OFFICE OF THE ENGINEER-IN-CHIEF,

M.P., P.W.D. SATPURA BHAWAN, BHOPAL

SCHEDULE OF RATES FOR BUILDING WORKS (w.e.f. 15/06/2009)

(ERRATA/AMMENDMENT/ADDENDUM NO.6)

The rates of Chapter-II to Chapter-XXII of building SOR w.e.f. 01.08.2014 are revised as follows:-

**CHAPTER-II**

**Excavation for foundation**

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| 2.1 | Suface dressing of the ground including removing vegetation and in-  equalities not exceeding 15 cm deep and disposal of 2.1.1 all kings of soil  rubbish, lead upto 50m and lift upto 1.5 m. | 100 sqm | 803.00 |
| 2.2 | Clearing jungle including uprooting of rank vegetation,grass brush wood trees and saplings of girth upto 30 cm measured at a height of 1 m above ground level and removal of rubbish upto a distance of 50m outside the periphery of the area cleared. | 100 sqm | 414.00 |
| 2.3 | Clearing grass and removal of the rubbish upto a distance of 50 m outside the periphery of area cleared. | 100 sqm | 213.00 |
| 2.4 | 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. |  |  |
| 2.4.1 | Beyond 30 cm girth upto and including 60 cm girth | Each | 129.00 |
| 2.4.2 | Beyond 60 cm girth upto and including 120 cm girthgirth. | Each | 565.00 |
| 2.4.3 | Beyond 120 cm girth upto and including 240 cm girth | Each | 2601.00 |
| 2.4.4 | 2.4.4 Above 240 cm girth | Each | 5224.00 |
| 2.5 | 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:  All kinds of soil | sqm | 33.00 |
| 2.6 | Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means in over areas (exceeding 30cm in depth 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom ,disposal of expatiated earth leed up to 50m lift upto 1.5 m disposed earth to be leveled and neatly dressed (No extra lift is payable if work is done by mechanical means)  All kinds of soil. | cum | 129.00 |
| 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 eccavated earth lead upto 50 m and lift upto 1.5m disposed earth to be levelled and neatly dressed. |  |  |
| 2.7.1 | Ordinary rock | Cum | 203.00 |
| 2.7.2 | Hard rock ( requiring blasting). | Cum | 402.00 |
| 2.7.3 | Hard rock ( blsting prohibited) | Cum | 491.00 |

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| 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 excavates soil as directed width a lead of 50m (No extra lift is payable if work is done by mechanical means)  All kinds soil | cum | 131.00 |
| 2.9 | Excavation work 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 width a lead of 50m |  |  |
| 2.9.1 | Ordinary rock | Cum | 216.00 |
| 2.9.2 | Hard rock (requiring blasting) | Cum | 452.00 |
| 2.9.3 | Hard rock (blasting prohibited) | Cum | 493.00 |
| 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 20cm in depth including consolidating each deposited layer by ramming, watering, etc and diposing of surplus excavated soil as directed, width a lead of 50m: (No extra lift is payable if work is done by mechanical means) |  |  |
| 2.10.1 | All kinds of soil | Meter |  |
| 2.10.1.1 | Pipes, cables, etc, not exceeding 80mm dia | Meter | 96.00 |
| 2.10.1.2 | Pipes, cables etc, exceeding 80mm dia, but not exceeding 300mm dia. | Meter | 156.00 |
| 2.10.1.3 | Pipes, cables etc, exceeding 300mm dia but not exceeding 600mm. | Meter | 244.00 |
| 2.11 | Extra for excavating trenches for pipes cables etc in all kinds of soil for depth exceeding 1.5m but not exceeding 3m (Rate is over corresponding basic item for depth upto 1.5meter) | Meter | 134% |
| 2.12 | Extra for excavating trenches for pipes cables etc in all kinds of soil for depth exceeding 3m in depth but not exceeding 4.5m (Rate is over corresponding basic item for depth upto 1.5 meter) | Meter | 345% |
| 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 refilling the excavated 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 martial as directed within a lead of 50 m |  |  |

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| 2.13.1 | Ordinary rock | Meter | 139.00 |
| 2.13.1.1 | pipes, cables etc. not exceeding 80 mm dia | Meter | 344.00 |
| 2.13.1.2 | pipes, cables etc. exceeding 80 mm dia but not exceeding 300 mm dia. | Meter | 395.00 |
| 2.13.1.3 | pipes, cables etc. exceeding 300 mm dia but not exceeding 600 mm dia. | Meter |  |
| 2.13.2 | Hard rock (requiring blasting) |  |  |
| 2.13.2.1 | pipes, cables etc. exceeding 80 mm dia |  | 251.00 |
| 2.13.2.2 | pipes, cables etc. exceeding 80 mm dia but not exceeding 300 mm dia. | Meter | 621.00 |
| 2.13.2.3 | pipes, cables etc. not exceeding 300 mm dia but not exceeding 600 mm dia. | Meter | 715.00 |
| 2.13.3 | Hard rock (requiring prohibited) | Meter |  |
| 2.13.3.1 | pipes, cables etc. not exceeding 80 mm dia | Meter | 270.00 |
| 2.13.3.2 | pipes cables etc. exceeding 80 mm dia but not exceeding 300 mm dia | Meter | 670.00 |
| 2.13.3.3 | pipes cables etc. exceeding 300 mm dia but not exceeding 300 mm dia 600 | Meter | 770.00 |
| 2.14 | Extra for excavating trenches for pipes, cables etc. in ordinary/hard rock exceeding 3m in depth but not exceeding 4.5 m (Rate in over corresponding basic item for depth upto 1.5m) | Meter | 102% |
| 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 in over corresponding basic item for depth upto 1.5m) | Meter | 252% |
| 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 | 118.00 |
| 2.16.2 | Depth exceeding 1.5 but not exceeding 3m. | Sqm | 122.00 |
| 2.16.3 | Dept exceeding 3m but not exceeding 4.5m | Sqm | 130.00 |
| 2.17 | Close timbering in case of shafts wells. cesspits manholes and the like including shutting 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 | 120.00 |
| 2.17.2 | Depth exceeding 1.5 but not exceeding 3 m | Sqm | 128.00 |

