	Description	Unit	Rate ₹
	roller of minimum 8 to 10 tonne capacity to achieve specified values of compaction and surface accuracy :		
16.36.1	For 50mm compacted thickness using coarse aggregate of size 50-20 mm graded @ 0.60 cum per 10 sqm key aggregate of size 12.5 mm graded @ 0.15 cum per 10 sqm. With paving asphalt grade VG - 10 @ 50 kg/ 10 sqm.	sqm	386.60
16.36.2	For 75 mm compacted thickness in two layers using stone aggregate of size 63-41 mm graded @ 0.90 cum per 10 sqm key aggregate of size 20.0 mm graded @ 0.18 cum per 10 sqm. With paving asphalt grade VG - 10 @ 68 kg/10 sqm.	sqm	552.95
<b>MASTIC AND BITUMASTIC WEARING COURSE</b>			
16.37	Providing and laying bitumen mastic wearing course (as per specifications) with industrial bitumen of grade 85/25 conforming to IS : 702, prepared by using mastic cooker and laid to required level and slope, including providing antiskid surface with bitumen precoated fine grained hard stone chipping of approved size at the rate of 0.005 cum per 10 sqm and at approximate spacing of 10 cm centre to centre in both directions, pressed into surface protruding 1 mm to 4 mm over mastic surface, including cleaning the surface, removal of debris etc. all complete. (Considering bitumen using 10.2% as per MORTH specification).		
16.37.1	25mm thick	sqm	811.95
16.37.2	40 mm thick	sqm	1,299.15
16.38	2.5 cm thick bitumastic sheet with hot bitumen of approved quality, using stone chippings (60% with 12.5 mm nominal size and 40% with 10 mm nominal size) @ 1.65 cum per 100 sqm and coarse sand @ 1.65 cum per 100 sqm of road surface and with bitumen @ 56 kg/cum of stone chippings and @ 128 kg/cum of sand over a tack coat with hot straight run bitumen, including consolidation with road roller of 8 to 10 tonne etc. complete. (tack coat to be paid separately) :		
16.38.1	With paving Asphalt grade VG - 10 heated and then mixed with solvent at the rate of 70 grams per kg of asphalt	sqm	243.60
16.38.2	With paving Asphalt grade VG - 30	sqm	240.90
16.38.3	With Refinery Modified Bitumen CRMB 55 conforming to IRC: SP : 53	sqm	246.75
16.39	4 cm thick bitumastic sheet with hot bitumen of approved quality, using stone chippings (60% with 12.5 mm nominal size and 40% with 10 mm nominal size) @ 2.60 cum per 100 sqm and coarse sand @ 2.60 cum per 100 sqm of road surface and with bitumen @ 56 kg/cum of stone chippings and @ 128 kg/cum of sand over a tack coat with hot straight run bitumen, including consolidation with road roller of 8 to 10 tonne etc. complete. (tack coat to be paid separately) :		
16.39.1	With paving Asphalt grade VG - 10 heated and then mixed with solvent at the rate of 70 grams per kg of asphalt	sqm	373.85
16.39.2	With paving asphalt grade VG - 30 with no solvent	sqm	369.65
16.39.3	With Refinery Modified Bitumen CRMB 55 conforming to IRC: SP : 53	sqm	378.85

Code No.	Description	Unit	Rate ₹
<b>SEAL COAT</b>			
16.40	Providing and laying seal coat of premixed fine aggregate ( passing 2.36 mm and retained on 180 micron sieve) with bitumen using 128 kg of bitumen of grade VG - 10 bitumen per cum of fine aggregate and 0.60 cum of fine aggregate per 100 sqm of road surface, including rolling and finishing with road roller all complete.	sqm	65.80
16.41	Providing and laying seal coat over prepared surface of road with bitumen heated in bitumen boiler fitted with the spray set spraying using 98 kg of bitumen of grade VG - 10 and blinding surface with 0.90 cum of stone aggregate of 6.7 mm size (Passing 11.2 mm sieve and retained on 2.36 mm sieve) per 100 sqm of road surface, including rolling and finishing with power road roller all complete.	sqm	86.10
<b>Note : Seal coat items to be operated only with the prior approval of Chief Engineer concerned.</b>			
<b>CONCRETE PAVEMENT</b>			
16.42	Cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size) in pavements, laid to required slope and camber in panels as required including consolidation finishing and tamping complete.	cum	4,873.25
16.43	Providing and laying design mix cement concrete of M-30 grade, in roads/ taxi tracks/ runways, using cement content as per design mix, using coarse sand and graded stone aggregate of 40 mm nominal size in appropriate proportions as per approved & specified design criteria, providing dowel bars with sleeve/ tie bars wherever required, laying at site, spreading and compacting mechanically by using needle and surface vibrators, levelling to required slope/ camber, finishing with required texture, including steel form work with sturdy M.S. channel sections, curing, making provision for contraction/ expansion, construction & longitudinal joints ( 10 mm wide x 50 mm deep) by groove cutting machine, providing and filling joints with approved joint filler and sealants, complete all as per direction of Engineer-in-charge (Item of joint fillers, sealants, dowel bars with sleeve/ tie bars to be paid separately).		
<b>Note:-</b> Cement content considered in M-30 is @ 340 kg/cum. Excess/ less cement used as per design mix is payable/ recoverable separately.			
16.43.1	Cement concrete prepared with batch mixing machine	cum	6,126.85
16.43.2	Cement concrete manufactured in automatic batching plant (RMC plant) i/c transportation to site in transit mixer	cum	6,475.30
16.43A	Annexure 'A' to Item number 16.43	cum	212.30
16.43B	Annexure 'B' to Item number 16.43	cum	443.95
16.44	Extra for providing and mixing hardening compound of approved quality as per manufacturer's specification in cement concrete.	litre	46.45
16.45	Providing and fixing in position pre-moulded joint filler in expansion joints.	per cm depth per cm width per m length	2.45

Code No.	Description	Unit	Rate ₹
16.46	Providing and laying in position bitumen hot sealing compound for expansion joints etc.		
16.46.1	Using grade 'A' sealing compound.	per cm depth per cm width per m length	1.90
<b>PAINTING ROAD / RUNWAY MARKING</b>			
16.47	Painting runway/taxi track/apron marking with adequate nos of coats to give uniform finish with road marking paint of superior make as approved by the Engineer-in-charge, i/c cleaning the surface of all dirt, scales, oil, grease and other foreign material etc. and lining out complete.		
16.47.1	New work (Two or more coats)	sqm	104.45
16.47.2	Old work (One or more coats)	sqm	65.35
16.48	Painting road surface marking with adequate nos of coats to give uniform finish with ready mixed road marking paint conforming to IS : 164, on bituminous surface in white/yellow shade, including cleaning the surface of all dirt, scales, oil, grease and foreign material etc. complete.		
16.48.1	New work (Two or more coats)	sqm	112.75
16.48.2	Old work (One or more coats)	sqm	73.40
<b>MISCELLANEOUS</b>			
16.49	Making bell mouth opening/ entrance of size 100x50x50 cm for drainage pipe under footpath, including providing cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) for shape of bell mouth, including plastering providing and fixing precast R.C.C./ S.F.R.C. slab including plastering with cement mortar 1:3 (1 cement : 3 fine sand) of 6 mm thickness on exposed surface of the slab & bell mouth including centring, shuttering & neat cement punning inside the bell mouth etc. all complete.	each	1,664.85
16.50	Providing and fixing Glow studs of size 100x20 mm made of heavy duty body shall be moulded ASA (Acrylic styrene Acryloretite ) or HIP (High impact polystyrene) or ABS having electronically welded micro- prismatic lens with abrasion resistant coating as approved by Engineer in charge. The glow stud shall support a load of 13635 kg tested in accordance with ASTM D4280. The slope of retro- reflective surface shall be 35 (+/-5) degrees to base .The reflective panels on both sides with at least 12 cm of reflective area up each side. The luminance intensity should be as per the specification and shall be tested as described in ASTM I: 809 as recommended in BS: 873 part 4 : 1973. The studs shall be fixed to the Road surface using the adhesive conforming to IS, as per procedure recommended by the manufacturer complete and as per direction of Engineer-in-charge.	each	240.00
16.51	Preparation of sub-base road pavement with commercial dry lime (slaked), fly ash stabilised soil with a mix of 3% lime, 12% fly ash and 85% local suitable soil by weight, so as to achieve minimum		

Code No.	Description	Unit	Rate ₹
	field C.B.R. of 20, including mixing, rolling with road roller curing etc. all complete.		
	16.51.1 Minimum thickness 15 cm	cum	627.10
16.52	Providing and fixing precast lime fly ash concrete blocks 1:2:3:6 (1 lime: 2 fly ash : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size), including finishing with 10mm thick cement mortar 1:3 (1 cement : 3 coarse sand) in foot paths, including preparation of sub grade with a hand rammer, laying 10 mm thick leveling course of fine sand (jamuna sand) and filling the joints with fine sand.	cum	6,044.00
16.52X	Sub Analysis X for sub analysis item Number 16.52Y	cum	1,903.30
16.52Y	Sub Analysis Y for Item Number 16.52	cum	2,511.30
16.53	Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length ( total length 90 m), having 50 nos rounds per 6 metre length, upto 3 m height of wall with existing angle iron 'Y' shaped placed 2.4 m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately)	metre	284.10
16.54	Providing and laying Dense Graded Bituminous Macadam using crushed stone aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equiped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers as per specifications to achieve the desired compaction and density, complete as per specificatons and directions of Engineer-in-Charge.		
	16.54.1 50 to 100 mm average compacted thickness with bitumen of grade VG-30 @5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	cum	8,724.75
	16.54.2 50 to 100 mm average compacted thickness with bitumen of grade VG-30 @5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Drum Type Hot Mix Plant of 60-90 TPH capacity.	cum	8,488.90
16.55	Providing and laying bituminous macadam using crushed stone aggregates of specified grading premixed with bituminous binder, transported to site by tippers, laid over a previously prepared surface with paver finisher equiped with electronic sensor to the required grade, level and alignment and		

Code No.	Description	Unit	Rate ₹
	rolling with smooth wheeled, vibratory and tandem rollers as per specifications to achieve the desired compaction and density, complete as per specifications and directions of Engineer-in-Charge.		
16.55.1	50 to 100 mm average compacted thickness with bitumen of grade VG-30 @ 3.5 0% (percentage by weight of total mix) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	cum	6,651.80
16.55.2	50 to 100 mm average compacted thickness with bitumen of grade VG-30 @3.50% (percentage by weight of total mix) prepared in Drum Type Hot Mix Plant of 60-90 TPH capacity.	cum	6,427.45
16.56	Providing and laying semi- dense Bituminous concrete using crushed stone aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equipped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction and density as per specification, complete and as per directions of Engineer-in-Charge.		
16.56.1	25 mm compacted thickness with bitumen of grade VG-30 @5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	sqm	217.60
16.56.2	25 mm compacted thickness with bitumen of grade VG-30 @5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Drum Type Hot Mix Plant of 60-90 TPH capacity.	sqm	211.70
16.57	Providing and laying Bituminous concrete using crushed stone aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equipped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction and density as per specification, complete and as per directions of Engineer-in-Charge.		
16.57.1	40/50 mm compacted thickness with bitumen of grade VG-30 @5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	cum	9,502.40
16.57.2	40/50 mm compacted thickness with bitumen of grade VG-30 @5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) and waste plastic additive @8% (percentage by weight of bitumen) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	cum	9,984.05
16.57.3	40/50 mm compacted thickness with bitumen of grade PMB-40 @5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	cum	9,562.60

Code No.	Description	Unit	Rate ₹
16.57.4	40/50 mm compacted thickness with bitumen of grade CRMB-60 @5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	cum	9,472.30
16.57.5	40/50 mm compacted thickness with bitumen of grade VG-30 @5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) prepared in drum Type Hot Mix Plant of 60-90 TPH capacity.	cum	9,261.60
16.57.6	40/50 mm compacted thickness with bitumen of grade VG-30 @5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) and waste plastic additive @8% (percentage by weight of bitumen) prepared in drum Type Hot Mix Plant of 60-90 TPH capacity.	cum	9,743.20
16.57.7	40/50 mm compacted thickness with bitumen of grade PMB-40 @5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) prepared in drum Type Hot Mix Plant of 60-90 TPH capacity.	cum	9,321.80
16.57.8	40/50 mm compacted thickness with bitumen of grade CRMB-60 @5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) prepared in Drum Type Hot Mix Plant of 60-90 TPH capacity.	cum	9,231.50
16.58	Deleted.		
16.59	Manufacturing, supplying and fixing retro reflective sign boards made up of 2 mm thick aluminium sheet, face to be fully covered with high intensity encapsulated type heat activated retro reflective sheeting conforming to type - IV of ASTM-D 4956-01 in blue and silver white or other colour combination including subject matter, message (bi-lingual), symbols and borders etc. as per IRC ; 67:2001 , pasted on substrate by an adhesive backing which shall be activated by applying heat and pressure conforming to class -2 of ASTM-D-4956-01 and fixing the same with suitable sized aluminium alloy rivets @ 20 cm c/c to back support frame of M.S. angle iron of size 25x25x3 mm along with theft resistant measures, mounted and fixed with 2 Nos. M.S. angles of size 35x35x5 mm to a vertical post made up to M.S. Tee section ISMT 50x50x6 mm welded with base plate of size 100x100x5 mm at the bottom end and including making holes in pipes, angles flats, providing & fixing M.S. message plate of required size, steel work to be painted with two or more coats of synthetic enamel paint of required shade and of approved brand & manufacture over priming coat of zinc chromate yellow primer (vertical MS-Tee support to be painted in black and white colours).Backside of aluminium sheet to be painted with two or more coats of epoxy paint over and including appropriate priming coat including all leads and lifts etc. complete as per drawing , specification and direction of Engineer--in-charge.		
16.59.1	Mandatory/ Regulatory sign boards of 900 mm diameter with support length of 3750 mm	sqm	4,843.65

Code No.	Description	Unit	Rate ₹
	16.59.2 Cautionary /warning sign boards of equilateral triangular shape having each side of 900 mm with support length of 3650 mm	sqm	3,532.35
16.60	Manufacturing, supplying and fixing retro reflective overhead signage boards made up of 2 mm thick aluminium sheet, face to be fully covered with high intensity and encapsulated lens type heat activated retro reflective sheeting conforming to type - III of ASTM-D-4956-01 as approved by Engineer-in-charge, letters, borders etc. as per IRC : 67-2001 in silver white with blue colour back ground and with high intensity grade, pasted on substrate by pressure sensitive adhesive backing which shall be activated by applying pressure conforming to class II of ASTM-D-4956-01 and fixing the same to the plate of structural frame work by means of suitable sized aluminium alloys, rivets or bolts & nuts @ 300 mm centre to centre all along the periphery as well as in two vertical rows along with theft resistant measures, including the cost of painting with two or more coats of epoxy paint in grey colour on the back side of aluminium sheet including appropriate priming coat. The rate includes the cost of rounding off the corners, lowering down the structural frame work from the gantry, fixing and erecting the same in position all complete as per drawings, specification and direction of the engineer-in-charge.(Structural frame work including M.S. plate to be provided separately. Rectangular area of the sheet only shall be measured for payment).	sqm	4,657.95
	16.60.1 Overhead informatory road signage	sqm	4,657.95
16.61	Providing Retro-reflective regulatory sign board of size 900 mm diameter made out of 2 mm thick aluminium sheet, face to be fully covered with high intensity encapsulated lens type retro -reflective sheeting as approved by Engineer-in-charge . Letter, symbols, borders etc. will be as per IRC - 67 with required colour scheme on the boards and with the high intensity grade A. The aluminium sheet to be riveted to M.S. frame of angle iron of size 40x40x4 mm. The boards will be fixed to 1 No. 50x50 mm square post made of M.S. angle 50x50x4 mm, 4 m long welded to the frame with adequate anti-theft arrangement .Sheet work to be painted with two or more coats of synthetic enamel paint over an under coat (primer) and back side of aluminium sheet to be painted with two or more coats of epoxy paint including appropriate priming coat complete in all respects as per direction of Engineer-in-charge.	sqm	5,373.45
16.62	Providing and applying 2.5 mm thick road marking strips (retro-reflective) of specified shade/ colour using hot thermoplastic material by fully/ semi automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour , T&P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and accordance with applicable specifications.	sqm	529.40
16.63	Providing, laying and making kerb channel 30 cm wide and 50 mm thick with cement concrete 1:3:6 (1 cement: 3 coarse sand:6 graded stone aggregate 20 mm nominal size) over 75mm bed of dry brick		

Code No.	Description	Unit	Rate ₹
	ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including finishing the top smooth etc. complete and as per direction of Engineer-in-charge.	sqm	318.25
16.64	Providing and laying 75 mm thick compacted bed of dry brick aggregate of 40 mm thick nominal size including spreading, well ramming, consolidating and grouting with jamuna sand, including finishing smooth etc. complete as per direction of Engineer-in-charge.	sqm	106.70
16.65	Providing and fixing post delineators made of ABS round body fitted with 2 nos 100 mm dia high reflective reflectors and mounted on MS pipe of 65 mm dia duly powder coated anti-rust and anti theft steel to be installed as per direction of Engineer-in-charge.	each	591.10
16.66	Excavating holes upto 0.10 cum, including getting out the excavated soil, then returning the soil as deported in layers not exceeding 20 cm in depth, including consolidating and deposited layer by ramming watering etc., disposing of surplus excavated soil as directed with in a lead of 50 mm and lift upto 1.5 m.		
	16.66.1 All kind of soil	each	15.70
16.67	Providing and fixing at or near ground level factory made RCC pavement slab of M-30 grade of size 450x450x50 mm, including reinforcement with 6 mm dia M.S. bars 4 nos on each side, including setting in position in footpath to the required level and line over a bed of 20 mm average thick cement mortar 1:5 (1 cement : 5 coarse sand), having joint thickness not more than 5mm except on curve, including filling of joints with same cement mortar and making grooves etc. complete as per direction of Engineer-in-charge.	sqm	561.50
16.68	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.	sqm	557.45
16.69	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	cum	5,236.95
16.70	Providing and fixing G.I. chain link fabric fencing of required width in mesh size 50x50 mm including strengthening with 2 mm dia wire or nuts, bolts and washers as required complete as per the direction of Engineer-in-charge.		
	16.70.1 Made of G.I. wire of dia 4 mm	sqm	525.55
	16.70.2 Made of G.I. wire of dia. 4 mm, PVC coated to achieve outer dia not less than 5 mm in required colour and shade	sqm	558.50

Code No.	Description	Unit	Rate ₹
16.71	Providing and fixing G.I. chain link fabric fencing of required width in mesh size 25x25 mm made of G.I. wire of dia 3 mm including strengthening with 2 mm dia wire or nuts, bolts and washers as required complete as per the direction of Engineer-in-charge.	sqm	625.60
16.72	Supplying and stacking of hard stone (for stone pitching) 22.5 cm thick at site.	cum	668.40
16.73	Dry stone pitching 22.5 cm thick laid in courses and required profile with hammer dressed stones having no side less than 15 cm, with minimum depth of 20 cm including preparing the bedding surface etc. all complete.(Payment for Stone to be made separately).	sqm	225.60
16.74	75 mm thick back filling for pitching including supplying of required materials and consolidation etc. complete with :		
16.74.1	Moorum	sqm	54.65
16.74.2	Stone aggregate 20 mm nominal size	sqm	121.40
16.74.3	Stone aggregate 40 mm nominal size	sqm	104.80
16.75	Providing and laying C.C. pavement of mix M-25 with ready mixed concrete from batching plant. The ready mixed concrete shall be laid and finished with screed board vibrator , vacuum dewatering process and finally finished by floating, brooming with wire brush etc. complete as per specifications and directions of Engineer-in-charge. (The panel shuttering work shall be paid for separately). (Note:- Cement content considered in this item is @ 330 kg/cum. Excess/less cement used as per design mix is payable/ recoverable separately).	cum	6,248.00
16.76	Deduct for using of M-20 grade concrete instead of M-25 grade concrete in C.C. pavement.	cum	173.25
16.77	Scarifying the existing bituminous road surface to a depth of 50 mm and disposal of scarified material within all lifts and lead upto 1km (by mechanical means).	sqm	3.10
16.78	Construction of granular sub-base by providing close graded Material conforming to specifications, mixing in a mechanical mix plant at OMC, carriage of mixed material by tippers to work site, for all leads & lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge.		
16.78.1	With material conforming to Grade-I (size range 75 mm to 0.075 mm) having CBR Value-30	cum	2,018.50
16.78.2	With material conforming to Grade-II (size range 53 mm to 0.075 mm ) having CBR Value-25	cum	2,044.35
16.78.3	With material conforming to Grade-III (size range 26.5 mm to 0.075 mm ) having CBR Value-20	cum	2,029.50
16.79	Providing, laying, spreading and compacting graded stone aggregate (size range 53 mm to 0.075 mm ) to wet mix macadam (WMM) specification including premixing the material with water at OMC in		

Code No.	Description	Unit	Rate ₹
	mechanical mix plant, carriage of mixed material by tipper to site, for all leads & lifts, laying in uniform layers with mechanical paver finisher in sub- base / base course on well prepared surface and compacting with vibratory roller of 8 to 10 tonne capacity to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge.	cum.	2,074.25
16.80	Construction of dry lean cement concrete sub base over a prepared sub-grade with coarse and fine aggregate conforming to IS:383, the size of coarse aggregate not exceeding 25 mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per specifications, cement content not to be less than 150 Kg/cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, for all leads & lifts, laid with a mechanical paver, compacting with 8-10 tonne vibratory roller, finishing and curing etc. complete as per direction of Engineer-in-charge.	cum	3,003.10
16.81	Providing and erecting 2.00 metre high temporary barricading at site as per drawing/ direction of Engineer-in-Charge which includes writing and painting, arrangement for traffic diversion such as traffic signals during construction at site for day and night, glow lamps, reflective signs, marking, flags, caution tape as directed by the Engineer-in-Charge. The barricading provided shall be retained in position at site continuously i/c shifting of barricading from one location to another location as many times as required during the execution of the entire work till its completion. Rate include its maintenance for damages, painting, all incidentals, labour materials, equipments and works required to execute the job. The barricading shall not be removed without prior approval of Engineer-in-Charge. (Note :- One time payment shall be made for providing barricading from start of work till completion of work i/c shifting. The barricading provided shall remain to be the property of the contractor on completion of the work).	metre	1,314.05
16.81X	Sub analysis item for material component of Item No. 16.81	metre	41.90
16.81Y	Sub analysis item for fabrication charges of Item No. 16.81	metre	756.45
16.82	Taking out existing kerb stones of all types from footpath/ central verge, including removal of mortar etc., disposal of unserviceable material to the dumping ground, for which payment shall be made separately and stacking of serviceable material within 50 metre lead as per direction of Engineer-in-Charge.	metre	13.00
16.83	Taking out existing CC interlocking paver blocks from footpath/ central verge, including removal of rubbish etc., disposal of unserviceable material to the dumping ground, for which payment shall be made separately and stacking of serviceable material within 50 metre lead as per direction of Engineer-in-Charge.	sqm	43.65
16.84	Laying old cement concrete interlocking paver blocks of any design/ shape laid in required line, level, curvature, colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge. (Old CC paver blocks shall be supplied by the department free of cost).	sqm	179.95

Code No.	Description	Unit	Rate ₹
16.85	Laying at or near ground level old kerb stones of all types in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement : 3 coarse sand), including making joints with or without grooves (thickness of joints, except at sharp curve, shall not be more than 5 mm), including making drainage opening wherever required etc. complete as per direction of Engineer-in-charge. (Length of finished kerb edging shall be measured for payment). (Old kerb stones shall be supplied by the department free of cost)	metre	39.90
16.86	Providing and laying gang saw cut 18 mm thick, mirror polished pre moulded and pre polished machine cut granite stone of required size and shape of approved shade, colour and texture in footpath, flooring cut granite stone of required size and shape of approved shade, colour and texture in footpath, flooring in road side plazas and similar locations, laid over 20mm thick base of cement mortar 1:4 (1cement : 4 coarse sand) including grouting the joints with white cement mixed with matching pigment, epoxy touch ups etc. complete as per direction of Engineer-in-Charge.		
	16.86.1 Area less than 0.50 sqm.	sqm	3,068.80
16.87	Providing and laying gang saw cut 30 mm thick, mirror polished pre moulded and pre polished machine cut granite stone of required size and shape of approved shade, colour and texture in footpath, flooring in road side plazas and similar locations, laid over 20mm thick base of cement mortar 1:4 (1cement : 4 coarse sand) including grouting the joints with white cement mixed with matching pigment, epoxy touch ups etc. complete as per direction of Engineer-in-Charge.		
	16.87.1 Area less than 0.50 sqm.	sqm	3,556.60
16.88	Providing and laying matt finished vitrified tile of size 100x100x16mm having water absorption less than 0.5% and conforming to IS: 15622 of approved make in all colours and shades in out door floors such as footpath, court yard multi models etc., laid on 20mm thick base of cement mortar 1:4 (1cement : 4 coarse sand) in all shapes & patterns including grouting the joints with white cement mixed with matching pigments etc. complete as direction of Engineer-in-Charge.	sqm	1,435.10
16.89	Providing and laying matt finished vitrified tile of size 300x300x9.8mm having with water absorption less than 0.5% and conforming to IS: 15622 of approved make in all colours and shades in for outdoor floors such as footpath, court yard, multi modals location etc., laid on 20mm thick base of cement mortar 1:4 (1cement : 4 coarse sand) in all shapes & patterns including grouting the joints with white cement mixed with matching pigments etc. complete as per direction of Engineer-in-Charge.	sqm	947.25
16.90	Providing and laying tactile tile (for vision impaired persons as per standards) of size 300x300x9.8mm having with water absorption less than 0.5% and conforming to IS: 15622 of approved make in all colours and shades in for outdoor floors such as footpath, court yard, multi modals location etc., laid on 20mm thick base of cement mortar 1:4 (1cement : 4 coarse sand) in all shapes & patterns including grouting the joints with white cement mixed with matching pigments etc. complete as per direction of Engineer-in-Charge.	sqm	1,363.05

Code No.	Description	Unit	Rate ₹
16.91	Providing and laying factory made coloured chamfered edge Cement Concrete paver blocks of required strength, thickness & size/shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of fine sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with jamuna sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand in footpath, parks, lawns, drive ways or light traffic parking etc. complete as per manufacturer's specifications & direction of Engineer-in-Charge. 60mm thick C.C. paver block of M-35 grade with approved colour, design & pattern.	sqm	727.00
16.92	Providing and fixing 10x10x7.50 cm Granite stone block hand cut and chisel dressed on top, for paving in floors, drains etc. laid over 20mm thick base mortar 1:4 (1cement:4 coarse sand) with joints 10mm wide filled with same mortar including ruled pointing etc. complete as per direction of engineer-in charge.	sqm	1,318.80

**SUB HEAD : 17.0**

**SANITARY INSTALLATIONS**



## BASIC RATES (17.0 SANITARY INSTALLATIONS)

Code No.	Description	Unit	Rate ₹
0100	Bandhani	day	328.00
0101	Bhisti	day	328.00
0103	Blacksmith 2nd class	day	361.00
0112	Carpenter 2nd class	day	361.00
0114	Beldar	day	297.00
0115	Coolie	day	297.00
0116	Fitter (grade 1)	day	393.00
0117	Assistant Fitter or 2nd class Fitter	day	361.00
0123	Mason (brick layer) 1st class	day	393.00
0124	Mason (brick layer) 2nd class	day	361.00
0128	Mate	day	328.00
0131	Painter	day	361.00
0295	Stone Aggregate (Single size) : 20 mm nominal size	cum	1200.00
0297	Stone Aggregate (Single size) : 10 mm nominal size	cum	1050.00
0367	Portland Cement	tonne	5240.00
0586	Chromium plated Brass screws 40 mm	100 Nos	200.00
0588	Chromium plated Brass screws 25 mm	100 Nos	120.00
0828	Anticorrosive bituminous paint (black)	litre	90.00
0830	Enamel paint	litre	160.00
0834	Synthetic enamel paint in all shades except black or chocolate shade	litre	140.00
0982	Coarse sand (zone III)	cum	1120.00
1007	Structural steel such as tees, angles channels and R.S. joists	quintal	4926.00
1309	C.I. bracket for wash basin and sinks	pair	70.00
1315	C.P.brass chain with 40 mm dia rubber plug	each	40.00
1330	Clamps and M.S. stays including bolts and nuts for 100 mm pipe	each	35.00
1331	M.S.Holder bat clamp of approved design for 100 mm S.C.I. pipe	each	20.00
1332	M.S.Holder bat clamp of approved design for 75 mm S.C.I. pipe	each	18.00
1334	Clamps and M.S. stays including bolts and nuts for 50 mm pipe	each	28.00
1335	Clamps and M.S. stays including bolts and nuts for 75 mm pipe	each	30.00
1350	Mosquito proof coupling of approved design	each	30.00
1363	Vitreous china foot rests 250x130x30 mm	pair	100.00
1369	S.C.I. gully or nahani grating 100 mm dia	each	18.00
1373	Rubber insertions for 80 mm dia pipe joints	each	15.00
1374	Rubber insertions for 100 mm dia pipe joints	each	18.00
1392	Mirror of superior make glass 60x45 cm	each	310.00
1396	Vitreous china pedestal for wash basin	each	700.00
1397	Pig lead	kilogram	90.00
1532	Flush pipe with union spreaders and clamps all in C.P. brass for single stall	each	270.00
1533	Flush pipe with union spreaders and clamps all in C.P. brass for double stall	each	400.00
1534	Flush pipe with union spreaders and clamps all in C.P. brass for range of three stall	each	520.00

Code No.	Description	Unit	Rate ₹
1535	Flush pipe with union spreaders and clamps all in C.P. brass for range of four stall	each	600.00
1540	Flush pipe and spreaders G.I. for single set of one squatting plate urinal	each	175.00
1541	Flush pipe and spreaders G.I. for range of two squatting plates urinal	each	250.00
1542	Flush pipe and spreaders G.I. for range of three squatting plates urinal	each	300.00
1543	Flush pipe and spreaders G.I. for range of four squatting plates urinal	each	390.00
1614	G.I. inlet connection	each	65.00
1616	S.C.I. soil, waste and vent single socketed pipe 1.80 metres long: 75 mm dia	each	950.00
1617	S.C. I. soil, waste and vent single socketed pipe 1.80 metres long: 100 mm dia	each	1150.00
1620	S.C.I. plain bend 75 mm dia	each	170.00
1621	S.C.I. plain bend 100 mm dia	each	350.00
1624	S.C.I. bend with access door 75 mm dia	each	200.00
1625	S.C.I. bend with access door 100 mm dia	each	252.00
1627	S.C.I. plain single equal junctions 75x75x75 mm dia	each	265.00
1628	S.C.I. plain single equal junctions 100x100x100 mm dia	each	450.00
1630	S.C.I. single equal junctions 75x75x75 mm dia with access door	each	278.00
1631	S.C.I. single equal junctions 100x100x100 mm dia with access door	each	376.00
1633	S.C.I. plain double equal junctions 75x75x75x75 mm dia	each	346.00
1634	S.C.I. plain double equal junctions 100x100x100x100 mm dia	each	520.00
1636	S.C.I. double equal junctions 75x75x75x75 mm dia with access door	each	425.00
1637	S.C.I. double equal junctions 100x100x100x100 mm dia with access door	each	550.00
1639	Slotted cowl (terminal guard ) 75 mm dia	each	151.00
1640	Slotted cowl (terminal guard) 100 mm dia	each	190.00
1653	Sand cast iron S&S plain single unequal junctions: 100x100x75 mm dia	each	370.00
1656	Sand cast iron S&S single unequal junctions: 100x100x75 mm dia with access door	each	400.00
1659	Sand cast iron S&S plain double unequal junctions: 100x100x75x75 mm dia	each	550.00
1662	Sand cast iron S&S double unequal junctions: 100x100x75x75 mm dia with access door	each	550.00
1666	Sand cast iron heel rest bend 75 mm dia	each	220.00
1667	Sand cast iron heel rest bend 100 mm dia	each	250.00
1669	S.C.I. single equal invert branch of required degree 75x75x75 mm dia	each	320.00
1670	S.C.I. single equal invert branch of required degree 100x100x100 mm dia	each	410.00
1672	S.C.I. double equal invert branch of required degree 75x75x75x75 mm dia	each	410.00
1673	S.C.I. double equal invert branch of required degree 100x100x100x100 mm dia	each	550.00
1674	S.C.I. single unequal invert branch of required degree 100x100x75 mm dia	each	495.00
1677	S.C.I. double unequal invert branch of required degree 100x100x75x75 mm dia	each	570.00

Code No.	Description	Unit	Rate ₹
1682	S.C.I. door pieces 75 mm dia	each	275.00
1683	S.C.I. door pieces 100 mm dia	each	400.00
1685	S.C.I. collar 75 mm dia	each	113.00
1686	S.C.I. collar 100 mm dia	each	143.00
1863	Fire clay kitchen sink: 600x450x250 mm	each	1350.00
1871	White vitreous china laboratory sink 450x300x150 mm	each	820.00
1872	White vitreous china laboratory sink 600x450x200 mm	each	1525.00
1875	White plastic seat (solid) with lid C.P. brass hinges and rubber buffers	each	330.00
1876	Black plastic seat (solid) with lid C.P. brass hinges and rubber buffers	each	310.00
1881	Spun yarn	kilogram	50.00
1885	15 mm C.P. brass tap	each	250.00
1889	C.P. brass toilet paper holder of standard size	each	225.00
1891	C.I. trap for standard urinal with vent arm with operating and other couplings in C.P. brass: 50 mm dia	each	170.00
1893	C.I. trap for standard urinal with vent arm with operating and other couplings in C.P. brass: 80 mm dia	each	225.00
1895	C.P. brass trap 40 mm dia	each	250.00
1896	100 mm S.C.I. trap with vent heel	each	315.00
1897	100 mm S.C.I. trap with 100 mm inlet and 100 mm outlet	each	275.00
1898	100 mm S.C.I. trap with 100 mm inlet and 75 mm outlet	each	218.00
1913	Vitreous china lipped front urinal	each	460.00
1915	Vitreous china squatting plate urinal	each	1280.00
1947	Vitreous china flat back wash basin 630x450 mm	each	725.00
1949	Vitreous china angle back wash basin 600x480 mm	each	725.00
1950	Vitreous china angle back wash basin 400x400 mm	each	425.00
1951	C.P. brass waste 32 mm	each	80.00
1952	C.P. brass waste 40 mm	each	95.00
1953	Vitreous china Indian type W.C. pan size 580 mm	each	450.00
1954	Vitreous china orrisa type W.C. pan size 580 mm	each	780.00
1955	Vitreous china pedestal type water closet	each	700.00
1965	White vitreous china dual purpose closet (Anglo Indian W.C.) suitable for use as squatting pan or European type water closet as per manufacturer's specifications	each	1300.00
1970	Vitreous china foot rests 250x125x25 mm	pair	100.00
2202	Carriage of stone aggregate below 40 mm nominal size	cum	106.64
2203	Carriage of coarse sand	cum	106.64
2205	Carriage of steel	tonne	94.80
2209	Carriage of cement	tonne	94.80
3213	Vitreous china Surgeon type wash basin of size 660x460 mm	each	1100.00
3228	600x120 mm glass shelf with anodised aluminium angle frame, C.P. brass brackets and guard rail of standard size	each	250.00
3229	Vitreous china flat back wash basin 550x400 mm	each	550.00
3617	C.P. Brass union 40mm dia	each	195.00
3620	C.C.I. (spun) socketed soil, waste and vent pipe 1.80 metres long:100 mm dia	each	1250.00

Code No.	Description	Unit	Rate ₹
3621	C.C.I. (spun) socketed soil, waste and vent pipe 1.80 metres long:75 mm dia	each	1035.00
3624	S.C.I. S&S bends with access door 100 mm dia	each	290.00
3625	S.C.I. S&S bends with access door 75 mm dia	each	240.00
3628	S.C.I. S&S bend 100 mm dia	each	265.00
3629	S.C.I. S&S bend 75 mm dia	each	195.00
3634	S.C.I. S&S heel rest sanitary bend 100 mm dia	each	296.00
3635	S.C.I. S&S heel rest sanitary bend 75 mm dia	each	250.00
3640	S.C.I. S&S single equal junctions 100x100x100 mm	each	472.00
3641	S.C.I. S&S single equal junctions 75x75x75 mm	each	330.00
3644	S.C.I. S&S single equal junctions with access door 100x100x100 mm	each	495.00
3645	S.C.I. S&S single equal junctions with access door 75x75x75 mm	each	373.00
3650	S.C.I. S&S double equal junctions 100x100x100x100 mm	each	620.00
3651	S.C.I. S&S double equal junctions 75x75x75x75 mm	each	462.00
3654	S.C.I. S&S double equal junctions with access door 100x100x100x100 mm	each	615.00
3655	S.C.I. S&S double equal junctions with access door 75x75x75x75 mm	each	480.00
3660	S.C.I. S&S single unequal junctions 100x100x75 mm	each	570.00
3664	S.C.I. S&S single unequal junctions with access door 100x100x75 mm	each	640.00
3670	S.C.I. S&S double unequal junctions 100x100x75x75 mm	each	800.00
3674	S.C.I. S&S double unequal junctions with access door 100x100x75x75 mm	each	850.00
3681	S.C.I. S&S single equal invert branch of required degree 100x100x100 mm dia	each	425.00
3682	S.C.I. S&S single equal invert branch of required degree 75x75x75 mm dia	each	323.00
3685	S.C.I. S&S double equal invert branch of required degree 100x100x100x100 mm dia	each	530.00
3686	S.C.I. S&S double equal invert branch of required degree 75x75x75x75 mm dia	each	425.00
3690	S.C.I. S&S single unequal invert branch of required degree 100x100x75 mm dia	each	545.00
3695	S.C.I. S&S double unequal invert branch of required degree 100x100x75x75 mm dia	each	725.00
3699	S.C.I. S&S, 75 mm offset for 75 mm dia pipe	each	225.00
3707	S.C.I. S&S, 150 mm offset for 75 mm dia pipe	each	285.00
3708	S.C.I. S&S, 150 mm offset for 100 mm dia pipe	each	390.00
3712	S.C.I. S&S, 114 mm offset for 75 mm dia pipe	each	300.00
3713	S.C.I. S&S, 114 mm offset for 100 mm dia pipe	each	383.00
3716	S.C.I. S&S, 152 mm offset for 75 mm dia pipe	each	358.00
3717	S.C.I. S&S, 152 mm offset for 100 mm dia pipe	each	465.00
3728	S.C.I. S&S door pieces 100 mm dia	each	400.00
3729	S.C.I. S&S door pieces 75 mm dia	each	295.00
3733	S.C.I. S&S, Slotted Cowl (Terminal Guard) 100 mm	each	350.00

Code No.	Description	Unit	Rate ₹
3734	S.C.I. S&S, Slotted Cowl (Terminal Guard) 75 mm	each	300.00
3738	S.C.I. S&S, collars 100 mm	each	250.00
3739	S.C.I. S&S, collars 75 mm	each	170.00
3746	S.C.I. S&S, 75 mm offset for 75 mm dia pipe	each	218.00
3747	S.C.I. S&S, 75 mm offset for 100 mm dia pipe	each	363.00
3749	Vitreous china toilet paper holder of standard size	each	150.00
4202	Red oxide Zinc chromate primer	litre	70.00
7004	Vitreous china flat back wash basin 450x300 mm	each	425.00
7005	Vitreous china 10 litres low level cistern without fittings	each	925.00
7006	Vitreous china 10 litres low level cistern with fittings	each	1600.00
7048	Rawl plug 50 mm (designation 10 nos)	each	10.00
7072	Wall mounted water closet	each	4650.00
7073	Adjustable Vitreous China Cistern with fittings	each	2500.00
7074	White Vitreous China Waterless Urinal	each	15000.00
7075	Cistern with fittings for Waterless Urinal	each	3400.00
7076	White Vitreous Urinal	each	14000.00
7095	Stainless steel kitchen sink - with drain board bowl depth 250 mm	each	5185.00
7096	Stainless steel kitchen sink - with drain board 510 x 1040 mm bowl depth 225 mm	each	4950.00
7097	Stainless steel kitchen sink - with drain board 510 x 1040 mm bowl depth 200 mm	each	4250.00
7098	Stainless steel kitchen sink - with drain board 510x1040 mm bowl depth 178 mm	each	3000.00
7101	Stainless steel kitchen sink - without drain board 610x510 mm bowl depth 200 mm	each	3150.00
7102	Stainless steel kitchen sink - without drain board 610x460 mm bowl depth 200 mm	each	2845.00
7103	Stainless steel kitchen sink - without drain board 470x420 mm bowl depth 178 mm	each	2120.00
7104	Coloured Orissa pattern W.C. pan 580x440 mm	each	1320.00
7105	Coloured Pedestal type W.C. pan 580x440 mm (European type)	each	1150.00
7106	Coloured Vitreous china 10 lit. low level cistern	each	1720.00
7107	Coloured (other than black) solid P.V.C. seat in European W.C. pan	each	550.00
7112	Circular shape 450 mm dia Mirror with Plastic moulded frame	each	450.00
7113	Rectangular shape 453x357 mm Mirror with Plastic moulded frame	each	300.00
7114	Oval shape 450x350 mm (outer dimensions) Mirror with Plastic moulded frame	each	350.00
7115	Rectangular shape 1500x450 mm Mirror with Plastic moulded frame	each	700.00
7116	Hard board 6 mm thick	sqm	175.00
7117	Semi Rigid PVC waste pipe for sink and wash basin 32 mm dia with length not less than 700 mm i/c PVC waste fittings	each	30.00
7118	Semi Rigid PVC waste pipe for sink and wash basin 40 mm dia with length not less than 700 mm i/c PVC waste fittings	each	35.00
7119	Flexible (coil shaped) PVC waste pipe for sink and washbasin 32 mm dia with length not less than 700 mm i/c PVC waste fittings	each	28.00