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| 2.17.3 | Depth exceeding 3 m but not exceeding 4.5 m | Sqm | 136.00 |
| 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 | 105.00 |
| 2.18.2 | Depth exceeding 1.5 but not exceeding 3 m | Sqm | 109.00 |
| 2.18.3 | Depth exceeding 3 m but not exceeding 4.5 m | Sqm | 114.00 |
| 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 | 1558.00 |
| 2.20 | Open timbering in trenches including strutting and shoring complete(measurements to be taken of the face area timbered): |  |  |
|  | Depth nor exceeding 1.5 m | Sqm | 59.00 |
|  | Depth exceedign 1.5 m but not exceeding 3 m | Sqm | 62.00 |
|  | Depth exceeding 3 m but not exceeding 4.5 m | Sqm | 66.00 |
| 2.21 | Open timbering in case of wells cesspits manholes and the like including strutting and shoring complete (Measurements to be taken face area timbered.): |  |  |
| 2.21.1 | Depth not exceeding 1.5m | Sqm | 51.00 |
| 2.21.2 | Depth exceeding 1.5 m but not exceeding 3m. | Sqm | 55.00 |
| 2.21.3 | Depth exceeding 3m. but not exceeding 4.5m. | Sqm | 59.00 |
| 2.22 | Open timbering over areas including strutting shoring etc. complete (Measurements tube taken of the face area timbered) |  |  |
| 2.22.1 | Depth not exceeding 1.5m sqm 24.00 | Sqm | 32.00 |
| 2.22.2 | Depth exceeding 1.5 m but not exceeding 3m. | Sqm | 35.00 |
| 2.22.3 | Depth exceeding 3m. but not exceeding 4.5m. | Sqm | 39.00 |
| 2.23 | Extra for planking and strutting in open timbering in required to be left permanently in position. (Face area of the timber permanently left to be measured.) | Sqm | 784.00 |
| 2.24 | Extra rate for quantities fo works executed. |  |  |
| 2.24.1 | in or under water and/or liquid mud, including pumping out water as requried | Meter depth | 20% |

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| 2.24.2 | In or under foul position including pumping water as requried. | Meter depth | 25% |
|  | **Note:-** the extra percentage rate applicable in respect of each item but limited to quantities of work executed in these different conditions the unit, namely, metre depth, to be considered for payment, shall be the depth measured from the sub soil water level upto the center of gravity of the quantity executed in difficult conditions. The depth shall be reckoned correct to 0.1 meter. 0.05 meter or more shall be taken as 0.1 metre and less than 0.05 meter ignored. |  |  |
| 2.25 | Filling available excavated earth (excluding hard rock/ordinary rock) in trenches plinth sides of foundations etc. in layers not exceeding 20 cm in Depth. Consolidating each deposited layer by ramming and watering lead up to 50 m and lift upto 1.5m | Cum | 72.00 |
| 2.26 | Extra for every additional lift of 1.5m or part thereof in excavation (No extra lift is payable if work is done by mechanical means) |  |  |
| 2.26.1 | All kinds of soil | Cum | 30.00 |
| 2.26.1 | Ordinary or hard rock | Cum | 53.00 |
| 2.27 | supplying and filling in plinth with crusher stone dust/coarse sand under floors including watering ramming consolidating in layer not exceeding 20 cm in depth in layers not exceeding 20cm in depth and dressing complete. | Cum | 672.00 |
| 2.28 | supplying and filling in plinth with hard muram/hard copra under floors including watering ramming consolidating in layer not exceeding 20 cm in depth dressing complete. | Cum | 471.00 |
| 2.29 | Exceeding holes upto 0.10cm & upto 0.5 cum including getting out the excavated soil then returning the soil as required in layer not exceeding 20cm in depth. Including consolidating each deposited layer by ramming watering etc. disposing of surplus excavated soil. as directed within a lead of 50m. and lift upto 1.5cm |  |  |
| 2.29.1 | All kinds of soil | Each | 42.00 |
| 2.29.2 | Ordinary rock | Each | 68.00 |
| 2.29.3 | Hard rock (requiring blasting) | Each | 138.00 |
| 2.29.4 | Hard rock (blasting prohibited) | Each | 151.00 |
| 2.30 | Diluting and injecting chemical emulsion for OSTCONSTRUCTIONAL ant termite treatment (including cost of emulsion) : |  |  |
| 2.30.1 | 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: |  |  |

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| 2.30.1.1 | With Chlorpyriphos / Lindane E.C. 20% with 1% concentration. | Metre | 36.00 |
| 2.30.2 | Along external wall below concrete or masonry apron using chemical emulsion @ 2.25 liters per linear metre including drilling and plugging holes etc. |  |  |
| 2.30.2.1 | With Chlorpyriphos/ Lindane E.C. 20% with 1% concentration. | Metre | 42.00 |
| 2.30.3 | 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 sand) to match the existing floor : |  |  |
| 2.30.3.1 | With Chlorpyriphos/Lindane E.C. 20% with 1% concentration. | Sqm | 199.00 |
| 2.30.4 | Treatment of existing masonry using chemical emulsion @ one litre per hole, 300 mm interval including drilling 10 mm diameter and 200mm deep holes at 45 degree and plugging them with cement mortar 1 :2 (1 cement : 2 sand) to the full depth of the hole : |  |  |
| 2.30.4.1 | With Chlorpyriphos/Lindane E.C. 20% with 1% concentration. |  | 50.00 |
| 2.30.5 | Treatment at points of contact of wood work by chemical emulsion Chlorpyriphos/ 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 150mm centre to centre and sealing the same. | Metre | 201.00 |
| 2.31 | Deduct for disposed soil not leveled and neatly dressed . | Cum | 22.00 |
| 2.32 | Preconstruction curative Cum. preventive antitermite treatment to the building under construction by providing (i) surface treatment by spreading emulsion over the plinth area before laying the base concrete under floors @ 5.0 litres/Sqm.(ii) Pumping the emulsion in plinth masonry on filling side at floor junction @ 7.5 litres/Sqm. (iii) Pumping the emulsion from outer side of the plinth below ground alround the masonry @ 5.0 litres/Sqm as per I.S. 8944 (1Chlorpyrifos: 19 water) with five years service guarantee Emulsion. (Measurements to be taken for plinth area)  **Note**:- treatment should start when foundation trenches and pits are ready to take concrete or leveling course in foundations. Laying of bed concrete start when the chemical emulsion has been absorbed by the soil and the surface is reasonably dry treatment should not subsoil water. This also applies to filled up soil within the plinth area before laying the sub grade for flooring. | sqm | 136.00 |

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| 2.33 | Making bore holes for providing dowel bars at designed depth in rock foundation by drilling 40 mm dia bore hole in rock including necessary bending hooking, in position and grouting with cement slurry etc. complete as per drawing and spectification. (Steel to be paid separately). | Metre | 205.00 |

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| Item  No. | Description | Unit | Rate (in Rs.) |
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| 3.1 | Cement Mortar 1:1 (1 cement : 1 sand) | cum | 8096.00 |
| 3.2 | Cement mortar 1:2 (1 cement : 2 sand). | cum | 6156.00 |
| 3,3 | Cement mortar 1:3 (1 cement : 3 sand). | cum | 5186,00 |
| 3.4 | Cement mortar 1:4 (1 cement : 4 *sand).* | cum | 4317.00 |
| 3.5 | Cement mortar 1:5 (1 cement : 5 sand). | cum | 3848.00 |
| 3.6 | Cement mortar 1:6 (1 cement : 6 sand). | cum | 3447.00 |
| 3.7 | Cement mortar 1:2 (1 cement : 2 stone dust). | cum | 5416.00 |
| 3,8 | Cement mortar 1:2 (1 cement : 2 marble dust), | **CUM** | 5969,00 |
| 3.9 | White cement mortar 1:2 (1 white cement • 2 marble dust). | cum | 14420.00 |
| 3.10 | Cement mortar 1:5 (1 cement : 5 marble dust). | cum | 3637.00 |
| 3.11 | White cement mortar 1:3 (1 white cement : 3 marble dust). | cum | 11313.00 |
| 3,12 | White cement mortar 1:5 (1 white cement : 5 marble dust). | cum | 7490.00 |
| 3.13 | Mortar in lime , surkhi ( 50% red and 50% light yellow) and marble dust 1:1.5:0,5 | cum | 4024.00 |

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| **Item No.** | **Description** | **Unit** | **Rate (In Rs.)** |
| 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 With 20mm nominal size graded stone aggregate. |  |  |
|  | 4.1.1.1 M 25 – Grade concrete | Cum | 6338.00 |
|  | 4.1.1.2 M 20 – Grade concrete | Cum | 4933.00 |
|  | 4.1.1.3 M 15 - Grade concrete | Cum | 4471.00 |
|  | 4.1.1.4 Nominal Mix – 1 Cement : 3 sand : 6 graded stone aggregate (M 10) | Cum | 3890.00 |
|  | 4.1.2 With 40mm nominal size graded stone aggregate. |  |  |
|  | 4.1.2.1 M 15 – Grade concrete | Cum | 4403.00 |
|  | 4.1.2.2 Nominal Mix – 1 Cement : 3 sand : 6 graded stone aggregate (M 10) | Cum | 3808.00 |
|  | 4.1.2.3 Nominal Mix – 1 Cement : 3 sand : 6 graded stone aggregate (M 7.5) | Cum | 3474.00 |
|  | 4.1.3 With Fly ash |  |  |
|  | 4.1.3.1 1:2:3½:9 (1 ordinary portland cement : 2 Fly ash : 3½ sand : 9 graded stone aggregate 40 mm nominal size) | Cum | 3459.00 |
|  | 4.1.3.2 1:2½:4:11 (1 ordinary portland cement : 2½ fly ash : 4  sand : 11 graded stone aggregate 40 mm nominal size) | Cum | 3150.00 |
|  | Note: No fly ash is to be added to Portland Puzzolona cement in any case which itself contains fly ash |  |  |
| 4.2 | Providing and laying cement concrete in retaining walls, return  walls, walls (any thickness) including attached pilasters, columns, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets etc. up to floor two level, excluding the cost of centering, shuttering and finishing : |  |  |
|  | 4.2.1 With 20mm nominal size graded stone aggregate |  |  |
|  | 4.2.1.1 M 25 – Grade concrete | Cum | 6582.00 |
|  | 4.2.1.2 M 20 – Grade concrete | Cum | 5177.00 |
|  | 4.2.1.3 M 15 – Grade concrete | Cum | 4714.00 |
|  | 4.2.1.4 Nominal Mix – 1 Cement : 3 sand : 6 graded stone aggregate (M 10) | Cum | 4134.00 |

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| **Item No.** | **Description** | **Unit** | **Rate (In Rs.)** |
|  | 4.2.2 With 40mm nominal size graded stone aggregate |  |  |
|  | 4.2.2.1 M 15 – Grade concrete | Cum | 4647.00 |
|  | 4.2.2.2 Nominal Mix – 1 Cement : 3 sand : 6 graded stone aggregate (M 10) | Cum | 4052.00 |
| 4.3 | Centering and shuttering including strutting, propping etc. and  removal of form work for : |  |  |
|  | 4.3.1 Foundations, footings, bases for columns. | Sqm | 169.00 |
|  | 4.3.2 Retaining walls,return walls,walls (any thickness) including attached pilasters, buttresses, plinth and string courses | Sqm | 267.00 |
|  | 4.3.3 Columns, piers, abutments, pillars, posts and struts. | Sqm | 356.00 |
| 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 M15 (With 20mm nominal size graded stone aggregrate) | Cum | 4471.00 |
|  | 4.4.2 Nominal Mix – 1 Cement : 3 sand : 6 graded stone aggregate (M 10) (With 20mm nominal size graded stone aggregrate) | Cum | 3890.00 |
| 4.5 | Providing and fixing up to floor two level precast cement concrete string or lacing courses, copings, bed plates, anchor blocks, plain window sills, shelves, louvers, steps, stair case s, etc. Including hoisting and setting in position with cement mortar 1:3 (1 Cement : 3 sand), cost of required centering, shuttering and finishing smooth with 6mm thick cement plaster 1:3 (1 Cement : 3 sand) on exposed surfaces complete. |  |  |
|  | 4.5.1 M20 (With 20mm nominal size graded stone aggregate) | Cum | 5558.00 |
|  | 4.5.2 M15 (With 20mm nominal size graded stone aggregate) | Cum | 5095.00 |
|  | 4.5.3 Nominal Mix – 1 Cement : 3 sand : 6 graded stone aggregate (M 10) (With 20mm nominal size graded stone aggregrate) | Cum | 4515.00 |
| 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 sand) including the cost of required centering, shuttering and finishing smooth with 6mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces complete. |  |  |
|  | 4.6.1 M15 (With 20mm nominal size graded stone aggregate) | Cum | 4702.00 |