Code No.	Description	Unit	Rate ₹
7120	Flexible (coil shaped) PVC waste pipe for sink and wash basin 40 mm dia with length not less than 700 mm i/c PVC waste fittings	each	30.00
7123	Coloured High density polyethylene / poly propylene 10 lit. (full flush) capacity controlled low level flushing cistern with fittings	each	685.00
7126	White Vitreous china 10 litre (full flush) capacity controlled low level flushing cistern with all fittings	each	975.00
7127	Coloured Vitreous china 10 litre (full flush) capacity controlled low level flushing cistern with all fittings	each	1500.00
7358	Flushing Cistern P.V.C. 10 litre capacity ( low level ) (White) ( with fittings, accessories and flush pipe)	each	640.00
7359	P.V.C. automatic flushing cistern 5 litre capacity	each	490.00
7361	P.V.C. automatic flushing cistern 10 litre capacity	each	530.00
7363	15 mm C.P. brass tap with elbow operation lever	each	700.00
7364	White glazed fire clay draining board 600x450x25 mm	each	550.00
7375	G.I. flush pipe and C.P. brass spreader including C.P. connecting pipe Single lipped urinal	each	465.00
7376	G.I. flush pipe and C.P. brass spreader including C.P. connecting pipe Range of two lipped urinals	each	1050.00
7377	G.I. flush pipe and C.P. brass spreader including C.P. connecting pipe Range of three lipped urinals	each	1250.00
7378	G.I. flush pipe and C.P. brass spreader including C.P. connecting pipe Range of four lipped urinals	each	1900.00
7379	White vitreous china clay half stall urinal flat back 580x380x350 mm or angle back 450x375x350 mm with waste fittings as per IS: 2556	each	1600.00
7491	PTMT - Waste Coupling 31/32 mm	each	62.00
7492	PTMT - Waste Coupling 38/40 mm	each	88.00
7493	PTMT - Bottle Trap 31/32 mm	each	390.00
7494	PTMT - Bottle Trap 38/40 mm	each	410.00
7503	PTMT Liquid Soap Container of 400 ml capacity	each	185.00
7504	PTMT Towel Ring 215x200x37 mm	each	152.00
7505	PTMT- Towel Rail (450 mm)	each	242.00
7506	PTMT - Towel Rail (600 mm)	each	292.00
7507	PTMT Shelf 450x124x36 mm	each	314.00
7508	PTMT - Urinal Spreader 15 mm	each	150.00
7805	Salem Stainless steel AISI - 304 (18/8) Orrisa pattern W.C. pan 724 mm X 578 mm	each	3800.00
7806	Salem Stainless steel AISI - 304 (18/8) Round basin 405mm X 355 mm	each	1850.00
7807	Salem Stainless steel AISI - 304 (18/8) Wash basin 530mm X 345 mm	each	1850.00
7808	Centrifugally cast (spun) iron S&S 100 mm inlet and 100 mm outlet	each	435.00
7809	Centrifugally cast (spun) iron S&S 100 mm inlet and 75 mm outlet	each	468.00
7858	P.T.M.T. Urinal cock 15 mm dia	each	120.00
9999	Sundries	L.S.	1.70

## 17.0 SANITARY INSTALLATIONS

Code No.	Description	Unit	Rate ₹
17.1	Providing and fixing water closet squatting pan (Indian type W.C. pan ) with 100 mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required :		
17.1.1	White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests	each	3,265.25
17.1.2	Stainless Steel AISI-304(18/8) Orissa pattern W.C. pan of size 585x480 mm with flush pipe and integrated type foot rests	each	6,773.00
17.2	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required :		
17.2.1	W.C. pan with ISI marked white solid plastic seat and lid	each	3,189.75
17.2.2	W.C. pan with ISI marked black solid plastic seat and lid	each	3,166.55
17.3	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I.brackets, 40 mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :		
17.3.1	W.C. pan with ISI marked white solid plastic seat and lid	each	4,636.25
17.3.2	W.C. pan with ISI marked black solid plastic seat and lid	each	4,613.05
17.4	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm and 340x410x265 mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :		
17.4.1	One urinal basin with 5 litre white P.V.C. automatic flushing cistern	each	3,174.60
17.4.2	Range of two urinal basins with 5 litre white P.V.C. automatic flushing cistern	each	5,166.90
17.4.3	Range of three urinal basins with 10litre white P.V.C. automatic flushing cistern	each	6,887.15
17.4.4	Range of four urinal basins with 10 litre white P.V.C. automatic flushing cistern	each	9,580.35
17.5	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350 mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS : 2556, C.I. trap with outlet grating and other couplings in C.P. brass,		

Code No.	Description	Unit	Rate ₹
	including painting of fittings and cutting and making good the walls and floors wherever required :		
17.5.1	Single half stall urinal with 5 litre P.V.C. automatic flushing cistern	each	6,249.20
17.5.2	Range of two half stall urinals with 5 litre P.V.C. automatic flushing cistern	each	9,826.90
17.5.3	Range of three half stall urinals with 10 litre P.V.C. automatic flushing cistern	each	12,816.05
17.5.4	Range of four half stall urinals with 10 litre P.V.C. automatic flushing cistern	each	15,674.30
17.6	Providing and fixing one piece construction white vitreous china squatting plate with an integral longitudinal flushing pipe, white P.V.C. automatic flushing cistern, with fittings, standard size G.I. / PVC flush pipe for back and front flush with standard spreader pipes with fittings, G.I clamps and C.P. brass coupling complete, including painting of fittings and cutting and making good the walls and floors etc. wherever required :		
17.6.1	Single squatting plate with 5 litre P.V.C. automatic flushing cistern	each	4,023.50
17.6.2	Range of two squatting plates with 5 litre P.V.C. automatic flushing cistern	each	5,860.20
17.6.3	Range of three squatting plates with 10 litre P.V.C. automatic flushing cistern	each	7,719.75
17.6.4	Range of four squatting plates with 10 litre P.V.C. automatic flushing cistern	each	9,328.15
17.7	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require :		
17.7.1	White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps	each	2,174.65
17.7.2	White Vitreous China Wash basin size 630x450 mm with a single 15 mm C.P. brass pillar tap	each	1,903.25
17.7.3	White Vitreous China Wash basin size 550x400 mm with a pair of 15 mm C.P. brass pillar taps	each	1,971.35
17.7.4	White Vitreous China Flat back wash basin size 550x 400 mm with single 15 mm C.P. brass pillar tap	each	1,699.95
17.7.5	White Vitreous China Angle back wash basin size 600x 480 mm with single 15 mm C.P. brass pillar tap	each	1,903.35
17.7.6	White Vitreous China Angle back wash basin size 400x 400 mm with single 15 mm C.P. brass pillar tap	each	1,554.80
17.7.7	White Vitreous China Flat back wash basin size 450x 300 mm with single 15 mm C.P. brass pillar tap	each	1,554.80
17.7.8	White Vitreous China Surgeon type wash basin of size 660x460 mm with a pair of 15 mm C.P. brass pillar taps with elbow operated levers	each	3,748.45
17.7.9	White Vitreous China Surgeon type wash basin of size 660x460 mm with single 15 mm C.P. brass pillar taps with elbow operated levers ISI marked	each	2,907.90

Code No.	Description	Unit	Rate ₹
	17.7.10 Stainless Steel AISI-304(18/8) Round basin 405x355 mm with single 15 mm C.P. brass pillar tap	each	3,209.90
	17.7.11 Stainless Steel AISI-304(18/8) Wash basin 530x345 mm with single 15 mm C.P. brass pillar tap	each	2,977.60
17.8	Providing and fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of pipes and fittings.	each	972.45
17.9	Providing and fixing kitchen sink with C.I. brackets, C.P. brass chain with rubber plug, 40 mm C.P. brass waste complete, including painting the fittings and brackets, cutting and making good the walls wherever required :		
	17.9.1 White glazed fire clay kitchen sink of size 600x450x 250 mm	each	2,388.45
17.10	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS : 13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required :		
	17.10.1 Kitchen sink with drain board		
	17.10.1.1 510x1040 mm bowl depth 250 mm	each	6,975.40
	17.10.1.2 510x1040 mm bowl depth 225 mm	each	6,702.45
	17.10.1.3 510x1040 mm bowl depth 200 mm	each	5,889.40
	17.10.1.4 510x1040 mm bowl depth 178 mm	each	4,437.50
17.10.2	Kitchen sink without drain board		
	17.10.2.1 610x510 mm bowl depth 200 mm	each	4,290.80
	17.10.2.2 610x460 mm bowl depth 200 mm	each	3,936.55
	17.10.2.3 470x420 mm bowl depth 178 mm	each	3,094.45
17.11	Providing and fixing white vitreous china laboratory sink with C.I. brackets, C.P. brass chain with rubber plug, 40 mm C.P brass waste and 40mm C.P. brass trap with necessary C.P. brass unions complete, including painting of fittings and brackets, cutting and making good the wall wherever required :		
	17.11.1 Size 450x300x150 mm	each	2,173.60
	17.11.2 Size 600x450x200 mm	each	2,992.45
17.12	Providing and fixing draining board with C.I. brackets including painting of brackets, cutting and making good the walls wherever required :		
	17.12.1 White glazed fire clay draining board of size 600x450x 25 mm	each	994.20
17.13	Providing and fixing white vitreous china water closet squatting pan (Indian type) :		
	17.13.1 Long pattern W.C. pan of size 580 mm	each	976.50
	17.13.2 Orissa pattern W.C. pan of size 580x440 mm	each	1,359.80
17.14	Extra for using coloured W.C. pan instead of white W.C. pan :		
	17.14.1 Orissa pattern W.C. pan 580x440 mm	each	627.20
17.15	Providing and fixing white vitreous china pedestal type (European type/ wash down type) water closet pan.	each	1,266.90

Code No.	Description	Unit	Rate ₹
17.16	Extra for using coloured pedestal type W.C pan (European type) with low level cistern of same colour instead of white vitreous china W.C pan and cistern.	each	1,446.05
17.17	Providing and fixing a pair of white vitreous china foot rests of standard pattern for squatting pan water closet :		
17.17.1	250x130x30 mm	pair	159.45
17.17.2	250x125x25 mm	pair	159.45
17.18	Providing and fixing P.V.C. low level flushing cistern with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete.		
17.18.1	10 litre capacity - White	each	853.80
17.18.2	10 litre capacity - coloured	each	909.65
17.19	Providing and fixing controlled flush, low level cistern made of vitreous china with all fittings complete.		
17.19.1	10 litre (full flush) capacity-white	each	1,559.85
17.19.2	10 litre (full flush) capacity-coloured	each	2,169.65
17.20	Providing and fixing solid plastic seat with lid for pedestal type W.C. pan complete :		
17.20.1	White solid plastic seat with lid	each	409.75
17.20.2	Black solid plastic seat with lid	each	386.50
17.20.3	Coloured (other than black & white) solid plastic seat with lid	each	665.25
17.21	Deleted.		
17.22	Providing and fixing G.I. inlet connection for flush pipe connecting with W.C. pan.	each	101.95
17.23	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm or 340x410x265 mm sizes respectively.	each	857.55
17.24	Providing and fixing white vitreous china squatting plate urinal with integral rim longitudinal flush pipe.	each	1,731.90
17.25	Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fittings :		
17.25.1	Flat back wash basin of size 630x450 mm	each	967.10
17.25.2	Flat back wash basin of size 550x400 mm	each	763.85
17.25.3	Angle back wash basin of size 600x480 mm	each	967.10
17.25.4	Angle back wash basin of size 400x400 mm	each	618.65
17.25.5	Flat back wash basin of size 450x300 mm	each	618.65
17.25.6	Surgeon type wash basin of size 660x460 mm	each	1,402.65
17.26	Providing and fixing kitchen sink including making all connections excluding cost of fittings.		
17.26.1	White glazed fire clay sink of size 600x450x250 mm	each	1,669.15

Code No.	Description	Unit	Rate ₹
17.27	Providing and fixing white vitreous china laboratory sink including making all connections excluding cost of fittings :		
17.27.1	Size 450x300x150 mm	each	1,053.55
17.27.2	Size 600x450x200 mm	each	1,872.40
17.28	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.		
17.28.1	Semi rigid pipe		
17.28.1.1	32 mm dia	each	74.90
17.28.1.2	40 mm dia	each	80.70
17.28.2	Flexible pipe		
17.28.2.1	32 mm dia	each	72.55
17.28.2.2	40 mm dia	each	74.90
17.29	Providing and fixing 100 mm sand cast Iron grating for gully trap.	each	29.10
17.30	Providing and fixing in position 25 mm diameter mosquito proof coupling of approved municipal design.	each	38.45
17.31	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	each	762.55
17.32	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing :		
17.32.1	Circular shape 450 mm dia	each	856.65
17.32.2	Rectangular shape 453x357 mm	each	700.30
17.32.3	Oval shape 450x350 mm (outer dimensions)	each	756.35
17.32.4	Rectangular shape 1500x450 mm	each	1,304.75
17.33	Providing and fixing 600x120x5 mm glass shelf with edges round off, supported on anodised aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs etc., complete.	each	522.20
17.34	Providing and fixing toilet paper holder :		
17.34.1	C.P. brass	each	339.85
17.34.2	Vitreous china	each	322.15
17.35	Providing and fixing soil, waste and vent pipes :		
17.35.1	100 mm dia		
17.35.1.1	Sand cast iron S&S pipe as per IS: 1729	metre	854.85
17.35.1.2	Centrifugally cast (spun) iron socket & spigot (S&S) pipe as per IS: 3989	metre	952.50
17.35.2	75 mm diameter :		
17.35.2.1	Sand cast iron S&S pipe as per IS: 1729	metre	705.55
17.35.2.2	Centrifugally cast (spun) iron socketed pipe as per IS: 3989	metre	787.70

Code No.	Description	Unit	Rate ₹
17.36	Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2 ( 1 cement : 2 fine sand) in S.C.I./ C.I. Pipes :		
17.36.1	75 mm dia pipe	each	59.50
17.36.2	100 mm dia pipe	each	70.10
17.37	Providing and fixing M.S. holder-bat clamps of approved design to Sand Cast iron/cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10 cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including cost of cutting holes and making good the walls etc. :		
17.37.1	For 100 mm dia pipe	each	140.65
17.37.2	For 75 mm dia pipe	each	138.35
17.38	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.		
17.38.1	100 mm dia		
17.38.1.1	Sand cast iron S&S as per IS - 1729	each	340.30
17.38.1.2	Sand cast iron S&S as per IS - 3989	each	384.45
17.38.2	75 mm dia		
17.38.2.1	Sand cast iron S&S as per IS - 1729	each	271.00
17.38.2.2	Sand cast iron S&S as per IS- 3989	each	317.50
17.39	Providing and fixing plain bend of required degree.		
17.39.1	100 mm dia		
17.39.1.1	Sand cast iron S&S as per IS - 1729	each	433.20
17.39.1.2	Sand cast iron S&S as per IS : 3989	each	334.50
17.39.2	75 mm dia		
17.39.2.1	Sand cast iron S&S as per IS -1729	each	218.75
17.39.2.2	Sand cast iron S&S as per IS - 3989	each	247.80
17.40	Providing and fixing heel rest sanitary bend		
17.40.1	100 mm dia		
17.40.1.1	Sand cast iron S&S as per IS - 1729	each	317.05
17.40.1.2	Sand cast iron S&S as per IS - 3989	each	370.50
17.40.2	75 mm dia		
17.40.2.1	Sand cast iron S&S as per IS - 1729	each	276.85
17.40.2.2	Sand cast iron S&S as per IS - 3989	each	311.65
17.41	Providing and fixing double equal junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete :		
17.41.1	100x100x100x100 mm		
17.41.1.1	Sand cast iron S&S as per IS - 1729	each	686.15
17.41.1.2	Sand cast iron S&S as per IS - 3989	each	761.65

Code No.	Description	Unit	Rate ₹
	17.41.2 75x75x75x75 mm		
	17.41.2.1 Sand cast iron S&S as per IS - 1729	each	532.35
	17.41.2.2 Sand cast iron S&S as per IS - 3989	each	596.25
17.42	Providing and fixing double equal plain junction of required degree.		
	17.42.1 100x100x100x100 mm		
	17.42.1.1 Sand cast iron S&S as per IS - 1729	each	630.65
	17.42.1.2 Sand cast iron S&S as per IS - 3989	each	746.80
	17.42.2 75x75x75x75 mm		
	17.42.2.1 Sand cast iron S&S as per IS - 1729	each	423.20
	17.42.2.2 Sand cast iron S&S as per IS - 3989	each	557.90
17.43	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.		
	17.43.1 100x100x100 mm		
	17.43.1.1 Sand cast iron S&S as per IS - 1729	each	484.30
	17.43.1.2 Sand cast iron S&S as per IS - 3989	each	622.55
	17.43.2 75x75x75 mm		
	17.43.2.1 Sand cast iron S&S as per IS - 1729	each	361.60
	17.43.2.2 Sand cast iron S&S as per IS - 3989	each	471.95
17.44	Providing and fixing single equal plain junction of required degree :		
	17.44.1 100x100x100 mm		
	17.44.1.1 Sand cast iron S&S as per IS - 1729	each	549.35
	17.44.1.2 Sand cast iron S&S as per IS - 3989	each	574.90
	17.44.2 75x75x75 mm		
	17.44.2.1 Sand cast iron S&S as per IS - 1729	each	329.10
	17.44.2.2 Sand cast iron S&S as per IS - 3989	each	404.60
17.45	Providing and fixing double unequal junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete :		
	17.45.1 100x100x75x75 mm		
	17.45.1.1 Sand cast iron S&S as per IS - 1729	each	686.40
	17.45.1.2 Sand cast iron S&S as per IS - 3989	each	1,034.85
17.46	Providing and fixing double unequal plain junction of required degree :		
	17.46.1 100x100x75x75 mm		
	17.46.1.1 Sand cast iron S&S as per IS - 1729	each	665.50
	17.46.1.2 Sand cast iron S&S as per IS - 3989	each	955.90

Code No.	Description	Unit	Rate ₹
17.47	Providing and fixing single unequal junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete :		
17.47.1	100x100x75 mm		
17.47.1.1	Sand cast iron S&S as per IS - 1729	each	512.20
17.47.1.2	Sand cast iron S&S as per IS - 3989	each	790.55
17.48	Providing and fixing single unequal plain junction of required degree :		
17.48.1	100x100x75 mm		
17.48.1.1	Sand cast iron S&S as per IS - 1729	each	456.45
17.48.1.2	Sand cast iron S&S as per IS - 3989	each	688.75
17.49	Providing and fixing double equal plain invert branch of required degree:		
17.49.1	100x100x100x100 mm		
17.49.1.1	Sand cast iron S&S as per IS - 1729	each	665.50
17.49.1.2	Sand cast iron S&S as per IS 3989	each	642.30
17.49.2	75x75x75x75 mm		
17.49.2.1	Sand cast iron S&S as per IS - 1729	each	497.50
17.49.2.2	Sand cast iron S&S as per IS - 3989	each	514.95
17.50	Providing and fixing single equal plain invert branch of required degree :		
17.50.1	100x100x100 mm		
17.50.1.1	Sand cast iron S&S as per iron 1729	each	502.90
17.50.1.2	Sand cast iron S&S as per IS - 3989	each	520.35
17.50.2	75x75x75 mm		
17.50.2.1	Sand cast iron S&S as per IS - 1729	each	393.00
17.50.2.2	Sand cast iron S&S as per IS - 3989	each	396.45
17.51	Providing and fixing double unequal invert branch of required degree :		
17.51.1	100x100x75x75 mm		
17.51.1.1	Sand cast iron S&S as per IS - 1729	each	688.75
17.51.1.2	Sand cast iron S&S as per IS - 3989	each	868.80
17.52	Providing and fixing single unequal plain invert branch of required degree :		
17.52.1	100x100x75 mm		
17.52.1.1	Sand cast iron S&S as per IS - 1729	each	601.65
17.52.1.2	Sand cast iron S&S as per IS - 3989	each	659.70
17.53	Providing and fixing sand cast iron S&S off sets as per IS: 1729		
17.53.1	76 mm off sets		
17.53.1.1	With 75 mm dia pipe	each	274.50
17.53.1.2	With 100 mm dia pipe	each	442.90

Code No.	Description	Unit	Rate ₹
	17.53.2 114 mm off sets		
	17.53.2.1 With 75 mm dia pipe	each	375.15
	17.53.2.2 With 100 mm dia pipe	each	471.55
	17.53.3 152 mm off sets		
	17.53.3.1 With 75 mm dia pipe	each	451.25
	17.53.3.2 With 100 mm dia pipe	each	575.55
17.54	Providing and fixing sand cast iron S&S off sets as per IS: 3989 :		
	17.54.1 75 mm off sets		
	17.54.1.1 With 75 mm dia pipe	each	282.65
	17.54.2 150 mm off sets		
	17.54.2.1 With 75 mm dia pipe	each	362.85
	17.54.2.2 With 100 mm dia pipe	each	484.80
17.55	Providing and fixing door piece, insertion rubber washer 3mm thick, bolts & nuts complete :		
	17.55.1 100 mm		
	17.55.1.1 Sand cast iron S&S as per IS - 1729	each	512.20
	17.55.1.2 Sand cast iron S&S as per IS - 3989	each	512.20
	17.55.2 75 mm		
	17.55.2.1 Sand cast iron S&S as per IS - 1729	each	358.15
	17.55.2.2 Sand cast iron S&S as per IS - 3989	each	381.35
17.56	Providing and fixing terminal guard :		
	17.56.1 100 mm		
	17.56.1.1 Sand cast iron S&S as per IS - 1729	each	247.40
	17.56.1.2 Sand cast iron S&S as per IS - 3989	each	433.20
	17.56.2 75 mm		
	17.56.2.1 Sand cast iron S&S as per IS - 1729	each	196.70
	17.56.2.2 Sand cast iron S&S as per IS - 3989	each	369.75
17.57	Providing and fixing collar :		
	17.57.1 100 mm		
	17.57.1.1 Sand cast iron S&S as per IS - 1729	each	192.80
	17.57.1.2 Sand cast iron S&S as per IS - 3989	each	317.05
	17.57.2 75 mm		
	17.57.2.1 Sand cast iron S&S as per IS - 1729	each	152.55
	17.57.2.2 Sand cast iron S&S as per IS - 3989	each	218.75

Code No.	Description	Unit	Rate ₹
17.58	Providing lead caulked joints to sand cast iron/centrifugally cast (spun) iron pipes and fittings of diameter :		
17.58.1	100 mm	each	232.30
17.58.2	75 mm	each	196.20
17.58.3	50 mm	each	156.60
17.59	Providing and fixing M.S. stays and clamps for sand cast iron/centrifugally cast (spun) iron pipes of diameter :		
17.59.1	100 mm	each	67.35
17.59.2	75 mm	each	56.15
17.59.3	50 mm	each	51.25
17.60	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors :		
17.60.1	100 mm inlet and 100 mm outlet		
17.60.1.1	Sand cast iron S&S as per IS: 3989	each	938.05
17.60.1.2	Sand Cast Iron S&S as per IS: 1729	each	752.20
17.60.2	100 mm inlet and 75 mm outlet		
17.60.2.1	Sand cast iron S&S as per IS - 3989	each	976.40
17.60.2.2	Sand Cast Iron S&S as per IS- 1729	each	686.00
17.61	Cutting chases in brick masonry walls for following diameter sand cast iron/ centrifugally cast (spun) iron pipes and making good the same with cement concrete 1:3:6 ( 1 cement : 3 coarse sand :6 graded stone aggregate 12.5 mm nominal size), including necessary plaster and pointing in cement mortar 1:4 (1 cement : 4 coarse sand) :		
17.61.1	100 mm dia	metre	302.60
17.61.2	75 mm dia	metre	216.60
17.61.3	50 mm dia	metre	138.40
17.62	Painting C.I. cistern with bitumastic or any other anti-corrosive paint inside and white paint over a coat of zinc chromate yellow primer (of approved quality ) on the outside surface of the cistern, flush pipe, other fittings, etc. complete for new work.	each	398.80
17.63	Re-painting C.I. cistern with bitumastic or any other anti-corrosive paint inside and white paint on the outside surface of the cistern, flush pipe, other fittings, etc. complete, including polishing of wooden seat and lid and cleaning of W.C. pan with acid wherever necessary.	each	281.60
17.64	Repainting C.I. cistern with synthetic enamel paint of approved colour, brand and manufacture on the outside surface of cistern, flush pipe, other fittings etc. complete.	each	118.85
17.65	Painting sand cast iron/ centrifugally cast (spun) iron soil, waste vent pipes and fittings with two coats of synthetic enamel paint of any colour such as chocolate grey, or buff etc. over a coat of primer (of approved quality) for new work :		
17.65.1	100 mm diameter pipe	metre	33.85
17.65.2	75 mm diameter pipe	metre	25.90

Code No.	Description	Unit	Rate ₹
17.66	Repainting sand cast iron/ centrifugally cast iron (spun) iron, soil, waste, vent pipes and fittings with one coat of synthetic enamel paint of any colour such as chocolate, grey or buff etc :		
17.66.1	100 mm diameter pipe	metre	16.70
17.66.2	75 mm diameter pipe	metre	12.55
17.67	Repainting bath tub of size 1700x730x430 mm with enamel paint.	each	371.65
17.68	Providing and fixing vitreous china dual purpose closet suitable for use as squatting pan or European type water closet (Anglo Indian W.C pan) with seat & lid fixed with C.P. brass hinges and rubber buffers, 10 litre low level flushing cistern with fitting and brackets, 40 mm flush bend, 20 mm over flow pipe, with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :		
17.68.1	White vitreous china dual purpose WC pan with white solid plastic seat and lid with white vitreous china flushing cistern and C.P. flush bend.	each	6,316.05
17.69	Providing and fixing PTMT Waste Coupling for wash basin and sink, of approved quality and colour.		
17.69.1	Waste coupling 31 mm dia of 79 mm length and 62mm breadth weighing not less than 45 gms	each	99.30
17.69.2	Waste coupling 38 mm dia of 83 mm length and 77mm breadth, weighing not less than 60 gms	each	114.40
17.70	Providing and fixing PTMT Bottle Trap for Wash basin and sink.		
17.70.1	Bottle trap 31mm single piece moulded with height of 270 mm, effective length of tail pipe 260 mm from the centre of the waste coupling, 77 mm breadth with 25 mm minimum water seal, weighing not less than 260 gms	each	408.25
17.70.2	Bottle trap 38 mm single piece moulded with height of 270 mm, effective length of tail pipe 260 mm from the centre of the waste coupling, 77 mm breadth with 25 mm minimum water seal, weighing not less than 263 gms	each	440.75
17.71	Providing and fixing PTMT liquid soap container 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour, weighing not less than 105 gms.	each	181.75
17.72	Providing and fixing PTMT towel ring trapezoidal shape 215 mm long, 200 mm wide with minimum distances of 37 mm from wall face with concealed fittings arrangement of approved quality and colour, weighing not less than 88 gms.	each	174.80
17.73	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fittings arrangement of approved quality and colour.		
17.73.1	450 mm long towel rail with total length of 495 mm, 78 mm wide and effective height of 88 mm, weighing not less than 170 gms	each	408.90
17.73.2	600 mm long towel rail with total length of 645 mm, width 78 mm and effective height of 88 mm, weighing not less than 190 gms	each	448.40

Code No.	Description	Unit	Rate ₹
17.74	Providing and fixing PTMT shelf 440 mm long, 124 mm width and 36 mm height of approved quality and colour, weighing not less than 300 gms.	each	485.55
17.75	Providing and fixing PTMT 15 mm Urinal spreader size 95x69x100 mm with 1/2" BSP thread and shapes, weighing not less than 60 gms.	each	160.85
17.76	Providing and fixing PTMT urinal cock of approved quality and colour.		
17.76.1	15 mm nominal bore, 80 mm long, 42 mm high and 30mm wide with BSP female threads weighing not less than 48 gms	each	155.30
17.77	Providing and fixing M.S. holder bat clamp of approved design to sand cast iron/ cast iron (spun) pipes comprising of M.S. flat brackets made of 50x5 mm flat of specified shape, projecting 75 mm outside the wall surface and fixed on wall with 4nos, 6mm dia expansion hold fasteners, including drilling necessary holes in brick wall/ CC/ RCC surface and the cost of bolts etc. The pipes shall be fixed to the already fixed brackets with the help of 30 mm x1.6 mm galvanised M.S. flats of specified shape and of total length 420 mm and shall be fixed with M.S. nuts, bolts, & washers of size 25x6 mm, one bolts on each side of the pipe.		
17.77.1	Total bracket length 580 mm of approved shape and design (for single 100 mm dia pipe)	each	193.35
17.77.2	Total bracket length 810 mm of approved shape and design (for two 100 mm dia pipes)	each	235.30
17.77.3	Total bracket length 1040 mm of approved shape and design (for three 100 mm dia pipes)	each	277.15
17.78	Providing and fixing white vitreous china extended wall mounting water closet of size 780x370x690 mm of approved shape including providing & fixing white vitreous china cistern with dual flush fitting, of flushing capacity 3 litre/6 litre (adjustable to 4 litre/8 litres), including seat cover, and cistern fittings, nuts, bolts and gasket etc complete.	each	9,965.25
17.79	Providing & fixing white vitreous china water less urinal of size 600 x 330 x 315 mm having antibacterial /germs free ceramic surface, fixed with cartridge having debris catcher and hygiene seal.	each	21,791.65
17.80	Providing and fixing white vitreous china battery based infrared sensor operated urinal of approx. size 610 x 390 x 370 mm having pre & post flushing with water (250 ml & 500 ml consumption), having water inlet from back side, including fixing to wall with suitable brackets all as per manufacturers specification and direction of Engineer-in-charge.	each	16,681.05

**SUB HEAD : 18.0**

**WATER SUPPLY**



**BASIC RATES (SH: 18.0 WATER SUPPLY)**

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
0010	Hire charges of Derrick monkey rope	day	800.00
0114	Beldar	day	297.00
0115	Coolie	day	297.00
0116	Fitter (grade 1)	day	393.00
0117	Assistant Fitter or 2nd class Fitter	day	361.00
0123	Mason (brick layer) 1 st class	day	393.00
0124	Mason (brick layer) 2nd class	day	361.00
0761	Fuel wood	quintal	500.00
0771	Kerosene oil	litre	45.00
1301	Bleaching powder	quintal	1750.00
1304	Surface box for stop cock	each	125.00
1305	Surface box for sluice valve	each	210.00
1307	Surface box for water meter	each	250.00
1339	Brass bib-cock 15 mm dia	each	210.00
1340	Brass bib-cock 20 mm dia	each	225.00
1342	Brass stop-cock 15 mm dia	each	210.00
1343	Brass stop-cock 20 mm dia	each	280.00
1360	C.I.mouth, brass ferrule 15 mm dia	each	140.00
1361	C.I.mouth, brass ferrule 20 mm dia	each	160.00
1362	C.I.mouth, brass ferrule 25 mm dia	each	220.00
1373	Rubber insertions for 80 mm dia pipe joints	each	15.00
1374	Rubber insertions for 100 mm dia pipe joints	each	18.00
1375	Rubber insertions for 125 mm dia pipe joints	each	20.00
1376	Rubber insertions for 150 mm dia pipe joints	each	20.00
1377	Rubber insertions for 200 mm dia pipe joints	each	25.00
1378	Rubber insertions for 250 mm dia pipe joints	each	40.00
1379	Rubber insertions for 300 mm dia pipe joints	each	45.00
1380	Rubber insertions for 350 mm dia pipe joints	each	50.00
1381	Rubber insertions for 400 mm dia pipe joints	each	73.00
1382	Rubber insertions for 450 mm dia pipe joints	each	92.00
1383	Rubber insertions for 500 mm dia pipe joints	each	110.00
1384	Rubber insertions for 600 mm dia pipe joints	each	125.00
1397	Pig lead	kilogram	90.00
1464	S & S.C.I. standard specials upto 300 mm dia (heavy class)	quintal	3600.00
1466	S & S.C.I. standard specials over 300 mm dia (heavy class)	quintal	3700.00
1468	Flanged C.I. standard specials upto 300 mm dia (heavy class)	quintal	5500.00

Code No.	Description	Unit	Rate ₹
1470	Flanged C.I. standard specials over 300 mm dia (heavy class)	quintal	5800.00
1472	Casing pipe 100 mm dia	metre	335.00
1545	G.I. pipes 15 mm dia	metre	105.00
1546	G.I. pipes 20 mm dia	metre	125.00
1547	G.I. pipes 25 mm dia	metre	160.00
1548	G.I. pipes 32 mm dia	metre	180.00
1549	G.I. pipes 40 mm dia	metre	220.00
1550	G.I. pipes 50 mm dia	metre	275.00
1551	G.I. pipes 65 mm dia	metre	365.00
1552	G.I. pipes 80 mm dia	metre	460.00
1555	G.I. back (jam) nuts 25 mm dia	each	10.00
1559	G.I. back (jam) nuts 65 mm dia	each	22.00
1608	G.I. tees (equal) 25 mm	each	45.00
1612	G.I. tees (equal) 65 mm	each	280.00
1641	G.I. Union 15 mm nominal bore	each	55.00
1642	G.I. Union 20 mm nominal bore	each	75.00
1643	G.I. Union 25 mm nominal bore	each	85.00
1644	G.I. Union 32 mm nominal bore	each	120.00
1645	G.I. Union 40 mm nominal bore	each	185.00
1646	G.I. Union 50 mm nominal bore	each	220.00
1647	G.I. Union 65 mm nominal bore	each	430.00
1648	G.I. Union 80 mm nominal bore	each	510.00
1649	Polyethylene water storage tank with cover and suitable locking arrangement	per litre	5.30
1687	Unplasticised P.V.C. connection pipe with brass union 30 cm long 15 mm bore	each	30.00
1688	Unplasticised P.V.C. connection pipe with brass union 30 cm long 20 mm bore	each	35.00
1689	Unplasticised P.V.C. connection pipe with brass union 45 cm long 15 mm bore	each	35.00
1690	Unplasticised P.V.C. connection pipe with brass union 45 cm long 20 mm bore	each	48.00
1693	S.C.I. hand pump	each	670.00
1878	Shower rose C.P. brass for 15 to 20 mm inlet 100 mm dia	each	50.00
1879	Shower rose C.P. brass for 15 to 20 mm inlet 150 mm dia	each	60.00
1881	Spun yarn	kilogram	50.00
1882	Strainer brass 40 mm dia 1.5 metre long	each	600.00
1922	H.P. or L.P. ball valve with polythene floats: 15 mm dia	each	210.00
1923	H.P. or L.P. ball valve with polythene floats: 20 mm dia	each	305.00

Code No.	Description	Unit	Rate ₹
1924	H.P. or L.P. ball valve with polythene floats: 25 mm dia	each	330.00
1927	Brass full way valve with C.I. wheel (screwed end) 25 mm dia	each	350.00
1928	Brass full way valve with C.I. wheel (screwed end) 32 mm dia	each	410.00
1929	Brass full way valve with C.I. wheel (screwed end) 40 mm dia	each	480.00
1930	Brass full way valve with C.I. wheel (screwed end) 50 mm dia	each	620.00
1931	Brass full way valve with C.I. wheel (screwed end) 65 mm dia	each	1080.00
1932	Brass full way valve with C.I. wheel (screwed end) 80 mm dia	each	1620.00
1933	Gunmetal non-return valve-horizontal (screwed end) 25 mm dia	each	330.00
1934	Gunmetal non-return valve-horizontal (screwed end) 32 mm dia	each	450.00
1935	Gunmetal non-return valve-horizontal (screwed end) 40 mm dia	each	560.00
1936	Gunmetal non-return valve-horizontal (screwed end) 50 mm dia	each	820.00
1937	Gunmetal non-return valve-horizontal (screwed end) 65 mm dia	each	1490.00
1938	Gunmetal non-return valve-horizontal (screwed end) 80 mm dia	each	2120.00
1940	C.I. sluice valve (with caps) class I : 100 mm dia	each	2410.00
1941	C.I. sluice valve (with caps) class I : 125 mm dia	each	2600.00
1942	C.I. sluice valve (with caps) class I : 150 mm dia	each	3600.00
1943	C.I. sluice valve (with caps) class I : 200 mm dia	each	7500.00
1944	C.I. sluice valve (with caps) class I : 250 mm dia	each	10980.00
1945	C.I. sluice valve (with caps) class I : 300 mm dia	each	15500.00
1956	Bolts and nuts 16 mm dia 60 mm long	each	12.00
1957	Bolts and nuts 16 mm dia 65 mm long	each	12.00
1958	Bolts and nuts 20 mm dia 65 mm long	each	15.00
1959	Bolts and nuts 20 mm dia 70 mm long	each	15.00
1960	Bolts and nuts 20 mm dia 75 mm long	each	14.00
1961	Bolts and nuts 20 mm dia 80 mm long	each	18.00
1962	Bolts and nuts 24 mm dia 85 mm long	each	28.00
1963	Bolts and nuts 24 mm dia 90 mm long	each	32.00
1964	Bolts and nuts 27 mm dia 100 mm long	each	38.00
2271	Carriage of G.I. pipes below 100 mm dia	tonne	94.80
2272	Carriage of Stainless Steel pipes below 100 mm dia	tonne	94.80
2309	Carriage of Cast Iron fittings	tonne	94.80
2319	Carriage of Spun iron S & S pipes 100 mm dia	100 metre	233.10
2320	Carriage of Spun iron S & S pipes 125 mm dia	100 metre	311.37
2321	Carriage of Spun iron S & S pipes 150 mm dia	100 metre	388.51
2322	Carriage of Spun iron S & S pipes 200 mm dia	100 metre	631.97
2323	Carriage of Spun iron S & S pipes 250 mm dia	100 metre	898.07
2324	Carriage of Spun iron S & S pipes 300 mm. dia	100 metre	1110.03

Code No.	Description	Unit	Rate ₹
2325	Carriage of Spun iron S & S pipes 350 mm dia	100 metre	1554.03
2326	Carriage of Spun iron S & S pipes 400 mm dia	100 metre	2119.14
2327	Carriage of Spun iron S & S pipes 450 mm dia	100 metre	2590.06
2328	Carriage of Spun iron S & S pipes 500 mm dia	100 metre	2590.06
2329	Carriage of Spun iron S & S pipes 600mm dia	100 metre	3885.10
2330	Carriage of C.I. pipes 500 mm dia	100 metre	2590.06
2331	Carriage of R.C.C. pipes 900 mm dia	100 metre	5827.64
2332	Carriage of R.C.C. pipes 1000 mm dia	100 metre	7770.19
2333	Carriage of R. C. C. pipes 1100 mm dia	100 metre	7770.19
2334	Carriage of R.C.C. pipes 1200 mm dia	100 metre	7770.19
2341	Carriage of pig lead	tonne	94.80
2343	Carriage of Ductile Iron pipes (k7) 100 mm dia	100 metre	233.10
2344	Carriage of Cast iron pipes 150 mm dia	100 metre	388.51
2345	Carriage of Cast iron pipes 200 mm dia	100 metre	631.97
2346	Carriage of Cast iron pipes 250 mm dia	100 metre	898.07
2347	Carriage of Cast iron pipes 300 mm dia	100 metre	1110.03
2348	Carriage of Cast iron pipes 350 mm dia	100 metre	1554.03
2349	Carriage of Cast iron pipes 400 mm dia	100 metre	2119.14
2350	Carriage of Cast iron pipes 450 mm dia	100 metre	2590.06
2351	Carriage of Cast iron pipes 500 mm dia	100 metre	2590.06
2352	Carriage of Cast iron pipes 600 mm dia	100 metre	3885.10
2353	Carriage of Cast iron pipes 700 mm dia	100 metre	3885.10
2355	Carriage of Cast iron pipes 800 mm dia	100 metre	3885.10
2356	Carriage of Cast iron pipes 900 mm dia	100 metre	5827.64
2357	Carriage of Cast iron pipes 1000 mm dia	100 metre	7770.19
3080	Gunmetal non-return valve - vertical (screwed end) 25 mm dia	each	320.00
3084	Gunmetal non-return valve - vertical (screwed end) 32 mm dia	each	520.00
3088	Gunmetal non-return valve - vertical (screwed end) 40 mm dia	each	750.00
3092	Gunmetal non-return valve - vertical (screwed end) 50 mm dia	each	1010.00
3096	Gunmetal non-return valve - vertical (screwed end) 65 mm dia	each	1710.00
3300	Gunmetal non-return valve - vertical (screwed end) 80 mm dia	each	2890.00
3311	C.I.sluiice valve (with caps) class II : 100 mm dia	each	2910.00
3314	C.I.sluiice valve (with caps) class II : 125 mm dia	each	3500.00
3317	C.I.sluiice valve (with caps) class II : 150 mm dia	each	4300.00
3320	C.I.sluiice valve (with caps) class II : 200 mm dia	each	9210.00
3321	C.I.sluiice valve (with caps) class II : 250 mm dia	each	14800.00
3326	C.I.sluiice valve (with caps) class II : 300 mm dia	each	18500.00