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| **Item No.** | **Description** | **Unit** | **Rate (In Rs.)** |
| 4.7 | Providing and fixing up to floor two level precast cement concrete solid block including hoisting and setting in position with cement mortar 1:3 (1 cement : 3 sand), cost of required centering, shuttering and finishing smooth with 6mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces complete : |  |  |
|  | 4.7.1 M15 (With 20mm nominal size graded stone aggregate) | Cum | 7057.00 |
|  | 4.7.2 Nominal Mix – 1 Cement : 3 sand : 6 graded stone aggregate (M 10) (With 20mm nominal size graded stone aggregrate) | Cum | 6477.00 |
| 4.8 | Providing and fixing up to floor two level precast cement concrete hollow block including hoisting and setting in position with cement mortar 1:3 (1 cement : 3 sand), cost of required centering, shuttering and finishing smooth with 6mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces complete : |  |  |
|  | 4.8.1 M15 (With 20mm nominal size graded stone aggregate) | Cum | 5339.00 |
|  | 4.8.2 Nominal Mix – 1 Cement : 3 sand : 6 graded stone aggregate (M 10) (With 20mm nominal size graded stone aggregrate) | Cum | 5072.00 |
| 4.9 | Add extra for item no. 4.7 and 4.8 above floor II level for every additional floor or part there of | Cum | 1% |
| 4.10 | Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 sand : 4 graded stone aggregate 12.5mm nominal size). | Sqm | 200.00 |
| 4.11 | Providing and laying damp-proof course 50mm thick with cement concrete 1:2:4 (1 cement : 2 sand : 4 graded stone aggregate 20mm nominal size). | Sqm | 247.00 |
| 4.12 | Extra for providing and mixing water proofing material as per IS standard in cement concrete work quantity as prescribed by the manufacturer. | Per bag of 50 kg of cement | 44.00 |
| 4.13 | Applying a coat of residual petroleum bitumen of penetration  80/100 of approved quality using 1.7kg 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 | 124.00 |
| 4.14 | Extra for concrete work in superstructure above floor two level for each floors or part thereof. | Cum | 1% |
| 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 | 297.00 |

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| **Item No.** | **Description** | **Unit** | **Rate (In Rs.)** |
|  | **Note for item No. 4.15:-** 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. |  |  |
| 4.16 | Extra for laying concrete in or under foul positions. | Cum | 109.00 |
| 4.17 | Making plinth protection 50mm thick of cement concrete grade M 10 over 75mm bed of dry metal ballast 40mm nominal size well rammed and consolidated and filled with sand including finishing the top smooth (with 20mm nominal size graded stone aggregate.) | Sqm | 351.00 |
| 4.18 | Extra for addition of synthetic polyester triangular fibre of length 12 mm. effective diameter 10-40 microns and specific gravity of 1.34 to 1.40 in cement concrete/RCC/Flooring/Water retaining structure by using 125 gms of synthetic polyester triangular fibre for 50 kgs cement used as per directions of Engineer-in-charge. | Per bag of 50 kg of cement | 45.00 |
| 4.19 | Precasting and placing in position 125 mm dia Ballards 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 150x150x6 mm MS. Plate welded at bottom and embedded 150 mm in cement concrete 1:3:6 (1 cement :3 and : 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 | 485.00 |

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| **Item No.** | **Description** | **Unit** | **Rate (In Rs.)** |
| 5.1 | Providing and laying in position specified grade of reinforced  cement concrete (with 20mm nominal size graded stone aggregate) excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level : |  |  |
|  | 5.1.1 M 20 – Grade Concrete | Cum | 5091.00 |
|  | 5.1.2 M 20 – Grade Concrete | Cum | 4629.00 |
| 5.2 | Reinforced cement concrete work (with 20mm nominal size graded stone aggregate) in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, posts and struts su spended floor roof slab, beams, etc. up to floor two level excluding cost of centering, shuttering, finishing and reinforcement : |  |  |
|  | 5.2.1 M 20 – Grade Concrete | Cum | 5202.00 |
|  | 5.2.2 M 20 – Grade Concrete | Cum | 4739.00 |
| 5.3 | Reinforced cement concrete work (with 20mm nominal size graded stone aggregate) in beams, suspended floors, roofs having slope of any degree landings, balconies, shelves,  chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor two level excluding the cost of centering,  shuttering, finishing and reinforcement in concrete grade. |  |  |
|  | 5.3.1 M 20 – Grade Concrete | Cum | 5284.00 |
|  | 5.3.2 M 20 – Grade Concrete | Cum | 4844.00 |
| 5.4 | Providing and laying up to floor two level reinforced cement  concrete (with 20mm nominal size graded stone aggregate) in kerbs, steps and the like excluding the cost of centering, shuttering, finishing and reinforcement with Concrete grade |  |  |
|  | 5.4.1 M 20 – Grade Concrete | Cum | 5038.00 |
|  | 5.4.2 M 20 – Grade Concrete | Cum | 4575.00 |
| 5.5 | Reinforced cement concrete work (with 20mm nominal size graded stone aggregate) in arches, archribs, domes,  vaults, shells, folded plate and roofs having slope at any degree up to floor two level excluding the cost of centering, shuttering, finishing and reinforcement in Concrete grade. |  |  |
|  | 5.5.1M 20 – Grade Concrete | Cum | 5460.00 |
|  | 5.5.2 M 20 – Grade Concrete | Cum | 4997.00 |
| 5.6 | Reinforced cement concrete work (with 20mm nominal size graded stone aggregate) in chimneys, shaft, up to floor two level excluding the cost of centring, shuttering, finishing and reinforcement with M 20 – Grade Concrete | Cum | 5266.00 |

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| **Item No.** | **Description** | **Unit** | **Rate (In Rs.)** |
| 5.7 | Reinforced cement concrete work (with 20mm nominal size graded stone aggregate) in well-steining excluding the cost of centering, shuttering, finishing and reinforcement in concrete grade | Cum | 4953.00 |
| 5.8 | Reinforced cement concrete work (with 20mm nominal size graded stone aggregate) in vertical and horizontal fins individually or forming box louvers, facias and eaves boards up to floor two level excluding the cost of centering, shuttering, finishing and reinforcement in M – 20 grade. concrete | Cum | 5339.00 |
| 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 up to plinth level. | Sqm | 174.00 |
|  | 5.9.2 Walls (any thickness) including attached pilasters  butteresse s, plinth beams and string courses etc.up to plinth level. | Sqm | 267.00 |
|  | 5.9.3 Suspended floors, roofs, landings, balconies and access  platform. Shelves (Cast in situ) Lintels, beams, beams, girders, bressumers and cantilevers, Columns, Pillars,Posts and Struts Walls in super structure. | Sqm | 264.00 |
|  | 5.9.4 Shelves (Cast in situ) | Sqm | 264.00 |
|  | 5.9.5 Lintels, beams, girders, bressumers and cantilevers. | Sqm | 227.00 |
|  | 5.9.6 Columns, Pillars, Piers, Abutments, Posts and Struts. | Sqm | 356.00 |
|  | 5.9.7 Stairs, (excluding landings) except spiral-staircases. | Sqm | 332.00 |
|  | 5.9.8 Spiral staircases (including landing) | Sqm | 322.00 |
|  | 5.9.9 Arches, domes, vaults up to 6 m span | Sqm | 836.00 |
|  | 5.9.10 Extra for arches, domes, vaults exceeding 6 m span | Sqm | 451.00 |
|  | 5.9.11 Chimneys and shafts | Sqm | 267.00 |
|  | 5.9.12 Coffer/waffle slab of any size or shape as shown in the drawing. | Sqm | 1346.00 |
|  | 5.9.13 Well steining | Sqm | 240.00 |
|  | 5.9.14 Vertical and horizontal fins individually or formatting box louvers band, facia and eaves boards. | Sqm | 481.00 |
|  | 5.9.15 Extra for shuttering in circular work or any other geometrical shape (20% of respective centering and shuttering items) | Sqm | 20% |
|  | 5.9.16 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 | 174.00 |

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| **Item No.** | **Description** | **Unit** | **Rate (In Rs.)** |
|  | 5.9.17 cornices and mouldings | Sqm | 576.00 |
|  | 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 | 415.00 |
|  | 5.9.19 Weather shade, chajjas, corbels etc., including edges. | Sqm | 451.00 |
|  | 5.9.20 Suspended floors, roofs, landings, balconies and access platform with water proof ply 12 mm thick (item to be executed with prior permission of S.E. in case of B & R works and from Additional Project Director in case of PIU works) | Sqm | 381.00 |
|  | 5.9.21 Lintels, beams, columns, girders, bressumers and cantilevers with water proof ply 12 mm thick (item to be executed with prior permission of S.E. in case B & R works and from Additional Project Director in case of PIU works) | Sqm | 343.00 |
| 5.9 A | Providing and fixing tie bolt, spring coil and plasting cone in wall shuttering complete as per the direction of Engineer-in-charge |  |  |
|  | 5.9A.1 12 mm dia. & 100 mm length | Each set | 140.00 |
|  | 5.9A.2 12 mm dia. & 150 mm length | Each set | 152.00 |
|  | 5.9A.3 20 mm dia. & 150 mm length | Each set | 169.00 |
|  | 5.9A.4 20 mm dia. & 225 mm length | Each set | 187.00 |
| 5.10 | Extra for additional height in centering, shuttering where ever  required with adequate bracing, propping etc. including cost of deshuttering and decentering at all levels, over a height of 3.6 m, for every additional height of 1 metre or part thereof (Plan area to be measured) |  |  |
|  | 5.10.1 Suspended floors, roofs, landing, beams and balconies | Sqm | 107.00 |
| 5.11 | Providing, hoisting and fixing up to floor two level precast  reinforced cement concrete in shelves including setting in cement mortar 1:3 (1 cement : 3 sand), cost of required centering, shuttering and finishing with neat cement punning on exposed surfaces but excluding the cost of reinforcement with concrete grade M 15 – Grade Concrete | Cum | 7830.00 |
| 5.12 | Providing precast cement concrete Jali 1:2:4 (1cement :2sand:4 graded stone aggregate 6mm 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 (1cement:3 fine sand) etc. complete excluding plastering of the jambs, ills and soffits. |  |  |
|  | 5.12.1 50 mm thick | Sqm | 790.00 |

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| **Item No.** | **Description** | **Unit** | **Rate (In Rs.)** |
|  | 5.12.2 40 mm thick | Sqm | 689.00 |
|  | 5.12.3 25 mm thick | Sqm | 598.00 |
| 5.13 | Encasing rolled steel sections, in beams and columns, with cement concrete M 15 (1 cement: 2 sand: 4 graded stone aggregate 20mm nominal size) including centering and shuttering complete but excluding cost of reinforcement. | Cum | 6934.00 |
| 5.14 | Encasing rolled steel section in grillages with cement concrete M15 (1 cement: 2 sand: 4 graded stone aggregate 20 mm nominal size) including centering and shuttering but excluding cost of expanded metal and hangers. | Cum | 4835.00 |
| 5.15 | Extra for providing and fixing expanded metal mesh of size  20x60mm and strands 3.25mm wide 1.6mm thick weighing 3.64 kg. per sqm. for encasing of rolled steel sections in beams, columns and grillages excluding cost of hangers. | Sqm | 408.00 |
| 5.16 | Reinforcement for R.C.C. work including straightening, cutting,  bending, placing in position and binding including cost of binding wire up to floor two level including all wastage etc. complete. |  |  |
|  | 5.16.1 Mild steel and Medium Tensile steel bars. | Kg | 60.50 |
|  | 5.16.2 Hard drawn steel wire | Kg | 72.75 |
|  | 5.16.3 Cold twisted bars (CTD) | Kg | 62.90 |
|  | 5.16.4 Hot rolled deformed bars | Kg | 62.90 |
|  | 5.16.5 Hard drawn steel wire fabric | Kg | 75.90 |
|  | 5.16.6 Thermo-Mechanically Treated bars.(TMT) | Kg | 62.90 |
| 5.17 | Add extra for providing reinforcement above Floor two level for  every additional floor or part there of. | Kg | 0.20 |
| 5.18 | Providing and fixing in position copper plate as per design for  expansion joints. | Kg | 472.00 |
| 5.19 | Providing and filling in position, blown bitumen in expansion joints | Per cm depth per cm width 100 metre long. | 723.00 |
| 5.20 | Providing and filling in position bitumen mix filler of Proportion 80 kg. of hot bitumen, 1 kg. Of cement and 0.25 cubic meter of sand for expansion joints | Per cm depth per cm width 100 metre long. | 204.00 |