Code No.	Description	Unit	Rate ₹
3327	15 mm Battery Based Sensor Pillar Cock	each	5822.00
7257	C.P. Brass bibcock 15 mm	each	375.00
7258	C.P. Brass long nose bibcock 15 mm	each	657.00
7259	C.P. Brass long body bibcock 15 mm	each	501.00
7260	C.P. Brass stop cock (concealed) 15 mm	each	513.00
7261	C.P. Brass angle valve 15 mm	each	417.00
7400	15 mm PTMT bib cock	each	120.00
7401	15 mm PTMT bib cock with flange (fancy)	each	133.00
7402	15 mm PTMT bib-cock long body with flange	each	160.00
7403	15 mm dia PTMT stop cock(male thread)	each	120.00
7405	20 mm dia PTMT stop cock	each	150.00
7406	PTMT pillar cock	each	180.00
7407	PTMT push cock 15 mm dia	each	117.00
7408	PTMT push cock 12 mm dia 20 mm BSP	each	90.00
7409	PTMT grating 100 mm dia	each	35.00
7410	PTMT Pillar cock (fancy) 15 mm foam flow	each	240.00
7411	125 mm grating with waste hole	each	42.00
7412	Rectangular type with openable circular lid 150 mm size 18 mm high with 100 mm dia (110 gm)	each	122.00
7415	Double acting air valve 50 mm	each	4000.00
7416	Double acting air valve 80 mm	each	5200.00
7417	Double acting air valve 100 mm	each	6800.00
7418	Water meter (including testing charges) 80 mm	each	2130.00
7419	Water meter (including testing charges) 100 mm	each	3300.00
7420	Water meter (including testing charges) 150 mm	each	5000.00
7421	Water meter (including testing charges) 200 mm	each	5400.00
7422	Dirt box strainer 80 mm	each	2810.00
7423	Dirt box strainer 100 mm	each	4580.00
7424	Dirt box strainer 150 mm	each	5810.00
7425	Dirt box strainer 200 mm	each	8250.00
7495	PTMT Ball Cock 15mm complete with Epoxy Coated Aluminium Rod & H.D. Ball	each	162.00
7496	PTMT Ball Cock 20mm complete with Epoxy Coated Aluminium Rod & H.D. Ball	each	198.00
7497	PTMT Ball Cock 25mm complete with Epoxy Coated Aluminium Rod & H.D. Ball	each	420.00
7498	PTMT Ball Cock 40mm complete with Epoxy Coated Aluminium Rod & H.D. Ball	each	810.00

Code No.	Description	Unit	Rate ₹
7499	PTMT Ball Cock 50mm complete with Epoxy Coated Aluminium Rod & H.D. Ball	each	1150.00
7500	PTMT Angle Stop cock with Flange 15 mm	each	150.00
7501	PTMT Swiveling shower 15 mm	each	110.00
7509	PTMT Soap Dish/Holder 138x102x75 mm	each	130.00
7651	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 100 mm dia	metre	800.00
7652	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 150 mm dia	metre	1200.00
7653	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 200 mm dia	metre	1650.00
7654	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 250 mm dia	metre	2300.00
7655	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 300 mm dia	metre	2860.00
7656	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 350 mm dia	metre	3510.00
7657	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 400 mm dia	metre	4500.00
7658	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 450 mm dia	metre	5200.00
7659	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 500 mm dia	metre	6580.00
7660	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 600 mm dia	metre	7930.00
7662	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 750 mm dia	metre	11900.00
7663	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 800 mm dia	metre	12000.00
7664	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 900 mm dia	metre	14500.00
7665	Ductile Iron class K - 9 pipe Conforming to I.S. 8329 - 1000 mm dia	metre	16300.00
7666	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 100 mm dia	each	30.00
7668	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 150 mm dia	each	38.00
7669	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 200 mm dia	each	66.00
7670	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 250 mm dia	each	78.00
7671	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 300 mm dia	each	115.00
7672	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 350 mm dia	each	132.00
7673	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 400 mm dia	each	240.00
7674	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 450 mm dia	each	280.00
7675	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 500 mm dia	each	305.00
7676	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 600 mm dia	each	380.00
7677	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 700 mm dia	each	575.00
7678	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 750 mm dia	each	690.00
7679	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 800 mm dia	each	760.00
7680	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 900 mm dia	each	1000.00
7681	Rubber Gaskets Conforming to I.S 5382 of S.B.R quality 1000 mm dia	each	1200.00
7682	Ductile Iron K - 12 specials suitable for push on jointing up to 600 mm dia	quintal	13000.00
7683	Ductile Iron K - 12 specials suitable for push on jointing over 600 mm dia	quintal	18000.00

Code No.	Description	Unit	Rate ₹
7684	Ductile Iron specials suitable for mechanical jointing as per I.S. 9523 - up to 600 mm dia	quintal	13700.00
7685	Ductile Iron Specials suitable for mechanical jointing as per I.S. 9523 over 600 mm dia	quintal	19650.00
7686	Ductile Iron Pipe Class K-9 flanges and welding 100 mm dia	metre	2180.00
7687	Ductile Iron Pipe Class K-9 flanges and welding 150 mm dia	metre	3500.00
7688	Ductile Iron Pipe Class K-9 flanges and welding 200 mm dia	metre	4110.00
7689	Ductile Iron Pipe Class K-9 flanges and welding 250 mm dia	metre	3425.00
7690	Ductile Iron Pipe Class K-9 flanges and welding 300 mm dia	metre	6960.00
7691	Ductile Iron Pipe Class K-9 flanges and welding 350 mm dia	metre	8800.00
7692	Ductile Iron Pipe Class K-9 flanges and welding 400 mm dia	metre	10610.00
7693	Ductile Iron Pipe Class K-9 flanges and welding 450 mm dia	metre	12900.00
7694	Ductile Iron Pipe Class K-9 flanges and welding 500 mm dia	metre	15100.00
7695	Ductile Iron Pipe Class K-9 flanges and welding 600 mm dia	metre	20630.00
7696	Ductile Iron Pipe Class K-9 flanges and welding 700 mm dia	metre	25600.00
7697	S&S Centrifugally (Spun) C.I. Pipe class LA 100 mm dia	metre	900.00
7698	S&S Centrifugally (Spun) C.I. Pipe class LA 125 mm dia	metre	1120.00
7699	S&S Centrifugally (Spun) C.I. Pipe class LA 150 mm dia	metre	1350.00
7700	S&S Centrifugally (Spun) C.I. Pipe class LA 200 mm dia	metre	2300.00
7701	S&S Centrifugally (Spun) C.I. Pipe class LA 250 mm dia	metre	3000.00
7702	S&S Centrifugally (Spun) C.I. Pipe class LA 300 mm dia	metre	4050.00
7703	S&S Centrifugally (Spun) C.I. Pipe class LA 350 mm dia	metre	4850.00
7704	S&S Centrifugally (Spun) C.I. Pipe class LA 400 mm dia	metre	6400.00
7705	S&S Centrifugally (Spun) C.I. Pipe class LA 450 mm dia	metre	7750.00
7706	S&S Centrifugally (Spun) C.I. Pipe class LA 500 mm dia	metre	9000.00
7707	S&S Centrifugally (Spun) C.I. Pipe class LA 600 mm dia	metre	12595.00
7708	S&S Centrifugally (Spun) C.I. Pipe Specials as per IS 1538 suitable for lead jointing up to 300 mm dia	quintal	5450.00
7709	S&S Centrifugally (Spun) C.I. Pipe Specials as per IS 1538 suitable for lead jointing over 300 mm dia	quintal	8200.00
7710	S&S Centrifugally (Spun) C.I. Pipe specials suitable for mechanical joint as per I.S. 13382 up to 300 mm dia	quintal	9000.00
7711	S&S Centrifugally (Spun) C.I. Pipe Specials suitable for mechanical joint as per I.S. 13382 over 300 mm dia	quintal	9500.00
7712	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 100 mm dia	metre	1375.00
7713	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 150 mm dia	metre	2150.00
7714	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 200 mm dia	metre	3400.00

Code No.	Description	Unit	Rate ₹
7715	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 250 mm dia	metre	4100.00
7716	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 300 mm dia	metre	5240.00
7717	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 350 mm dia	metre	6600.00
7718	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 400 mm dia	metre	8550.00
7719	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 450 mm dia	metre	10900.00
7720	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 500 mm dia	metre	13560.00
7721	Screwed double flanged centrifugally cast (spun) C.I. Pipe of Class B conforming to I.S. 1536, - 600 mm dia	metre	18800.00
7722	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 100 mm dia	metre	775.00
7723	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 150 mm dia	metre	1120.00
7724	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 200 mm dia	metre	1550.00
7725	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 250 mm dia	metre	2100.00
7726	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 300 mm dia	metre	2900.00
7727	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 350 mm dia	metre	3445.00
7728	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 400 mm dia	metre	4015.00
7729	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 450 mm dia	metre	4852.00
7730	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 500 mm dia	metre	5735.00
7731	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 600 mm dia	metre	7480.00
7732	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 700 mm dia	metre	9613.00
7733	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 800 mm dia	metre	12100.00
7734	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 900 mm dia	metre	16070.00
7735	Ductile Iron Class K- 7 pipe conforming to I.S. 8329 - 1000 mm dia	metre	17032.00
7859	P.T.M.T. Bib cock with nozzle 15 mm	each	145.00
7861	P.T.M.T. Stop cock (concealed) 15 mm	each	158.00
7862	15 mm nominal bore and 30 cm length PVC connection pipe with P.T.M.T. Nuts	each	32.00
7863	15 mm nominal bore and 45 cm length PVC connection pipe with P.T.M.T. Nuts	each	40.00
7864	P.T.M.T. extension nipple 15 mm	each	32.00
7865	P.T.M.T. extension nipple 20 mm	each	38.00
7866	P.T.M.T. extension nipple 25 mm	each	57.00
8300	1216 mm PE-AL-PE Composite pressure pipe	metre	95.00
8301	1620 mm PE-AL-PE Composite pressure pipe	metre	125.00
8302	2025 mm PE-AL-PE Composite pressure pipe	metre	160.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
8303	2532 mm PE-AL-PE Composite pressure pipe	metre	205.00
8304	3240 mm PE-AL-PE Composite pressure pipe	metre	340.00
8305	4050 mm PE-AL-PE Composite pressure pipe	metre	375.00
8625	Poly propylene- Random - Co - Polymer (PPR) pipes SDR 7.4 - 16 mm Outer dia	metre	37.00
8626	Poly propylene - Random - Co - Polymer (PPR) pipes SDR 7.4 - 20 mm Outer dia	metre	57.00
8627	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 - 25 mm outer dia	metre	88.00
8628	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 - 32 mm Outer dia	metre	142.00
8629	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 - 40 mm Outer dia	metre	213.00
8630	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 - 50 mm Outer dia	metre	335.00
8631	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 - 63 mm Outer dia	metre	513.00
8633	Poly propylene - Random - Co - polymer (PPR) pipes SDR 7.4 - 90 mm Outer dia	metre	1066.00
8634	Poly propylene - Random - Co - polymer (PPR) pipes SDR - 11 - 110 mm Outer dia	metre	1200.00
8635	Poly propylene - Random - Co - polymer (PPR) pipes SDR - 11 - 160 mm Outer dia	metre	2500.00
8636	Chlorinated Polyvinyl - chloride (CPVC) pipe 15 mm outer dia	metre	55.00
8637	Chlorinated Polyvinyl - chloride (CPVC) pipe 20 mm outer dia	metre	68.00
8638	Chlorinated Polyvinyl - chloride (CPVC) pipe 25 mm outer dia	metre	95.00
8639	Chlorinated Polyvinyl - chloride (CPVC) pipe 32 mm outer dia	metre	130.00
8640	Chlorinated Polyvinyl - chloride (CPVC) pipe 40 mm outer dia	metre	185.00
8641	Chlorinated Polyvinyl - chloride (CPVC) pipe 50 mm outer dia	metre	300.00
8642	Chlorinated Polyvinyl - chloride (CPVC) pipe 62.5 mm inner dia	metre	910.00
8643	Chlorinated Polyvinyl - chloride (CPVC) pipe 75 mm inner dia	metre	1300.00
8644	Chlorinated Polyvinyl - chloride (CPVC) pipe 100 mm inner dia	metre	1800.00
8645	Chlorinated Polyvinyl - chloride (CPVC) pipe 150 mm inner dia	metre	2150.00
8701	SS pipe 304 grades with press fit technology as per JIS 3448 standard 48.60 mm outer dia	metre	680.00
8702	Coupling/Socket fittings for 15.88 mm outer dia SS pipe	each	57.00
8779	SS pipe 304 grades with press fit technology as per JIS 3448 standard 15.88 mm outer dia	metre	144.00
8780	SS pipe 304 grades with press fit technology as per JIS 3448 standard 22.22 mm outer dia	metre	254.00
8781	SS pipe 304 grades with press fit technology as per JIS 3448 standard 28.58 mm outer dia	metre	330.00

Code No.	Description	Unit	Rate ₹
8782	SS pipe 304 grades with press fit technology as per JIS 3448 standard 34.00 mm outer dia	metre	468.00
8783	SS pipe 304 grades with press fit technology as per JIS 3448 standard 42.70 mm outer dia	metre	582.00
8786	Coupling/Socket fittings for 22.22 mm outer dia SS pipe	each	88.00
8787	Coupling/Socket fittings for 28.58 mm outer dia SS pipe	each	108.00
8788	Coupling/Socket fittings for 34.00 mm outer dia SS pipe	each	231.00
8789	Coupling/Socket fittings for 42.70 mm outer dia SS pipe	each	330.00
8790	Coupling/Socket fittings for 48.60 mm outer dia SS pipe	each	446.00
8791	Reducer for 22.22 mm X 15.88 mm outer Dia SS pipe	each	103.00
8792	Reducer for 28.58 mm X 15.88 mm outer Dia SS pipe	each	141.00
8793	Reducer for 28.58 mm X 22.22 mm outer Dia SS pipe	each	145.00
8794	Reducer for 34.00 mm X 15.88 mm outer Dia SS pipe	each	234.00
8795	Reducer for 34.00 mm X 22.22 mm outer Dia SS pipe	each	237.00
8796	Reducer for 34.00 mm X 28.58 mm outer Dia SS pipe	each	237.00
8797	Reducer for 42.70 mm X 15.88 mm outer Dia SS pipe	each	359.00
8798	Reducer for 42.70 mm X 22.22 mm outer Dia SS pipe	each	362.00
8799	Reducer for 42.70 mm X 28.58 mm outer Dia SS pipe	each	362.00
8800	Reducer for 42.70 mm X 34.00 mm outer Dia SS pipe	each	387.00
8801	Reducer for 48.60 mm X 15.88 mm outer Dia SS pipe	each	468.00
8802	Reducer for 48.60 mm X 22.22 mm outer Dia SS pipe	each	470.00
8803	Reducer for 48.60 mm X 28.58 mm outer Dia SS pipe	each	474.00
8804	Reducer for 48.60 mm X 34.00 mm outer Dia SS pipe	each	479.00
8805	Reducer for 48.60 mm X 42.70 mm outer Dia SS pipe	each	522.00
8806	Slip Coupling / Socket 15.88 mm outer dia SS pipe	each	113.00
8807	Slip Coupling / Socket 22.22 mm outer dia SS pipe	each	184.00
8808	Slip Coupling / Socket 28.58 mm outer dia SS pipe	each	236.00
8809	Slip Coupling / Socket 34.00 mm outer dia SS pipe	each	349.00
8810	Slip Coupling / Socket 42.70 mm outer dia SS pipe	each	490.00
8811	Slip Coupling / Socket 48.60 mm outer dia SS pipe	each	609.00
8812	Elbow 90° for 15.88 mm outer dia SS pipe	each	86.00
8813	Elbow 90° for 22.22 mm outer dia SS pipe	each	153.00
8814	Elbow 90° for 28.58 mm outer dia SS pipe	each	211.00
8815	Elbow 90° for 34.00 mm outer dia SS pipe	each	429.00
8816	Elbow 90° for 42.70 mm outer dia SS pipe	each	657.00
8817	Elbow 90° for 48.60 mm outer dia SS pipe	each	808.00
8818	Reducing Elbow 90° for 22.22 mm X 15.88 mm outer dia SS pipe	each	148.00
8819	Reducing Elbow 90° for 28.58 mm X 15.88 mm outer dia SS pipe	each	216.00

Code No.	Description	Unit	Rate ₹
8820	Reducing Elbow 90° for 28.58 mm X 22.22 mm outer dia SS pipe	each	221.00
8821	Reducing Elbow 90° for 34.00 mm X 22.22 mm outer dia SS pipe	each	321.00
8822	Reducing Elbow 90° for 34.00 mm X 28.58 mm outer dia SS pipe	each	396.00
8823	Reducing Elbow 90° for 42.70 mm X 34.00 mm outer dia SS pipe	each	698.00
8824	Equal Tee for 15.88 mm outer dia SS pipe	each	159.00
8825	Equal Tee for 22.22 mm outer dia SS pipe	each	231.00
8826	Equal Tee for 28.58 mm outer dia SS pipe	each	296.00
8827	Equal Tee for 34.00 mm outer dia SS pipe	each	617.00
8828	Equal Tee for 42.70 mm outer dia SS pipe	each	864.00
8829	Equal Tee for 48.60 mm outer dia SS pipe	each	1028.00
8830	Reducing Tee for 22.22 mm X 15.88 mm outer dia SS pipe	each	225.00
8831	Reducing Tee for 28.58 mm X 15.88 mm outer dia SS pipe	each	280.00
8832	Reducing Tee for 28.58 mm X 22.22 mm outer dia SS pipe	each	291.00
8833	Reducing Tee for 34.00 mm X 15.88 mm outer dia SS pipe	each	548.00
8834	Reducing Tee for 34.00 mm X 22.22 mm outer dia SS pipe	each	558.00
8835	Reducing Tee for 34.00 mm X 28.58 mm outer dia SS pipe	each	564.00
8836	Reducing Tee for 42.70 mm X 15.88 mm outer dia SS pipe	each	819.00
8837	Reducing Tee for 42.70 mm X 22.22 mm outer dia SS pipe	each	821.00
8838	Reducing Tee for 42.70 mm X 28.58 mm outer dia SS pipe	each	822.00
8839	Reducing Tee for 42.70 mm X 34.00 mm outer dia SS pipe	each	830.00
8840	Reducing Tee for 48.60 mm X 15.88 mm outer dia SS pipe	each	894.00
8841	Reducing Tee for 48.60 mm X 22.22 mm outer dia SS pipe	each	913.00
8842	Reducing Tee for 48.60 mm X 28.58 mm outer dia SS pipe	each	920.00
8843	Reducing Tee for 48.60mm X 34.00 mm outer dia SS pipe	each	958.00
8844	Reducing Tee for 48.60mm X 42.70mm outer dia SS pipe	each	993.00
8845	Male thread Tee for 15.88 mm outer dia X 15 mm nominal dia threaded	each	286.00
8846	Male thread Tee for 22.22 mm outer dia X 15 mm nominal dia threaded	each	344.00
8847	Male thread Tee for 22.22 mm outer dia X 20 mm nominal dia threaded	each	368.00
8848	Male thread Tee for 28.58 mm outer dia X 15 mm nominal dia threaded	each	414.00
8849	Male thread Tee for 28.58 mm outer dia X 20 mm nominal dia threaded	each	432.00
8850	Male thread Tee for 28.58 mm outer dia X 20 mm nominal dia threaded	each	483.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
8851	Male thread Tee for 34.00 mm outer dia X 15 mm nominal dia threaded	each	602.00
8852	Male thread Tee for 34.00 mm outer dia X 20 mm nominal dia threaded	each	651.00
8853	Male thread Tee for 34.00 mm outer dia X 25 mm nominal dia threaded	each	777.00
8854	Male thread Tee for 34.00 mm outer dia X 32 mm nominal dia threaded	each	981.00
8855	Male thread Tee for 42.70 mm outer dia X 15 mm nominal dia threaded	each	919.00
8856	Male thread Tee for 42.70 mm outer dia X 20 mm nominal dia threaded	each	941.00
8857	Male thread Tee for 42.70 mm outer dia X 25 mm nominal dia threaded	each	1024.00
8858	Male thread Tee for 42.70 mm outer dia X 32 mm nominal dia threaded	each	1137.00
8859	Male thread Tee for 42.70 mm outer dia X 40 mm nominal dia threaded	each	1381.00
8860	Male thread Tee for 48.60 mm outer dia X 15 mm nominal dia threaded	each	1000.00
8861	Male thread Tee for 48.60 mm outer dia X 20 mm nominal dia threaded	each	1030.00
8862	Male thread Tee for 48.60 mm outer dia X 25 mm nominal dia threaded	each	1074.00
8863	Male thread Tee for 48.60 mm outer dia X 32 mm nominal dia threaded	each	1290.00
8864	Male thread Tee for 48.60 mm outer dia X 40 mm nominal dia threaded	each	1431.00
8865	Male thread Tee for 48.60 mm outer dia X 50 mm nominal dia threaded	each	1749.00
8866	Female thread Tee for 15.88 mm outer dia X 15 mm nominal dia threaded	each	292.00
8867	Female thread Tee for 22.22 mm outer dia X 15 mm nominal dia threaded	each	344.00
8868	Female thread Tee for 22.22 mm outer dia X 20 mm nominal dia threaded	each	356.00
8869	Female thread Tee for 28.58 mm outer dia X 15 mm nominal dia threaded	each	445.00
8870	Female thread Tee for 28.58 mm outer dia X 20 mm nominal dia threaded	each	455.00
8871	Female thread Tee for 28.58 mm outer dia X 25 mm nominal dia threaded	each	498.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
8872	Female thread Tee for 34.00 mm outer dia X 15 mm nominal dia threaded	each	668.00
8873	Female thread Tee for 34.00 mm outer dia X 20 mm nominal dia threaded	each	679.00
8874	Female thread Tee for 34.00 mm outer dia X 25 mm nominal dia threaded	each	766.00
8875	Female thread Tee for 34.00 mm outer dia X 32 mm nominal dia threaded	each	910.00
8876	Female thread Tee for 42.70 mm outer dia X 15 mm nominal dia threaded	each	894.00
8877	Female thread Tee for 42.70 mm outer dia X 20 mm nominal dia threaded	each	910.00
8878	Female thread Tee for 42.70 mm outer dia X 25 mm nominal dia threaded	each	1022.00
8879	Female thread Tee for 42.70 mm outer dia X 32 mm nominal dia threaded	each	1067.00
8880	Female thread Tee for 42.70 mm outer dia X 40 mm nominal dia threaded	each	1162.00
8881	Female thread Tee for 48.60 mm outer dia X 15 mm nominal dia threaded	each	1065.00
8882	Female thread Tee for 48.60 mm outer dia X 20 mm nominal dia threaded	each	1076.00
8883	Female thread Tee for 48.60 mm outer dia X 25 mm nominal dia threaded	each	1115.00
8884	Female thread Tee for 48.60 mm outer dia X 32 mm nominal dia threaded	each	1184.00
8885	Female thread Tee for 48.60 mm outer dia X 40 mm nominal dia threaded	each	1233.00
8886	Female thread Tee for 48.60 mm outer dia X 50 mm nominal dia threaded	each	1366.00
8887	Female threaded Connector/Adapter for 15.88 mm outer dia X 15 mm nominal threaded	each	190.00
8888	Female threaded Connector/Adapter for 22.22 mm outer dia X 15 mm nominal threaded	each	230.00
8889	Female threaded Connector/Adapter for 22.22 mm outer dia X 20 mm nominal threaded	each	237.00
8890	Female threaded Connector/Adapter for 28.58 mm outer dia X 15 mm nominal threaded	each	277.00
8891	Female threaded Connector/Adapter for 28.58 mm outer dia X 20 mm nominal threaded	each	286.00
8892	Female threaded Connector/Adapter for 28.58 mm outer dia X 25 mm nominal threaded	each	337.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
8893	Female threaded Connector/Adapter for 34.00 mm outer dia X 25 mm nominal threaded	each	409.00
8894	Female threaded Connector/Adapter for 34.00 mm outer dia X 32 mm nominal threaded	each	538.00
8895	Female threaded Connector/Adapter for 42.70 mm outer dia X 32 mm nominal threaded	each	576.00
8896	Female threaded Connector/Adapter for 42.70 mm outer dia X 40 mm nominal threaded	each	681.00
8897	Female threaded Connector/Adapter for 48.60 mm outer dia X 40 mm nominal threaded	each	838.00
8898	Female threaded Connector/Adapter for 48.60 mm outer dia X 50 mm nominal threaded	each	965.00
8899	Male threaded Connector/Adapter for 15.88 mm outer dia X 15 mm nominal threaded	each	193.00
8900	Male threaded Connector/Adapter for 22.22 mm outer dia X 15 mm nominal threaded	each	227.00
8901	Male threaded Connector/Adapter for 22.22 mm outer dia X 20 mm nominal threaded	each	248.00
8902	Male threaded Connector/Adapter for 28.58 mm outer dia X 20 mm nominal threaded	each	313.00
8903	Male threaded Connector/Adapter for 28.58 mm outer dia X 25 mm nominal threaded	each	320.00
8904	Male threaded Connector/Adapter for 34.00 mm outer dia X 25 mm nominal threaded	each	461.00
8905	Male threaded Connector/Adapter for 34.00 mm outer dia X 32 mm nominal threaded	each	565.00
8906	Male threaded Connector/Adapter for 42.70 mm outer dia X 32 mm nominal threaded	each	649.00
8907	Male threaded Connector/Adapter for 42.70 mm outer dia X 40 mm nominal threaded	each	726.00
8908	Male threaded Connector/Adapter for 48.60 mm outer dia X 40 mm nominal threaded	each	840.00
8909	Male threaded Connector/Adapter for 48.60 mm outer dia X 50 mm nominal threaded	each	1138.00
8910	Valve Connector for 15.88 mm outer dia X 15 mm nominal dia threaded	each	234.00
8911	Valve Connector for 22.22 mm outer dia X 15 mm nominal dia threaded	each	276.00
8912	Valve Connector for 22.22 mm outer dia X 20 mm nominal dia threaded	each	295.00
8913	Valve Connector for 28.58 mm outer dia X 25 mm nominal dia threaded	each	424.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
8914	Valve Connector for 34.00 mm outer dia X 32 mm nominal dia threaded	each	629.00
8915	Valve Connector for 42.70 mm outer dia X 40 mm nominal dia threaded	each	875.00
8916	Valve Connector for 48.60 mm outer dia X 50 mm nominal dia threaded	each	1176.00
8917	Female Threaded Elbow 90 <sup>0</sup> for 15.88 mm outer dia X 15 mm nominal dia threaded	each	205.00
8918	Female Threaded Elbow 90 <sup>0</sup> for 22.22 mm outer dia X 15 mm nominal dia threaded	each	275.00
8919	Female Threaded Elbow 90 <sup>0</sup> for 22.22 mm outer dia X 20 mm nominal dia threaded	each	284.00
8920	Female Threaded Elbow 90 <sup>0</sup> for 28.58 mm outer dia X 25 mm nominal dia threaded	each	421.00
8921	Female Threaded Elbow 90 <sup>0</sup> for 34.00 mm outer dia X 32 mm nominal dia threaded	each	733.00
8922	Female Threaded Elbow 90 <sup>0</sup> for 42.70 mm outer dia X 32 mm nominal dia threaded	each	920.00
8923	Female Threaded Elbow 90 <sup>0</sup> for 42.70 mm outer dia X 40 mm nominal dia threaded	each	995.00
8924	Female Threaded Elbow 90 <sup>0</sup> for 48.60 mm outer dia X 40 mm nominal dia threaded	each	1103.00
8925	Female Threaded Elbow 90 <sup>0</sup> for 48.60 mm outer dia X 50 mm nominal dia threaded	each	1286.00
8926	Male Threaded Elbow 90 <sup>0</sup> for 15.88 mm outer dia X 15 mm nominal dia threaded	each	216.00
8927	Male Threaded Elbow 90 <sup>0</sup> for 22.22 mm outer dia X 15 mm nominal dia threaded	each	273.00
8928	Male Threaded Elbow 90 <sup>0</sup> for 22.22 mm outer dia X 20 mm nominal dia threaded	each	288.00
8929	Male Threaded Elbow 90 <sup>0</sup> for 28.58 mm outer dia X 25 mm nominal dia threaded	each	377.00
8930	Male Threaded Elbow 90 <sup>0</sup> for 34.00 mm outer dia X 25 mm nominal dia threaded	each	605.00
8931	Male Threaded Elbow 90 <sup>0</sup> for 34.00 mm outer dia X 32 mm nominal dia threaded	each	736.00
8932	Male Threaded Elbow 90 <sup>0</sup> for 42.70 mm outer dia X 32 mm nominal dia threaded	each	934.00
8933	Male Threaded Elbow 90 <sup>0</sup> for 42.70 mm outer dia X 40 mm nominal dia threaded	each	1060.00
8934	Male Threaded Elbow 90 <sup>0</sup> for 48.60 mm outer dia X 40 mm nominal dia threaded	each	1190.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
8935	Male Threaded Elbow 90° for 48.60 mm outer dia X 50 mm nominal dia threaded	each	1449.00
8936	Cap for 15.88 mm outer dia pipe	each	45.00
8937	Cap for 22.22 mm outer dia pipe	each	64.00
8938	Cap for 28.58 mm outer dia pipe	each	84.00
8939	Cap for 34.00 mm outer dia pipe	each	173.00
8940	Cap for 42.70 mm outer dia pipe	each	253.00
8941	Cap for 48.60 mm outer dia pipe	each	330.00
8942	Pipe Bridge for 15.88 mm outer dia pipe	each	214.00
8943	Pipe Bridge for 15.88 mm outer dia pipe	each	271.00
8944	Pipe Bridge for 28.58 mm outer dia pipe	each	407.00
9999	Sundries	L.S.	1.70

## 18.0 WATER SUPPLY

Code No.	Description	Unit	Rate ₹
<b>PE - AL - PE COMPOSITE PRESSURE PIPES</b>			
18.1	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450, U.V. stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 80 °C, including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows, tees, reducers, couplers & connectors etc., with clamps at 1.00 metre spacing. This includes testing of joints complete as per direction of the Engineer in charge.		
	<b>Internal work - Exposed on wall</b>		
18.1.1	1216 (16 mm OD) pipe	metre	209.50
18.1.2	1620 (20 mm OD) pipe	metre	261.50
18.1.3	2025 (25 mm OD) pipe	metre	321.05
18.1.4	2532 (32 mm OD) pipe	metre	400.30
18.1.5	3240 (40 mm OD) pipe	metre	629.60
18.1.6	4050 (50 mm OD) pipe	metre	682.45
18.2	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450, U.V. stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 80 °C, including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows, tees, reducers, couplers & connectors etc., with clamps at 1.00 metre spacing. This includes the costs of cutting chases and including testing of joints complete as per direction of the engineer in charge.		
	<b>Concealed work</b> , including cutting chases and making good the wall etc.		
18.2.1	1216 (16 mm OD) pipe	metre	336.25
18.2.2	1620 (20 mm OD) pipe	metre	379.25
18.2.3	2025 (25 mm OD) pipe	metre	468.40
18.2.4	2532 (32 mm OD) pipe	metre	559.85
18.3	Providing and fixing Polyethelene-Aluminium-Polyethelene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450, U.V. stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 80 °C, including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows, tees, reducers, couplers & connectors etc., with trenching, refilling and testing of joints complete as per direction of the engineer in charge.		
	<b>External work</b>		
18.3.1	1216 (16 mm OD) pipe	metre	198.15
18.3.2	1620 (20 mm OD) pipe	metre	243.45

Code No.	Description	Unit	Rate ₹
18.3.3	2025 (25 mm OD ) pipe	metre	296.30
18.3.4	2532 (32 mm OD ) pipe	metre	364.25
18.3.5	3240 (40 mm OD ) pipe	metre	577.60
18.3.6	4050 (50 mm OD ) pipe	metre	630.45
<b>PP- R PIPES</b>			
18.4	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes SDR 7.4, U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply, including all PP - R plain & brass threaded polypropylene random fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes testing of joints complete as per direction of Engineer in Charge.		
<b>Internal work - Exposed on wall</b>			
18.4.1	PN - 16 Pipe, 16 mm OD	metre	121.90
18.4.2	PN - 16 Pipe, 20 mm OD	metre	158.80
18.4.3	PN - 16 Pipe, 25 mm OD	metre	212.35
18.4.4	PN - 16 Pipe, 32 mm OD	metre	305.20
18.4.5	PN - 16 Pipe, 40 mm OD	metre	437.85
18.4.6	PN - 16 Pipe, 50 mm OD	metre	619.05
18.5	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes SDR 7.4, U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply, including all PP - R plain & brass threaded polypropylene random fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge.		
<b>Concealed work, including cutting chases and making good the walls etc.,</b>			
18.5.1	PN - 16 Pipe, 16 mm OD	metre	218.35
18.5.2	PN - 16 Pipe, 20 mm OD	metre	259.00
18.5.3	PN - 16 Pipe, 25 mm OD	metre	322.05
18.5.4	PN - 16 Pipe, 32 mm OD	metre	431.80
18.6	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes, U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply, including all PP - R plain & brass threaded polypropylene random fittings, including trenching, refilling & testing of joints complete as per direction of Engineer in Charge.		
<b>External work</b>			
18.6.1	PN - 16 Pipe, 16 mm OD (SDR - 7.4)	metre	110.60
18.6.2	PN - 16 Pipe, 20 mm OD (SDR - 7.4)	metre	140.75
18.6.3	PN - 16 Pipe, 25 mm OD (SDR - 7.4)	metre	192.50
18.6.4	PN - 16 Pipe, 32 mm OD (SDR - 7.4)	metre	274.05

Code No.	Description	Unit	Rate ₹
18.6.5	PN - 16 Pipe, 40 mm OD (SDR - 7.4)	metre	385.85
18.6.6	PN - 16 Pipe, 50 mm OD (SDR - 7.4)	metre	567.05
18.6.7	PN - 16 Pipe, 63 mm OD (SDR - 7.4)	metre	854.30
18.6.8	PN - 16 Pipe, 75 mm OD (SDR - 7.4)	metre	1,136.70
18.6.9	PN - 16 Pipe, 90 mm OD (SDR - 7.4)	metre	1,715.15
18.6.10	PN - 10 Pipe, 110 mm OD (SDR - 11)	metre	1,917.50
18.6.11	PN - 10 Pipe, 160 mm OD (SDR - 11)	metre	3,937.25
<b>C.P.V.C. PIPES</b>			
18.7	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.		
<b>Internal work - Exposed on wall</b>			
18.7.1	15 mm nominal outer dia Pipes	metre	155.80
18.7.2	20 mm nominal outer dia Pipes	metre	182.15
18.7.3	25 mm nominal outer dia Pipes	metre	222.90
18.7.4	32 mm nominal outer dia Pipes	metre	287.10
18.7.5	40 mm nominal outer dia Pipes	metre	395.60
18.7.6	50 mm nominal outer dia Pipes	metre	569.20
18.8	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge.		
<b>Concealed work, including cutting chases and making good the walls etc.</b>			
18.8.1	15 mm nominal outer dia Pipes	metre	254.95
18.8.2	20 mm nominal outer dia Pipes	metre	281.35
18.8.3	25 mm nominal outer dia Pipes	metre	336.25
18.8.4	32 mm nominal outer dia Pipes	metre	407.40
18.9	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement ,trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.		
<b>External work</b>			
18.9.1	15 mm nominal outer dia Pipes	metre	137.75
18.9.2	20 mm nominal outer dia Pipes	metre	157.40

Code No.	Description	Unit	Rate ₹
	18.9.3 25 mm nominal outer dia Pipes	metre	203.10
	18.9.4 32 mm nominal outer dia Pipes	metre	255.95
	18.9.5 40 mm nominal outer dia Pipes	metre	343.55
	18.9.6 50 mm nominal outer dia Pipes	metre	517.20
	18.9.7 62.50 mm nominal inner dia Pipes	metre	1,453.75
	18.9.8 75 mm nominal inner dia Pipes	metre	2,042.65
	18.9.9 100 mm nominal inner dia Pipes	metre	2,823.45
	18.9.10 150 mm nominal inner dia Pipes	metre	3,408.80
18.10	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, i/c cutting and making good the walls etc.		
	<b>Internal work - Exposed on wall</b>		
	18.10.1 15 mm dia nominal bore	metre	181.35
	18.10.2 20 mm dia nominal bore	metre	221.50
	18.10.3 25 mm dia nominal bore	metre	282.30
	18.10.4 32 mm dia nominal bore	metre	333.50
	18.10.5 40 mm dia nominal bore	metre	413.25
	18.10.6 50 mm dia nominal bore	metre	512.10
18.11	Providing and fixing G.I. Pipes complete with G.I. fittings and clamps, i/c making good the walls etc. concealed pipe, including painting with anti corrosive bitumastic paint, cutting chases and making good the wall :		
	18.11.1 15 mm dia nominal bore	metre	263.70
	18.11.2 20 mm dia nominal bore	metre	298.05
18.12	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc.		
	<b>External work</b>		
	18.12.1 15 mm dia nominal bore	metre	156.60
	18.12.2 20 mm dia nominal bore	metre	186.25
	18.12.3 25 mm dia nominal bore	metre	238.95
	18.12.4 32 mm dia nominal bore	metre	274.60
	18.12.5 40 mm dia nominal bore	metre	327.15
	18.12.6 50 mm dia nominal bore	metre	392.50
	18.12.7 65 mm dia nominal bore	metre	515.55
	18.12.8 80 mm dia nominal bore	metre	628.35
18.13	Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete :		
	18.13.1 25 to 40 mm nominal bore	each	338.90
	18.13.2 50 to 80 mm nominal bore	each	721.95

Code No.	Description	Unit	Rate ₹
18.14	Fixing water meter and stop cock in G.I. pipe line including cutting and threading the pipe and making long screws etc. complete (cost of water meter and stop cock to be paid separately).	each	286.60
	<b>BRASS FITTINGS</b>		
18.15	Providing and fixing brass bib cock of approved quality :		
18.15.1	15 mm nominal bore	each	259.85
18.15.2	20 mm nominal bore	each	280.05
18.16	Providing and fixing brass stop cock of approved quality :		
18.16.1	15 mm nominal bore	each	259.85
18.16.2	20 mm nominal bore	each	343.95
18.17	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :		
18.17.1	25 mm nominal bore	each	427.80
18.17.2	32 mm nominal bore.	each	500.35
18.17.3	40 mm nominal bore	each	584.20
18.17.4	50 mm nominal bore	each	749.40
18.17.5	65 mm nominal bore	each	1,286.25
18.17.6	80 mm nominal bore	each	1,918.85
18.18	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :		
18.18.1	15 mm nominal bore	each	286.55
18.18.2	20 mm nominal bore	each	407.40
18.18.3	25 mm nominal bore	each	446.95
18.19	Providing and fixing gun metal non- return valve of approved quality (screwed end) :		
18.19.1	25 mm nominal bore		
18.19.1.1	Horizontal	each	410.00
18.19.1.2	Vertical	each	444.85
18.19.2	32 mm nominal bore		
18.19.2.1	Horizontal	each	551.95
18.19.2.2	Vertical	each	633.25
18.19.3	40 mm nominal bore		
18.19.3.1	Horizontal	each	682.25
18.19.3.2	Vertical	each	902.95
18.19.4	50 mm nominal bore		
18.19.4.1	Horizontal	each	987.10
18.19.4.2	Vertical	each	1,207.80

Code No.	Description	Unit	Rate ₹
18.19.5	65 mm nominal bore		
18.19.5.1	Horizontal	each	1,767.85
18.19.5.2	Vertical	each	2,023.40
18.19.6	80 mm nominal bore		
18.19.6.1	Horizontal	each	2,502.40
18.19.6.2	Vertical	each	3,396.80
18.20	Providing and fixing brass ferrule with C.I. mouth cover including boring and tapping the main :		
18.20.1	15 mm nominal bore	each	242.20
18.20.2	20 mm nominal bore	each	279.00
18.20.3	25 mm nominal bore	each	361.80
18.21	Providing and fixing uplasticised PVC connection pipe with brass unions :		
18.21.1	30 cm length		
18.21.1.1	15 mm nominal bore	each	58.95
18.21.1.2	20 mm nominal bore	each	64.80
18.21.2	45 cm length		
18.21.2.1	15 mm nominal bore	each	67.35
18.21.2.2	20 mm nominal bore	each	82.45
18.22	Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet :		
18.22.1	100 mm diameter	each	71.40
18.22.2	150 mm diameter	each	85.60
<b>C.I./ DUCTILE IRON PIPES &amp; SPECIALS</b>			
18.23	Laying in position centrifugally cast (spun) iron S&S or flanged pipes (excluding cost of pipe).	quintal	124.40
18.24	Laying in position S&S or flanged C.I. special such as tees, bends, collars, tapers and caps etc.(excluding cost of specials).	quintal	231.35
18.25	Providing and laying S&S C.I. standard specials such as tees, bends, collars, tapers, caps etc. (Heavy class) :		
18.25.1	Up to 300 mm dia	quintal	4,423.75
18.25.2	Over 300 mm dia	quintal	4,539.90
18.26	Providing and laying flanged C.I. standard specials such as tees, bends, collars, tapers, caps etc., suitable for flanged jointing as per IS : 1538 :		
18.26.1	Up to 300 mm dia	quintal	6,630.60
18.26.2	Over 300 mm dia	quintal	6,979.05
18.27	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS - 1536 :		
18.27.1	100 mm dia pipe	metre	1,072.70
18.27.2	125 mm dia pipe	metre	1,336.60

Code No.	Description	Unit	Rate ₹
18.27.3	150 mm dia pipe	metre	1,612.60
18.27.4	200 mm dia pipe	metre	2,737.40
18.27.5	250 mm dia pipe	metre	3,573.95
18.27.6	300 mm dia pipe	metre	4,818.75
18.27.7	350 mm dia pipe	metre	5,779.60
18.27.8	400 mm dia pipe	metre	7,614.35
18.27.9	450 mm dia pipe	metre	9,219.95
18.27.10	500 mm dia pipe	metre	10,703.95
18.27.11	600 mm dia pipe	metre	14,967.80
18.28	Providing lead caulked joints to spun iron or C.I. pipes and specials, including testing of joints but excluding the cost of pig lead :		
18.28.1	100 mm diameter pipe	each	187.10
18.28.2	125 mm diameter pipe	each	275.70
18.28.3	150 mm diameter pipe	each	280.85
18.28.4	200 mm diameter pipe	each	372.40
18.28.5	250 mm diameter pipe	each	465.30
18.28.6	300 mm diameter pipe	each	560.60
18.28.7	350 mm diameter pipe	each	578.15
18.28.8	400 mm diameter pipe	each	753.80
18.28.9	450 mm diameter pipe	each	844.85
18.28.10	500 mm diameter pipe	each	894.30
18.28.11	600 mm diameter pipe	each	1,205.25
18.29	Supplying pig lead at site of work.	quintal	10,464.50
18.30	Providing flanged joints to double flanged C.I./D.I. pipes and specials, including testing of joints :		
18.30.1	80 mm diameter pipe	each	114.45
18.30.2	100 mm diameter pipe	each	189.60
18.30.3	125 mm diameter pipe	each	191.95
18.30.4	150 mm diameter pipe	each	227.65
18.30.5	200 mm diameter pipe	each	233.45
18.30.6	250 mm diameter pipe	each	350.40
18.30.7	300 mm diameter pipe	each	356.20
18.30.8	350 mm diameter pipe	each	489.15
18.30.9	400 mm diameter pipe	each	702.25
18.30.10	450 mm diameter pipe	each	870.10
18.30.11	500 mm diameter pipe	each	991.75
18.30.12	600 mm diameter pipe	each	1,164.50

Code No.	Description	Unit	Rate ₹
<b>C.I. SLUICE VALVES/ FIRE HYDRANTS &amp; FIXTURES</b>			
18.31	Providing and fixing C.I. sluice valves (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pieces if required will be paid separately) :		
18.31.1	100 mm diameter		
18.31.1.1	Class I	each	3,285.75
18.31.1.2	Class II	each	3,895.60
18.31.2	125 mm diameter		
18.31.2.1	Class I	each	3,540.20
18.31.2.2	Class II	each	4,614.65
18.31.3	150 mm diameter		
18.31.3.1	Class I	each	4,812.35
18.31.3.2	Class II	each	5,659.40
18.31.4	200 mm diameter		
18.31.4.1	Class I	each	9,472.65
18.31.4.2	Class II	each	11,529.00
18.31.5	250 mm diameter		
18.31.5.1	Class I	each	13,890.10
18.31.5.2	Class II	each	18,448.20
18.31.6	300 mm diameter		
18.31.6.1	Class I	each	19,303.10
18.31.6.2	Class II	each	22,935.50
18.32	Constructing masonry Chamber 30x30x50 cm inside, in brick work in cement mortar 1:4 (1 cement :4 coarse sand) for stop cock, with C. I. surface box 100x100 x75 mm (inside) with hinged cover fixed in cement concrete slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 ( 1 cement : 5 fine sand : 10 graded stone aggregate 40mm nominal size ) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12mm thick, finished with a floating coat of neat cement complete as per standard design :		
18.32.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	each	1,101.70
18.33	Constructing masonry Chamber 60x60x75 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100mm top diameter, 160 mm bottom diameter and 180 mm deep ( inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) , i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design :		
18.33.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	each	6,441.05

Code No.	Description	Unit	Rate ₹
18.34	Constructing masonry Chamber 90x90x100 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100 mm top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design :		
18.34.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	each	11,128.55
18.35	Constructing masonry Chamber 120x120x100 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100 mm top diameter, 160 mm bottom diameter and 180 mm deep ( inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design :		
18.35.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	each	15,305.40
18.36	Constructing masonry Chamber 60x60x75 cm, inside in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for fire hydrants, with C.I. surface box 350x350 mm top and 165 mm deep ( inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand:10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design :		
18.36.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	each	6,140.50
18.37	Constructing masonry Chamber 60x45x50 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for water meter complete with C.I. double flap surface box 400x200x200 mm (inside) with locking arrangement and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 ( 1 cement : 5 fine sand:10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design :		
18.37.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	each	5,737.40

Code No.	Description	Unit	Rate ₹
18.38	Painting G.I. pipes and fittings with synthetic enamel white paint with two coats over a ready mixed priming coat, both of approved quality for new work :		
18.38.1	15 mm diameter pipe	metre	8.60
18.38.2	20 mm diameter pipe	metre	10.10
18.38.3	25 mm diameter pipe	metre	13.35
18.38.4	32 mm diameter pipe	metre	15.75
18.38.5	40 mm diameter pipe	metre	18.70
18.38.6	50 mm diameter pipe	metre	22.00
18.39	Repainting G.I. pipes and fittings with synthetic enamel white paint with one coat of approved quality :		
18.39.1	15 mm diameter pipe	metre	4.40
18.39.2	20 mm diameter pipe	metre	5.10
18.39.3	25 mm diameter pipe	metre	6.50
18.39.4	32 mm diameter pipe	metre	7.65
18.39.5	40 mm diameter pipe	metre	8.95
18.39.6	50 mm diameter pipe	metre	10.50
18.40	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality :		
18.40.1	15 mm diameter pipe	metre	5.25
18.40.2	20 mm diameter pipe	metre	6.15
18.40.3	25 mm diameter pipe	metre	7.90
18.40.4	32 mm diameter pipe	metre	9.35
18.40.5	40 mm diameter pipe	metre	10.65
18.40.6	50 mm diameter pipe	metre	12.65
18.40.7	65 mm diameter pipe	metre	15.60
18.40.8	80 mm diameter pipe	metre	18.05
18.41	Providing and filling sand of grading zone V or coarser grade, all-round the G.I. pipes in external work :		
18.41.1	15 mm diameter pipe	metre	61.55
18.41.1A	Sub analysis item for sand filling component	cum	831.70
18.41.2	20 mm diameter pipe	metre	62.40
18.41.3	25 mm diameter pipe	metre	64.05
18.41.4	32 mm diameter pipe	metre	65.70
18.41.5	40 mm diameter pipe	metre	66.55
18.41.6	50 mm diameter pipe	metre	69.05
18.41.7	65 mm diameter pipe	metre	108.95
18.41.8	80 mm diameter pipe	metre	112.30
18.41.9	100 mm diameter pipe	metre	118.95
18.41.10	150 mm diameter pipe	metre	177.15

Code No.	Description	Unit	Rate ₹
18.42	Boring with 100 mm diameter casing pipe for hand pump / tubewell, in all soils except ordinary hard rocks requiring blasting, including removing the casing pipe after the hand pump / tube well is lowered and tested :		
18.42.1	Up to 6 metres depth	metre	300.20
18.42.2	Beyond 6 m and up to 12 m depth	metre	356.65
18.42.3	Beyond 12 m and up to 18 m depth	metre	415.40
18.43	Providing and placing in position filters of 40 mm diameter G.I. pipe with brass strainer of approved quality.	metre	582.65
18.44	Providing and fixing to filter and lowering to proper levels 40 mm G.I. pipe for tube well including cleaning and priming the tube well.	metre	304.75
18.45	Providing and placing in position hand pump of approved quality for 40 mm diameter G.I. pipe complete with all accessories.	each	893.75
18.46	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work) :		
18.46.1	15 mm nominal bore	each	155.65
18.46.2	20 mm nominal bore	each	178.85
18.46.3	25 mm nominal bore	each	190.45
18.46.4	32 mm nominal bore	each	231.15
18.46.5	40 mm nominal bore	each	306.60
18.46.6	50 mm nominal bore	each	379.35
18.46.7	65 mm nominal bore	each	623.25
18.46.8	80 mm nominal bore	each	716.15
18.47	Providing and fixing G.I. Union in existing G.I. pipe line, cutting and threading the pipe and making long screws, including excavation, refilling the earth or cutting of wall and making good the same complete wherever required :		
18.47.1	15 mm nominal bore	each	331.95
18.47.2	20 mm nominal bore	each	355.20
18.47.3	25 mm nominal bore	each	366.80
18.47.4	32 mm nominal bore	each	407.45
18.47.5	40 mm nominal bore	each	482.95
18.47.6	50 mm nominal bore	each	619.75
18.47.7	65 mm nominal bore	each	863.70
18.47.8	80 mm nominal bore	each	956.60
18.48	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, ISI : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	per litre	6.30
	<b>C.P. BRASS FITTINGS</b>		
18.49	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931 :		
18.49.1	15 mm nominal bore	each	458.40

Code No.	Description	Unit	Rate ₹
18.50	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms.		
18.50.1	15 mm nominal bore	each	795.20
18.51	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.		
18.51.1	15 mm nominal bore	each	609.40
18.52	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931.		
18.52.1	15 mm nominal bore	each	618.70
18.53	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 a) 15 mm nominal bore		
18.53.1	15mm nominal bore	each	506.70
<b>PTMT FITTINGS</b>			
18.54	Providing and fixing PTMT bib cock of approved quality and colour.		
18.54.1	15mm nominal bore, 86 mm long, weighing not less than 88 gms	each	132.05
18.54.2	15 mm nominal bore, 122mm long, weighing not less than 99 gms	each	178.55
18.54.3	15 mm nominal bore, 165 mm long, weighing not less than 110 gms	each	201.75
18.54.4	15mm nominal bore, 90 mm long, weighing not less than 93 gms	each	184.35
18.55	Providing and fixing PTMT stop cock of approved quality and colour.		
18.55.1	15 mm nominal bore, 86 mm long, weighing not less than 88 gms	each	132.05
18.55.2	20 mm nominal bore, 89 mm long, weighing not less than 88 gms	each	166.90
18.55.3	Concealed stop cock, 15 mm nominal bore, 108 mm long, weighing not less than 108 gms	each	199.45
18.56	Providing and fixing PTMT pillar cock of approved quality and colour .		
18.56.1	15 mm nominal bore, 107 mm long, weighing not less than 110 gms	each	204.55
18.56.2	15 mm nominal bore, 125 mm long foam flow, weighing not less than 120 gms	each	280.05
18.57	Providing and fixing PTMT, push cock of approved quality and colour.		
18.57.1	15 mm nominal bore, 98 mm long, weighing not less than 75 gms	each	120.45
18.57.2	15 mm nominal bore, 80 mm long, weighing not less than 46 gms	each	108.85
18.58	Providing and fixing PTMT grating of approved quality and colour.		
18.58.1	Circular type		

Code No.	Description	Unit	Rate ₹
	18.58.1.1 100 mm nominal dia	each	44.20
	18.58.1.2 125 mm nominal dia with 25 mm waste hole	each	57.00
	18.58.2 Rectangular type with openable circular lid		
	18.58.2.1 150 mm nominal size square 100 mm diameter of the inner hinged round grating	each	149.90
	<b>AIR VALVE &amp; WATER METER (BULK TYPE)</b>		
18.59	Providing and fixing C.I. double acting air valve of approved quality with bolts, nuts, rubber insertions etc. complete (The tail pieces, tapers etc if required will be paid separately) :		
	18.59.1 50 mm dia	each	4,773.30
	18.59.2 80 mm dia	each	6,167.10
	18.59.3 100 mm dia	each	8,103.20
18.60	Providing and fixing enclosed type water meter (bulk type) conforming to IS : 2373 and tested by Municipal Board complete with bolts, nuts, rubber insertions etc. (The tail pieces if required will be paid separately) :		
	18.60.1 80 mm dia nominal bore	each	3,087.95
	18.60.2 100 mm dia nominal bore	each	4,622.85
	18.60.3 150 mm dia nominal bore	each	6,776.20
	18.60.4 200 mm dia nominal bore	each	7,355.05
18.61	Providing and fixing C.I. dirt box strainer for bulk type water meter with nuts, bolts, rubber insertions etc. complete conforming to IS : 2373 :		
	18.61.1 80 mm dia	each	3,621.05
	18.61.2 100 mm dia	each	5,852.90
	18.61.3 150 mm dia	each	7,408.95
	18.61.4 200 mm dia	each	10,357.30
18.62	Providing and fixing PTMT Ball cock of approved quality, colour and make complete with Epoxy coated aluminium rod with L.P./ H.P.H.D. plastic ball.		
	18.62.1 15 mm nominal bore, 105 mm long, weighing not less than 138 gms	each	198.25
	18.62.2 20 mm nominal bore, 120 mm long, weighing not less than 198 gms	each	279.65
	18.62.3 25 mm nominal bore, 152mm long, weighing not less than 440 gms	each	551.50
	18.62.4 40 mm nominal bore, 206mm long, weighing not less than 690 gms	each	969.65
	18.62.5 50 mm nominal bore, 242mm long, weighing not less than 1240 gms	each	1,399.40
18.63	Providing and fixing PTMT angle stop cock 15 mm nominal bore, weighing not less than 85 gms	each	166.90

Code No.	Description	Unit	Rate ₹
18.64	Providing and fixing PTMT swivelling shower, 15 mm nominal bore, weighing not less than 40 gms	each	114.40
18.65	Providing and fixing PTMT soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with concealed fitting arrangements, weighing not less than 106 gms.	each	152.70
18.66	Providing and laying S&S C.I. Standard specials such as tees, bends, collars tapers and caps etc, suitable for flanged jointing as per IS : 1538 :		
18.66.1	Up to 300 mm dia	quintal	6,572.55
18.66.2	Above 300 mm dia	quintal	9,766.65
18.67	Providing and laying S&S C.I. Standard specials suitable for mechanical jointing as per IS : 13382 :		
18.67.1	Up to 300 mm dia	quintal	10,695.85
18.67.2	Above 300 mm dia	quintal	11,276.60
18.68	Providing and laying D.I. specials of class K-12 suitable for push-on jointing as per IS : 9523 :		
18.68.1	Up to 600 mm dia	quintal	15,341.85
18.68.2	Above 600 mm dia	quintal	21,149.40
18.69	Providing and laying D.I. Specials of Class K - 12 suitable for mechanical jointing as per IS : 9523 :		
18.69.1	Up to 600 mm dia	quintal	16,154.90
18.69.2	Above 600 mm dia	quintal	23,065.80
18.70	Providing push-on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and the cost of rubber gasket :		
18.70.1	100 mm dia pipes	joint	59.25
18.70.2	150 mm dia pipes	joint	91.10
18.70.3	200 mm dia pipes	joint	139.30
18.70.4	250 mm dia pipes	joint	168.90
18.70.5	300 mm dia pipes	joint	227.50
18.70.6	350 mm dia pipes	joint	247.25
18.70.7	400 mm dia pipes	joint	404.00
18.70.8	450 mm dia pipes	joint	466.15
18.70.9	500 mm dia pipes	joint	503.00
18.70.10	600 mm dia pipes	joint	644.90
18.70.11	650 mm dia pipes	joint	909.00
18.70.12	700 mm dia pipes	joint	1,042.55
18.70.13	800 mm dia pipes	joint	1,148.90
18.70.14	900 mm dia pipes	joint	1,474.65
18.70.15	1000 mm dia pipes	joint	1,738.25

Code No.	Description	Unit	Rate ₹
18.71	Providing and laying Double Flanged (screwed / welded) Centrifugally (Spun) Cast Iron, Class B (IS : 1536) :		
18.71.1	100 mm dia C.I. Double Flanged Pipe	metre	1,633.35
18.71.2	150 mm dia C.I. Double Flanged Pipe	metre	2,556.70
18.71.3	200 mm dia C.I. Double Flanged Pipe	metre	4,035.55
18.71.4	250 mm dia C.I. Double Flanged Pipe	metre	4,878.80
18.71.5	300 mm dia C.I. Double Flanged Pipe	metre	6,236.00
18.71.6	350 mm dia C.I. Double Flanged Pipe	metre	7,852.90
18.71.7	400 mm dia C.I. Double Flanged Pipe	metre	10,162.95
18.71.8	450 mm dia C.I. Double Flanged Pipe	metre	12,941.20
18.71.9	500 mm dia C.I. Double Flanged Pipe	metre	16,072.10
18.71.10	600 mm dia C.I. Double Flanged Pipe	metre	22,273.70
18.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329 :		
18.72.1	100 mm dia Ductile Iron Class K-7 pipes	metre	922.05
18.72.2	150 mm dia Ductile Iron Class K-7 pipes	metre	1,333.75
18.72.3	200 mm dia Ductile Iron Class K-7 pipes	metre	1,845.10
18.72.4	250 mm dia Ductile Iron Class K-7 pipes	metre	2,498.45
18.72.5	300 mm dia Ductile Iron Class K-7 pipes	metre	3,441.45
18.72.6	350 mm dia Ductile Iron Class K-7 pipes	metre	4,101.50
18.72.7	400 mm dia Ductile Iron Class K-7 pipes	metre	4,785.45
18.72.8	450 mm dia Ductile Iron Class K-7 pipes	metre	5,779.40
18.72.9	500 mm dia Ductile Iron Class K-7 pipes	metre	6,823.90
18.72.10	600 mm dia Ductile Iron Class K-7 pipes	metre	8,905.55
18.72.11	700 mm dia Ductile Iron Class K-7 pipes	metre	11,445.60
18.72.12	800 mm dia Ductile Iron Class K-7 pipes	metre	14,402.20
18.72.13	900 mm dia Ductile Iron Class K-7 pipes	metre	19,084.65
18.72.14	1000 mm dia Ductile Iron Class K-7 pipes	metre	20,306.10
18.72.15	100 mm dia Ductile Iron Class K-9 pipes	metre	954.00
18.72.16	150 mm dia Ductile Iron Class K-9 pipes	metre	1,431.00
18.72.17	200 mm dia Ductile Iron Class K-9 pipes	metre	1,968.80
18.72.18	250 mm dia Ductile Iron Class K-9 pipes	metre	2,741.60
18.72.19	300 mm dia Ductile Iron Class K-9 pipes	metre	3,410.05
18.72.20	350 mm dia Ductile Iron Class K-9 pipes	metre	4,194.10
18.72.21	400 mm dia Ductile Iron Class K-9 pipes	metre	5,369.30
18.72.22	450 mm dia Ductile Iron Class K-9 pipes	metre	6,207.95
18.72.23	500 mm dia Ductile Iron Class K-9 pipes	metre	7,833.85
18.72.24	600 mm dia Ductile Iron Class K-9 pipes	metre	9,465.65

Code No.	Description	Unit	Rate ₹
	18.72.25 700 mm dia Ductile Iron Class K-9 pipes	metre	13,077.20
	18.72.26 750 mm dia Ductile Iron Class K-9 pipes	metre	14,191.35
	18.72.27 800 mm dia Ductile Iron Class K-9 pipes	metre	14,360.50
	18.72.28 900 mm dia Ductile Iron Class K-9 pipes	metre	17,331.70
	18.72.29 1000 mm dia Ductile Iron Class K-9 pipes	metre	19,495.70
18.73	Providing and laying Double Flanged (Screwed / Welded) Centrifugally (Spun) Ductile Iron Pipes of Class K - 9 conforming to IS : 8329 :		
	18.73.1 100 mm dia Ductile Iron Double Flanged	metre	2,561.90
	18.73.2 150 mm dia Ductile Iron Double Flanged	metre	4,110.30
	18.73.3 200 mm dia Ductile Iron Double Flanged	metre	4,836.10
	18.73.4 250 mm dia Ductile Iron Double Flanged	metre	4,062.45
	18.73.5 300 mm dia Ductile Iron Double Flanged	metre	8,192.00
	18.73.6 350 mm dia Ductile Iron Double Flanged	metre	10,352.95
	18.73.7 400 mm dia Ductile Iron Double Flanged	metre	12,482.50
	18.73.8 450 mm dia Ductile Iron Double Flanged	metre	15,172.40
	18.73.9 500 mm dia Ductile Iron Double Flanged	metre	17,752.80
	18.73.10 600 mm dia Ductile Iron Double Flanged	metre	24,254.40
	18.73.11 700 mm dia Ductile Iron Double Flanged	metre	30,081.70
18.74	Providing and fixing unplasticised P.V.C. connection pipe with PTMT Nuts, collar and bush of approved quality and colour.		
	18.74.1 15 mm nominal bore with 30cm length	each	61.30
	18.74.2 15 mm nominal bore with 45 cm length	each	73.15
18.75	Providing and fixing PTMT extension nipple for water tank pipe, fittings of approved quality and colour.		
	18.75.1 15 mm nominal bore, weighing not less than 32 gms	each	43.85
	18.75.2 20mm nominal bore, weighing not less than 40 gms	each	50.80
	18.75.3 25mm nominal bore, weighing not less than 62 gms	each	72.90
18.76	Cutting holes up to 30x30 cm in walls including making good the same:		
	18.76.1 With common burnt clay F.P.S. (non modular) bricks	each	196.40
18.77	Cutting holes up to 15x15 cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including finishing complete so as to make it leak proof.	each	176.30
18.78	Making chases up to 7.5x7.5 cm in walls including making good and finishing with matching surface after housing G.I. pipe etc.	metre	77.65
18.79	Making hole up to 20x20 cm and embedding pipes up to 150 mm diameter in masonry and filling with cement concrete 1:3:6 (1 cement : 3 coarse sand 6 graded stone aggregate 20 mm nominal size) including disposal of malba.	metre	119.45

Code No.	Description	Unit	Rate ₹
18.80	Disinfecting C.I. water mains by flushing with water containing bleaching powder @ 0.5 gms per litre of water and cleaning the same with fresh water, operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory.		
18.80.1	80 mm diameter C.I. pipe	100 metre	638.30
18.80.2	100 mm diameter C.I. pipe	100 metre	840.50
18.80.3	125 mm diameter C.I. pipe	100 metre	1052.85
18.80.4	150 mm diameter C.I. pipe	100 metre	1,267.80
18.80.5	200 mm diameter C.I. pipe	100 metre	1,700.25
18.80.6	250 mm diameter C.I. pipe	100 metre	2,150.90
18.80.7	300 mm diameter C.I. pipe	100 metre	2,411.00
18.80.8	350 mm diameter C.I. pipe	100 metre	2,682.85
18.80.9	400 mm diameter C.I. pipe	100 metre	2,973.05
18.80.10	450 mm diameter C.I. pipe	100 metre	3,270.30
18.80.11	500 mm diameter C.I. pipe	100 metre	2,586.35
18.80.12	600 mm diameter C.I. pipe	100 metre	4,237.45
18.81	Extra for every operation of disinfecting the C.I. main by flushing with water containing bleaching powder @ 0.5 gms per litre of water and cleaning the same with fresh water, including getting the samples of water tested in the municipal laboratory :		
18.81.1	80 mm diameter C.I. pipe	100 metre	234.05
18.81.2	100 mm diameter C.I. pipe	100 metre	286.50
18.81.3	125 mm diameter C.I. pipe	100 metre	351.05
18.81.4	150 mm diameter C.I. pipe	100 metre	410.95
18.81.5	200 mm diameter C.I. pipe	100 metre	627.25
18.81.6	250 mm diameter C.I. pipe	100 metre	725.45
18.81.7	300 mm diameter C.I. pipe	100 metre	820.15
18.81.8	350 mm diameter C.I. pipe	100 metre	966.35
18.81.9	400 mm diameter C.I. pipe	100 metre	1,115.10
18.81.10	450 mm diameter C.I. pipe	100 metre	1,269.70
18.81.11	500 mm diameter C.I. pipe	100 metre	1,426.05
18.81.12	600 mm diameter C.I. pipe	100 metre	1,748.10
18.82	Dismantling old C.I. pipes including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints, melting of lead and making into blocks, including stacking of pipes at site lead up to 50 metre :		
18.82.1	80 mm diameter C.I. pipe	metre	149.15
18.82.2	100 mm diameter C.I. pipe	metre	155.30
18.82.3	125 mm diameter C.I. pipe	metre	161.10

Code No.	Description	Unit	Rate ₹
	18.82.4 150 mm diameter C.I. pipe	metre	167.15
	18.82.5 200 mm diameter C.I. pipe	metre	186.30
	18.82.6 250 mm diameter C.I. pipe	metre	205.10
	18.82.7 300 mm diameter C.I. pipe	metre	221.55
	18.82.8 350 mm diameter C.I. pipe	metre	236.90
	18.82.9 400 mm diameter C.I. pipe	metre	251.10
	18.82.10 450 mm diameter C.I. pipe	metre	265.75
	18.82.11 500 mm diameter C.I. pipe	metre	278.50
	18.82.12 600 mm diameter C.I. pipe	metre	300.90
18.83	Labour for cutting C.I. pipe with steel saw.		
	18.83.1 80 mm diameter C.I. pipe	Each cut	51.65
	18.83.2 100 mm diameter C.I. pipe	Each cut	69.50
	18.83.3 125 mm diameter C.I. pipe	Each cut	96.90
	18.83.4 150 mm diameter C.I. pipe	Each cut	130.75
	18.83.5 200 mm diameter C.I. pipe	Each cut	174.40
	18.83.6 250 mm diameter C.I. pipe	Each cut	216.25
	18.83.7 300 mm diameter C.I. pipe	Each cut	259.95
	18.83.8 350 mm diameter C.I. pipe	Each cut	301.80
	18.83.9 400 mm diameter C.I. pipe	Each cut	345.20
	18.83.10 450 mm diameter C.I. pipe	Each cut	387.35
	18.83.11 500 mm diameter C.I. pipe	Each cut	430.75
	18.83.12 600 mm diameter C.I. pipe	Each cut	512.70
18.84	Providing & fixing chrome plated brass battery based infrared sensor operated pillar cock, having foam flow technology.		
	18.84.1 15 mm nominal bore	each	6,778.15
18.85	Providing and fixing Stainless Steel pipe and fitting of grade AISI 304 as per JIS standard 3448 complete with press type fitting (fitting shall be paid for separately) i/c fixing of the pipe with clamps at 1.00 m spacing including cutting and making good the walls including testing of joints complete as per direction of Engineer -in-charge. (The pipe length inserted in the fitting shall not be measured for payment) Internal work - Exposed on wall		
	18.85.1 15.88 mm outer dia pipe	metre	241.70
	18.85.2 22.22 mm outer dia Pipe	metre	375.85
	18.85.3 28.58 mm outer dia Pipe	metre	468.85
	18.85.4 34.00 mm outer dia Pipe	metre	637.20
	18.85.5 42.70 mm outer dia Pipe	metre	776.50
	18.85.6 48.60 mm outer dia Pipe	metre	896.00

Code No.	Description	Unit	Rate ₹
18.86	Providing and fixing Stainless Steel pipe and fitting of grade AISI 304 as per JIS standard 3448 complete with press type fitting (fitting shall be paid for separately) i/c fixing of the pipe with clamps at 1.00m spacing and also including cutting of chases and making good the walls including testing of joints complete as per direction of Engineer -in-charge. (The pipe length inserted in the fitting shall not be measured for payment)		
	Internal work - Concealed Pipe		
18.86.1	15.88 mm outer dia .Pipes.	metre	318.80
18.86.2	22.22 mm Outer dia pipes	metre	453.00
18.87	Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per dirction of Engineer-in-charge.		
	Coupling/Socket		
18.87.1	For 15.88 mm outer dia pipe	each	66.20
18.87.2	For 22.22 mm outer dia pipe	each	102.20
18.87.3	For 28.58 mm outer dia pipe	each	125.45
18.87.4	For 34.00 mm outer dia pipe	each	268.30
18.87.5	For 42.70 mm outer dia pipe	each	383.30
18.87.6	For 48.60 mm outer dia pipe	each	518.05
18.88	Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per dirction of Engineer-in-charge.		
	Reducer		
18.88.1	For 22.22 mm x 15.88 mm outer dia pipe	each	119.65
18.88.2	For 28.58 mm x 15.88 mm outer dia pipe	each	163.75
18.88.3	For 28.58 mm x 22.22 mm outer dia pipe	each	168.40
18.88.4	For 34.00 mm x 15.88 mm outer dia pipe	each	271.80
18.88.5	For 34.00 mm x 22.22 mm outer dia pipe	each	275.30
18.88.6	For 34.00 mm x 28.58 mm outer dia pipe	each	275.30
18.88.7	For 42.70 mm x 15.88 mm outer dia pipe	each	417.00
18.88.8	For 42.70 mm x 22.22 mm outer dia pipe	each	420.45
18.88.9	For 42.70 mm x 28.58 mm outer dia pipe	each	420.45
18.88.10	For 42.70 mm x 34.00 mm outer dia pipe	each	449.50
18.88.11	For 48.60 mm x 15.88 mm outer dia pipe	each	543.60
18.88.12	For 48.60 mm x 22.22 mm outer dia pipe	each	545.90

Code No.	Description	Unit	Rate ₹
	18.88.13 For 48.60 mm x 28.58 mm outer dia pipe	each	550.55
	18.88.14 For 48.60 mm x 34.00 mm outer dia pipe	each	556.35
	18.88.15 For 48.60 mm x 42.70 mm outer dia pipe	each	606.30
18.89	Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge. Slip Coupling/ Socket		
	18.89.1 For 15.88 mm outer dia pipe	each	131.25
	18.89.2 For 22.22 mm outer dia pipe	each	213.70
	18.89.3 For 28.58 mm outer dia pipe	each	274.10
	18.89.4 For 34.00 mm outer dia pipe	each	405.35
	18.89.5 For 42.70 mm outer dia pipe	each	569.15
	18.89.6 For 48.60 mm outer dia pipe	each	707.35
18.90	Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge. Elbow 90°		
	18.90.1 For 15.88mm outer dia pipe	each	99.90
	18.90.2 For 22.22 mm outer dia pipe	each	177.70
	18.90.3 For 28.58 mm outer dia pipe	each	245.10
	18.90.4 For 34.00 mm outer dia pipe	each	498.30
	18.90.5 For 42.70 mm outer dia pipe	each	763.10
	18.90.6 For 48.60 mm outer dia pipe	each	938.50
18.91	Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge. Reducing Elbow 90°		
	18.91.1 For 22.22 mm x 15.88 mm outer dia pipe	each	171.90
	18.91.2 For 28.58 mm x 15.88 mm outer dia pipe	each	250.90
	18.91.3 For 28.58 mm x 22.22 mm outer dia pipe	each	256.70
	18.91.4 For 34.00 mm x 22.22 mm outer dia pipe	each	372.85
	18.91.5 For 34.00 mm x 28.58 mm outer dia pipe	each	459.95
	18.91.6 For 42.70 mm x 34.00 mm outer dia pipe	each	810.75
18.92	Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge.		

Code No.	Description	Unit	Rate ₹
	Equal Tee		
	18.92.1 For 15.88 mm outer dia pipe	each	184.70
	18.92.2 For 22.22 mm outer dia pipe	each	268.30
	18.92.3 For 28.58 mm outer dia pipe	each	343.80
	18.92.4 Details of Cost for one no.	each	716.65
	18.92.5 For 42.70 mm outer dia pipe	each	1,003.55
	18.92.6 For 48.60 mm outer dia pipe	each	1,194.00
18.93	Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge.		
	Reducing Tee		
	18.93.1 For 22.22 mm x 15.88 mm outer dia pipe	each	261.35
	18.93.2 For 28.58 mm x 15.88 mm outer dia pipe	each	325.20
	18.93.3 For 28.58 mm x 22.22 mm outer dia pipe	each	338.00
	18.93.4 For 34.00 mm x 15.88 mm outer dia pipe	each	636.50
	18.93.5 For 34.00 mm x 22.22 mm outer dia pipe	each	648.10
	18.93.6 For 34.00 mm x 28.58 mm outer dia pipe	each	655.10
	18.93.7 For 42.70 mm x 15.88 mm outer dia pipe	each	951.25
	18.93.8 For 42.70 mm x 22.22 mm outer dia pipe	each	953.60
	18.93.9 For 42.70 mm x 28.58 mm outer dia pipe	each	954.75
	18.93.10 For 42.70 mm x 34.00 mm outer dia pipe	each	964.05
	18.93.11 For 48.60 mm x 15.88 mm outer dia pipe	each	1,038.40
	18.93.12 For 48.60 mm x 22.22 mm outer dia pipe	each	1,060.45
	18.93.13 For 48.60 mm x 28.58 mm outer dia pipe	each	1,068.60
	18.93.14 For 48.60 mm x 34.00 mm outer dia pipe	each	1,112.70
	18.93.15 For 48.60 mm x 42.70 mm outer dia pipe	each	1,153.35
18.94	Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge.		
	Male Thread Tee		
	18.94.1 For 15.88 mm outer dia x 15 mm nominal dia threaded	each	332.20
	18.94.2 For 22.22 mm outer dia x 15 mm nominal dia threaded	each	399.55
	18.94.3 For 22.22 mm outer dia x 20 mm nominal dia threaded	each	427.45
	18.94.4 For 28.58 mm outer dia x 15 mm nominal dia threaded	each	480.85
	18.94.5 For 28.58 mm outer dia x 20 mm nominal dia threaded	each	501.75
	18.94.6 For 28.58 mm outer dia x 25 mm nominal dia threaded	each	561.00

Code No.	Description	Unit	Rate ₹
18.94.7	For 34.00 mm outer dia x 15 mm nominal dia threaded	each	699.20
18.94.8	For 34.00 mm outer dia x 20 mm nominal dia threaded	each	756.15
18.94.9	For 34.00 mm outer dia x 25 mm nominal dia threaded	each	902.50
18.94.10	For 34.00 mm outer dia x 32 mm nominal dia threaded	each	1,139.45
18.94.11	For 42.70 mm outer dia x 15 mm nominal dia threaded	each	1,067.40
18.94.12	For 42.70 mm outer dia x 20 mm nominal dia threaded	each	1,092.95
18.94.13	For 42.70 mm outer dia x 25 mm nominal dia threaded	each	1,189.40
18.94.14	For 42.70 mm outer dia x 32 mm nominal dia threaded	each	1,320.65
18.94.15	For 42.70 mm outer dia x 40 mm nominal dia threaded	each	1,604.05
18.94.16	For 48.60 mm outer dia x 15 mm nominal dia threaded	each	1,161.50
18.94.17	For 48.60 mm outer dia x 20 mm nominal dia threaded	each	1,196.35
18.94.18	For 48.60 mm outer dia x 25 mm nominal dia threaded	each	1,247.45
18.94.19	For 48.60 mm outer dia x 32 mm nominal dia threaded	each	1,498.35
18.94.20	For 48.60 mm outer dia x 40 mm nominal dia threaded	each	1,662.10
18.94.21	For 48.60 mm outer dia x 50 mm nominal dia threaded	each	2,031.45
18.95	Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge. Female Thread Tee		
18.95.1	For 15.88 mm outer dia x 15 mm nominal dia threaded	each	339.15
18.95.2	For 22.22 mm outer dia x 15 mm nominal dia threaded	each	399.55
18.95.3	For 22.22 mm outer dia x 20 mm nominal dia threaded	each	413.50
18.95.4	For 28.58 mm outer dia x 15 mm nominal dia threaded	each	516.85
18.95.5	For 28.58 mm outer dia x 20 mm nominal dia threaded	each	528.50
18.95.6	For 28.58 mm outer dia x 25 mm nominal dia threaded	each	578.45
18.95.7	For 34.00 mm outer dia x 15 mm nominal dia threaded	each	775.90
18.95.8	For 34.00 mm outer dia x 20 mm nominal dia threaded	each	788.65
18.95.9	For 34.00 mm outer dia x 25 mm nominal dia threaded	each	889.70
18.95.10	For 34.00 mm outer dia x 32 mm nominal dia threaded	each	1,056.95
18.95.11	For 42.70 mm outer dia x 15 mm nominal dia threaded	each	1,038.40
18.95.12	For 42.70 mm outer dia x 20 mm nominal dia threaded	each	1,056.95
18.95.13	For 42.70 mm outer dia x 25 mm nominal dia threaded	each	1,187.05
18.95.14	For 42.70 mm outer dia x 32 mm nominal dia threaded	each	1,239.30
18.95.15	For 42.70 mm outer dia x 40 mm nominal dia threaded	each	1,349.65
18.95.16	For 48.60 mm outer dia x 15 mm nominal dia threaded	each	1,237.00
18.95.17	For 48.60 mm outer dia x 20 mm nominal dia threaded	each	1,249.75
18.95.18	For 48.60 mm outer dia x 25 mm nominal dia threaded	each	1,295.05

Code No.	Description	Unit	Rate ₹
	18.95.19 For 48.60 mm outer dia x 32 mm nominal dia threaded	each	1,375.20
	18.95.20 For 48.60 mm outer dia x 40 mm nominal dia threaded	each	1,432.15
	18.95.21 For 48.60 mm outer dia x 50 mm nominal dia threaded	each	1,586.60
18.96	Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge. Female Thread Connector/ Adapter		
	18.96.1 For 15.88 mm outer dia x 15 mm nominal dia threaded	each	220.70
	18.96.2 For 22.22 mm outer dia x 15 mm nominal dia threaded	each	267.15
	18.96.3 For 22.22 mm outer dia x 20 mm nominal dia threaded	each	275.30
	18.96.4 For 28.58 mm outer dia x 15 mm nominal dia threaded	each	321.75
	18.96.5 For 28.58 mm outer dia x 20 mm nominal dia threaded	each	332.20
	18.96.6 For 28.58 mm outer dia x 25 mm nominal dia threaded	each	391.45
	18.96.7 For 34.00 mm outer dia x 25 mm nominal dia threaded	each	475.05
	18.96.8 For 34.00 mm outer dia x 32 mm nominal dia threaded	each	624.90
	18.96.9 For 42.70 mm outer dia x 32 mm nominal dia threaded	each	669.00
	18.96.10 For 42.70 mm outer dia x 40 mm nominal dia threaded	each	791.00
	18.96.11 For 48.60 mm outer dia x 40 mm nominal dia threaded	each	973.35
	18.96.12 For 48.60 mm outer dia x 50 mm nominal dia threaded	each	1,120.85
18.97	Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge. Male Thread Connector/ Adapter		
	18.97.1 For 15.88 mm outer dia x 15 mm nominal dia threaded	each	224.15
	18.97.2 For 22.22 mm outer dia x 15 mm nominal dia threaded	each	263.65
	18.97.3 For 22.22 mm outer dia x 20 mm nominal dia threaded	each	288.05
	18.97.4 For 28.58 mm outer dia x 20 mm nominal dia threaded	each	363.55
	18.97.5 For 28.58 mm outer dia x 25 mm nominal dia threaded	each	371.70
	18.97.6 For 34.00 mm outer dia x 25 mm nominal dia threaded	each	535.45
	18.97.7 For 34.00 mm outer dia x 32 mm nominal dia threaded	each	656.25
	18.97.8 For 42.70 mm outer dia x 32 mm nominal dia threaded	each	753.80
	18.97.9 For 42.70 mm outer dia x 40 mm nominal dia threaded	each	843.25
	18.97.10 For 48.60 mm outer dia x 40 mm nominal dia threaded	each	975.65
	18.97.11 For 48.60 mm outer dia x 50 mm nominal dia threaded	each	1,321.80
18.98	Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile		