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| **Item No.** | **Description** | **Unit** | **Rate (In Rs.)** |
| 5.21 | Providing and filling gap in expansion joint between RCC/Stone/Ceremic tiles/Granite/Marble by providing silicon sealant over backer rod of approved quality weather sealant as per drawing and direction of engineer in charge up to 25 mm width & 12 mm depth. | Per cm depth per cm width 100 metre long. | 10454.00 |
| 5.22 | Providing and fixing in position bitumen impregnated fibre board conforming to IS: 1838 including cost of primer, sealing compound in expansion joints. |  |  |
|  | 5.22.1 12 mm thick | Sqm | 402.00 |
|  | 5.22.2 25 mm thick | Sqm | 574.00 |
| 5.23 | Providing and fixing sheet covering over expansion joints with iron screws as per design |  |  |
|  | 5.23.1 Non-asbestos fibre cement board 6mm thick as per  IS:14862. |  |  |
|  | 5.23.1.1 150mm wide. | RM | 102.00 |
|  | 5.23.1.2 200mm wide. | RM | 137.00 |
|  | 5.23.2 Aluminium fluted strips 3.15mm thick. |  |  |
|  | 5.23.2.1 150 mm wide. | RM | 483.00 |
|  | 5.23.2.2 200mm wide. | RM | 646.00 |
|  | 5.23.3 Providing and fixing in position stainless steel Grade 304 plate – 1.0 mm thick as per design for expansion joints |  |  |
|  | 5.23.3.1 150 mm wide. | RM | 367.00 |
|  | 5.23.3.2 200mm wide. | RM | 443.00 |
| 5.24 | Providing for plaster drip course/ groove in plastered surface or moulding to R.C.C. projections. | RM | 18.50 |
| 5.25 | 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.  **Note for Item No. 5.25:-** The quantity will be calculated by multiplying the depth measured from the subsoil water level up to the centre of the RCC under ubsoil water with the quantity of RCC in cubic metre execute 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 palcing reinforcement or centering & shuttering under sub – soil water conditions | Cum | 297.00 |
| 5.26 | Extra for laying reinforced cement concrete in or under foul positions. | Cum | 109.00 |

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| **Item No.** | **Description** | **Unit** | **Rate (In Rs.)** |
| 5.27 | Providing and laying in position machine batched, 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 centring, 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 condidered in this item is 330 kg/cum excess/ less cement used as per design mix is payable/recoverable separately) |  |  |
|  | 5.27.1 All works up to plinth level | Cum | 5641.00 |
|  | 5.27.2 All works above plinth level and up to floor five level | Cum | 5757.00 |
| 5.28 | Extra for providing richer mixes at all floor levels. |  |  |
|  | 5.28.1 Providing M-30 grade concrete instead of M-25 grade B.M.C/ R.M.C.  (Note:- Cement content considered in M-30 is @ 340 kg/cum) | Cum | 70.00 |
|  | 5.28.2 Providing M-35 grade concrete instead of M-25 grade B.M.C/ R.M.C.  (Note:- Cement content considered in M-35 is @ 350 kg/cum) | Cum | 140.00 |
|  | 5.28.1 Providing M-40 grade concrete instead of M-25 grade B.M.C/ R.M.C.  (Note:- Cement content considered in M-40 is @ 360 kg/cum) | Cum | 210.00 |
| 5.29 | Add/deduct for using extra/less cement in the items of design mix over and above the specified cement content therein. | Quintal | 669.00 |
| 5.30 | Providing and placing in position precast reinforced cement concrete waffle units square or rectangular as per design and shape for floors and roofs in M 20 – Grade Concrete (with graded stone aggregate 10 mm nominal size) including flush or deep ruled pointing at joints in cement mortar 1:2 (1 cement : 2 sand), making necessary holes of required sizes for carrying through service lines etc. including provision of steel hooks for lifting and form work, handling, hoisting, centering and erection complete for all floor levels but excluding the cost of reinforcement | Cum | 13479.00 |
| 5.31 | Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using 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 continous agitated mixer, |  |  |

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| **Item No.** | **Description** | **Unit** | **Rate (In Rs.)** |
|  | 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 entering, 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—charge.  Note: Cement content considered in this item is @ 330 kg/cum. Excess/less cement used as per design mix is payable/ recoverable separately |  |  |
|  | 5.31.1 All works up to plinth level | Cum | 6280.00 |
|  | 5.31.2 All works above plinth level and up to floor V level | Cum | 6434.00 |
| 5.32 | Extra for RCC work above floor II level for each floor or part there off. | Cum | 1% of respective item |
| 5.33 | Supplying and applying pre tested and approved water based concrete curing compound to concrete/masonry surface, all as per manufactures’ specification and direction of Engineer-in-charge. |  |  |
|  | 5.33.1 Non pigmented wet curing compound | Sqm | 93.00 |
|  | 5.33.2 Pigmented wet curing compound | Sqm | 100.00 |
| 5.34 | Providing and fixing in position factory made precast RCC M-40 Doors and window 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. galvanized sleeves for accommodating 6 mm dia fully threaded bolts for fixing hold fast on vertical members, providing suitable arrangement for receiving sliding door bolts and tower bolt etc. all complete, as per the direction of Engineer-in-charge. (The cost of hold fast and cement concrete block of 1:3:6 (1 cement :3 sand : 6 Graded stone aggregate 20 mm nominal size) mix is also included in the item) The frame shall be measured in running meter correct to two places of decimal. |  |  |
|  | 5.34.1 Door frame 125 mmx 60 mm | RM | 351.00 |
|  | 5.34.2 Door frame 100 mmx 60 mm | RM | 321.00 |
|  | 5.34.3 Door frame 85 mmx 60 mm | RM | 306.00 |
| 5.35 | Smooth finishing of the exposed surface of RCC work with 6 mm thick cement mortar 1;3 (1 cement : 3 sand) | Sqm | 96.00 |