Code No.	Description	Unit	Rate ₹
	or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge.		
	Valve Connector		
	18.98.1 For 15.88 mm outer dia x 15 mm nominal dia threaded	each	271.80
	18.98.2 For 22.22 mm outer dia x 15 mm nominal dia threaded	each	320.55
	18.98.3 For 22.22 mm outer dia x 20 mm nominal dia threaded	each	342.65
	18.98.4 For 28.58 mm outer dia x 25 mm nominal dia threaded	each	492.50
	18.98.5 For 34.00 mm outer dia x 32 mm nominal dia threaded	each	730.60
	18.98.6 For 42.70 mm outer dia x 40 mm nominal dia threaded	each	1,016.30
	18.98.7 For 48.60 mm outer dia x 50 mm nominal dia threaded	each	1,365.90
18.99	Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge.		
	Female Threaded Elbow 90°		
	18.99.1 For 15.88 mm outer dia x 15 mm nominal dia threaded	each	238.10
	18.99.2 For 22.22 mm outer dia x 15 mm nominal dia threaded	each	319.40
	18.99.3 For 22.22 mm outer dia x 20 mm nominal dia threaded	each	329.85
	18.99.4 For 25.58 mm outer dia x 25 mm nominal dia threaded	each	489.00
	18.99.5 For 34.00 mm outer dia x 32 mm nominal dia threaded	each	851.40
	18.99.6 For 42.70 mm outer dia x 32 mm nominal dia threaded	each	1,068.60
	18.99.7 For 42.70 mm outer dia x 40 mm nominal dia threaded	each	1,155.70
	18.99.8 For 48.60 mm outer dia x 40 mm nominal dia threaded	each	1,281.15
	18.99.9 For 48.60 mm outer dia x 50 mm nominal dia threaded	each	1,493.70
18.100	Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge.		
	Male Threaded Elbow 90°		
	18.100.1 For 15.88 mm outer dia x 15 mm nominal dia threaded	each	250.90
	18.100.2 For 22.22 mm outer dia x 15 mm nominal dia threaded	each	317.10
	18.100.3 For 22.22 mm outer dia x 20 mm nominal dia threaded	each	334.50
	18.100.4 For 28.58 mm outer dia x 25 mm nominal dia threaded	each	437.90
	18.100.5 For 34.00 mm outer dia x 25 mm nominal dia threaded	each	702.70
	18.100.6 For 34.00 mm outer dia x 32 mm nominal dia threaded	each	854.85
	18.100.7 For 42.70 mm outer dia x 32 mm nominal dia threaded	each	1,084.85
	18.100.8 For 42.70 mm outer dia x 40 mm nominal dia threaded	each	1,231.20
	18.100.9 For 48.60 mm outer dia x 40 mm nominal dia threaded	each	1,382.20
	18.100.10 For 48.60 mm outer dia x 50 mm nominal dia threaded	each	1,683.00

Code No.	Description	Unit	Rate ₹
18.101	Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge.		
	Cap		
18.101.1	For 15.88 mm outer dia pipe	each	52.25
18.101.2	For 22.22 mm outer dia pipe	each	74.35
18.101.3	For 28.58 mm outer dia pipe	each	97.55
18.101.4	For 34.00 mm outer dia pipe	each	200.95
18.101.5	For 42.70 mm outer dia pipe	each	293.85
18.101.6	For 48.60 mm outer dia pipe	each	383.30
18.102	Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge.		
	Pipe Bridge		
18.102.1	For 15.88 mm outer dia pipe	each	248.55
18.102.2	For 22.22 mm outer dia pipe	each	314.75
18.102.3	For 28.58 mm outer dia pipe	each	472.75



**SUB HEAD : 19.0**

**DRAINAGE**



**BASIC RATES (SH: 19.0 DRAINAGE)**

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
0101	Bhisti	day	328.00
0103	Blacksmith 2nd class	day	361.00
0114	Beldar	day	297.00
0115	Coolie	day	297.00
0123	Mason (brick layer) 1 st class	day	393.00
0124	Mason (brick layer) 2nd class	day	361.00
0285	Brick Aggregate (Single size) : 63 mm nominal size	cum	500.00
0287	Brick Aggregate (Single size) : 40 mm nominal size	cum	510.00
0362	Brick bats	cum	500.00
0367	Portland Cement	tonne	5240.00
0983	Fine sand (zone IV)	cum	650.00
1003	Mild steel round bar above 12 mm dia	quintal	4300.00
1006	Mild steel square bars	quintal	4500.00
1336	Clearing eye with chain and lid 100 mm dia	each	44.00
1337	Clearing eye with chain and lid 150 mm dia	each	50.00
1352	C.I. cover and frame 300x300 mm inside	each	300.00
1353	C.I.cover without frame 300x300 mm inside i/c cover of 4.50 kg	each	225.00
1354	Rectangular cover 455x610 mm with frame (low duty)	each	1500.00
1355	Rectangular cover 455x610 mm without frame (low duty)	each	1000.00
1356	500 mm dia cover with frame (medium duty)	each	4750.00
1357	500 mm dia cover without frame (medium duty)	each	2300.00
1364	C.I. grating 100x100 mm	each	15.00
1366	C.I. grating 150x150 mm	each	25.00
1367	C.I. grating 180x180 mm	each	30.00
1617	S.C. I. soil, waste and vent single socketed pipe 1.80 metres long: 100 mm dia	each	1150.00
1618	S.C.I. soil, waste and vent single socketed pipe 1.80 metres long: 150 mm dia	each	1750.00
1621	S.C.I. plain bend 100 mm dia	each	350.00
1622	S.C.I. plain bend 150 mm dia	each	600.00
1628	S.C.I. plain single equal junctions 100x100x100 mm dia	each	450.00
1700	R.C.C. pipes NP2 class 100 mm dia	metre	200.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
1701	R.C.C. pipes NP2 class 150 mm dia	metre	210.00
1702	R.C.C. pipes NP2 class 250 mm dia	metre	260.00
1703	R.C.C. pipes NP2 class 300 mm dia	metre	300.00
1704	R.C.C. pipes NP2 class 450 mm dia	metre	400.00
1705	R.C.C. pipes NP2 class 500 mm dia	metre	580.00
1706	R.C.C. pipes NP2 class 600 mm dia	metre	920.00
1707	R.C.C. pipes NP2 class 700 mm dia	metre	1050.00
1709	R.C.C. pipes NP2 class 800 mm dia	metre	1170.00
1710	R.C.C. pipes NP2 class 900 mm dia	metre	1280.00
1711	R.C.C. pipes NP2 class 1000 mm dia	metre	1590.00
1712	R.C.C. pipes NP2 class 1100 mm dia	metre	1875.00
1713	R.C.C. pipes NP2 class 1200 mm dia	metre	1925.00
1714	R.C.C. collars NP2 class 100 mm dia	each	30.00
1715	R.C.C. collars NP2 class 150 mm dia	each	35.00
1716	R.C.C. collars NP2 class 250 mm dia	each	50.00
1717	R.C.C. collars NP2 class 300 mm dia	each	55.00
1718	R.C.C. collars NP2 class 450 mm dia	each	100.00
1719	R.C.C. collars NP2 class 500 mm dia	each	115.00
1720	R.C.C. collars NP2 class 600 mm dia	each	140.00
1721	R.C.C. collars NP2 class 700 mm dia	each	150.00
1723	R.C.C. collars NP2 class 800 mm dia	each	200.00
1724	R.C.C. collars NP2 class 900 mm dia	each	235.00
1725	R.C.C. collars NP2 class 1000 mm dia	each	280.00
1726	R.C.C. collars NP2 class 1100 mm dia	each	300.00
1727	R.C.C. collars NP2 class 1200 mm dia	each	350.00
1728	RCC pipe 450 mm dia NP-3 spigot	metre	1496.00
1729	RCC pipe 600 mm dia NP-3 spigot	metre	1995.00
1730	RCC pipe 900 mm dia NP-3 spigot	metre	3150.00
1731	RCC pipe 1000 mm dia NP-3 spigot	metre	3885.00
1732	RCC pipe 1200 mm dia NP-3 spigot	metre	5040.00
1733	RCC pipe 1800 mm dia NP-3 spigot	metre	9450.00
1734	RCC pipe 450 mm dia NP-4 spigot	metre	1733.00
1735	RCC pipe 600 mm dia NP-4 spigot	metre	2310.00

Code No.	Description	Unit	Rate ₹
1736	RCC pipe 900 mm dia NP-4 spigot	metre	4595.00
1737	RCC pipe 1000 mm dia NP-4 spigot	metre	5565.00
1738	RCC pipe 1200 mm dia NP-4 spigot	metre	6510.00
1739	RCC pipe 1800 mm dia NP-4 spigot	metre	13650.00
1854	Stoneware pipes grade A (60 cm long) 100 mm dia	each	50.00
1855	Stoneware pipes grade A (60 cm long) 150 mm dia	each	80.00
1856	Stoneware pipes grade A (60 cm long) 200 mm dia	each	135.00
1858	Stoneware pipes grade A (60 cm long) 250 mm dia	each	220.00
1859	Stoneware pipes grade A (60 cm long) 300 mm dia	each	240.00
1881	Spun yarn	kilogram	50.00
1900	S.W. gully trap P type 100x100 mm	each	90.00
1902	S.W. gully trap P type 150x100 mm	each	130.00
1904	S.W. gully trap P type 180x150 mm	each	225.00
2201	Carriage of bricks	1000 Nos	284.39
2209	Carriage of cement	tonne	94.80
2224	Carriage of S.W. pipes 100 mm dia	100 metre	142.19
2225	Carriage of S.W. pipes 150 mm dia	100 metre	284.39
2226	Carriage of S.W. pipes 200 mm dia	100 metre	473.98
2228	Carriage of S.W. pipes 250 mm dia	100 metre	812.54
2229	Carriage of S.W. pipes 300 mm dia	100 metre	1015.68
2260	Carriage of brick aggregate	cum	115.92
2261	Carriage of fine sand (1 part badarpur sand: 2 parts jamuna sand)	cum	106.64
2272	Carriage of Stainless Steel pipes below 100 mm dia	tonne	94.80
2275	Carriage of R.C.C. pipes 100 mm dia	100 metre	233.10
2281	Carriage of R.C.C. pipes 150 mm dia	100 metre	388.51
2287	Carriage of R.C.C. pipes 250 mm dia	100 metre	898.07
2290	Carriage of R.C.C. pipes 300 mm dia	100 metre	1110.03
2299	Carriage of R.C.C. pipes 450 & 500 mm dia	100 metre	2590.06
2303	Carriage of R.C.C. pipes 600,700,750 & 800 mm dia	100 metre	3885.10
2331	Carriage of R.C.C. pipes 900 mm dia	100 metre	5827.64
2332	Carriage of R.C.C. pipes 1000 mm dia	100 metre	7770.19
2333	Carriage of R. C. C. pipes 1100 mm dia	100 metre	7770.19

Code No.	Description	Unit	Rate ₹
2334	Carriage of R.C.C. pipes 1200 mm dia	100 metre	7770.19
2336	Carriage of R.C.C. pipe above 1200 mm dia and upto 1800 mm dia	100 metre	7339.87
2602	Common burnt clay F.P.S. (non modular) bricks class designation 7.5	1000 Nos	3800.00
3860	560 mm dia cover with frame (Heavy duty)	each	9000.00
3861	560 mm dia cover without frame (Heavy duty)	each	5000.00
7087	S.C.I. Tee 150 mm	each	600.00
7128	S.W. intercepting trap 100 mm dia	each	190.00
7129	S.W. intercepting trap 150 mm dia	each	250.00
7130	Rectangular shape 600x450 mm precast R.C.C. manhole cover with frame - L.D. - 25	each	750.00
7131	Square shape 450x450 mm precast R.C.C. manhole cover with frame - L.D. - 25	each	650.00
7132	Circular shape 450 mm dia precast R.C.C. manhole cover with frame - L.D. - 25	each	600.00
7133	Rectangular shape 500x500 mm precast R.C.C. manhole cover with frame - M.D. - 10	each	700.00
7134	Circular shape 500 mm dia precast R.C.C. manhole cover with frame -M.D.-10	each	600.00
7135	Circular shape 560 mm dia precast R.C.C. manhole cover with frame - H.D. - 20	each	1100.00
7136	Circular shape 560 mm dia precast R.C.C. manhole cover with frame - E.H.D. - 35	each	1225.00
7354	Plastic encapsulated M.S. foot rest 30x20x15 cm	each	115.00
7380	Precast R.C.C. grating with frame 500x450 mm horizontal grating	each	650.00
7381	Precast R.C.C. grating with frame 450x100 mm vertical grating	each	325.00
8701	SS pipe 304 grades with press fit technology as per JIS 3448 standard 48.60 mm outer dia	metre	680.00
9999	Sundries	L.S.	1.70

## 19.0 DRAINAGE

Code No.	Description	Unit	Rate ₹
	<p><b>NOTE</b> :- The rates given for all the items under sub-head ' Drainage' are applicable to work executed in soils above sub- soil water level. Extra allowance has to be made for work under sub- soil water level.</p> <p><b>STONE WARE PIPES AND FITTINGS</b></p>		
19.1	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete :		
19.1.1	100 mm diameter	metre	197.60
19.1.2	150 mm diameter	metre	301.90
19.1.3	200 mm diameter	metre	447.25
19.1.4	250 mm diameter	metre	676.75
19.1.5	300 mm diameter	metre	747.90
19.2	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete as per standard design :		
19.2.1	100 mm diameter S.W. pipe	metre	543.55
19.2.2	150 mm diameter S.W. pipe	metre	664.80
19.2.3	200 mm diameter S.W. pipe	metre	774.95
19.2.4	250 mm diameter S.W. pipe	metre	896.15
19.3	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) up to haunches of S.W. pipes including bed concrete as per standard design :		
19.3.1	100 mm diameter S.W. pipe	metre	258.35
19.3.2	150 mm diameter S.W. pipe	metre	418.70
19.3.3	200 mm diameter S.W. pipe	metre	492.15
19.3.4	250 mm diameter S.W. pipe	metre	572.95
19.3.5	300 mm diameter S.W. pipe	metre	661.10
19.4	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design :		
19.4.1	100x100 mm size P type		
19.4.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	1,520.90
19.4.1.2	With Sewer bricks conforming to IS : 4885	each	1,522.10

Code No.	Description	Unit	Rate ₹
19.4.2	150 x 100 mm size P type		
19.4.2.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	1,546.95
19.4.2.2	With sewer bricks conforming to IS : 4885	each	1,548.15
19.4.3	180x150 mm size P type		
19.4.3.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	1,635.00
19.4.3.2	With Sewer bricks conforming to IS : 4885	each	1,636.20
19.5	Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps :		
19.5.1	100 mm diameter	metre	29.30
19.5.2	150 mm diameter	metre	32.45
19.5.3	200 mm diameter	metre	34.50
19.5.4	250 mm diameter	metre	36.55
19.5.5	300 mm diameter	metre	38.65
19.5.6	350 mm diameter	metre	44.50
19.5.7	400 mm diameter	metre	48.65
19.5.8	450 mm diameter	metre	50.70
19.6	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :		
19.6.1	100 mm dia. R.C.C. pipe	metre	311.90
19.6.2	150 mm dia. R.C.C. pipe	metre	340.35
19.6.3	250 mm dia. R.C.C. pipe	metre	455.90
19.6.4	300 mm dia. R.C.C. pipe	metre	494.35
19.6.5	450 mm dia. R.C.C. pipe	metre	688.90
19.6.6	500 mm dia. R.C.C. pipe	metre	915.85
19.6.7	600 mm dia. R.C.C. pipe	metre	1,358.65
19.6.8	700 mm dia. R.C.C. pipe	metre	1,539.00
19.6.9	800 mm dia. R.C.C. pipe	metre	1,722.50
19.6.10	900 mm dia. R.C.C. pipe	metre	1,931.75
19.6.11	1000 mm dia. R.C.C. pipe	metre	2,395.25
19.6.12	1100 mm dia. R.C.C. pipe	metre	2,821.35
19.6.13	1200 mm dia. R.C.C. pipe	metre	3,002.85
19.7	Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand ) with R.C.C. top slab with 1:2:4 mix (1 cement : 2		

Code No.	Description	Unit	Rate ₹
	coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design :		
19.7.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) :		
19.7.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	8,062.70
19.7.1.2	With Sewer bricks conforming to IS : 4885	each	8,065.80
19.7.2	Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (medium duty) 500 mm internal diameter, total weight of cover and frame to be not less than 116 kg (weight of cover 58 kg and weight of frame 58 kg) :		
19.7.2.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	17,592.00
19.7.2.2	With Sewer bricks conforming to IS : 4885	each	17,600.55
19.7.3	Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (heavy duty) 560 mm internal diameter, total weight of cover and frame to be not less than 208 kg (weight of cover 108 kg and weight of frame 100 kg) :		
19.7.3.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	22,155.05
19.7.3.2	With Sewer bricks conforming to IS : 4885	each	22,162.45
19.8	Extra for depth for manholes :		
19.8.1	Size 90x80 cm		
19.8.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	metre	5,481.40
19.8.1.2	With Sewer bricks conforming to IS : 4885	metre	5,490.50
19.8.2	Size 120x90 cm		
19.8.2.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	metre	6,563.00
19.8.2.2	With Sewer bricks conforming to IS : 4885	metre	6,573.85

Code No.	Description	Unit	Rate ₹
19.9	Constructing brick masonry circular type manhole 0.91 m internal dia at bottom and 0.56m dia at top in cement mortar 1:4 (1 cement :4 coarse sand), in side cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size), and making necessary channel in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement, all complete as per standard design :		
19.9.1	0.91 m deep with S.F.R.C. cover and frame (heavy duty, HD-20 grade designation) 560 mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182 kg., fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including centering, shuttering all complete. (Excavation, foot rests and 12mm thick cement plaster at the external surface shall be paid for separately) :		
19.9.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	8,241.55
19.9.1.2	With Sewer bricks conforming to IS : 4885	each	8,236.05
19.10	Extra depth for circular type manhole 0.91m internal dia (at bottom) beyond 0.91 m to 1.67 m		
19.10.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	metre	4,698.40
19.10.2	With Sewer bricks conforming IS : 4885	metre	4,706.00
19.11	Constructing brick masonry circular manhole 1.22 m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement :4 coarse sand) inside cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement foundation concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) and making necessary channel in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement, all complete as per standard design :		
19.11.1	1.68 m deep with SFRC Cover and frame (heavy duty HD-20 grade designation) 560 mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182 kg. fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including centering, shuttering all complete. (Excavation, foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately) :		

Code No.	Description	Unit	Rate ₹
	19.11.1.1 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	15,524.40
	19.11.1.2 With Sewer bricks conforming IS : 4885	each	15,525.85
19.12	Extra depth for circular type manhole 1.22 m internal dia (at bottom) beyond 1.68 m to 2.29 m :		
	19.12.1 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	metre	6,087.10
	19.12.2 With Sewer bricks conforming IS : 4885	metre	6,097.05
19.13	Constructing brick masonry circular manhole 1.52 m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement : 4 coarse sand) inside cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) and making necessary channel in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement, all complete as per standard design :		
	19.13.1 2.30 m deep with SFRC Cover and frame (heavy duty HD-20 grade designation) 560 mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182 kg. fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including centering, shuttering all complete. (Excavation, foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately) :		
	19.13.1.1 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	33,216.90
	19.13.1.2 With Sewer bricks conforming IS : 4885	each	33,229.95
19.14	Extra depth for circular type manhole 1.52 m internal dia (at bottom) beyond 2.30 m :		
	19.14.1 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	metre	14,522.90
	19.14.2 With Sewer bricks conforming IS : 4885	metre	14,548.65
19.15	Providing M.S. foot rests including fixing in manholes with 20x20x10 cm cement concrete blocks 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) as per standard design :		
	19.15.1 With 20x20 mm square bar	each	261.45
	19.15.2 With 20 mm diameter round bar	each	225.90
19.16	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910, on 12 mm dia steel bar conforming to IS : 1786, having minimum cross section as 23 mmx25 mm and over all minimum length 263 mm and width as 165 mm with		

Code No.	Description	Unit	Rate ₹
	minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design.	each	295.20
19.17	Replacement of M.S. foot rests in manholes including dismantling concrete blocks and fixing with 20x20x10 cm cement concrete blocks 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) :		
19.17.1	With 20x20 mm square bar	each	305.00
19.17.2	With 20 mm diameter round bar	each	269.45
19.18	Supplying and fixing C.I. cover without frame for manholes :		
19.18.1	455x610 mm rectangular C.I. cover (light duty) the weight of the cover to be not less than 23 kg	each	1,217.00
19.18.2	500 mm diameter C.I. cover (medium duty) the weight of the cover to be not less than 58 kg	each	2,739.45
19.18.3	560 mm diameter C.I. cover (heavy duty) the weight of the cover to be not less than 108 kg	each	5,880.70
19.19	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of required shape and approved quality		
19.19.1	L D - 2.5		
19.19.1.1	Rectangular shape 600x450 mm internal dimensions	each	1,108.05
19.19.1.2	Square shape 450 mm internal dimensions	each	942.65
19.19.1.3	Circular shape 450 mm internal diameter	each	884.60
19.19.2	M D - 10		
19.19.2.1	Square shape 450 mm internal dimension	each	1056.15
19.19.2.2	Circular shape 500 mm internal diameter	each	960.45
19.19.3	H D - 20		
19.19.3.1	Circular shape 560 mm internal diameter	each	1,492.05
19.19.4	EHD - 35		
19.19.4.1	Circular shape 560 mm internal dia	each	1,637.20
19.20	Supplying and fixing C.I. cover 300x300 mm without frame for gully trap (standard pattern) the weight of cover to be not less than 4.5 kg	each	277.00
19.21	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone		

Code No.	Description	Unit	Rate ₹
	aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 coarse sand), finished with a floating coat of neat cement and making necessary channels for the drain etc. complete :		
	19.21.1 For pipes 100 to 250 mm diameter	each	330.50
	19.21.2 For pipes 250 to 300 mm diameter	each	394.75
	19.21.3 For pipes 350 to 450 mm diameter	each	574.10
19.22	Providing sand cast iron drop connection externally for 60 cm drop from branch sewer line to main sewer manhole including inspection and cleaning eye with chain and lid, sand cast iron drop pipe and bend encased all-round with cement concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) with all centering and shuttering required, cutting holes in walls and making good with brick work in cement mortar 1:4 (1 cement : 4 coarse sand) plastered with cement mortar 1:3 (1 cement : 3 coarse sand) on inside of the manhole wall, lead caulked joints between sand cast iron pipes and fittings, stiff cement mortar 1:1 (1 cement : 1 fine sand) joints between sand cast iron tee and S.W. pipe, making required channels complete as per standard design and specifications :		
	19.22.1 100 mm dia sand cast iron drop connection	each	5,884.25
	19.22.2 150 mm dia sand cast iron drop connection	each	8,130.35
19.23	Extra for depths beyond 60 cm of sand cast iron drop connection complete :		
	19.23.1 For 100 mm dia sand cast iron drop connection	metre	1,811.45
	19.23.2 For 150 mm dia sand cast iron drop connection	metre	2,399.15
19.24	Dismantling of manhole including R.C.C. top slab, C.I. cover with frame, including stacking of useful materials near the site and disposal of unserviceable materials into municipal dumps within 50 m lead :		
	19.24.1 Rectangular manhole 90x80 cm and 45 cm deep	each	847.25
	19.24.2 Rectangular manhole 120x90 cm and 90 cm deep	each	1,487.15
	19.24.3 Rectangular arch type manhole 140x90 cm and 2.45 m deep	each	2,813.45
	19.24.4 Circular manhole 122 cm diameter and 1.68 m deep	each	2,155.85
19.25	Extra for depth of manholes dismantled :		
	19.25.1 Rectangular manhole 90x80 cm and beyond 45 cm depth	metre	677.80
	19.25.2 Rectangular manhole 120x90 cm and beyond 90 cm depth	metre	807.15
	19.25.3 Rectangular arch type manhole 140x90 cm and beyond 2.45 m depth (up to 4.25 m depth)	metre	653.30
	19.25.4 Circular manhole 122 cm diameter and beyond 1.68 m depth (up to 2.29 m depth)	metre	736.95

Code No.	Description	Unit	Rate ₹
19.26	Raising manhole cover and frame slab to required level including dismantling existing slab and making good the damage as required (Raising depth of manhole to be paid separately) :		
19.26.1	Rectangular manhole 90x80 cm with rectangular cover 600x450 mm of grade LD - 2.5	each	1,446.35
19.26.2	Rectangular manhole 120x90 cm with circular cover 500 mm dia of grade MD - 10	each	2,267.90
19.26.3	Rectangular manhole 120x90 cm with circular cover 560 mm dia of grade HD - 20	each	2,110.85
19.26.4	Circular manhole 140 cm dia with circular cover 600 mm dia of grade EHD - 35	each	195.95
19.27	Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design :		
19.27.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	3,774.95
19.28	Constructing brick masonry road gully chamber 45x45x77.5 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand ) with pre-cast R.C.C. vertical grating complete as per standard design :		
19.28.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	4,228.00
19.29	Constructing brick masonry road gully chamber 110x50x77.5 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame and vertical grating complete as per standard design :		
19.29.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	7,166.70
19.30	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg), R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand), finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design :		
19.30.1	Inside dimensions 455x610 mm and 45 cm deep for single pipe line :		
19.30.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	4,505.00

Code No.	Description	Unit	Rate ₹
19.30.2	Inside dimensions 500x700 mm and 45 cm deep for pipe line with one or two inlets :		
19.30.2.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	5,159.50
19.30.3	Inside dimensions 600x 850 mm and 45 cm deep for pipe line with three or more inlets :		
19.30.3.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	5,967.85
19.31	Extra for depth beyond 45 cm of brick masonry chamber :		
19.31.1	For 455x610 mm size		
19.31.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	metre	3,820.80
19.31.2	For 500x700 mm size		
19.31.2.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	metre	4,165.80
19.31.3	For 600x850 mm size		
19.31.3.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	metre	4,847.85
19.32	Making soak pit 2.5 m diameter 3.0 metre deep with 45 x 45 cm dry brick honey comb shaft with bricks and S.W. drain pipe 100 mm diameter, 1.8 m long complete as per standard design.		
19.32.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	16,705.45
19.33	Constructing soak pit 1.20x1.20x1.20 m filled with brickbats including S.W. drain pipe 100 mm diameter and 1.20 m long complete as per standard design.	each	2,049.45
19.34	Providing and fixing S.W. intercepting trap in manholes with stiff mixture of cement mortar 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete :		
19.34.1	100 mm dia	each	282.75
19.34.2	150 mm dia	each	383.25
19.35	Providing and laying Non Pressure NP-3 class (Medium duty) R.C.C. pipes including collars/spigot jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete		
19.35.1	450 mm dia RCC pipes.	metre	1905.15
19.35.2	600 mm dia RCC pipes.	metre	2490.15
19.35.3	900 mm dia RCC pipes.	metre	3922.10
19.35.4	1000 mm dia RCC pipes. (Laying by manual/ machanical means)	metre	4851.25

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
19.35.5	1200 mm dia RCC pipes. (Laying by manual/ mechanical means)	metre	6363.55
19.35.6	1800 mm dia RCC pipes. (Laying by manual/ mechanical means)	metre	11683.90
19.36	Providing and laying Non Pressure NP-4 class (Heavy duty) R.C.C. pipes including collars/spigot jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete		
19.36.1	450 mm dia RCC pipes.	metre	2180.45
19.36.2	600 mm dia RCC pipes.	metre	2856.00
19.36.3	900 mm dia RCC pipes.	metre	5600.45
19.36.4	1000 mm dia RCC pipes.(Laying by manual/ mechanical means)	metre	6802.55
19.36.5	1200 mm dia RCC pipes. (Laying by manual/ mechanical means)	metre	8070.95
19.36.6	1800 mm dia RCC pipes. (Laying by manual/ mechanical means)	metre	16513.95

**SUB HEAD : 20.0**

**PILE WORK**



**BASIC RATES (SH: 20.0 PILE WORK)**

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
0017	Hire and running charges of tipper	day	1700.00
0018	Hire and running charges of loader	day	5000.00
0024	Hire and running charges of hydraulic piling rig with power unit etc. including complete accessories and shifting at site	day	34000.00
0025	Hire and running charges of light crane	day	2200.00
0026	Hire and running charges of bentonite pump	day	4200.00
0027	Hire and running charges of vibrating pile driving hammer complete with power unit and accessories	day	35000.00
0028	Hire and running charges of crane 20 tonne capacity	day	9300.00
0080	Hire and running charges of drill machine up to 400 mm dia (including cost of mobile oil, diesel consumption in ordinary soil and operator)	day	7500.00
0081	Pile Integrity testing equipment	day	3000.00
0114	Beldar	day	297.00
0130	Mistry	day	393.00
7181	C.I. pile shoe	kilogram	50.00
7182	M.S. clamps for pile shoe	kilogram	45.00
7183	Bentonite	tonne	3100.00
7246	Vertical load testing (initial) of piles in accordance with IS : 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification and up to 50 tonne capacity pile	per test	33200.00
7247	Vertical load testing (initial) of piles in accordance with IS : 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & above 50 tonne and up to 100 tonne	per test	40300.00
7248	Vertical load testing (initial) of piles in accordance with IS : 2911 (Part-IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & group of two or more up to 50 tonne	per test	48500.00
7249	Cyclic vertical load testing of piles in accordance with IS : 2911 (Part-IV) including preparation of pile head etc. for Single pile up to 50 tonne capacity	per test	15000.00

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
7250	Cyclic vertical load testing of piles in accordance with IS : 2911 (Part- IV) including preparation of pile head etc. for Single pile above 50 tonne capacity pile and up to 100 tonne capacity pile	per test	23000.00
7251	Cyclic vertical load testing of piles in accordance with IS : 2911 (Part- IV) including preparation of pile head etc. for Group of two piles up to 50 tonne capacity each	per test	29500.00
7252	Lateral load testing of single pile in accordance with IS : 2911 part -IV for determining safe allowable lateral load on pile up to 50 tonne capacity	per test	15000.00
7253	Lateral load testing of single pile in accordance with IS : 2911 part -IV for determining safe allowable lateral load on pile above 50 tonne capacity	per test	23600.00
9999	Sundries	L.S.	1.70

## 20.0 PILE WORK

Code No.	Description	Unit	Rate ₹
20.1	Providing, driving and installing driven cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap) :		
20.1.1	400 mm dia piles	metre	1,845.95
20.1.2	450 mm dia piles	metre	2,261.30
20.1.3	500 mm dia piles	metre	2,724.20
20.1.4	550 mm dia piles	metre	2,944.00
20.1.5	750 mm dia piles	metre	4,962.65
20.1.6	1000 mm dia piles	metre	8,148.85
20.1.7	1200 mm dia piles	metre	10,464.95
20.1.8	1500 mm dia piles	metre	14,650.50
20.2	Boring, providing and installing bored cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring, with bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc. all complete, including removal of excavated earth with all lifts and leads (Length of pile for payment shall be measured upto bottom of pile cap).		
20.2.1	300 mm dia piles	metre	1,424.75
20.2.2	400 mm dia piles	metre	1,729.40
20.2.3	450 mm dia piles	metre	2,238.60
20.2.4	500 mm dia. piles	metre	2,626.25
20.2.5	600 mm dia piles	metre	3,454.75
20.2.6	750 mm dia piles	metre	4,944.35
20.2.7	1000 mm dia piles	metre	8,201.40
20.2.8	1200 mm dia piles	metre	10,641.25
20.2.9	1500 mm dia piles	metre	15,168.35
20.3	Boring, Providing and installing cast in situ single under reamed piles of specified diameter and length below pile cap in M-25 cement concrete, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and the length of the pile to be embedded in pile cap etc. all complete. (Length of pile for payment shall be measured upto to the bottom of pile cap) :		
20.3.1	300 mm dia piles	metre	2,065.50
20.3.2	400 mm dia piles	metre	2,471.20

Code No.	Description	Unit	Rate ₹
	20.3.3 450 mm dia piles	metre	2,713.55
	20.3.4 550 mm dia piles	metre	3,001.60
20.4	Extra over item No. 23.3 for providing additional bulb in under reamed piles, under specified dia meter (Only the quantity of extra bulbs are to be paid).		
	20.4.1 300mm dia piles	each	1,417.30
	20.4.2 400mm dia piles	each	1,599.25
	20.4.3 450 mm dia piles	each	1,709.10
	20.4.4 550 mm dia piles	each	1,884.90
20.5	Providing, driving and installing driven Pre-cast reinforced cement concrete piles of specified diameter and length below the pile cap in M-25 cement concrete to carry safe working load not less than specified. With a central through preformed hole with M.S. black pipe of dia, 40 mm for grouting with cement sand grouting of mix 1:2 (1 cement : 2 coarse sand) under sufficient positive pressure to ensure complete filling including centring, shuttering, driving and removing the steel casing pipe and lifting casing etc. complete but excluding the cost of steel reinforcement. (Length of pile for payment shall be measured from top of the shoe to the bottom of pile cap).		
	20.5.1 400 mm dia piles	metre	2,328.45
	20.5.2 450 mm dia piles	metre	2,776.65
	20.5.3 500 mm dia piles	metre	2,945.35
	20.5.4 550 mm dia piles	metre	3,305.05
	20.5.5 750 mm dia piles	metre	5,977.70
	20.5.6 1000 mm dia piles	metre	8,079.15
20.6	Vertical load testing of piles in accordance with IS 2911 (Part IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of Engineer in-charge.		
	20.6.1 Single pile upto 50 tonne capacity		
	20.6.1.1 Initial test	per test	38,561.80
	20.6.1.2 Routine test	per test	17,422.50
	20.6.2 Single pile above 50 tonne and upto 100 tonne capacity		
	20.6.2.1 Initial test	per test	46,808.45
	20.6.2.2 Routine test	per test	26,714.50
	20.6.3 Group of two or more piles upto 50 tonne capacity		
	20.6.3.1 Initial test	per test	56,332.80
	20.6.3.2 Routine test	per test	34,264.20
20.7	Cyclic vertical load testing of pile in accordance with IS Code of practice IS: 2911 (part IV) including preparation of pile head etc for.		
	20.7.1 Single pile		
	20.7.1.1 Upto 50 tonne capacity pile	per test	17,422.50

Code No.	Description	Unit	Rate ₹
	20.7.1.2 Above 50 tonne and upto 100 tonne capacity pile	per test	26,714.50
	20.7.2 Group of two piles		
	20.7.2.1 Upto 50 tonne capacity each	per test	34,264.20
20.8	Lateral load testing of single pile in accordance with IS Code of practice IS : 2911 (Part IV) for determining safe allowable lateral load on pile :		
	20.8.1 Upto 50 tonne capacity pile	per test	17,422.50
	20.8.2 Above 50 tonne and upto 100 tonne capacity pile	per test	27,411.40
20.9	Integrity testing of Pile using Low Strain/ Sonic Integrity Test/ Sonic Echo Test method in accordance with IS 14893 including surface preparation of pile top by removing soil, mud, dust & chipping lean concrete lumps etc. and use of computerised equipment and high skill trained personal for conducting the test & submission of results, all complete as per direction of Engineer-in-charge.	per test	729.65
	<b>Note :-</b> The inclusion of the above item in the schedule of work shall be judiciously decided by the technical sanctioning authority, keeping in view the quality control, type of soil strata & importance of the project.		



**SUB HEAD : 21.0**

**ALUMINIUM WORK**



## BASIC RATES (SH: 21.0 ALUMINIUM WORK)

Code No.	Description	Unit	Rate ₹
0100	Bandhani	day	328.00
0111	Carpenter 1 st class	day	393.00
0112	Carpenter 2nd class	day	361.00
0114	Beldar	day	297.00
0116	Fitter (grade 1)	day	393.00
0123	Mason (brick layer) 1 st class	day	393.00
0124	Mason (brick layer) 2nd class	day	361.00
0139	Skilled Beldar (for floor rubbing etc.)	day	328.00
0589	Chromium plated Brass screws 20 mm	100 Nos	100.00
0689	Anodised Aluminium butt hinges 100x75x4 mm	10 Nos	520.00
0992	Galvanised steel plain sheets	quintal	5200.00
2406	Float glass sheet of nominal thickness 4 mm (weight not less than 10 kg/sqm)	sqm	330.00
2407	Float glass sheet of nominal thickness 5.5 mm (weight not less than 13.50 kg/sqm)	sqm	500.00
2408	Float glass sheet of nominal thickness 8 mm (weight not less than 20.00 kg/sqm)	sqm	700.00
2704	Aluminium Strip 40 mm wide and 2 mm thick	kilogram	220.00
7001	Brass 100mm mortice latch and lock with 6 levers without pair of handles	each	260.00
7019	Dash fastener / Chemical fastner	each	15.00
7048	Rawl plug 50 mm (designation 10 nos)	each	10.00
7306	Aluminium T or L sections	kilogram	200.00
7313	Expandable fastener with plastic sleeve and M.S. screws : 32 mm long	each	11.00
7347	Cadmium plated full threaded steel screws (30x4 mm dia)	100 Nos	28.00
7348	Aluminium washer 2 mm thick 15 mm dia	100 Nos	10.00
7388	Dash hold fastener 12.5 mm dia, 50 mm long with 6 mm dia bolt	each	50.00
7389	Anodising 15 microns on aluminium sections	kilogram	40.00
7390	Neoprene/EPDM rubber gasket	metre	25.00
7391	Anodising 25 microns on aluminium sections	kilogram	50.00
7392	Powder coating 50 microns on aluminium sections	kilogram	64.00
7393	Polyester powder coating 50 microns on aluminium sections	kilogram	70.00
7394	Double action hydraulic floor spring with stainless steel cover plate	each	1550.00

Code No.	Description	Unit	Rate ₹
7395	6 mm dia G.I. adjustable hangers including clips (up to 1.2 m length)	each	28.00
7396	Double action hydraulic floor spring with brass cover plate	each	1700.00
7477	Prelaminated particle board with one side decorative and other side balancing lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade) 12 mm thick	sqm	740.00
7480	Pre/aminated particle board with both sides decorative lamination, flat pressed 3 layer & graded (medium density) Grade I, Type II conforming to IS : 12823 (exterior grade) 12 mm thick	sqm	780.00
8646	Silicon sealant	cartridge	307.00
8647	Stainless steel screws 30 mm x4 mm	100 Nos	29.00
8648	Hermetically sealed double glazed unit made with 6 mm thick clear float glass both side having 12 mm air gap	sqm	2290.00
8649	Stainless steel (SS 304 grade) adjustable friction window stay 205 x 19 mm	each	172.00
8650	Stainless steel (SS 304 grade) adjustable friction window stay 255 x 19 mm	each	215.00
8651	Stainless steel (SS 304 grade) adjustable friction window stay 355 x 19 mm	each	275.00
8652	Stainless steel (SS 304 grade) adjustable friction window stay 510 x 19 mm	each	490.00
8653	Stainless steel (SS 304 grade) adjustable friction window stay 710 x 19 mm	each	850.00
8654	Masking tape	metre	2.50
8660	Aluminium casement window fastener (Anodised AC 15 )	each	40.00
8661	Aluminium casement window fastener (powder coated )	each	41.00
8662	Aluminium casement window fastener (polyester powder coated)	each	40.00
8663	Aluminium round shape handle (anodised AC 15)	each	49.00
8664	Aluminium round shape handle (powder coated)	each	54.00
8665	Aluminium round shape handle (polyester powder coated)	each	59.00
8666	Stainless steel screws 25 mm x4 mm	100 Nos	32.00
8774	Aluminium Grill	kg	250.00
8776	Stainless steel dash fastener of 8 mm dia and 75 mm long bolt	each	20.00
8778	Toughened glass 12 mm thickness	sqm	1900.00
9999	Sundries	L.S.	1.70

## 21.0 ALUMINIUM WORK

Code No.	Description	Unit	Rate ₹
21.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :		
21.1.1	For fixed portion		
21.1.1.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	kg	343.70
21.1.1.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	kg	373.00
21.1.1.3	Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)	kg	380.30
21.1.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)		
21.1.2.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	kg	397.75
21.1.2.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	kg	427.60
21.1.2.3	Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)	kg	435.05
21.2	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge.		
21.2.1	Pre-laminated particle board with decorative lamination on one side and balancing lamination on other side	sqm	1,017.25
21.2.2	Pre-laminated particle board with decorative lamination on both sides	sqm	1,066.00
21.3	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket		

Code No.	Description	Unit	Rate ₹
	etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):		
21.3.1	With float glass panes of 4.0 mm thickness	sqm	790.00
21.3.2	With float glass panes of 5.50 mm thickness	sqm	1,009.00
21.3.3	With float glass panes of 8 mm thickness	sqm	1,267.50
21.4	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge.		
21.4.1	With stainless steel cover plate minimum 1.25 mm thickness	each	2,020.05
21.4.2	With brass cover plate minimum 1.25 mm thickness	each	2,194.30
21.5	Providing and fixing powder coated aluminium work (minimum thickness of powder coating 50 micron) consisting of tee/ angle sections, of approved make conforming to IS : 733 in frames of false ceiling including aluminium angle cleats with necessary C.P. brass/ stainless steel sunk screws, aluminium perimeter angles fixed to wall with stainless steel sunk screws, aluminium perimeter angles fixed to wall with stainless steel rawl plugs @ 450 mm centre to centre and fixing the frame work to G.I. level adjusting hangers 6 mm dia. with necessary cadmium plated machine screws all complete as per approved architectural drawings and direction of the Engineer-in-charge (level adjusting hangers, ceiling cleats and expansion hold fasteners to be paid for separately).	kg	459.15
21.6	Providing and fixing 6 mm dia. G.I. level adjusting hangers (upto 1200mm length), fixed to roof slabs by means of ceiling cleats made out of G.I. flat 40x3mm size 60 mm long and stainless steel expandable dash fastener of 12.5 mm dia and 50 mm long, complete as per direction of Engineer -in-charge.	each	105.70
21.7	Providing and fixing machine moulded aluminium covering of approved pattern & design, made out of machine cut aluminium sheet and machine holed for receiving dash fastener, over expansion joints on vertical surfaces/ceiling floors, the fixing on plate in one row on one side of joint only shall be done with stainless steel dash fasteners of 8 mm dia and 75 mm long bolt including providing aluminium washers 2 mm thick & 15 mm dia , at a staggered pitch of 200mm centre to centre including drilling holes in the receiving surface and providing expandable plastic sleeves in holes etc. complete as per direction of Engineer-in-charge.		
21.7.1	Anodised aluminium sheet 2.5mm thick (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	kg	469.20
21.7.2	Powder coated aluminium sheet 2.5mm thick (minimum thickness of powder coating 50 micron)	kg	498.50