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| **Item No.** | **Description** | **Unit** | **Rate (In Rs.)** |
| 5.36 | Providing and fixing in position pre moulded compressible filler board made from polymer base in black color approved make conforming to the specifications having minimum density of 95 kg/ cum non staining, with less than I percent water absorption and compression recovery of 93 percent minimum including cost of double sided adhesive tape, sealant etc. in expansion joints. |  |  |
|  | 5.36.1 12 thick | Sqm | 441.00 |
|  | 5.36.2 25 mm thick | Sqm | 894.00 |
| 5.37 | Providing and sealing the retaining wall expansion joints with Anodized Aluminum Extruded section of 135 mm x 3.1 mm confirm to alloy of 6063 T5/T6 including fixing of an imported EPDM moisture Barrier confirm to (American Society for Testing and Materials) 2240 & ASTM – G53 & 84 fixing with Epoxy adhesive confirm to ASTM C-881 complete in all respect as per manufacturer Drawing and specifications. With 5 year garuntee. | Metre | 3234.00 |
| 5.38 | Providing & Sealing the roof slab expansion joints with Anodised/Powder coated Centre extuded section confirm to ally of 6063 T5/T6 including providing of TWO LAYERS of imported EPDM moisture barrier confirm to ASTM 2240 & ASTM – G53 & 84 fixing by Epoxy Adhesive confirm to ASTM C-881 complete in all respect as per manufacturer Drawing and specification. With 5 year garuntee. | Metre | 4568.00 |
| 5.39 | Providing and sealing the internal wall expansion joints with 105 mm x 2.20 mm thick power coated/Anodised Extruded Aluminum frame to alloy of 6063 T5/T6 Specifications having tapered edges with snapped locking clips system complete in all respect as per manufacturer Drawing and specifications. With 5 year garuntee. | Metre | 2508.00 |
| 5.40 | Providing and fixing external wall expansion joints systems including comprised of Anodized Aluminum Frames confirm to ally of 663 T5/T6 including providing of Stainless stell clip @ 330 mm C/C fitting with center screw system all complete as per manufacturers specifications. With 5 year garuntee. | Metre | 2894.00 |
| 5.41 | Providing and sealing the Heavy Duty floor / Parking expansion joints comprised of free float center Extruded Aluminium frame confirm to alloy of 6063 T5/T6 Specifications the exposed width should be 40 mm and the base frame must having 60 mm width including providing and fixing of imported EPDM moisture barrier confirm to ASTM 2240 & ASTM-G53 & 84 fixing by Epoxy Adhesive confirm to ASTM C-881 complete in all respect as per manufacturer Drawing and specifications. With 5 year garuntee. | Metre | 3748.00 |

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| 6.1 | Brick work with well burnt chimney in bulls patent trench kiln manufactured by ghol process crushing strength not less than 40kg /sqcm and water absorption not more than 15% in foundation and plinth i/c curing etc complete. |  |  |
| 6.1.1 | Cement mortar 1:4 (1 cement : 4 sand) | Cum | 5818.00 |
| 6.1.2 | Cement mortar 1:6 (1 cement : 6 sand) | Cum | 5626.00 |
| 6.2 | Brick work with well burnt chimney bricks in bulls patent trench kiln manufactured by ghol process, crushing strength not less than 40kg/cm2 and water absorption not more than 15% in superstructure above plinth level and up to floor two level i/c curing etc complete. |  |  |
| 6.2.1 | Cement mortar 1:4 (1 cement : 4 sand) | Cum | 6012.00 |
| 6.2.2 | Cement mortar 1:6 (1 cement : 6 sand) | Cum | 5821.00 |
| 6.3 | Brick work with well burnt chimney bricks in bulls patent trench kiln, crushing strength not less than 25kg /sqcm and water absorption not more than 20% in foundation and plinth i/c curing etc complete. |  |  |
| 6.3.1 | Cement mortar 1:4 (1 cement : 4 sand) | Cum | 5252.00 |
| 6.3.2 | Cement mortar 1:6 (1 cement : 6 sand) | Cum | 5061.00 |
| 6.4 | Brick work with well burnt chimney in bulls patent trench kiln manufactured by ghol process crushing strength not less than 25kg /sqcm and water absorption not more than 20% in superstructure above plinth level and up to floor to level; i/c curing etc complete. |  |  |
| 6.4.1 | Cement mortar 1:4 (1 cement : 4 sand) | Cum | 5446.00 |
| 6.4.2 | Cement mortar 1:6 (1 cement : 6 sand) | Cum | 5255.00 |
| 6.5 | Brick work with well brunt open bhatta, bricks, crushing strength not less than 25kg /sqcm and water absorpt ion not more than 20% in foundation and plinth i/c curing etc complete. |  |  |
| 6.5.1 | Cement mortar 1:4 (1 cement : 4 sand) | Cum | 4347.00 |
| 6.5.2 | Cement mortar 1:6 (1 cement : 6 sand) | Cum | 4155.00 |
| 6.6 | Brick work with well brunt open bhatta, bricks, crushing strength not less than 25kg /cm2 and water absorpt ion not more than 20% in foundation above plinth level and up to floor level i/c curing etc complete. |  |  |
| 6.6.1 | Cement mortar 1:4 (1 cement : 4 sand) | Cum | 4541.00 |