Code No.	Description	Unit	Rate ₹
21.8	Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete.		
21.8.1	Upto 5mm depth and 5 mm width	metre	83.05
21.9	Extra for applying additional anodic coating AC 25 instead of AC 15 to aluminium extruded sections.		
21.9.1	For fixed portion	kg	11.60
21.9.2	For shutters of doors, windows & ventilators	kg	11.60
21.10	Providing and fixing double glazed hermetically sealed glazing in aluminium windows, ventilators and partition etc. with 6 mm thick clear float glass both side, having 12 mm air gap, including providing EPDM gasket, perforated aluminium spacers, desiccants, sealant (Both primary and secondary sealant) etc. as per specifications, drawings and direction of Engineer-in-charge complete.	sqm	3,381.90
21.11	Providing and fixing stainless steel (SS 304 grade) adjustable friction windows stays of approved quality with necessary stainless steel screws etc. to the side hung windows as per direction of Engineer-in-charge complete.		
21.11.1	205 X 19 mm	each	212.35
21.11.2	255 X 19 mm	each	262.30
21.11.3	355 X 19 mm	each	332.00
21.11.4	510 X 19 mm	each	581.70
21.11.5	710 X 19 mm	each	999.85
21.12	Providing and fixing aluminium tubular handle bar 32 mm outer dia, 3.0 mm thick & 2100 mm long with SS screws etc .complete as per direction of Engineer-in-Charge.		
21.12.1	Anodized (AC 15 ) aluminium tubular handle bar	each	462.35
21.12.2	Powder coated minimum thickness 50 micron aluminium tubular handle bar	each	507.90
21.12.3	Polyester powder coated minimum thickness 50 micron aluminium tubular handle bar	each	519.30
21.13	Providing and fixing 100mm brass locks (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	each	386.80
21.14	Providing and fixing anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868. Minimum anodic coating of grade AC 15) sub frame work for windows and ventilators with extruded built up standard tubular sections of approved make conforming to IS: 733 and IS: 1285, fixed with dash fastener of required dia and size (Dash fastener to be paid for separately).	kg	310.85
21.15	Providing and fixing aluminium casement windows fastener of required length for aluminium windows with necessary screws etc. complete.		
21.15.1	Anodized (AC 15) aluminium	each	51.20

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
	21.15.2 Powder coated minimum thickness 50 micron aluminium	each	52.40
	21.15.3 Polyester powder coated minimum thickness 50 micron aluminium	each	51.20
21.16	Providing and fixing aluminium round shape handle of outer dia 100mm with SS screws etc. complete as per direction of Engineer-in-charge		
	21.16.1 Anodized (AC 15 ) aluminium	each	61.70
	21.16.2 Powder coated minimum thickness 50 micron aluminium	each	67.50
	21.16.3 Polyester powder coated minimum thickness 50 micron aluminium	each	73.30
21.17	Providing and fixing anodised aluminium grill (anodised transparent or dyed to required shade according to IS: 1868 with minimum anodic coating of grade AC 15) of approved design/pattern, with approved standard section and fixed to the existing window frame with C.P. brass/ stainless steel screws @ 200 mm centre to centre, including cutting the grill to proper opening size for fixing and operation of handles and fixing approved anodised aluminium standard section around the opening, all complete as per requirement and direction of Engineer-in-charge. (Only weight of grill to be measured for payment).	kg	398.45
21.18	Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top & bottom pivot & spring type fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer-in-charge (Door handle, lock and stopper etc.to be paid separately).	sqm	4,692.70

**SUB HEAD : 22.0**

**WATER PROOFING**



## BASIC RATES (22.0 WATER PROOFING)

Code No.	Description	Unit	Rate ₹
0002	Hire charges of Concrete Mixer 0.25 to 0.40 cum with Hopper	day	800.00
0012	Vibrator (Needle type 40 mm)	day	325.00
0101	Bhisti	day	328.00
0114	Beldar	day	297.00
0115	Coolie	day	297.00
0123	Mason (brick layer) 1 st class	day	393.00
0124	Mason (brick layer) 2nd class	day	361.00
0125	Mason (for plain stone work) 2nd class	day	361.00
0128	Mate	day	328.00
0130	Mistry	day	393.00
0131	Painter	day	361.00
0155*	Mason (average)	day	377.00
0159	Skilled torch operator for laying tack	day	393.00
0285	Brick Aggregate (Single size) : 63 mm nominal size	cum	500.00
0295	Stone Aggregate (Single size) : 20 mm nominal size	cum	1200.00
0296	Stone Aggregate (Single size) : 12.5 mm nominal size	cum	1050.00
0297	Stone Aggregate (Single size) : 10 mm nominal size	cum	1050.00
0313	Blown type petroleum bitumen of penetration 85/25 of approved quality	tonne	37000.00
0316	Bitumen solution primer of approved quality	litre	45.00
0318	Bitumen felt fibre base (vegetable or animal):As per IS 7193 Grade I	sqm	60.00
0319	Bitumen felt as per IS 7193 Grade II	sqm	76.00
0322	Bitumen felt :Type 3 grade 1	sqm	60.00
0367	Portland Cement	tonne	5240.00
0370	Coal (steam)	quintal	400.00
0982	Coarse sand (zone III)	cum	1120.00
1169	Kota stone slab 25mm thick (rough chiseled)	sqm	210.00
1177	Stone grit 6 mm and down size or pea sized gravel	cum	925.00
1213	Water proofing materials	kilogram	32.00
1241	Commercial LPG in cylinder	kg	70.00
2200	Carriage of steam coal	tonne	121.88
2202	Carriage of stone aggregate below 40 mm nominal size	cum	106.64

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
2203	Carriage of coarse sand	cum	106.64
2209	Carriage of cement	tonne	94.80
2211	Carriage of tar / bitumen	tonne	106.64
2216	Carriage of stone blocks white & red sand stone & kota stone slab	tonne	94.80
2260	Carriage of brick aggregate	cum	115.92
3002	Polyvinyle chloride sheet 400 micron thick	sqm	35.00
7233	Fibre glass tissue reinforcement Type II Grade I	sqm	96.00
7427	Water stops Serrated with central bulb (225 mm wide, 8-11 mm thick)	metre	415.00
7428	Water stops Dumb bell with central bulb	metre	390.00
7429	Kickers	metre	375.00
8200	A.P.P. modified polymeric felt (two layers) 1.5 mm thick	sqm	60.00
8201	A.P.P. modified polymeric felt (two layers) 2 mm thick	sqm	75.00
8203	A.P.P. modified 2 mm thick membrane reinforced with glass fibre matt	sqm	85.00
8204	A.P.P. modified 3 mm thick membrane reinforced with glass fibre matt	sqm	200.00
8205	A.P.P. modified 3 mm thick membrane reinforced with polyester matt	sqm	230.00
8206	Bitumen primer for bitumen membrane	litre	82.00
8207	Geotextile 120 grams per sqm membrane	sqm	38.00
8501	Polymer modified cementation coating	kilogram	135.00
8502	Fibre glass cloth	sqm	44.00
9999	Sundries	L.S.	1.70

## 22.0 WATER PROOFING

Code No.	Description	Unit	Rate ₹
22.1	Providing and laying integral cement based treatment for water proofing on horizontal surface at all depth below ground level for under ground structures as directed by Engineer-in-Charge and consisting of : i) 1st layer of 22 mm to 25 mm thick approved and specified rough stone slab over a 25 mm thick base of cement mortar 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound conforming to IS:2645 in the recommended proportion over the leveling course (leveling course to be paid separately). Joints sealed and grouted with cement slurry mixed with water proofing compound. ii) 2nd layer of 25 mm thick cement mortar 1:3 (1 cement: 3 coarse sand) mixed with water proofing compound in recommended proportions. iii) Finishing top with stone aggregate of 10 mm to 12 mm nominal size spreading @ 8 cudm/sqm thoroughly embedded in the 2nd layer.		
	22.1.1 Using rough kota stone.	sqm	844.10
22.2	Providing and laying integral cement based treatment for water proofing on the vertical surface by fixing specified stone slab 22 mm to 25 mm thick with cement slurry mixed with water proofing compound conforming to IS:2645 in recommended proportions with a gap of 20 mm (minimum) between stone slabs and the receiving surfaces and filling the gaps with neat cement slurry mixed with water proofing compound and finishing the exterior of stone slab with cement mortar 1:3 (1 cement : 3 coarse sand) 20 mm thick with neat cement punning mixed with water proofing compound in recommended proportion complete at all levels and as directed by Engineer-in-charge :		
	22.2.1 Using rough Kota stone	sqm	1,036.90
22.3	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like consisting of :		
	(i) 1st course of applying cement slurry @ 4.4 kg/sqm mixed with water proofing compound conforming to IS 2645 in recommended proportions including rounding off junction of vertical and horizontal surface.		
	(ii) 11nd course of 20 mm cement plaster 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface.		
	(iii) 111rd course of applying blown or residual bitumen applied hot at 1.7 kg. per sqm of area.		
	(iv) 1Vth course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 kg/sqm).	sqm	449.45
22.4	Providing and Placing in position suitable PVC water stops conforming to IS:12200 for construction/ expansion joints between		

Code No.	Description	Unit	Rate ₹
	two RCC members and fixed to the reinforcement with binding wire before pouring concrete etc. complete :		
22.4.1	Serrated with central bulb (225 mm wide, 8-11 mm thick)	metre	489.45
22.4.2	Dumb bell with central bulb (180 mm wide, 8 mm thick)	metre	460.40
22.4.3	Kickers (320 mm wide, 5 mm thick)	metre	443.00
22.5	Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying : a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. This layer will be allowed to air cure for 4 hours. b) Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.	sqm	255.00
22.6	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying: a) after surface preparation, first layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around. d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured.	sqm	356.75
22.7	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment. b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand ) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge. d) Finishing the surface with 20 mm thick		

Code No.	Description	Unit	Rate ₹
	jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep. e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer-in-Charge :		
22.7.1	With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	sqm	882.60
22.8	Providing and laying four courses water proofing treatment with bitumen felt over roofs consisting of first and third courses of blown bitumen 85/25 or 90/15 conforming to IS : 702 applied hot @ 1.45 Kg per square metre of area for each course, second course of roofing felt type 3 grade-I (hessian based self finished bitumen felt) and fourth and final course of stone grit 6 mm and down size or pea-sized gravel spread at 6 cubic diameter per square metre including preparation of surface but excluding grading complete with :		
22.8.1	Bitumen felt (hessian base) type 3 grade I conforming to IS : 1322	sqm	291.40
22.9	Providing and laying six courses water proofing treatment with bitumen felt over roofs consisting of first, third and fifth course of blown bitumen 85/25 or 90/15 conforming to IS : 702 applied hot @ 1.45, 1.20 and 1.45 Kg per square metre of area respectively, second and fourth courses of roofing felt type 3 grade I conforming to IS : 1322 (Hessian based self finished bitumen felt) conforming to IS : 1322 and sixth and final course of stone grit 6 mm and down size or pea sized gravel spread at 6 cubic dm per sqm including preparation of surface but excluding grading, complete.	sqm	455.25
22.10	Providing and laying six courses water proofing treatment with bitumen felt over roofs consisting of first, third and fifth courses of blown or / and residual bitumen applied hot at 1.45, 1.20 and 1.70 kg per square metre of area respectively, second and fourth courses of roofing felt type 2 grade I (fibre base self finished bitumen felt) six and final courses of stone grit 6 mm and down size or pea sized gravel spread at 6cu.dm per sqm including preparation of surface, excluding grading, complete.	sqm	502.40
22.11	Providing and laying six courses water proofing treatment with bitumen felt over roofs consisting of first, third and fifth courses of blow or/ and residual bitumen applied hot at 1.45, 1.20 and 1.70 kg per square metre of area respectively, second and fourth courses of roofing felt type 2 grade II (glass fibre base self finished bitumen felt) and sixth and final course of stone grit 6 mm and down size or pea sized gravel spread at 6 cubic dm per sqm including preparation of surface but excluding grading, complete.	sqm	502.65
22.12	Supplying and applying bituminous solution primer on roof and or wall surface at 0.24 litre per sqm.	sqm	28.50

Code No.	Description	Unit	Rate ₹
22.13	Deduct for omitting in water proofing treatment final course of spreading stone grit 6 mm down size or pea sized gravel :		
22.13.1	At 6 cudm per sqm	sqm	12.80
22.13.2	at 8 cudm per sqm	sqm	16.25
22.14	Grading roof for water proofing treatment with		
22.14.1	Cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	5,021.05
22.14.2	Cement mortar 1:3 (1 cement : 3 coarse sand)	cum	8,116.10
22.14.3	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	7,308.70
22.15	Providing and laying in situ seven course water proofing treatment with APP (Atactic poly-propylene) modified Polymeric memberane over roof consisting of first coat of bitumen primer @ 0.40 Kg per sqm, 2nd, 4th & 6th courses of bonding material @ 1.20 Kg/sqm, which shall consist of blown type bitumen of grade 85/25 conforming to IS : 702, 3rd and 5th layers of roofing membrane APP modified Polymeric membrane 1.5 mm thick of 2.25 Kg/sqm weight consisting of five layers prefabricated with centre core as 20 micron HMHDPE film sandwiched on both sides with polymeric mix and the polymeric mix is protected on both side with 20 micron HMHDPE film. 7th, the top most layer shall be finished with brick tiles of class designation 10 grouted with cement mortar 1:3 (1cement : 3 fine sand) mixed with 2% integral water proofing compound by weight of cement over a 12 mm layer of cement mortar 1:3 (1 cement : 3 fine sand) and finished neat (item of laying brick tiles shall be paid for separately).	sqm	412.20
22.16	Providing and laying in situ five course water proofing treatment with APP (Atactic Polypropylene) modified Polymeric memberane over roof consisting of first coat of bitumen primer @ 0.40Kg per sqm, 2nd & 4th courses of bonding material @ 1.20 kg/sqm, which shall consist of blown type bitumen of grade 85/25 conforming to IS : 702, 3rd layer of roofing membrane APP modified Polymeric membrane 2.0 mm thick of 3.00 Kg/sqm weight consisting of five layers prefabricated with centre core as 100 micron HMHDPE film sandwiched on both sides with polymeric mix and the polymeric mix is protected on both side with 20 micron HMHDPE film. 5th, the top most layer shall be finished with brick tiles of class designation 10 grouted with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% integral water proofing compound by weight of cement over a 12 mm layer of cement mortar 1:3 (1 cement : 3 fine sand) and finished neat ( item of laying brick tiles shall be paid for separately).	sqm	314.80
22.17	Providing and laying in situ seven course water proofing treatment with APP (Atactic Polypropylene) modified Polymeric memberane over roof consisting of first coat of bitumen primer @ 0.40 Kg per sqm, 2nd, 4th & 6th courses of bonding material @ 1.20 kg/sqm, which shall consist of blown type bitumen of grade 85/25 conforming to IS : 702, 3rd and 5th layers of roofing membrane APP modified Polymeric membrane 2.0 mm thick of 3.00 Kg/sqm weight consisting		

Code No.	Description	Unit	Rate ₹
	of five layers prefabricated with centre core as 100 micron HMHDPE film sandwiched on both sides with polymeric mix and the polymeric mix is protected on both side with 20 micron HMHDPE film. 7th, the top most layer shall be finished with brick tiles of class designation 10 grouted with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% integral water proofing compound by weight of cement over a 12 mm layer of cement mortar 1:3 ( 1 cement : 3 fine sand) and finished neat (item of laying brick tiles shall be paid for separately).	sqm	511.85
22.18	Providing and fixing APP (Atactic Polypropylene Polymer) modified prefabricated five layer 2 mm thick water proofing membrane, black finished reinforced with glass fibre matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 litre/sqm by the same membrane manufacture of density at 25°C, 0.87 - 0.89 kg/ litre and viscosity 70 - 160 cps. Over the primer coat the layer of membrane shall be laid using Butane torch and sealing all joints etc., and preparing the surface complete. The vital physical and chemical parameters of the membrane shall be as under : Joint strength in longitudinal and transverse direction at 23°C as 350/300 N/ 5 cm. Tear strength in longitudinal and transverse direction as 60/80N. Softening point of membrane not less than 150°C. Cold flexibility shall be upto -2°C when tested in accordance with ASTM, D - 5147. The laying of membrane shall be got done through the authorised applicator of the manufacture of membrane.		
	22.18.1 2mm (for corrugated roof sheets)	sqm	348.65
22.19	Providing and laying APP (Atactic Polypropylene Polymer) modified prefabricated five layer, 3 mm thick water proofing membrane, black finished reinforced with glass fibre matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 litre/sqm by the same membrane manufactured of density at 25°C, 0.87 - 0.89 kg/litre and viscosity 70 - 160 cps. Over the primer coat the layer of membrane shall be laid using butane torch and sealing all joints etc., and preparing the surface complete. The vital physical and chemical parameters of the membrane shall be as under : Joint strength in longitudinal and transverse direction at 23°C as 350/300 N/5 cm. Tear strength in longitudinal and transverse direction as 60/80N. Softening point of membrane not less than 150°C. Cold flexibility shall be upto -2°C when tested in accordance with ASTM, D - 5147. The laying of membrane shall be got done through the authorised applicator of the manufacturer of membrane :		
	22.19.1 3 mm thick	sqm	399.75
22.20	Providing and laying APP (Atactic Polypropylene Polymer) modified prefabricated five layer 3 mm thick water proofing membrane, black finished reinforced with non-woven polyester matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 litre/sqm by the same membrane manufacture of density at 25°C, 0.87-0.89 kg/ litre and viscosity 70-160 cps. Over the primer coat the layer of membrane shall be laid using Butane Torch and sealing all joints etc, and preparing the surface complete. The vital physical and		

Code No.	Description	Unit	Rate ₹
	chemical parameters of the membrane shall be as under : Joint strength in longitudinal and transverse direction at 23°C as 650/450N/5cm. Tear strength in longitudinal and transverse direction as 300/250N. Softening point of membrane not less than 150°C. Cold flexibility shall be upto -2°C when tested in accordance with ASTM, D - 5147. The laying of membrane shall be got done through the authorised applicator of the manufacturer of membrane :		
	22.20.1    3 mm thick	sqm	448.30
22.21	Extra for covering top of membrane with Geotextile, 120 gsm non woven, 100% polyester of thickness 1 to 1.25 mm bonded to the membrane with intermittent touch by heating the membrane by Butane Torch as per manufactures recommendation.	sqm	64.55

**SUB HEAD : 23.0**

**HORTICULTURE  
&  
LAND SCAPING**



**BASIC RATES (SH: 23.0 HORTICULTURE & LANDSCAPING)**

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
0103	Blacksmith 2nd class	day	361.00
0114	Beldar	day	297.00
0115	Coolie	day	297.00
0124	Mason (brick layer) 2nd class	day	361.00
0303	Cowdung	cum	48.00
0979	Royalty for good earth	cum	30.00
0980	Royalty for sludge	cum	90.00
1008	Flats up to 10 mm in thickness	quintal	4200.00
2201	Carriage of bricks	1000 Nos	284.39
2205	Carriage of steel	tonne	94.80
2241	Carriage of good earth	cum	133.30
2242	Carriage of dump manure	cum	115.92
2317	Carriage of sludge	cum	115.92
2602	Common burnt clay F.P.S. (non modular) bricks class designation 7.5	1000 Nos	3800.00
2603	Common burnt clay F.P.S. (non modular) bricks class designation 5.0	1000 Nos	3500.00
9999	Sundries	L.S.	1.70

## 23.0 HORTICULTURE & LANDSCAPING

Code No.	Description	Unit	Rate ₹
23.1	Trenching in ordinary soil up to a depth of 60 cm including removal and stacking of serviceable materials and then disposing of surplus soil, by spreading and neatly leveling within a lead of 50 m and making up the trenched area to proper levels by filling with earth or earth mixed with sludge or/and manure before and after flooding trench with water (excluding cost of imported earth, sludge or manure).	cum	37.10
23.2	Supplying and stacking of good earth at site including royalty and carriage up to 1 km (earth measured in stacks will be reduced by 20% for payment).	cum	308.35
23.3	Supplying and stacking sludge at site including royalty and carriage up to 1 km (sludge measured in stacks will be reduced by 8% for payment).	cum	239.20
23.4	Supplying and stacking at site dump manure from approved source, including carriage up to 1 km (manure measured in stacks will be reduced by 8% for payment) :		
23.4.1	Screened through sieve of I.S. designation 20 mm	cum	167.60
23.4.2	Screened through sieve of I.S. designation 16 mm	cum	184.85
23.4.3	Screened through sieve of I.S. designation 4.75 mm	cum	198.65
23.5	Rough dressing the trenched ground including breaking clods.	100sqm	71.80
23.6	Uprooting weeds from the trenched area after 10 to 15 days of its flooding with water including disposal of uprooted vegetation.	100sqm	233.05
23.7	Fine dressing of the ground	100sqm	175.30
23.8	Spreading of sludge, dump manure and / or good earth in required thickness as per direction of Officer-in-charge (Cost of sludge, dump manure and / or good earth to be paid separately).	cum	25.15
23.9	Mixing earth and sludge or manure in the required proportion specified or directed by the Officer-in-charge..	cum	17.25
23.10	Grassing with selection No.1 grass including watering and maintenance of the lawn for 30 days or more till the grass forms a thick lawn, free from weeds and fit for mowing including supplying good earth, if needed (the good earth shall be paid for separately).		
23.10.1	In rows 5 cm apart in both directions	100sqm	841.25
23.10.2	With grass Turf	100sqm	634.30
23.11	Renovating lawns including weeding, cheeling the grass, forking the ground, top dressing with sludge or manure, mixing the same with forked soil, watering and maintaining the lawn for 30 days or more till the grass forms a thick lawn free from weeds and fit for mowing and disposal of rubbish as directed, including supplying good earth if needed but excluding the cost of sludge or manure (the good earth shall be paid for separately).	100sqm	1,626.75

Code No.	Description	Unit	Rate ₹
23.12	Uprooting rank vegetation and weeds by digging the area to a depth of 60cm, removing all weeds and other growth with roots by forking repeatedly, breaking clods, rough dressing, flooding with water, uprooting fresh growths after 10 to 15 days and then fine dressing for planting new grass, including disposal of all rubbish with all leads and lifts.	100sqm	2,887.60
23.13	Preparation of beds for hedging and shrubbery by excavating 60 cm deep and trenching the excavated base to a further depth of 30 cm, refilling the excavated earth after breaking clods and mixing with sludge or manure in the ratio of 8:1 (8 parts of stacked volume of earth after reduction by 20% : one part of stacked volume of sludge or manure after reduction by 8%), flooding with water, filling with earth if necessary, watering and finally fine dressing, leveling etc. including stacking and disposal of materials declared unserviceable and surplus earth by spreading and leveling as directed, within a lead of 50 m, lift up to 1.5 m complete (cost of sludge, manure or extra earth to be paid for separately).	cum	105.20
23.14	Digging holes in ordinary soil and refilling the same with the excavated earth mixed with manure or sludge in the ratio of 2:1 by volume (2 parts of stacked volume of earth after reduction by 20% : 1 part of stacked volume of manure after reduction by 8%) flooding with water, dressing including removal of rubbish and surplus earth, if any, with all leads and lifts (cost of manure, sludge or extra good earth if needed to be paid for separately) :		
23.14.1	Holes 1.2 m dia and 1.2 m deep	each	211.90
23.14.2	Holes 90 cm dia, and 90 cm deep	each	90.90
23.14.3	Holes 60 cm dia, and 60 cm deep	each	28.00
23.14.4	Holes 45 cm dia, and 45 cm deep	each	12.15
23.15	Half brick circular tree guard in bricks, internal diameter 1.25 metre and height 1.2 metre above ground and 0.20 m below ground, bottom two courses laid dry and top three courses in cement mortar 1:6 (1 cement : 6 fine sand) and the intermediate courses being in dry honey comb masonry as per design complete :		
23.15.1	With common burnt clay F.P.S. (non modular) bricks of class designation 5	each	1,241.55
23.16	Providing and fixing M.S. flat iron tree guard 60 cm dia and 2 m high, above ground consisting 4 nos 25 x 6 mm, 2.25 m long and 8 nos 25 x 3 mm 2 m long verticals M.S. flats, riveted to 3 nos 25 x 6 mm M.S. flat iron rings in two halves, fixing together at site with required six numbers of 8 mm dia. and 30 mm long bolts, including painting two coats with synthetic enamel paint of approved brand and manufacture over a coat of primer. One name plate of 1 mm thick M.S. sheet of size 250x100 mm shall be welded to the tree guard near the middle height and lettered CPWD / PWD/ any other		

Code No.	Description	Unit	Rate ₹
	approved name. The tree guard shall be suitably fixed to the ground by embedding four legs of tree guard in pits of suitable dia and to a depth of 25 cm, refilling the pits with soil and ramming, complete in all respect as per satisfaction and direction of Officer-in-charge.	each	2,884.15
23.17	Making tree guard 53 cm dia and 1.3 m high as per design from empty coal tar drums, supplied free by the department, including providing and fixing 2 nos M.S. sheet rings 50 x 0.5 mm fixed with rivets complete in all respects including painting inside and outside of tree guard with :		
23.17.1	A coat of coal tar	each	230.90
23.17.2	Two or more coats of synthetic enamel paint of approved quality shade over a priming coat	each	356.50
23.18	Making tree guard 53 cm dia and 2 m high as per design from empty coal tar drums, supplied free by the department, including providing and fixing four legs 40 cm long of 30 x 3 mm M.S. flat riveted to tree guard and providing and fixing 2 nos. M.S. sheet rings 50 x 0.5 mm fixed with rivets complete in all respects including painting inside and outside of tree guard with :		
23.18.1	A coat of coal tar	each	444.90
23.18.2	Two or more coats of synthetic enamel paint of approved brand and shade over a priming coat	each	638.25
23.19	Edging with bricks laid dry length wise, including required excavation, refilling, consolidating with hand packing and spreading surplus earth neatly within a lead of 50 m :		
23.19.1	Common burnt clay F.P.S. (non modular) bricks of class designation 7.5	metre	36.00
23.20	Filling mixture of earth and sludge or manure in the desired proportion in trenches, flooding with water and leveling (cost of supplying earth and sludge or manure and mixing excluded).	cum	8.60
23.21	Excavation in dumped stones or malba including stacking of serviceable and unserviceable material separately and disposal of unserviceable material, lead up to 50 m and lift up to 1.5 m, disposed material to be neatly dressed.	cum	241.50
23.22	Excavation in bajri path including stacking of serviceable and unserviceable material separately, lead up to 50 m and lift up to 1.5 m, disposed material to be neatly dressed.	cum	269.10
23.23	Excavation in water bound macadam road including stacking the serviceable and unserviceable material separately and disposal of unserviceable material, lead up to 50 m and lift up to 1.5 m, disposed material to be neatly dressed.	cum	331.15
23.24	Flooding the ground with water including making kiaries and dismantling the same.	100sqm	129.50

Code No.	Description	Unit	Rate ₹
23.25	Supplying and stacking of well decayed cow dung manure at site including royalty and carriage upto 1 km (Cow dung manure measured in stacks will reduced by 8% for Payment).	cum	190.40
23.26	Providing and fixing M. S. tree guard 45 cm square in plan, height 1.20 metre above ground level and 0.40 metre below ground level. The vertical members shall consist of four nos angle iron of size 25x25x3 mm, 1.8 m long, one at each corner and 8 nos flat iron of size 25x3 mm, 1.2 m long. The vertical members shall be welded to 4 nos 25x6 mm M. S. flats placed horizontally around the vertical member of the cage. One name plate of 1 mm thick M.S. sheet of size 250x100 mm shall be welded to the tree guard near the middle height and lettered CPWD / PWD/ any other approved name. The tree guard shall be fixed to the ground by making suitable holes and by embedding four corners leg in the ground, including refilling the earth, compaction etc. complete. The tree guard shall be painted with two or more coats of synthetic enamel paint of approved brand and manufacture over a coat of primer, complete in all respect.	each	1,713.85
23.27	Providing and fixing M. S. tree guard 50 cm square in plan, height 1.40 metre above ground level and 0.50 metre below ground level. The vertical members shall consist of four nos of angle iron of size 25x25x5 mm 1.9 long, one at each corner and 8 nos flat iron of size 25x5 mm 1.4 long. The vertical members shall be welded to 4 nos 25x6 mm M. S. flats placed horizontally around the vertical member of the cage. One name plate of 1 mm thick M.S. sheet of size 250x100 mm shall be welded to the tree guard near the middle height and lettered CPWD / PWD/ any other approved name. The tree guard shall be fixed to the ground by making suitable holes and by embedding four corners leg in the ground , including refilling the earth, compaction etc. complete. The tree guard shall be painted with two coats of paint of approved brand and manufacture over a coat of primer, complete in all respect.	each	2,689.95
23.28	Preparation of mounds of various size and shape by available excavated / supplied earth in layers not exceeding 20 cm in depth, breaking clods, watering of each layer, dressing etc., lead upto 50 meter and lift upto 1.5 m complete as per direction of Officer-in-charge.	cum	215.60
23.29	Providing Circular Cement Concrete pots of specified size, cast with cement concrete of nominal mix 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 6 mm nominal size), reinforced with 7 nos ( 3 nos horizontal & 4 nos vertical "U" shape) M.S. wires of 3.5 mm dia as per design, including required form work, finishing with cement punning on exposed surface, curing for specified period and stacking in required rows & height, all complete as per direction of Officer-in-charge.		
23.29.1	Top inside dia 35 cm, outer bottom dia 25 cm, total height 35 cm with wall thickness of 25.4 mm	each	166.25

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
23.29.2	Top inside dia 30 cm, outer bottom dia 20 cm, total height 30 cm with wall thickness of 25.4 mm	each	121.75
23.30	Providing Square Cement Concrete pots of specified size, cast with cement concrete of nominal mix 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6 mm nominal size), reinforced with 7 nos. ( 3 nos horizontal & 4 nos vertical "U" shape) M.S. wires of 3.5 mm dia as per design, including required form work, finishing with cement punning on exposed surface, curing for specified period and stacking in required rows & height , all complete as per direction of Officer-in-charge.		
23.30.1	Top inner width 35 cm, outer bottom width 25 cm, total height 35 cm and wall thickness 25.4 mm	each	200.55

**SUB HEAD : 24.0**

**RAIN WATER HARVESTING  
&  
TUBEWELLS**



## BASIC RATES (SH: 24.0 RAIN WATER HARVESTING & TUBEWELLS)

Code No.	Description	Unit	Rate ₹
0005	Hire charges of Diesel Truck - 9 tonne	day	1700.00
0040	Air compressor 250 cfm with two leads for pneumatic cutters / hammers	day	1900.00
0080	Hire and running charges of drill machine up to 400 mm dia (including cost of mobile oil, diesel consumption in ordinary soil and operator)	day	7500.00
0113	Chowkidar	day	297.00
0114	Beldar	day	297.00
0123	Mason (brick layer) 1 st class	day	393.00
0124	Mason (brick layer) 2nd class	day	361.00
1235	Diesel oil	litre	48.63
7743	M.S. pipe 150 mm dia casing pipe	metre	1060.00
7744	M.S. pipe 200 mm dia casing pipe	metre	1300.00
7745	PVC blind pipe 150 mm dia as per IS: 12818	metre	500.00
7746	PVC blind pipe 200 mm dia as per IS: 12818	metre	750.00
7747	M.S. cap 150 mm dia	each	160.00
7748	M.S. cap 200 mm dia	each	200.00
7749	M.S bail plug 150 mm dia	each	200.00
7750	M.S bail plug 200 mm dia	each	220.00
7751	PVC slotted pipe 150 mm dia as per IS: 12818	metre	450.00
7752	PVC slotted pipe 200 mm dia as per IS: 12818	metre	700.00
7753	Boulder 50 mm to 200 mm	cum	350.00
7754	Gravel 5 mm to 10 mm	cum	700.00
7755	Gravel 1.5 mm to 2 mm	cum	650.00
7756	Gravel 3 mm to 6 mm	cum	680.00
7757	M.S. pipe 100 mm dia casing pipe	metre	770.00
7758	uPVC blind pipe 100 mm dia as per IS: 12818	metre	360.00
7759	uPVC slotted pipe 100 mm dia as per IS: 12818	metre	380.00
7760	M.S. cap 100 mm dia	each	130.00
7761	M.S. bail plug 100 mm dia	each	160.00
7762	Precast R.C.C. perforated slab	each	800.00
7763	Water supply tanker of 5000 litre capacity	each	800.00
7764	M.S. socket 100 mm dia	each	180.00
7765	M.S. socket 150 mm dia	each	220.00
7766	M.S. socket 200 mm dia	each	280.00
7772	Pea Gravel	cum	750.00
9999	Sundries	L.S.	1.70

*SUB HEAD -24.0 RAIN WATER HARVESTING & TUBEWELLS*

## 24.0 RAIN WATER HARVESTING & TUBEWELLS

Code No.	Description	Unit	Rate ₹
24.1	Boring/drilling bore well of required dia for casing/ strainer pipe, by suitable method prescribed in IS: 2800 (part I), including collecting samples from different strata, preparing and submitting strata chart/ bore log, including hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer -in-charge, upto 90 metre depth below ground level.		
24.1.1	All types of soil		
24.1.1.1	300 mm dia	metre	398.25
24.1.1.2	350 mm dia	metre	435.60
24.1.1.3	400 mm dia	metre	557.55
24.1.2	Rocky strata including Boulders		
24.1.2.1	300 mm dia	metre	891.65
24.1.2.2	350 mm dia	metre	925.65
24.1.2.3	400 mm dia	metre	1,044.45
24.2	Boring/drilling bore well of required dia for casing/ strainer pipe, by suitable method prescribed in IS: 2800 (part I), including collecting samples from different strata, preparing and submitting strata chart/ bore log, including hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer -in-charge, beyond 90 metre & upto 150 metre depth below ground level.		
24.2.1	All types of soil		
24.2.1.1	300 mm dia	metre	464.60
24.2.1.2	350 mm dia	metre	516.25
24.2.1.3	400 mm dia	metre	696.95
24.2.2	Rocky strata including Boulders		
24.2.2.1	300 mm dia	metre	953.00
24.2.2.2	350 mm dia	metre	982.90
24.2.2.3	400 mm dia	metre	1,234.35
24.3	Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC medium well casing (CM) pipe of required dia, conforming to IS: 12818, including required hire and labour charges, fittings & accessories etc. all complete, for all depths, as per direction of Engineer -in-charge.		
24.3.1	100 mm nominal size dia	metre	423.85
24.3.2	150 mm nominal size dia	metre	586.65
24.3.3	200 mm nominal size dia	metre	878.25
24.4	Supplying, assembling, lowering and fixing in vertical position in bore well unplasticized PVC medium well screen (RMS) pipes with		

*SUB HEAD -24.0 RAIN WATER HARVESTING & TUBEWELLS*

Code No.	Description	Unit	Rate ₹
	ribs, conforming to IS: 12818, including hire & labour charges, fittings & accessories etc. all complete, for all depths, as per direction of Engineer-in-charge.		
24.4.1	100 mm nominal size dia	metre	447.25
24.4.2	150 mm nominal size dia	metre	528.60
24.4.3	200 mm nominal size dia	metre	820.45
24.5	Supplying, filling, spreading & leveling stone boulders of size range 5 cm to 20 cm, in recharge pit, in the required thickness, for all leads & lifts, all complete as per direction of Engineer-in-charge.	cum	494.75
24.6	Supplying, filling, spreading & leveling gravels of size range 5 mm to 10 mm, in the recharge pit, over the existing layer of boulders, in required thickness, for all leads & lifts, all complete as per direction of Engineer-in-charge.	cum	901.25
24.7	Supplying, filling, spreading & leveling coarse sand of size range 1.5 mm to 2 mm in recharge pit, in required thickness over gravel layer, for all leads & lifts, all complete as per direction of Engineer -in-charge.	cum	843.20
24.8	Gravel packing in tubewell construction in accordance with IS: 4097, including providing gravel fine/ medium/ coarse, in required grading & sizes as per actual requirement, all complete as per direction of Engineer-in-charge.	cum	976.60
24.9	Providing and fixing factory made precast RCC perforated drain covers, having concrete of strength not less than M-25, of size 1000 x 450x50 mm, reinforced with 8 mm dia four nos longitudinal & 9 nos cross sectional T.M.T. hoop bars, including providing 50 mm dia perforations @ 100 to 125 mm c/c, including providing edge binding with M.S. flats of size 50 mm x 1.6 mm complete, all as per direction of Engineer-in-charge.	each	958.80
24.10	Supplying, assembling, lowering and fixing in vertical position in bore well, ERW (Electric Resistance Welded) FE 410 mild steel screwed and socketed/ plain ended casing pipes of required dia, conforming to IS: 4270, of reputed & approved make, including painted with outside surface with two coats of anticorrosive paint of approved brand and manufacture, including required hire & labour charges, fittings & accessories, all complete, for all depths, as per direction of Engineer-in-charge.		
24.10.1	100 mm nominal size dia having minimum wall thickness 5.00 mm	metre	973.75
24.10.2	150 mm nominal size dia having minimum wall thickness 5.00 mm	metre	1,329.20
24.10.3	200 mm nominal size dia having minimum wall thickness 5.40 mm	metre	1,631.20
24.11	Supplying, assembling, lowering and fixing in vertical position in bore well, ERW (Electric Resistance Welded) FE 410 plain slotted (having slot of size 1.6/3.2 mm) mild steel threaded and socketed / plain bevel ended pipe (type A) of required dia, conforming to IS:		

**SUB HEAD -24.0 RAIN WATER HARVESTING & TUBEWELLS**

Code No.	Description	Unit	Rate ₹
	8110, of reputed and approved make, having wall thickness not less than 5.40 mm, including painted with outside surface with two coats of anticorrosive bitumestic paint of approved brand and manufacture, including hire & labour charges, fittings & accessories, all complete, for all depths, as per direction of Engineer -in-charge.		
24.11.1	100 mm nominal size dia	metre	1,033.35
24.11.2	150 mm nominal size dia	metre	1,408.70
24.11.3	200 mm nominal size dia	metre	1,711.25
24.12	Development of tube well in accordance with IS : 2800 (part I) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully developed, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water samples & getting tested in approved laboratory, i/c disinfection of tubewell, all complete, including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-in-charge.	hour	614.75
24.13	Providing and fixing suitable size threaded mild steel cap or spot welded plate to the top of bore well housing/ casing pipe, removable as per requirement, all complete for borewell of:		
24.13.1	100 mm dia	each	158.55
24.13.2	150 mm dia	each	195.15
24.13.3	200 mm dia	each	243.90
24.14	Providing and fixing M.S. clamp of required dia to the top of casing/ housing pipe of tubewell as per IS: 2800 (part I), including necessary bolts & nuts of required size complete.		
24.14.1	100 mm clamp	each	1,092.20
24.14.2	150 mm clamp	each	1,154.25
24.14.3	200 mm clamp	each	1,310.15
24.15	Providing and fixing Bail plug/ Bottom plug of required dia to the bottom of pipe assembly of tubewell as per IS:2800 (part I).		
24.15.1	100 mm dia	each	195.70
24.15.2	150 mm dia	each	242.15
24.15.3	200 mm dia	each	265.10

**SUB HEAD : 25.0**

**CONSERVATION  
OF  
HERITAGE BUILDINGS**



**BASIC RATES (SH: 25.0 CONSERVATION OF HERITAGE BUILDINGS)**

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
0101	Bhisti	day	328.00
0103	Blacksmith 2nd class	day	361.00
0114	Beldar	day	297.00
0115	Coolie	day	297.00
0116	Fitter (grade 1)	day	393.00
0124	Mason (brick layer) 2nd class	day	361.00
0155*	Mason (average)	day	377.00
0159	Skilled torch operator for laying tack	day	393.00
0773	Unslaked lime	quintal	300.00
1034	Bolts and nuts up to 300 mm in length	quintal	5600.00
1182	Surkhi	cum	700.00
2205	Carriage of steel	tonne	94.80
4009	Mild steel tubes hot finished welded type	kilogram	52.00
7346	Double coupler	each	55.00
7387	Spigot for standard jointing	kilogram	45.00
7397	Base Jack	each	180.00
7398	Challies	each	800.00
7399	Cup locks	each	80.00
7767	Stone cleaning chemical approved by ASI	litre	165.00
7768	Water repellent chemical approved by ASI	litre	1587.00
7769	Stone surface strengthening chemical approved by ASI	litre	1020.00
7770	Turpentine oil	litre	68.00
7771	Liquid Amonia 5%	litre	161.00
7775	Sodium pentachlorophenate	kilogram	630.00
9999	Sundries	L.S.	1.70

## 25.0 CONSERVATION OF HERITAGE BUILDINGS

Code No.	Description	Unit	Rate ₹
25.1	Raking out joints of stone masonry surface to the required width and depth, with due care and precaution, by mechanical / manual means, including preparing and cleaning the surface for re-pointing/ refilling of joints, including disposal of rubbish to the dumping ground within 50 metre lead.	sqm	24.00
25.2	Providing and fixing double scaffolding system (cup lock type) on the exterior side of building/structure, upto 25 metre height, above ground level, including additional rows of scaffolding in stepped manner as per requirement of site, made with 40mm dia M.S. tube, placed 1.5 metre centre to centre, horizontal & vertical tubes joint with cup & lock system with M.S. Tubes, M.S. tube challis, M.S. clamps and staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for execution of work of cleaning and/ or pointing and/ or applying chemical and removing it thereafter. The scaffolding system shall be stiffened with bracings, runners, connecting with the building etc, wherever required, if feasible, for inspection of work at required locations with essential safety features for the workmen etc., complete as per directions and approval of Engineer-in-charge.  <b>Note:-</b> (1) The elevational area of the scaffolding shall be measured for payment purpose. (2) The payment will be made once only for execution of all items for such works.	sqm	148.65
25.3	Cleaning the sand stone surface and removing dirt, dust, bird dropping, grease, oil, algae, fungus, monkey beats, vegetable growth etc., including providing, applying and washing the surface with liquid Ammonia Chemical of 5% solution and other chemical cleaning agent as approved by Archaeological Survey of India/ Engineer-in-charge, of approved brand and manufacturer, with the help of required scrubbers and also cleaning with machine operated water jet mixed with desired quantity of fine silica where ever required, without causing any scratching/ damage to the stone surface and finally washing the surface with clean water with the help of pressure jet machine, complete in all respect, including taking all precautions to safeguard ventilators, windows, doors etc. by suitable covering so as to avoid any damage to the building/ structure, all as per direction of Engineer-in-charge (The rate is inclusive of all materials & labours involved except scaffolding).	sqm	74.35
25.4	Providing and applying antifungal wash treatment using 3% solution of sodium pentachlorophenate, of reputed brand and manufacturer, on cleaned sand stone surface at desired locations as per direction of Engineer-in-charge (The rate is inclusive of all materials & labours involved except scaffolding).	sqm	31.20
25.5	Ruled / Flush pointing on Red sand stone masonry surface with lime, surkhi and marble dust mortar in the ratio of 1:1.5:1/2 {One lime: 1.5 surkhi (50% red and 50% light yellow surkhi ):1/2 marble dust}. (The rate is inclusive of all materials & labours involved except scaffolding).	sqm	130.25

*SUBHEAD -25.0 CONSERVATION OF HERITAGE BUILDINGS*

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
25.6	Ruled/ Flush pointing on White sand stone masonry surface with lime, surkhi and marble dust mortar in the ratio of 1:1.5:1/2 {One lime : 1.5 surkhi (15% dark red and 85% light yellow surkhi) : 1/2 marble dust}. (The rate is inclusive of all materials & labours involved except scaffolding).	sqm	130.25
25.7	Applying two or more coat of Ethyl Silicate chemical as approved by Archaeological Survey of India/ Engineer-in-charge, of approved brand and manufacturer, with brush or spray on the existing stone masonry surface till there is no further absorption of chemical by stone surface, including protecting the applied surface from direct sunlight by suitable means during application, all complete as per direction of the Engineer-in-Charge (The rate is inclusive of all materials & labours involved except scaffolding).	sqm	262.25
25.8	Applying breathable, non-reactive, antifungal, and water repellent Silane/ Siloxane chemical as approved by Archaeological Survey of India/ Engineer-in-charge, of approved brand and manufacture, diluted with solvent mineral Turpentine oil in the ratio of 1:12 (One part of approved chemical :12 Part of Turpentine oil), on the existing sand stone masonry surface with two or more coats to give uniform application of chemical on the surface, all complete as per direction of Engineer-In-charge (The rate is inclusive of all materials & labours involved except scaffolding).	sqm	79.25



**SUB HEAD : 26.0**

**STRUCTURAL GLAZING AND  
ALUMINIUM COMPOSITE PANEL**



**BASIC RATES (SH: 26.0 STRUCTURAL GLAZING AND ALUMINIUM COMPOSITE PANEL)**

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
2605	Structural sealant - 6 mm x 12 mm	metre	31.60
2606	Spacer tape 6.4 mm thick x 6 mm wide	metre	18.00
2607	Weather Sealant - Non Staining (600 ml)	each	459.15
2608	Weather Sealant - Normal (300 ml)	each	143.20
2609	MS Brackets/Aluminium Alloy Brackets	kg	100.00
2610	Silicon Gasket in Kg (Above 50 g / m)	kg	601.25
2611	EPDM Gasket in Kg (Above 60 g / m)	kg	160.00
2612	Anchor Fastner - M10	each	110.95
2613	SS Bolt with washer of sizes for structural glazing / ACP Cladding	each	35.00
2614	SS Screws of sizes for structural glazing / ACP Cladding	each	5.00
2615	Protective Tape	metre	25.00
2616	GI flashing - 1.2 mm Thick	kg	66.00
2617	6 mm thick High performance glass	sqm	1910.00
2618	6 mm thick clear heat strengthened glass	sqm	770.00
2619	6 mm thick clear heat strengthened glass	each	145.00
2620	ARMS GS HD -TOP HUNG -20"-TYPE P-COUPLE	pair	1570.80
2621	Connection Block	each	39.35
2622	Curtain wall striker	each	102.70
2623	Adjustable Fastening Pawl	each	38.25
2624	Corner drive	each	294.95
2625	Top wedge Block	each	136.55
2626	Glass wool Denisity 48 Kg / m3 with Black Glass Tissue (BGT)	sqm	230.00
2627	SS Screws - # 8 x 19	each	10.00
2628	Weather Sealant - DC 789	cartridge	135.00
2629	Cement Board	sqm	250.00
2630	Baker rod	metre	5.00
2631	4 mm thick ACP	sqm	1200.00
2632	Fire Stop	metre	561.95
2634	GI/Aluminium Sheet (0.8 mm thick)	kg	57.00
7306	Aluminium T or L sections	kilogram	200.00
7392	Powder coating 50 microns on aluminium sections	kilogram	64.00

*SUBHEAD -26.0 STRUCTURAL GLAZING AND ALUMINIUM COMPOSITE PANEL*

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Rate ₹</b>
8654	Masking tape	metre	2.50
8945	4 Point façade glass bracket	Nos	3318.00
8946	2 Point façade glass bracket	Nos	1659.00
8947	1 Point façade glass bracket	Nos	1404.00
8948	Flate head bolt	Nos	651.00
8949	400 fin plate at top	Pair	5931.00
9999	Sundries	L.S.	1.70

## 26.0 STRUCTURAL GLAZING AND ALUMINIUM COMPOSITE PANEL

Code No.	Description	Unit	Rate ₹
26.1	<p>Providing and supplying aluminium extruded tubular and other aluminium sections as per the architectural drawings and approved shop drawings , the aluminium quality as per grade 6063 T5 or T6 as per BS 1474,including super durable powder coating of 60-80 microns conforming to AAMA 2604 of required colour and shade as approved by the Engineer-in-Charge. ( The item includes cost of material such as cleats, sleeves, screws etc. necessary for fabrication of extruded aluminium frame work. Nothing extra shall be paid on this account).</p>	kg	338.25
26.2	<p>Designing, fabricating, testing, protection, installing and fixing in position semi (grid) unitized system of structural glazing (with open joints) for linear as well as curvilinear portions of the building for all heights and all levels, including:</p> <p>a) Structural analysis &amp; design and preparation of shop drawings for the specified design loads conforming to IS 875 part III (the system must passed the proof test at 1.5 times design wind pressure without any failure), including functional design of the aluminum sections for fixing glazing panels of various thicknesses, aluminium cleats, sleeves and splice plates etc. gaskets, screws, toggles, nuts, bolts, clamps etc., structural and weather silicone sealants, flashings, fire stop (barrier)-cum-smoke seals, microwave cured EPDM gaskets for water tightness, pressure equalisation &amp; drainage and protection against fire hazard including:</p> <p>b) Fabricating and supplying serrated M.S. hot dip galvanised / Aluminium alloy of 6005 T5 brackets of required sizes, sections and profiles etc. to accommodate 3 Dimensional movement for achieving perfect verticality and fixing structural glazing system rigidly to the RCC/ masonry/structural steel framework of building structure using stainless steel anchor fasteners/ bolts, nylon seperator to prevent bimetallic contacts with nuts and washers etc. of stainless steel grade 316, of the required capacity and in required numbers.</p> <p>c) Providing and filling, two part pump filled, structural silicone sealant and one part weather silicone sealant compatible with the structural silicone sealant of required bite size in a clean and controlled factory / work shop environment , including double sided spacer tape, setting blocks and backer rod, all of approved grade, brand and manufacture, as per the approved sealant design, within and all around the perimeter for holding glass.</p> <p>d) Providing and fixing in position flashings of solid aluminium sheet 1 mm thick and of sizes, shapes and profiles, as required as per the site conditions, to seal the gap between the building structure and all its interfaces with curtain glazing to make it watertight.</p>		

*SUBHEAD -26.0 STRUCTURAL GLAZING AND ALUMINIUM COMPOSITE PANEL*

Code No.	Description	Unit	Rate ₹
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e) Making provision for drainage of moisture/ water that enters the curtain glazing system to make it watertight, by incorporating principles of pressure equalization, providing suitable gutter profiles at bottom (if required), making necessary holes of required sizes and of required numbers etc. complete. This item includes cost of all inputs of designing, labour for fabricating and installation of aluminium grid, installation of glazed units, T&P, scaffolding and other incidental charges including wastages etc., enabling temporary structures and services, cranes or cradles etc. as described above and as specified. The item includes the cost of getting all the structural and functional design including shop drawings checked by a structural designer, dully approved by Engineer-in-charge. The item also includes the cost of all mock ups at site, cost of all samples of the individual components for testing in an approved laboratory, field tests on the assembled working structural glazing as specified, cleaning and protection till the handing over of the building for occupation. In the end, the Contractor shall provide a water tight structural glazing having all the performance characteristics etc. all complete as required, as per the Architectural drawings, as per item description, as specified, as per the approved shop drawings and as directed by the Engineer-in-Charge.

Note:- 1. The cost of providing extruded aluminium frames, shadow boxes, extruded aluminium section capping for fixing in the grooves of the curtain glazing and vermin proof stainless steel wire mesh shall be paid for separately under relevant items under this sub-head. However, for the purpose of payment, only the actual area of structural glazing (including width of grooves ) on the external face shall be measured in sqm. up to two decimal places.

Note:-2. The following performance test are to be conducted on structural glazing system if area of structural glazing exceeds 2500 Sqm from the certified laboratories accredited by NABL(National Accreditation Board for Testing and Calibration Laboratories), Department of Science & Technologies, India. Cost of testing is payable separately. The NIT approving authority will decide the necessity of testing on the basis of cost of the work, cost of the test and importance of the work. Performance Testing of Structural glazing system Tests to be conducted in the NBL Certified laboratories

1. Performance Laboratory Test for Air Leakage Test (-50pa to – 300pa) & (+50pa to +300pa) as per ASTM E-283-04 testing method for a range of testing limit 1 to 200 mVhr”
2. Static Water Penetration Test. (50pa to 1500pa) as per ASTM E-331-09 testing method for a range up to 2000 ml.”
3. Dynamic Water Penetration (50pa to 1500pa) as per AAMA 501.01-05 testing method for a range upto 2000 ml”

Code No.	Description	Unit	Rate ₹
	<p>4. Structural Performance Deflection and deformation by static air pressure test (1.5 times desing wind pressure without any failure) as per ASTME-330-10 testing method for a range upto 50 mm”</p> <p>5. Seismic Movement Test (upto 30 mm) as per AAMA 501.4-09 testing method for Qualitative test” Tests to be conducted on site</p> <p>6. Onsite Test for Water Leakage for a pressure range 50 kpa to 240 kpa (35psi) upto 2000ml”</p>	sqm	2.466.80
26.3	<p>Providing, assembling and supplying vision glass panels (IGUs) comprising of hermetically-sealed 6-12- 6 mm insulated glass (double glazed) vision panel units of size and shape as required and specified, comprising of an outer heat strengthened float glass 6mm thick, of approved colour and shade with reflective soft coating on surface # 2 of approved colour and shade, an inner Heat strengthned clear float glass 6mm thick, spacer tube 12mm wide, dessicants, including primary seal and secondary seal (structural silicone sealant) etc. all complete for the required performances, as per the Architectural drawings, as per the approved shop drawings, as specified and as directed by the Engineer-in-Charge. The IGUs shall be assembled in the factory/ workshop of the glass processor. (Payment for fixing of IGU Panels in the curtain glazing is included in cost of item No.26.2) For payment, only the actual area of glass on face # 1 of the glass panels (excluding the areas of the grooves and weather silicone sealant) provided and fixed in position, shall be measured in sqm.</p> <p>(i) Coloured tinted float glass 6mm thick substrate with reflective soft coating on face # 2, + 12mm Airgap + 6mm Heat Strengthened clear Glass of approved make having properties as visible Light transmittance (VLT) of 25 to 35 %, Light reflection internal 10 to 15%, light reflection external 10 to 20 %, shading coefficient (0.25-0.28) and U value of 3.0 to 3.3 W/m2 degree K etc. The properties of performance glass shall be decided by technical sanctioning authority as per the site requirement.</p>	sqm	3,948.95
26.4	<p>Extra for openable side / top hung vision glass panels (IGUs) including providing and supplying at site all accessories and hardwares for the openable panels as specified and of the approved make such as heavy duty stainless steel friction hinges, min 4 -point cremone locking sets with stainless steel plates, handles, buffers etc. including necessary stainless steel screws/ fasteners, nuts, bolts, washers etc. all complete as per the Architectural drawings, as per the approved shop drawings, as specified and as directed by the Engineer-in-Charge.</p>	sqm	3032.30
26.5	<p>Providing, fabricating and supplying shadow box of required size and shape, for fixing in the spandrel portion of the structural glazing, in linear as well as curvilinear portions of the building by providing semi</p>		

*SUBHEAD -26.0 STRUCTURAL GLAZING AND ALUMINIUM COMPOSITE PANEL*

Code No.	Description	Unit	Rate ₹
	-rigid, inorganic, non-combustible fibre glass wool insulation 50 mm thick, conforming to IS: 8183 and BS: 3958 Part 5. The insulation layer shall have facing (factory bonded on surface # 1 of the fibre glass insulation layer), of black non-woven fibre glass tissue of nominal thickness 0.5 mm and nominal mass not less than 60 gm / sqm, made of randomly oriented glass fibres distributed in a binder by a wet-lay process including fixing 1.5 mm thick solid aluminum sheet backing using, 6 mm thick cement board including SS rivets, nuts, bolts, washers etc complete.	sqm	1631.10
26.6	<p>Providing and supplying Spandrel Glass Panels comprising of 6 mm thick heat strengthened monolithic float glass of approved colour and shade with reflective soft coating on surface # 2 of approved colour and shade so as to match the colour and shade of the IGUs in the vision panels etc. ,all complete for the required performances as specified, as per the Architectural drawings, as per the approved shop drawings, as specified, and as directed by the Engineer- in-Charge. For payment, only the actual area of glass on face # 1 of the glass panels (but excluding the area of grooves and weather silicone sealant) provided and fixed in position, shall be measured in sqm.(Payment for fixing of Spandrel Glass Panels in the curtain glazing is included in cost of relevent Item*).</p> <p>(i) Coloured tinted float glass 6mm thick substrate with reflective soft coating on face # 2, having properties as visible Light transmittance (VLT) of 25 to 35 %, Light reflection internal 10 to 15%, light reflection external 10 to 20 %, shading coefficient (0.25- 0.28) and U value of 3.0 to 3.3 W/m2 degree K etc. . The properties of performance glass shall be decided by technical sanctioning authority as per the site requirement.</p>	sqm	2862.40
26.7	<p>Designing, fabricating, testing, installing and fixing in position Curtain Wall with Aluminium Composite Panel Cladding, with open grooves for linear as well as curvilinear portions of the building , for all heights and all levels etc. including:</p> <p>a) Structural analysis &amp; design and preparation of shop drawings for pressure equalisation or rain screen principle as required, proper drainage of water to make it watertight including checking of all the structural and functional design.</p> <p>b) Providing, fabricating and supplying and fixing panels of aluminium composite panel cladding in pan shape in metallic colour of approved shades made out of 4mm thick aluminium composite panel material consisting of 3mm thick FR grade mineral core sandwiched between two Aluminium sheets (each 0.5mm thick). The aluminium composite panel cladding sheet shall be coil coated, with Kynar 500 based</p>		

Code No.	Description	Unit	Rate ₹
26.8	<p>PVDF / Lumiflon based fluoropolymer resin coating of approved colour and shade on face # 1 and polymer (Service) coating on face # 2 as specified using stainless steel screws, nuts, bolts, washers, cleats, weather silicone sealant, backer rods etc.</p> <p>c) The fastening brackets of Aluminium alloy 6005 T5 / MS with Hot Dip Galvanised with serrations and serrated washers to arrest the wind load movement, fasteners, SS 316 Pins and anchor bolts of approved make in SS 316, Nylon separators to prevent bi-metallic contacts all complete required to perform as per specification and drawing</p> <p>The item includes cost of all material &amp; labour component, the cost of all mock ups at site, cost of all samples of the individual components for testing in an approved laboratory, field tests on the assembled working curtain wall with aluminium composite panel cladding, cleaning and protection of the curtain wall with aluminium composite panel cladding till the handing over of the building for occupation. Base frame work for ACP cladding is payable under the relevant aluminium item.s The Contractor shall provide curtain wall with aluminium composite panel cladding, having all the performance characteristics all complete , as per the Architectural drawings, as per item description, as specified, as per the approved shop drawings and as directed by the Engineer-in-Charge. However, for the purpose of payment, only the actual area on the external face of the curtain wall with Aluminum Composite Panel Cladding (including width of groove) shall be measured in sqm. up to two decimal places.</p> <p>"Design supply &amp; installation of suspended Spider Glozing system designed to withstand the wind pressure as pr IS 875 (Part-III). The Suspended System held with Spider Fittings of SS-316 Grade Steel of approved manufacturer with glass panel having 12 mm thick clear toughened glass held together with SS- 316 Grade Stainless steel Spider &amp; bolt assembly with laminated glass fins 21 mm thick. The Glass fins and glass panel assembly shall be connected to Slab/beams by means of SS- 316 Grade stainless steel brackets &amp; Anchor bolts and at the bottom using SS channel of 50x25x2mm using fastener &amp; anchor bolts, non staining weather sealants of approved make, Teflon/ nylon bushes and separators to prevent bi-metallic contacts, all complete to perform as per specification and approved drawings. The complete system to be designed to accommodate thermal expansion &amp; seismic movements etc. The joints between glass panels (6 to 8 mm) and gaps at the perimeter &amp; in U channel of the assembly to be filled with non staining weather sealant, so as to make the entire system fully water proof &amp; dust proof.</p>	sqm	3,696.65

Code No.	Description	Unit	Rate ₹
	<p>The rate shall include all design, Engineering and shop drawing including approval from structural designer, labour, T&amp;P, scaffolding , other incidental charges including wastage, enabling temporary services all fitting fixers nut bolts, washer, Buffer plates, fastener, anchors, SS channel laminated glass etc. all complete.</p> <p>For the purpose of payment, actual elevation area of Glazing including thickness of joints and the portion of Glass panel inside the SS channel shall be measured. "</p>	sqm	3429.90

**COEFFICIENTS  
FOR CEMENT  
CONSUMPTION**



**1.0 COEFFICIENTS FOR CEMENT CONSUMPTION**  
**3.0 MORTAR**

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
3.1	Cement Mortar 1:1 (1 cement : 1 fine sand).	cum	10.20
3.2	Cement mortar 1:2 (1 cement : 2 fine sand).	cum	6.80
3.3	Cement mortar 1:3 (1 cement : 3 fine sand).	cum	5.10
3.4	Cement mortar 1:4 (1 cement : 4 fine sand).	cum	3.80
3.5	Cement mortar 1:5 (1 cement : 5 fine sand).	cum	3.10
3.6	Cement mortar 1:6 (1 cement : 6 fine sand).	cum	2.50
3.7	Cement mortar 1:2 (1 cement : 2 coarse sand).	cum	6.80
3.8	Cement mortar 1:3 (1 cement : 3 coarse sand).	cum	5.10
3.9	Cement mortar 1:4 (1 cement : 4 coarse sand).	cum	3.80
3.10	Cement mortar 1:5 (1 cement : 5 coarse sand).	cum	3.10
3.11	Cement mortar 1:6 (1 cement : 6 coarse sand).	cum	2.50
3.12	Cement mortar 1:2 (1 cement : 2 stone dust).	cum	6.80
3.13	Cement mortar 1:2 (1 cement : 2 marble dust).	cum	6.80
3.14	Cement mortar 1:5 (1 cement : 5 marble dust).	cum	3.10
3.15	White cement mortar 1:2 (1 white cement : 2 marble dust).	cum	6.80*
3.16	White cement mortar 1:3 (1 white cement : 3 marble dust).	cum	5.10*
3.17	White cement mortar 1:5 (1 white cement : 5 marble dust).	cum	3.10*

\* denotes the White Cement.

# 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

## 4.0 CONCRETE WORK

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
<b>CEMENT CONCRETE (CAST - IN- SITU)</b>			
4.1	P/L cement concrete - all works upto plinth level :		
4.1.1	1:1:2 (1 Cement : 1 coarse sand : 2 graded stone aggregate 20 mm nominal size)	cum	6.10
4.1.2	1:1½:3 (1 Cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size)	cum	4.00
4.1.3	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	3.20
4.1.4	1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size)	cum	3.20
4.1.5	1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	cum	2.20
4.1.6	1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size)	cum	2.20
4.1.7	1:3:6 (1 Cement : 3 fine sand : 6 graded stone aggregate 40 mm nominal size)	cum	2.20
4.1.8	1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size)	cum	1.70
4.1.9	1:4:8 (1 cement : 4 fine sand : 8 graded stone aggregate 40 mm nominal size)	cum	1.70
4.1.10	1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size)	cum	1.30
4.1.11	1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size)	cum	1.30
4.1.12	1:2:3½:9 (1 ordinary portland cement : 2 Fly ash : 3½ coarse sand : 9 graded stone aggregate 40 mm nominal size)	cum	1.70
4.1.13	1:2½:4:11 (1 ordinary portland cement : 2½ fly ash : 4 coarse sand : 11 graded stone aggregate 40 mm nominal size)	cum	1.30
4.2	P/L cement concrete in retaining walls, return walls etc.:		
4.2.1	1:1:2 (1 cement : 1 coarse sand : 2 graded stone aggregate 20 mm nominal size)	cum	6.10
4.2.2	1:1½:3 (1 cement:1½ coarse sand:3 graded stone aggregate 20 mm nominal size)	cum	4.00

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
4.2.3	1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	3.20
4.2.4	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size)	cum	3.20
4.2.5	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	cum	2.20
4.2.6	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size)	cum	2.20
4.2.7	1:3:6 (1 cement : 3 fine sand : 6 graded stone aggregate 40 mm nominal size)	cum	2.20
4.2.8	1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size)	cum	1.30
4.4	P/L cement concrete in kerbs, steps etc.:		
4.4.1	1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	3.20
4.4.2	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	cum	2.20
<b>CEMENT CONCRETE (PRE-CAST)</b>			
4.5	P/L precast cement concrete string or lacing courses, copings etc.:		
4.5.1	1:1½:3 (1 cement:1½ coarse sand:3 graded stone aggregate 20 mm nominal size)	cum	4.05
4.5.2	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	3.19
4.5.3	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	cum	2.19
4.6	P/L precast cement concrete in kerbs, edgings etc.:		
4.6.1	1:2:4 ( 1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	3.25
4.7	P/L precast cement concrete solid blocks:		
4.7.1	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	3.76
4.7.2	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	cum	2.76
4.8	P/L precast cement concrete hollow blocks:		
4.8.1	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	2.099
4.8.2	1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	cum	1.693

**COEFFICIENTS FOR CEMENT CONSUMPTION S.H.- 4.0 CONCRETE WORK**

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
4.9	Precasting and placing in position 125 mm dia Bollards 600 mm high.	each	0.097
	<b>DAMP- PROOF COURSE</b>		
4.10	P/L D.P.C. 40 mm thick with C.C. (1:2:4).	sqm	0.13
4.11	P/L D.P.C. 50 mm thick with C.C. (1:2:4).	sqm	0.16
	<b>MISCELLANEOUS</b>		
4.17	Making plinth protection 50 mm thick of cement concrete 1:3:6	sqm	0.11
4.19	P/L Ready mixed concrete using flyash:		
4.19.1	All works upto plinth level		
4.19.1.1	M-15 grade plain cement concrete	cum	2.40
4.19.1.2	M-10 grade plain cement concrete	cum	2.20
4.19.2	All works above plinth and upto floor V level		
4.19.2.1	M-15 grade plain cement concrete	cum	2.40
4.19.2.2	M-10 grade plain cement concrete	cum	2.20
4.20	P/L ready mix plain cement concrete :		
4.20.1	All works upto plinth level		
4.20.1.1	M-15 grade plain cement concrete	cum	2.40
4.20.1.2	M-10 grade plain cement concrete	cum	2.20
4.20.2	All works above plinth and upto floor V level		
4.20.2.1	M-15 grade plain cement concrete	cum	2.40
4.20.2.2	M-10 grade plain cement concrete	cum	2.20

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 5.0 REINFORCED CEMENT CONCRETE

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
<b>CAST-IN-SITU</b>			
5.1	P/L R.C.C. upto plinth level :		
5.1.1	1:1:2 (1 cement : 1 coarse sand : 2 graded stone aggregate 20 mm nominal size)	cum	6.10
5.1.2	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	cum	4.00
5.1.3	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	3.20
5.2	R.C.C work in walls etc.:		
5.2.1	1:1:2 (1 cement : 1 coarse sand : 2 graded stone aggregate 20 mm nominal size)	cum	6.10
5.2.2	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	cum	4.00
5.2.3	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	3.20
5.3	R.C.C. (1:2:4) work in beams etc.	cum	3.20
5.4	R.C.C. (1:2:4) work in kerbs, steps etc.	cum	3.20
5.5	R.C.C. (1:2:4) work in arches, domes etc.	cum	3.20
5.6	R.C.C. (1:2:4) work in chimneys & shafts.	cum	3.20
5.7	R.C.C. (1:2:4) work in well-steining.	cum	3.20
5.8	R.C.C. (1:1.5:3) work in vertical and horizontal fins individually or forming box louvers, facias and eaves boards.	cum	4.00
<b>PRE - CAST R.C.C.</b>			
5.12	P/F precast R.C.C. (1:2:4) work in string courses, bands, copings, bed plates, anchor blocks, plain window sills etc.	cum	3.19
5.13	P/F precast R.C.C. (1:2:4) in small lintels not exceeding 1.5m clear span.	cum	3.16
5.14	P/F precast R.C.C. (1:2:4) in mouldings as in cornices, windows sills etc.	cum	3.19
5.15	P/F precast R.C.C. (1:2:4) in lintels, beams and bressumers etc.	cum	3.19
5.16	P/F precast R.C.C. (1:2:4) in shelves.	cum	3.80
5.17	P/F precast R.C.C. (1:2:4) in vertical & horizontal fins individually or forming box louvers.	cum	4.36
5.18	Fixing precast cement concrete Jali (1:2:4).		
5.18.1	50 mm thick	100 sqm	1.64*

*COEFFICIENTS FOR CEMENT CONSUMPTION S.H. -5.0 REINFORCED CEMENT CONCRETE*

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
	5.18.2 40 mm thick	100 sqm	1.64*
	5.18.3 25 mm thick	100 sqm	1.64*
	* Cement for fixing only.		
	<b>ENCASING ROLLED STEEL SECTION</b>		
5.19	Encasing rolled steel sections, in beams and columns, with cement concrete (1:2:4).	cum	3.20
5.20	Encasing rolled steel section in grillages with cement concrete (1:2:4).	cum	3.20
	<b>MISCELLANEOUS</b>		
5.23	Smooth finishing of exposed surface of R.C.C. work with 6 mm thick cement mortar (1:3).	100 sqm	3.67
5.24	Rendering smooth the top of suspended floors, landings and staircases with cement mortar (1:2).	100sqm	4.17
5.27	Providing and filling in position bitumen mix filler.	per cm depth per cm width per 100m	0.00032
	<b>DESIGN MIX CONCRETE</b>		
5.33	P/L Design mix concrete (M-25).	cum	3.30*
5.34	Extra for providing richer mixes at all floor levels :		
	5.34.1 Providing M-30 grade concrete instead of M-25 grade B.M.C/ R.M.C.	cum	0.10*
	5.34.2 Providing M-35 grade concrete instead of M-25 grade B.M.C./ R.M.C.	cum	0.20*
	5.34.3 Providing M-40 grade concrete instead of M-25 grade B.M.C./ R.M.C.	cum	0.30*
5.36	P/F precast R.C.C. in waffle units.	cum	4.16*
5.37	P/L RMC manufactured in fully automatic batching plant M-25 grade R.C.C.	cum	3.30*
5.40	P/L design mix cement concrete M-25 using Fly ash.	cum	3.30*
	* Actual weight for design mix will be worked out taking into consideration the cement requirement as per particular mix design.		
5:47:1	P/F factory made precast RCC M.40 doors & windows	Mtrs.	0.049
5:47:2	P/F factory made precast RCC M.40 doors & windows	Mtrs.	0.044
5:47:3	P/F factory made precast RCC M.40 doors & windows	Mtrs.	0.041
5.48	Providing and laying RCC for construction of piers abutments portal frames etc.	Cum.	4.80
5.49	Constructing cost insitu RCC diaphragm wall by providing .....	Cum.	4.14

**COEFFICIENTS FOR CEMENT CONSUMPTION S.H. -5.0 REINFORCED CEMENT CONCRETE**

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 6.0 BRICK WORK

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
6.1	Brick work in foundation & plinth with non modular bricks.		
6.1.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	0.95
6.1.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	0.625
6.2	Brick work in foundation & plinth with modular bricks.		
6.2.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	0.836
6.2.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	0.55
6.3	Brick work with machine moulded perforated bricks.		
6.3.1	With non modular bricks.	cum	0.625
6.3.2	With modular bricks.	cum	0.55
6.4	Brick work in superstructure.		
6.4.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	0.95
6.4.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	0.625
6.7	Half brick masonry in cement mortar (1:3) for closing cavity 5 to 7.5 cm wide in cavity wall.	100 metre	3.86
6.8	Brick work 7 cm in cement mortar (1:3).	100 sqm	9.23
6.9& 6.10	Brick work in plain & gauged arches in cement mortar (1:3).	cum	1.28
<b>HALF BRICK MASONRY</b>			
6.12& 6.13	Half brick masonry in foundations & plinth and superstructure.		
6.12.1 & 6.13.1	Cement mortar 1:3 (1 cement : 3 coarse sand)	100 sqm	14.28
6.12.2 & 6.13.2	Cement mortar 1:4 (1 cement : 4 coarse sand)	100 sqm	10.64
<b>BRICK TILE WORK</b>			
6.16	Tile brick masonry in foundation and plinth. :		
6.16.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	1.52
6.16.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	1.00
6.17& 6.18	Tile brick masonry with m/c moulded tiles in cement mortar 1:6 (1 cement : 6 coarse sand).	cum	1.00
6.20 & 6.21	Tile brick masonry with tile bricks in plain/gauged arches work in in cement mortar (1:4).	cum	1.33
6.22	Tile brick masonry work 5 cm thick in cement mortar (1:3).	100 sqm	7.65

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
<b>HONEY COMB WORK</b>			
6.23	Honey-comb brick work 10/11.4 cm thick in cement mortar 1:4.	100 sqm	6.56
<b>EXPOSED BRICK WORK</b>			
6.26	Brick work with selected bricks in cement mortar (1:6).	cum	0.625
6.27	Brick work with modular bricks in cement mortar (1:6).	cum	0.55
6.28	Brick work with machine moulded modular bricks in cement mortar (1:6).	cum	0.55
6.29	Brick work with m/c moulded F.P.S. bricks in cement mortar (1:6).	cum	0.625
6.30	Brick work with machine moulded perforated F.P.S. bricks in cement mortar (1:6).	cum	0.625
6.31	Brick work with machine moulded perforated modular bricks in cement mortar (1:6).	cum	0.55
6.32	Brick work with clay flyash F.P.S. brick.		
	6.32.1 Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	0.95
	6.32.2 Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	0.625
6.34	Brick work with non modular fly ash lime bricks (FALG Bricks) in :		
	6.34.1 Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	0.95
	6.34.2 Cement mortar 1:6 (1 cement : 6 Coarse sand)	cum	0.625
6.35	Brick work with modular calcium silicate bricks machine moulded in :		
	6.35.1 Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	0.836
	6.35.3 Cement mortar 1:6 (1 cement : 6 Coarse sand)	cum	0.55
6.36	Brick work with modular extruded burnt fly ash clay sewer bricks in :		
	6.36.1 Cement Mortar 1:4 ( 1 cement : 4 coarse sand)	cum	0.836
6.37	Brick work with modular extruded burnt fly ash clay sewer bricks in cement mortar (1:3).	cum	1.275
6.38	Autoclaved aerated cement blocks masonry with 100mm thick AAC blocks in cement mortar (1:4).	cum	0.57
6.44	Brick edging 7 cm wide in cement mortar (1:4).	100 metre	0.137
6.45	Half brick masonry with non modular FALG bricks.		
	6.45.1 Cement mortar 1:3 (1 cement :3 coarse sand).	100 sqm	14.28
	6.45.2 Cement mortar 1:4 (1 cement :4 coarse sand).	100 sqm	10.64

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 7.0 STONE WORK

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
<b>RANDOM RUBBLE MASONRY</b>			
7.1& 7.2	Random rubble masonry with cement mortar (1:6).	cum	0.825
<b>COURSED RUBBLE MASONRY</b>			
7.6	Coursed rubble masonry (first sort) with :		
	7.6.1 Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	0.750
7.7	Coursed rubble masonry (second sort) with :		
	7.7.1 Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	0.750
<b>ASHLAR MASONRY</b>			
7.12	Stone work in plain ashlar in cement mortar (1:6) including pointing with white cement mortar (1:2).	cum	0.54
7.13& 7.14	Stone work plain ashlar in arches/domes in cement mortar (1:3) including pointing with white cement mortar (1:2).	cum	1.07
7.15	Stone work ashlar punched in cement mortar 1:6) including pointing with white cement mortar (1:2).	cum	0.54
<b>SUNK, MOULDED, CARVED ASHLAR MASONRY</b>			
7.20	Stone work sunk and / or moulded including pointing with white cement mortar (1:2).	cum	0.54
<b>MISCELLANEOUS STONE WORK</b>			
7.23	Stone work (machine cut edges) for wall lining etc. (vener work) in cement mortar (1:3) including pointing in white cement mortar (1:2).	100 sqm	9.18 + 1.56*
7.25	P/F stainless steel cramps in stone wall lining in cement mortar (1:2).	kg	0.07
7.26	P/F stone dowels 10x5x2.50 cm in cement mortar (1:2) .	each	0.007
7.27	P/F copper pins 7.5 cm long 6 mm diameter in stone wall lining in cement mortar (1:2).	each	0.007
7.28	P/F sloping chajja of stone 40 mm thick and upto 80 cm wide in cement mortar (1:4) i/c pointing in white cement mortar (1:2).	100 sqm	5.59
7.29	P/F horizontal chajja of stone 40 mm thick and upto 80 cm projection in cement mortar (1:4) i/c pointing in white cement mortar (1:2).	100 sqm	4.94 + 0.03*
7.30	P/F 30 mm red sand stone sun-shade with cement mortar 1:4 including finishing complete.	100 sqm	2.19
7.31	Providing and fixing red sand stone brackets 55x22.5x45cm.	100nos	3.02

*COEFFICIENTS FOR CEMENT CONSUMPTION S.H -7.0 STONE WORK*

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
7.32	Stone work, plain in copings, cornices, string courses etc. in Cement mortar 1:6 including pointing with white cement mortar (1:2).	cum	0.54
7.36	Wall lining butch work with Dholpur stone 40 mm thick, in cement mortar (1:3) including ruled pointing in cement mortar (1:2).	100 sqm	15.50 + 1.70*
7.37	Stone work ( machine cut edges) for wall lining with grout of 12 mm thick in cement mortar (1:3) and jointed with Cement mortar (1:2).	100 sqm	13.744
7.38	Stone tile work for wall lining with 12 mm thick bed in cement mortar (1:3).	sqm	10.44 + 1.70*
<b>STONE WORK IN DRY CLADDING</b>			
7.41	P/F structural steel frame (for dry stone cladding) embedded in brick wall with cement concrete block (1:2:4)	100kg	1.05

\* White cement

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 8.0 MARBLE & GRANITE WORK

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
8.1	Marble work 18 mm thick for wall lining in cement mortar 1:3 including pointing with white cement mortar 1:2.	100 sqm	8.67 + 1.70*
8.2	P/F 18mm thick gang saw cut mirror polished premoulded and prepolished) machine cut for kitchen platforms, vanity counters etc. laid over 20mm thick base cement mortar 1:4.	100 sqm	9.12
8.4	Extra for fixing marble /granite stone over and above corresponding basic item, in facia and drops of width upto 150 mm with epoxy resin based adhesive including cleaning etc. complete.	100 metre	1.27
8.7	P/F cramps in RCC/ CC backing with cement mortar 1:2 .		
	8.7.1 Gunmetal cramps	kg	0.0635
	8.7.2 Stainless steel cramps	kg	0.0701
8.9	Stone tile work for wall lining over 12mm thick bed of cement mortar (1:3) and cement slurry @ 3.3 kg/sqm including pointing in white cement complete.	100 sqm	10.44 + 1.90*
8.11	P/F Machine cut Mirror/edge polished	100 Sqm.	8.16 + 3.30*
8.12	P/L flamed finish granite stone flooring	100 sqm.	13.50

\* White cement

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 9.0 WOOD AND P.V.C. WORK

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
<b>MISCELLANEOUS - WOOD WORK</b>			
9.32	P/F 50x50x50 mm 2nd class teak wood plugs in cement mortar 1:3.	100 nos	0.01
9.34	P/F 2nd class teak wood plain lining with wooden plugs.	100 sqm	0.055
9.46	P/F curtain rods of 1.25 mm thick chromium plated brass brackets with wooden plugs, etc.	100 metre	0.01
9.47	Providing and fixing nickel plated M.S. pipe curtain rods with nickel plated brackets.	100 metre	0.01
9.53	Providing 40x5 mm flat iron hold fast 40 cm long with cement concrete block 30x10x15cm 1:3:6 mix.	100 nos	1.10

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 10.0 STEEL WORK

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
10.4	P/F 1 mm thick M.S. sheet sliding-shutters with frame.	100 sqm	0.35
10.5	P/F 1 mm thick M.S. sheet door with frame.	100 sqm	0.35
10.6	Supplying and fixing rolling shutters.	100 sqm	0.35
10.10.1 & 10.11.1	Fixing standard steel glaze door windows etc.	100 kg	0.13
10.13.1	P/F 'T' iron froms for doors windows & ventilators	100 kg	0.11
10.15	Providing and fixing M.S. Tubular frames for doors, windows, ventilators and cupboard with 15x3 mm lugs 10 cm long embedded in cement concrete blocks 15x10x10 cm of 1:3:6 mix.	100 kg	0.28

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 11.0 FLOORING

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
11.1	Brick on edge flooring.		
	11.1.1 1:4 (1 cement : 4 coarse sand)	sqm	0.1850
	11.1.2 1:6 (1cement : 6 coarse sand)	sqm	0.1285
11.3	Cement concrete flooring 1:2:4.		
	11.3.1 40mm thick with 20mm nominal size stone aggregate	sqm	0.17
11.4	52 mm thick cement concrete flooring.	sqm	0.231
11.5	62 mm thick cement concrete flooring.	sqm	0.263
11.6	Cement plaster skirting with cement mortar (1:3).	sqm	0.14
11.7	Cement concrete pavement with C.C. (1:2:4).	cum	3.20
<b>TERRAZO FLOORING</b>			
11.9	40 mm thick marble chips flooring with under layer 34 mm thick cement concrete (1:2:4).		
	11.9.1 Dark shade pigment with ordinary cement	sqm	0.1695
	11.9.2 Light shade pigment with white cement	sqm	0.129+0.0405*
	11.9.3 Medium shade pigment with 50% white cement and 50% ordinary cement	sqm	0.1492+0.0202*
	11.9.4 White cement without any pigment	sqm	0.129+0.0202*
	11.9.5 Light shade pigment with ordinary cement	sqm	0.1695
	11.9.6 Ordinary cement without any pigment	sqm	0.1695
11.10	40 mm thick marble chips flooring with under layer 31mm thick cement concrete 1:2:4.		
	11.10.1 Dark shade pigment with Ordinary cement	sqm	0.1783
	11.10.2 Light shade pigment with white cement	sqm	0.1205+0.0578*
	11.10.3 Medium shade pigment with 50% white cement and 50% ordinary cement	sqm	0.1494+0.0289*
	11.10.4 White cement without any pigment	sqm	0.1205+0.0578*
	11.10.5 Light shade pigment with ordinary cement	sqm	0.1783
	11.10.6 Ordinary cement without any pigment	sqm	0.1783
11.11	40 mm thick marble chips flooring with under layer 28 mm thick cement concrete 1:2:4.		
	11.11.1 Dark shade pigment with ordinary cement	sqm	0.1907
	11.11.2 Light shade pigment with white cement	sqm	0.1097+0.081*
	11.11.3 Medium shade pigment with 50% white cement and 50% ordinary cement	sqm	0.1502+0.0405*
	11.11.4 White cement without any pigment	sqm	0.1097+0.081*

*COEFFICIENTS FOR CEMENT CONSUMPTION S.H.-11.0 FLOORING*

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
	11.11.5 Light shade pigment with ordinary cement	sqm	0.1097
	11.11.6 Ordinary cement without any pigment	sqm	0.1097
11.12	Marble chips skirting :		
	11.12.1 18 mm thick with under layer 12 mm thick in cement plaster 1:3 (1 cement : 3 coarse sand) :		
	11.12.1.1 Dark shade pigment with ordinary cement	sqm	0.1292
	11.12.1.2 Light shade pigment with white cement	sqm	0.0887+0.0405*
	11.12.1.3 Medium shade pigment with 50% white cement and 50% ordinary cement	sqm	0.109+0.0203*
	11.12.1.4 White cement without any pigment	sqm	0.109+0.0405*
	11.12.1.5 Light shade pigment with ordinary cement	sqm	0.1292
	11.12.1.6 Ordinary cement without any pigment	sqm	0.1292
11.15	Crazy marble stone flooring.		
	11.15.1 18 mm thick crazy marble stone white, black or as specified	sqm	0.1200+0.0405*
	* White Cement		
	TILE FLOORING		
11.16	Precast terrazo tiles 22mm thick in floors, and landings on 20mm thick bed of cement mortar (1:4).		
	11.16.1 Light shade using white cement	sqm	0.0895+0.044*
	11.16.2 Medium shade using 50% white cement and 50% ordinary cement	sqm	0.0917+0.0220*
	11.16.3 Dark shade using ordinary cement	sqm	0.0939
	11.16.4 Ordinary cement without any pigment	sqm	0.0939
11.18	Precast terrazo tiles 22 mm thick in skirting and risers of steps.		
	11.18.1 Light shade using white cement.	sqm	0.0734+0.066*
	11.18.2 Medium shades using 50% white cement and 50% ordinary cement.	sqm	0.1064+0.033*
	11.18.3 Dark shade using ordinary cement	sqm	0.1394
	11.18.4 Ordinary cement without any pigment	sqm	0.1394
11.19	Chequered terrazo tiles 22 mm thick in floors on 20 mm thick bed of cement mortar (1:4).		
	11.19.1 Light shade using white cement	sqm	0.0895+0.044*
	11.19.2 Medium shade using 50% white cement, 50% ordinary cement	sqm	0.0917+0.024*
	11.19.3 Dark shade using ordinary cement	sqm	0.0939
	11.19.4 Ordinary cement without any pigment	sqm	0.0939

COEFFICIENTS FOR CEMENT CONSUMPTION S.H.-11.0 FLOORING

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
11.20	Chequerred precast cement concrete tiles 22 mm thick in foot path on 20 mm thick bed of cement mortar (1:4).		
11.20.1	Light shade using white cement	sqm	0.1291+0.066*
11.20.2	Medium shade using 50% white cement 50% Grey cement	sqm	0.1621+0.033*
11.20.3	Dark shade using ordinary cement	sqm	0.1951
11.20.4	Ordinary cement without any pigment	sqm	0.1951
11.21	Providing and fixing 10mm thick acid and or alkali resistant tiles.		
11.21.1	In flooring on a bed of 10 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand)		
11.21.1.1	Acid and alkali resistant tile	sqm	0.0786**
11.21.2	In dado/skirting on 12 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand)		
11.21.2.1	Acid and alkali resistant tile	sqm	0.0862**
11.22	Tile work in skirting, risers of steps etc. with 8 mm thick marble tile.	sqm	0.1044
<b>STONE FLOORING</b>			
11.23	Marble stone flooring with 18 mm thick marble stone over 20 mm thick cement mortar (1:4).	sqm	0.13512
<b>KOTA STONE FLOORING</b>			
11.26	Kota stone slab flooring over 20 mm thick bed of cement mortar (1:4).	sqm	0.1491
11.27	Kota stone slabs 20 mm thick in risers of steps, skirting etc. laid on 12 mm (average) thick cement mortar 1:3.	sqm	0.1374
<b>SAND STONE FLOORING</b>			
11.28	40 mm thick fine dressed stone flooring over 20 mm (average) thick base of cement mortar 1:5 with joints finished flush.	sqm	0.0775
11.29	40 mm thick fine dressed stone flooring over 20 mm (average) thick base of cement mortar 1:5 including pointing with cement mortar 1:2.	sqm	0.0931
11.30	40 mm thick rubbed stone flooring over 20 mm (average) thick base of cement mortar 1:5 with joints 3mm thick, side buttered with cement mortar 1:2.	sqm	0.0931
<b>CERAMIC GLAZED TILES</b>			
11.36	P/F 1st quality ceramic glazed wall tiles over 12 mm thick bed of cement Mortar (1:3).	sqm	0.1242
11.37	P/L ceramic glazed floor tiles laid on 20 mm thick Cement Mortar (1:4).	sqm	0.1242
11.38	P/L ceramic glazed floor tiles laid on 20mm thick bed of Cement Mortar (1:4).	sqm	0.1242
11.39& 11.40	P/L rectified Glazed Ceramic floor tiles laid on 20mm thick cement mortar (1:4).	sqm	0.1242

COEFFICIENTS FOR CEMENT CONSUMPTION S.H.-11.0 FLOORING

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
<b>VITRIFIED FLOOR TILES</b>			
11.41	P/L vitrified floor tile laid on 20mm thick cement mortar (1:4).	sqm	0.1242
11.44	Crazy ceramic tile flooring.	sqm	0.0646
11.46	P/L vitrified tile in skirting in cement mortar (1:3).	sqm	0.088
11.51	P/L Machine cut, Mirror polished, Italian Marble stone flooring	Sqm.	0.085 + 0.05*
11.52	P/L Machine cut Mirror polished Marble stone flooring	Sqm.	0.085 + 0.05*

\* White cement

\*\* Acid alkali resistant cement.

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 12.0 ROOFING

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
12.16	10 cm thick mud phaska with flat tile bricks grouted with cement mortar (1:3).	100 sqm	3.11
12.17	10cm thick mud phaska with machine moulded tile bricks grouted with cement mortar (1:3).	100 sqm	3.11
12.19	Providing and laying brick tiles over mumty roofs grouted with cement mortar (1:3).	100 sqm	9.13
12.20	Providing and laying pressed clay tiles on roofs jointed with cement mortar (1:4).	100 sqm	9.92
12.21	Providing gola 75x75 mm in cement concrete (1:2:4).	metre	0.031
12.22	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete (1:2:4).	each	0.06
12.23	Providing sand stone slab for roofing and laying cement mortar (1 : 4).	100 sqm	0.74
12.38	Providing and fixing M.S. holder bat clamps in cement concrete blocks 10x10x10cm of 1:2:4 mix.	each	0.005
12.55	P/F heat resistant tile on roof with cement mortar (1:4) and filling joints with white cement marble mix.	sqm	0.1367

\* White cement

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 13.0 FINISHING

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
<b>CEMENT PLASTER (IN FINE SAND)</b>			
13.1	12 mm cement plaster:		
	13.1.1 1:4 (1 cement : 4 fine sand)	100 sqm	5.47
	13.1.2 1:6 (1 cement : 6 fine sand)	100 sqm	3.60
13.2	15 mm cement plaster:		
	13.2.1 1:4 (1 cement : 4 fine sand)	100 sqm	6.54
	13.2.2 1:6 (1 cement : 6 fine sand)	100 sqm	4.30
13.3	20 mm cement plaster :		
	13.3.1 1:4 (1 cement : 4 fine sand)	100 sqm	8.51
	13.3.2 1:6 (1 cement : 6 fine sand)	100 sqm	5.60
<b>CEMENT PLASTER (IN COARSE SAND)</b>			
13.4	12 mm cement plaster :		
	13.4.1 1:4 (1 cement : 4 coarse sand)	100 sqm	5.47
	13.4.2 1:6 (1 cement : 6 coarse sand)	100 sqm	3.60
13.5	15 mm cement plaster :		
	13.5.1 1:4 (1 cement : 4 coarse sand)	100 sqm	6.54
	13.5.2 1:6 (1 cement : 6 coarse sand)	100 sqm	4.30
13.6	20 mm cement plaster :		
	13.6.1 1:4 (1 cement : 4 coarse sand)	100 sqm	8.51
	13.6.2 1:6 (1 cement : 6 coarse sand)	100 sqm	5.60
<b>CEMENT PLASTER WITH A FLOATING COAT OF NEAT CEMENT</b>			
13.7	12 mm cement plaster finished with a floating coat of neat cement :		
	13.7.1 1:3 (1 cement : 3 fine sand)	100 sqm	9.54
	13.7.2 1:4 (1 cement : 4 fine sand)	100 sqm	7.67
13.8	15 mm cement plaster finished with a floating coat of neat cement :		
	13.8.1 1:3 (1 cement : 3 fine sand)	100 sqm	10.97
	13.8.2 1:4 (1 cement : 4 fine sand)	100 sqm	8.74
13.9	Cement plaster (1:3) finished with a floating coat of neat cement.		
	13.9.1 12 mm Cement Plaster	100 sqm	9.54
	13.9.2 20 mm Cement Plaster	100 sqm	13.62

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity of cement per unit quantity of work (Quintals)</b>
13.10	15 mm cement plaster (1:3) finished with a floating coat of neat cement.	100 sqm	10.97
	<b>CEMENT PLASTER IN TWO COATS</b>		
13.11	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 finished with a top layer 6mm thick cement plaster 1:6.	100 sqm	6.26
13.12	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 and a top layer 6mm thick cement plaster (1:3).	100 sqm	8.13
13.13	12 mm cement plaster 1:2 (1 cement : 2 stone dust).	100 sqm	9.79
13.14	15 mm cement plaster 1:2 (1 cement : 2 stone dust).	100 sqm	11.70
13.15	20 mm cement plaster 1:2 (1 cement : 2 stone dust).	100 sqm	15.23
	<b>6 MM CEMENT PLASTER</b>		
13.16	6 mm cement plaster of mix :		
	13.16.1 1:3 (1 cement : 3 fine sand)	100 sqm	3.67
13.17	6 mm cement plaster (1:3) finished with a floating coat of neat cement.	100 sqm	5.87
13.18	Neat cement punning	100 sqm	2.20
	<b>ROUGH CAST PLASTER</b>		
13.19	Rough cast plaster in two layers, under layer 12 mm cement plaster (1:4) and top layer 10mm cement plaster (1:3).	100 sqm	11.59
	<b>PEBBLE DASH PLASTER</b>		
13.20	Pebble dash plaster in two layers, under layer 12mm cement plaster 1:4 and top layer 10mm cement plaster with cement mortar (1:3) .	100 sqm	11.59
	<b>PLAIN CEMENT MORTAR BANDS</b>		
13.28	12 mm thick plain cement mortar bands in cement mortar (1:4) : (Flush /Sunk / Raised / Moulded Band).	100 metre 1cm wide	0.053
13.29	18 mm thick plain cement mortar band in cement mortar (1:4).	100 metre 1cm wide	0.076
13.30	18 mm thick moulded cement mortar band in two coats under layer 12mm thick with cement mortar 1:5, top layer 6mm thick with cement mortar (1:4).	100 metre 1cm wide	0.07
	<b>POINTING OF BRICK WORK</b>		
13.31	Pointing on brick work with cement mortar (1:3) :		
	13.31.1 Flush / Ruled/ Struck or weathered pointing	100 sqm	1.53
	13.31.2 Raised and cut pointing	100 sqm	2.04

*COEFFICIENTS FOR CEMENT CONSUMPTION S.H.: -13.0 FINISHING*

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
<b>POINTING ON TILE BRICK WORK</b>			
13.32	Pointing on tile brick work with cement mortar (1:3).		
	13.32.1 Flush/ Ruled/ Struck or weathered pointing	100 sqm	2.35
<b>POINTING ON STONE WORK</b>			
13.33	Pointing on stone work with cement mortar (1:3).		
	13.33.1 Flush/ Ruled pointing	100 sqm	1.17
	13.33.2 Raised and cut pointing	100 sqm	2.35
13.34	Raised and cut pointing on stone work in white cement mortar (1:3).	100 sqm	2.35*
13.35	Pointing on stone slab ceiling with cement mortar (1:2).	100 sqm	1.02
13.72	Washed stone grit plaster on exterior walls in two layers, under layer 12mm cement plaster (1:4), top layer 15mm cement plaster 1:1/2:2.	100 sqm	17.472

**Note:** - cement consumption for pointing is same for modular & non modular bricks.

\* White cement

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 14.0 REPAIR TO BUILDING

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
14.1	Repairs to plaster of thickness 12 mm to 20 mm in patches with cement mortar 1:4.	100 sqm	6.95
14.2	Fixing chowkhats in existing opening with hold fasts in cement concrete blocks with cement concrete 1:3:6.		
14.2.1	Door chowkhats	each	0.12
14.2.2	Window chowkhats	each	0.06
14.2.3	Clerestory window chowkhats	each	0.03
14.12	Providing and fixing 16 mm M.S. Fan clamps in existing R.C.C. slab.	each	0.016
14.13	Regrading terracing of mud phaska to proper slope.	100 sqm	3.11
14.14	Replacing sand stone slabs in roofing in cement mortar 1:4.	100 sqm	0.78
14.15	Renewing wooden battens in roofs & making good the holes in walls.	cum	0.36
14.16	Renewing wooden beams in roofs & making good the holes in walls.	cum	0.13
14.18	Flush pointing with cement mortar 1:3 for flat tile bricks on top of mud phaska.	100 sqm	0.76

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 16.0 ROAD WORK

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
<b>FENCING</b>			
16.23	P/F boundary stone including finishing smooth with cement mortar (1:3).	each	0.082
16.24	P/F precast R.C.C. kilometre stone including finishing smooth in cement mortar (1:3).		
16.24.1	35x111x25 cm size	each	0.37
16.24.2	50x152.5x25 cm size	each	0.698
16.24.3	35x93.5x18 cm size	each	0.23
<b>CONCRETE PAVEMENT</b>			
16.42	Cement concrete (1:2:4) in pavements.	cum	3.20
16.43	Providing and laying design mix cement concrete of M-30 grade, in roads/ taxi tracks/ runways, using cement content as per design mix.	cum	3.40
<b>MISCELLANEOUS</b>			
16.49	Making bell mouth opening including providing cement concrete (1:3:6) & plastering with cement mortar (1:3).	10 nos	6.60
16.52	Providing and fixing precast lime fly ash concrete blocks including finishing with 10mm thick cement mortar (1:3), in foot paths.	sqm	0.05
16.63	P/L kerb channel 30cm wide and 50mm thick of cement concrete (1:3:6).	metre	0.11
16.67	Providing and fixing factory made RCC pavement slab of M-30 grade in footpath over a bed of 20mm average thick cement mortar (1:5).	100 sqm	7.75
16.69	Providing and laying factory made kerb stone of M-25 grade jointed with cement mortar (1:3).	cum	0.05
16.75	Providing and laying C.C. pavement of mix M-25 with ready mixed concrete.	cum	3.30
16.80	Dry lean cement concrete sub base.	cum	1.50
16.85	Laying old kerb stones, jointed with cement mortar (1:3).	100 metre	0.3723
16.86	P/L gaug saw cut 18 mm thick, morror polished	Sqm.	0.09
16.87	P/L gaug saw cut 30 mm thick mirror polished	Sqm.	0.09
16.88	P/L Matt finished vitrified tile of size	Sqm.	0.12
16.89	P/L Matt finished vitrifid tile of size	Sqm.	0.12
16.90	P/L tactile tile	Sqm.	0.12
16.92	P/F 10x10x7.5 cm. granite stone block	Sqm.	1.85

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 17.0 SANITARY INSTALLATIONS

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
17.1/17.2/ 17.3	Fixing Indian type W.C. pan.	each	0.05
17.4	Fixing white vitreous china urinal basin :		
17.4.1	One urinal basin with 5 litre white P.V.C. automatic flushing cistern	each	0.025
17.4.2	Range of two urinal basins with 5 litre white P.V.C. automatic flushing cistern	each	0.04
17.4.3	Range of three urinal basins with 10litre white P.V.C. automatic flushing cistern	each	0.067
17.4.4	Range of four urinal basins with 10 litre white P.V.C. automatic flushing cistern	each	0.095
17.5	Fixing white vitreous china flat back half stall urinal :		
17.5.1	Single half stall urinal with 5 litre P.V.C. automatic flushing cistern	each	0.051
17.5.2	Range of two half stall urinals with 5 litre P.V.C. automatic flushing cistern	each	0.102
17.5.3	Range of three half stall urinals with 10 litre P.V.C. automatic flushing cistern	each	0.153
17.5.4	Range of four half stall urinals with 10 litre P.V.C. automatic flushing cistern	each	0.203
17.6	Fixing one piece construction white vitreous china squatting plate :		
17.6.1	Single squatting plate with 5 litre P.V.C. automatic flushing cistern	each	0.051
17.6.2	Range of two squatting plates with 5 litre P.V.C. automatic flushing cistern	each	0.102
17.6.3	Range of three squatting plates with 10 litre P.V.C. automatic flushing cistern	each	0.153
17.6.4	Range of four squatting plates with 10 litre P.V.C. automatic flushing cistern	each	0.203
17.7	Fixing wash basin with C.I. brackets.	each	0.025
17.8	Fixing white vitreous china pedestal for wash basin.	each	0.016*
17.9/ 17.10/ 17.11	Fixing kitchen sink with C.I. brackets.	each	0.025
17.12	Fixing draining board with C.I. brackets.	each	0.014
17.13	Fixing White vitreous china water closet squatting pan.	each	0.025
17.17	Fixing a pair of white vitreous china foot rests.	each	0.025
17.23	Fixing white vitreous china flat urinal basin.	each	0.01

*COEFFICIENTS FOR CEMENT CONSUMPTION S.H.: -17.0 SANITARY INSTALLATIONS*

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity of cement per unit quantity of work (Quintals)</b>
17.24	Fixing white vitreous china squatting plate urinal.	each	0.02
17.25	Fixing white vitreous china wash basin.	each	0.015
17.26/ 17.27	Fixing kitchen sink.	each	0.015
17.37	Providing and fixing M.S. holder-bat clamps.	each	0.005
17.59	Providing and fixing M.S. stays and clamps.	each	0.005
17.60	Providing and fixing trap of self-cleansing design.	each	0.025
17.61	Cutting chases in brick masonry walls for sand cast iron/centrifugally cast (spun) iron pipes and making good the same with C.C.(1:3:6).		
17.61.1	100 mm dia	100 metre	5.40
17.61.2	75 mm dia	100 metre	3.70
17.61.3	50 mm dia	100 metre	1.87

\* White Cement.

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 18.0 WATER SUPPLY

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
18.1/18.4/	Providing and fixing G.I./ PE-AL-PE/ PP-R pipes.		
18.7/18.10	<b>Internal work - Exposed on wall</b>		
18.10.1	15 mm dia nominal bore	100 metre	0.05
18.10.2	20 mm dia nominal bore	100 metre	0.06
18.10.3	25 mm dia nominal bore	100 metre	0.07
18.10.4	32 mm dia nominal bore	100 metre	0.075
18.10.5	40 mm dia nominal bore	100 metre	0.08
18.10.6	50 mm dia nominal bore	100 metre	0.08
18.2/18.5/	P/F concealed pipes.	100 metre	0.88
18.8/18.11			
18.32	Constructing masonry Chamber 30x30x50 cm, for stop cock.	each	0.26
18.33	Constructing masonry Chamber 60x60x75 cm, for sluice valve.	each	1.44
18.34	Constructing masonry Chamber 90x90x100 cm, for sluice valve.	each	2.48
18.35	Constructing masonry Chamber 120x120x100 cm, for sluice valve.	each	3.50
18.36	Constructing masonry Chamber 60x60x75 cm, for fire hydrants. each	each	1.30
18.37	Constructing masonry Chamber 60x45x50 cm, for water meter.	each	1.34
18.76	Cutting holes up to 30x30 cm in walls including making good the same.	100 nos.	2.92
18.77	Cutting holes up to 15x15 cm in R.C.C. floors and roofs and repairing the hole after insertion of drain pipes etc. with cement concrete (1:2:4).	100 nos.	0.70
18.78	Making chases up to 7.5x7.5 cm in walls i/c finishing.	100 metre	0.88
18.79	Making hole up to 20x20 cm and embedding pipes up to 150 mm diameter in masonry and filling with cement concrete (1:3:6).	100 metre	4.90

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 19.0 DRAINAGE

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
19.1	Jointing glazed stoneware pipes with stiff mixture of cement mortar in the proportion of (1:1).		
19.1.1	100 mm diameter	100 metre	2.17
19.1.2	150 mm diameter	100 metre	3.23
19.1.3	200 mm diameter	100 metre	4.33
19.1.5	250 mm diameter	100 metre	5.40
19.1.6	300 mm diameter	100 metre	6.47
19.2	Laying cement concrete (1:5:10) around S.W. pipes:		
19.2.1	100 mm diameter S.W. pipe	100 metre	19.24
19.2.2	150 mm diameter S.W. pipe	100 metre	23.53
19.2.3	200 mm diameter S.W. pipe	100 metre	27.43
19.2.5	250 mm diameter S.W. pipe	100 metre	31.72
19.3	Laying cement concrete (1:5:10) upto haunches of S.W. pipes:		
19.3.1	100 mm diameter S.W. pipe	100 metre	9.14
19.3.2	150 mm diameter S.W. pipe	100 metre	14.82
19.3.3	200 mm diameter S.W. pipe	100 metre	17.42
19.3.5	250 mm diameter S.W. pipe	100 metre	20.28
19.3.6	300 mm diameter S.W. pipe	100 metre	23.40
19.4	Providing and fixing square-mouth S.W. gully trap :		
19.4.1	100x100 mm size P type	each	0.27
19.4.2	150 x 100 mm size P type.	each	0.26
19.4.3	180x150 mm size P type	each	0.25
19.6	P/L NP2 class R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of (1:2):		
19.6.1	100 mm dia. R.C.C. pipe	100 metre	0.50
19.6.2	150 mm dia. R.C.C. pipe	100 metre	0.60
19.6.3	250 mm dia. R.C.C. pipe	100 metre	0.90
19.6.4	300 mm dia. R.C.C. pipe	100 metre	1.10
19.6.5	450 mm dia. R.C.C. pipe	100 metre	2.40
19.6.6	500 mm dia. R.C.C. pipe	100 metre	2.60
19.6.7	600 mm dia. R.C.C. pipe	100 metre	3.20
19.6.8	700 mm dia. R.C.C. pipe	100 metre	3.70
19.6.9	800 mm dia. R.C.C. pipe	100 metre	4.20

COEFFICIENTS FOR CEMENT CONSUMPTION S.H.: -19.0 DRAINAGE

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
	19.6.10 900 mm dia. R.C.C. pipe	100 metre	4.90
	19.6.11 1000 mm dia. R.C.C. pipe	100 metre	5.50
	19.6.12 1100 mm dia. R.C.C. pipe	100 metre	6.10
	19.6.13 1200 mm dia. R.C.C. pipe	100 metre	6.80
19.7	Constructing brick masonry manhole in cement mortar (1:4).		
	19.7.1 Inside size 90x80 cm and 45 cm deep	each	2.92
	19.7.2& Inside size 120x90 cm and 90 cm.deep		
	19.7.3	each	4.73
19.8	Extra for depth for manholes		
	19.8.1 Size 90x80 cm	metre	1.26
	19.8.2 Size 120x90 cm	metre	1.52
19.9	Constructing brick masonry circular type manhole 0.91 m internal dia at bottom and 0.56m dia at top in cement mortar (1:4).		
	19.9.1 0.91 m deep	each	2.75
19.10	Extra depth for circular type manhole 0.91m internal dia (at bottom) with beyond 0.91m to 1.67m	metre	1.40
19.11	Constructing brick masonry circular manhole 1.22m internal dia at bottom and 0.56m dia at top in cement mortar (1:4).		
	19.11.1 1.68 m deep	each	5.39
19.12	Extra depth for circular type manhole 1.22m internal dia (at bottom) beyond 1.68 m to 2.29 m.	metre	1.43
19.13	Constructing brick masonry circular manhole 1.52 m internal dia at bottom and 0.56 m dia at top in cement mortar (1:4).		
	19.13.1 2.30 m deep	each	10.86
19.14	Extra depth for circular type manhole 1.52 m internal dia (at bottom) beyond 2.30 m.	metre	3.11
19.15	Providing M.S. foot rests including fixing in manholes with 20x20x10 cm cement concrete blocks (1:3:6).	100 nos.	0.88
19.16	Providing orange colour safety foot rest.	100 nos	1.98
19.17	Replacement of M.S. foot rests in manholes with 20x10x10 cm C.C. blocks (1:3:6) mix.	100 nos	0.88
19.19	Providing and fixing in position precast R.C.C. manhole cover and frame.		
	19.19.1 L D- 2.5		
	19.19.1.1 Rectangular shape 600x450mm internal dimensions	each	0.128
	19.19.1.2 Square shape 450mm internal dimensions	each	0.096
	19.19.1.3 Circular shape 450mm internal diameter	each	0.096

COEFFICIENTS FOR CEMENT CONSUMPTION S.H.: -19.0 DRAINAGE

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
19.19.2	M D - 10		
19.19.2.1	Square shape 450mm internal dimension	each	0.128
19.19.2.2	Circular shape 500mm internal diameter	each	0.096
19.19.3	H D - 20		
19.19.3.1	Circular shape 560 mm internal diameter	each	0.096
19.19.4	EHD - 35		
19.19.4.1	Circular shape 560 mm internal dia	each	0.096
19.21	Making connection of drain or sewer line with existing manhole and making good the walls, floors with C.C.(1:2:4) mix.		
19.21.1	For pipes 100 to 250 mm diameter	each	0.056
19.21.2	For pipes 250 to 300 mm diameter	each	0.095
19.21.3	For pipes 350 to 450 mm diameter	each	0.153
19.22	Providing sand cast iron drop connection externally for 60 cm drop from branch sewer line to main sewer manhole. :		
19.22.1	100 mm dia sand cast iron drop connection	each	0.34
19.22.2	150 mm dia sand cast iron drop connection	each	0.46
19.23	Extra for depths beyond 60 cm of sand cast iron drop connection. :		
19.23.1	For 100 mm dia. sand cast iron drop connection	metre	0.21
19.23.2	For 150 mm dia. sand cast iron drop connection	metre	0.26
19.27	Constructing brick masonry road gully chamber 50x45x 60cm in cement mortar (1:4).	each	0.93
19.28	Constructing brick masonry road gully chamber 45x45x 77.5 cm in cement mortar (1:4).	each	0.82
19.29	Constructing brick masonry road gully chamber 110x50x 77.5 cm in cement mortar (1:4).	each	1.66
19.30	Constructing brick masonry chamber for underground C.I. inspection chamber and bends in cement mortar (1:4).		
19.30.1	Inside dimensions 455x610 mm and 45 cm deep for single pipe line	each	0.90
19.30.2	Inside dimensions 500x700 mm and 45 cm deep for pipe line with one or two inlets	each	1.02
19.30.3	Inside dimensions 600x 850 mm and 45 cm deep for pipe line with three or more inlets	each	1.27
19.31	Extra for depth beyond 45 cm of brick masonry chamber :		
19.31.1	For 455x610 mm size	metre	0.87
19.31.2	For 500x700 mm size	metre	0.95
19.31.3	For 600x850 mm size	metre	1.12

COEFFICIENTS FOR CEMENT CONSUMPTION S.H.: -19.0 DRAINAGE

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity of cement per unit quantity of work (Quintals)</b>
19.32	Making soak pit 2.5 m diameter 3.0 metre deep.	each	0.072
19.34	Providing and fixing S.W. intercepting trap in manholes with stiff mixture of cement mortar (1:1).		
19.34.1	100 mm dia	each	0.013
19.34.2	150 mm dia	each	0.019
19.35	P/L Non pressure Np-3 class		
19:35:1	a) 450 mm dia RCC pipe	100 Mtrs.	1.20
19:35:2	a) 600 mm dia R.C.C. pipe	100 mtrs.	1.60
19:35:3	a) 900 mm dia R.C.C. pipe	100 mtrs.	2.50
19:35:4	a) 1000 mm dia RCC pipe	100 mtrs.	2.80
19:35:5	a) 1200 mm dia RCC pipe	100 mtrs.	3.40
19:35:6	a) 1800 mm dia RCC pipe	100 mtrs.	4.90
19:36	P/L Non pressure Np-4 class		
19:36:1	450 mm dia RCC pipes	100 mtrs.	1.20
19:36:2	600 mm dia RCC pipes	100 mtrs.	1.60
19:36:3	900 mm dia RCC pipes	100 mtrs.	2.50
19:36:4	1000 mm dia RCC pipes	100 mtrs.	2.80
19:36:5	1200 mm dia RCC pipes	100 mtrs.	3.40
19:36:6	1800 mm dia RCC pipes	100 mtrs.	4.90

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 20.0 PILE WORK

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
20.1	Providing, driving and installing driven cast-in-situ reinforced cement concrete piles of grade M -25.		
20.1.1	400 mm dia piles	metre	0.414
20.1.2	450 mm dia piles	metre	0.525
20.1.3	500 mm dia piles	metre	0.648
20.1.4	550 mm dia piles	metre	0.784
20.1.5	750 mm dia piles.	metre	1.456
20.1.6	1000 mm dia piles	metre	2.590
20.1.7	1200 mm dia piles	metre	3.729
20.1.8	1500 mm dia piles	metre	5.83
20.2	Boring, providing and installing bored cast-in-situ reinforced cement concrete piles of grade M -25.		
20.2.1	300 mm dia piles	metre	0.232
20.2.2	400 mm dia piles	metre	0.414
20.2.3	450 mm dia piles	metre	0.525
20.2.4	500 mm dia. piles	metre	0.648
20.2.5	600 mm dia piles	metre	0.932
20.2.6	750 mm dia piles.	metre	1.456
20.2.7	1000 mm dia piles	metre	2.590
20.2.8	1200 mm dia piles	metre	3.729
20.2.9	1500 mm dia pile	metre	5.830
20.3	Boring, Providing and installing cast in situ single under reamed piles of grade M -25.		
20.3.1	300 mm dia piles	metre	0.257
20.3.2	400 mm dia piles	metre	0.488
20.3.3	450 mm dia piles	metre	0.629
20.3.4	550 mm dia piles	metre	0.792
20.4	Extra for providing additional bulb in under reamed piles.		
20.4.1	300mm dia piles	each	0.109
20.4.2	400mm dia piles	each	0.208
20.4.3	450 mm dia piles	each	0.267
20.4.4	550 mm dia piles	each	0.396
20.5	Providing, driving and installing driven Pre-cast reinforced cement concrete piles of grade M -25.		

*COEFFICIENTS FOR CEMENT CONSUMPTION S.H. -20.0 PILE WORK*

<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity of cement per unit quantity of work (Quintals)</b>
20.5.1	400 mm dia piles	metre	0.414
20.5.2	450 mm dia piles	metre	0.525
20.5.3	500 mm dia piles	metre	0.648
20.5.4	550 mm dia piles	metre	0.784
20.5.5	750 mm dia piles	metre	1.795
20.5.6	1000 mm dia piles	metre	2.590

## 1.0 COEFFICIENTS FOR CEMENT CONSUMPTION

### 22.0 WATER PROOFING

Code No.	Description	Unit	Quantity of cement per unit quantity of work (Quintals)
22.1	P/L integral cement based treatment for water proofing on horizontal surface. :		
	22.1.1 Using rough kota stone	sqm	0.342
22.2	P/L integral cement based treatment for water proofing on the vertical surface. :		
	22.2.1 Using rough Kota stone	sqm	0.443
22.3	P/L water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like consisting of:		
	i) Ist course of applying cement slurry @ 4.4 kg/sqm		
	ii) IInd course of 20mm cement plaster (1:3)		
	iii) IIIrd course of applying blown or residual bitumen applied hot at 1.7 Kg. per sqm of area		
	iv) IVth course of 400 micron thick PVC sheet	sqm	0.158
22.5	P/L water proofing treatment in sunken portion of WCs, bathroom etc.	sqm	0.0123
22.6	P/L water proofing treatment on roofs.	sqm	0.0195
22.7	P/L integral cement based water proofing treatment on roofs, balconies, terraces etc. :		
	22.7.1 With average thickness of 120mm and minimum thickness at khurra as 65 mm	sqm	0.387
22.14	Grading roof for water proofing treatment with		
	22.14.1 Cement concrete 1:2:4	cum	3.20
	22.14.2 Cement mortar 1:3	cum	5.10
	22.14.3 Cement mortar 1:4	cum	3.80

**1.0 COEFFICIENTS FOR CEMENT CONSUMPTION**  
**23.0 HORTICULTURE & LANDSCAPING**

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<b>Code No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity of cement per unit quantity of work (Quintals)</b>
23.30	Providing circular cement concrete pots.	100 nos	4.00
23.31	Providing square cement concrete pots.	100 nos	2.30

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**COEFFICIENTS  
FOR BITUMEN  
CONSUMPTION**



## 2.0 COEFFICIENT FOR BITUMEN CONSUMPTION

### 16.0 ROAD WORK

Code No.	Description	Unit	Quantity of bitumen per unit quantity of work (Quintals)
<b>SURFACE DRESSING</b>			
16.25	Surface dressing on new surface with paving bitumen of grade VG -10.	sqm	0.0225
16.26	Surface dressing on new surface in two coats with bitumen of grade VG -10.	sqm	0.029
16.27	Surface dressing on old surface with hot bitumen of grade VG -10.	sqm	0.0195
16.28	Surface dressing one coat on new surface :		
	16.28.1 Using bitumen emulsion	sqm	0.0195
16.29	Surface dressing one coat on old surface :		
	16.29.1 Using bitumen emulsion	sqm	0.0122
<b>PREMIX CARPET</b>			
16.30	Providing and applying tack coat with bitumen of grade VG-10 :		
	16.30.1 On W.B.M. @ 0.75 Kg / sqm	sqm	0.0075
	16.30.2 On bituminous surface @ 0.50 Kg / sqm	sqm	0.0050
16.31	Providing and applying tack coat using bitumen emulsion (Rapid Setting):		
	16.31.1 On W.B.M @ 0.4kg/sqm	sqm	0.0040
	16.31.2 On bituminous surface @ 0.25kg/sqm	sqm	0.0025
16.32	2 cm premix carpet surfacing with paving asphalt VG-10/VG-30/modified bitumen CRMB 55.	sqm	0.0144
16.33	2.5 cm premix carpet surfacing with paving asphalt VG-10/VG-30/modified bitumen CRMB 55.	sqm	0.018
16.34	2 cm premix carpet surfacing with bitumen emulsion.	sqm	0.033*
16.35	2.5 cm premix carpet surfacing with bitumen emulsion.	sqm	0.0388*
16.36	Providing and laying Bitumen Penetration Macadam :		
	16.36.1 For 50mm compacted thickness with paving asphalt VG-10 @ 50 kg/10 sqm	sqm	0.05
	16.36.2 For 75 mm compacted thickness in two layers with paving asphalt VG-10 @ 68 kg/10 sqm	sqm	0.068
<b>MASTIC AND BITUMASTIC WEARING COURSE</b>			
16.37	Providing and laying bitumen mastic wearing course:		
	16.37.1 25mm thick	sqm	0.0586
	16.37.2 40 mm thick	sqm	0.0938

Code No.	Description	Unit	Quantity of bitumen per unit quantity of work (Quintals)
16.38	2.5 cm thick bitumastic sheet with hot bitumen, paving asphalt VG-10/VG-30/modified bitumen CRMB 55.	sqm	0.0303
16.39	4 cm thick bitumastic sheet with hot bitumen, paving asphalt VG-10/VG-30/modified bitumen CRMB 55.	sqm	0.0479
<b>SEAL COAT</b>			
16.40	P/L seal coat using 128 kg of bitumen of grade VG-10.	sqm	0.0077
16.41	P/L seal coat using 98 kg of bitumen of grade VG-10.	sqm	0.0098
16.54	P/L Dense Bituminous macadam :		
16.54.1	50 to 100 mm average compacted thickness with bitumen of grade VG-30 @ 5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	cum	1.5438
16.54.2	50 to 100 mm average compacted thickness with bitumen of grade VG-30 @ 5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Drum Type Hot Mix Plant of 60-90 TPH capacity.	cum	1.5438
16.55	Providing and laying Bituminous Macadam.		
16.55.1	50 to 100 mm average compacted thickness with bitumen of grade VG-30 @ 3.50% (percentage by weight of total mix) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	cum	0.7683
16.55.2	50 to 100 mm average compacted thickness with bitumen of grade VG-30 @ 3.50% (percentage by weight of total mix) prepared in Drum Type Hot Mix Plant of 60-90 TPH capacity.	cum	0.7683
16.56	Providing and laying Semi Dense Bituminous concrete		
16.56.1	25 mm compacted thickness with bitumen of grade VG-30 @ 5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	100 sqm	2.884
16.56.2	25 mm compacted thickness with bitumen of grade VG-30 @ 5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Drum Type Hot Mix Plant of 60-90 TPH capacity.	100 sqm	2.884
16.57	P/L Bituminous Concrete :		
16.57.1	40/50 mm compacted thickness with bitumen of grade VG-30 @ 5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	cum	1.296

COEFFICIENT FOR BITUMEN CONSUMPTION -SH: 16.0 ROAD WORK

Code No.	Description	Unit	Quantity of bitumen per unit quantity of work (Quintals)
16.57.2	40/50 mm compacted thickness with bitumen of grade VG-30 @ 5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) and waste plastic additive @ 8% (percentage by weight of bitumen) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	cum	1.296
16.57.3	40/50 mm compacted thickness with bitumen of grade PMB-40 @ 5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	cum	1.296
16.57.4	40/50 mm compacted thickness with bitumen of grade CRMB-60 @ 5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	cum	1.296
16.57.5	40/50 mm compacted thickness with bitumen of grade VG-30 @ 5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) prepared in drum Type Hot Mix Plant of 60-90 TPH capacity.	cum	1.296
16.57.6	40/50 mm compacted thickness with bitumen of grade VG-30 @ 5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) and waste plastic additive @ 8% (percentage by weight of bitumen) prepared in drum Type Hot Mix Plant of 60-90 TPH capacity.	cum	1.296
16.57.7	40/50 mm compacted thickness with bitumen of grade PMB-40 @ 5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) prepared in drum Type Hot Mix Plant of 60-90 TPH capacity.	cum	1.296
16.57.8	40/50 mm compacted thickness with bitumen of grade CRMB-60 @ 5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) prepared in Drum Type Hot Mix Plant of 60-90 TPH capacity.	cum	1.296

\* Including tack coat

## 2.0 COEFFICIENT FOR BITUMEN CONSUMPTION

### 22.0 WATER PROOFING

Code No.	Description	Unit	Quantity of bitumen per unit quantity of work (Quintals)
22.3	P/L water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like.	sqm	0.017
22.6	P/L water proofing treatment on roofs with cement slurry & fibre glass cloth.	sqm	0.01
22.8	P/L four courses water proofing treatment with bitumen felt over roofs:		
	22.8.1 Bitumen felt (hessian base) type 3 grade I	sqm	0.029
22.9	P/L six courses water proofing treatment with bitumen felt over roofs applied hot @ 1.45, 1.20 & 1.45 for 1st, 3rd and 5th course.	sqm	0.041
22.10 & 22.11	P/L six courses water proofing treatment with bitumen felt over roofs applied hot @ 1.45, 1.20 & 1.70 for 1st, 3rd and 5th course.	sqm	0.0435
22.15	P/L in situ seven course water proofing treatment with APP (1.5 mm thick @ 2.25 kg./sqm).	sqm	0.036
22.16	P/L in situ five course water proofing treatment with APP (2.00 mm thick @ 3.00 kg./sqm).	sqm	0.024
22.17	P/L in situ seven course water proofing treatment with APP (2.00 mm thick @ 3.00 kg./sqm).	sqm	0.036
22.18	P/F APP.		
	22.18.1 2mm (for corrugated roof sheets)	sqm	0.036
22.19	P/L APP modified prefabricated five layer, 3 mm thick water proofing membrane. Tear strength in longitudinal and transverse direction as 60/80N.		
	22.19.1 3 mm thick	sqm	0.024
22.20	P/L APP modified prefabricated five layer 3 mm thick water proofing membrane. Tear strength in longitudinal and transverse direction as 300/250N.		
	22.20.1 3 mm thick	sqm	0.036

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