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| 6.6.2 | Cement mortar 1:6 (1 cement : 6 sand) | Cum | 4350.00 |
| 6.7 | Brick work with modular fly ash lime bricks (FALG Bricks) conforming to IS:12894-2002, class designation 100 average compressive strength in super structure above plinth level up to floor II level in : |  |  |
| 6.7.1 | Having 100 kg / cm2 average compressive strength |  |  |
| 6.7.1.1 | Cement mortar 1;4 (1 Cement:4 Sand) | Cum | 5403.00 |
| 6.7.1.2 | Cement mortar 1;6 (1 Cement:6 Sand) | Cum | 5212.00 |
| 6.7.2 | Having 75 kg / cm2 average compressive strength |  |  |
| 6.7.2.1 | Cement mortar 1;4 (1 Cement:4 Sand) | Cum | 5287.00 |
| 6.7.2.2 | Cement mortar 1;6 (1 Cement:6 Sand) | Cum | 5096.00 |
| 6.7.3 | Having 50 kg / cm2 average compressive strength |  |  |
| 6.7.3.1 | Cement mortar 1;4 (1 Cement:4 Sand) | Cum | 5230.00 |
| 6.7.3.2 | Cement mortar 1;6 (1 Cement:6 Sand) | Cum | 5039.00 |
| 6.8 | Brick work with calcium silicate bricks machine moulded conforming to IS:4139,having 100kg/cm2 average compressive strength in super structure above plinth level up to floor II level in : |  |  |
| 6.8.1 | Cement mortar 1;4 (1 Cement:4 Sand) | Cum | 5287.00 |
| 6.8.2 | Cement mortar 1;6 (1 Cement:6 Sand) | Cum | 5095.00 |
| 6.9 | Brick work with extruded burnt fly ash clay sewar bricks (conforming to IS : 4885) in foundation and plinth: |  |  |
| 6.9.1 | Cement mortar 1;4 (1 Cement:4 Sand) | Cum | 5082.00 |
| 6.10 | Brick work with extruded burnt fly ash clay sewar bricks (conforming to IS : 4885) in arches in foundation and plinth in cement mortar 1:3 ?(?1 cement :3 sand). | Cum | 7655.00 |
| 6.11 | Extra for AAC block masonry in superstructure above floor II level for every floor or part there of respective item. | Cum | 92.00 |
| 6.12 | Brick work with well burnt chimney bricks in bulls patent trench kiln manufactured by ghol process, crushing strength not less than 40kg/cm2 and water absorption not more than 15% in superstructure above plinth level and up to floor two level . |  |  |
| 6.12.1 | Cement mortar 1;3 (1 Cement:3 Sand) | Sqm | 697.00 |

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| 6.6.2 | Cement mortar 1:6 (1 cement : 6 sand) | Cum | 4350.00 |
| 6.7 | Brick work with modular fly ash lime bricks (FALG Bricks) conforming to IS:12894-2002, class designation 100 average compressive strength in super structure above plinth level up to floor II level in : |  |  |
| 6.7.1 | Having 100 kg / cm2 average compressive strength |  |  |
| 6.7.1.1 | Cement mortar 1;4 (1 Cement:4 Sand) | Cum | 5403.00 |
| 6.7.1.2 | Cement mortar 1;6 (1 Cement:6 Sand) | Cum | 5212.00 |
| 6.7.2 | Having 75 kg / cm2 average compressive strength |  |  |
| 6.7.2.1 | Cement mortar 1;4 (1 Cement:4 Sand) | Cum | 5287.00 |
| 6.7.2.2 | Cement mortar 1;6 (1 Cement:6 Sand) | Cum | 5096.00 |
| 6.7.3 | Having 50 kg / cm2 average compressive strength |  |  |
| 6.7.3.1 | Cement mortar 1;4 (1 Cement:4 Sand) | Cum | 5230.00 |
| 6.7.3.2 | Cement mortar 1;6 (1 Cement:6 Sand) | Cum | 5039.00 |
| 6.8 | Brick work with calcium silicate bricks machine moulded conforming to IS:4139,having 100kg/cm2 average compressive strength in super structure above plinth level up to floor II level in : |  |  |
| 6.8.1 | Cement mortar 1;4 (1 Cement:4 Sand) | Cum | 5287.00 |
| 6.8.2 | Cement mortar 1;6 (1 Cement:6 Sand) | Cum | 5095.00 |
| 6.9 | Brick work with extruded burnt fly ash clay sewar bricks (conforming to IS : 4885) in foundation and plinth: |  |  |
| 6.9.1 | Cement mortar 1;4 (1 Cement:4 Sand) | Cum | 5082.00 |
| 6.10 | Brick work with extruded burnt fly ash clay sewar bricks (conforming to IS : 4885) in arches in foundation and plinth in cement mortar 1:3 ?(?1 cement :3 sand). | Cum | 7655.00 |
| 6.11 | Extra for AAC block masonry in superstructure above floor II level for every floor or part there of respective item. | Cum | 92.00 |
| 6.12 | Brick work with well burnt chimney bricks in bulls patent trench kiln manufactured by ghol process, crushing strength not less than 40kg/cm2 and water absorption not more than 15% in superstructure above plinth level and up to floor two level . |  |  |
| 6.12.1 | Cement mortar 1;3 (1 Cement:3 Sand) | Sqm | 697.00 |

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| 6.12.2 | Cement mortar 1:4 (1 cement : 4 sand) | Sqm | 673.00 |
| 6.13 | Providing half Brick masonry with well burnt chimney bricks in bulls patent trench kiln crushing strength not less than 25kg/cm2 and water absorption not more than 20% in superstructure above plinth level and up to floor two level . |  |  |
| 6.13.1 | Cement mortar 1;3 (1 Cement:3 Sand) | Sqm | 639.00 |
| 6.13.2 | Cement mortar 1;4 (1 Cement:4 Sand) | sqm | 615.00 |
| 6.14 | Providing half Brick masonry with well burnt open bhatta bricks crushing strength not less than25kg/cm2 and water absorption not more than 20% in superstructure above plinth level and up to floor two level . |  |  |
| 6.14.1 | Cement mortar 1;3 (1 Cement:3 Sand) | Sqm | 546.00 |
| 6.14.2 | Cement mortar 1;4 (1 Cement:4 Sand) | Sqm | 522.00 |
| 6.15 | Half brick masonry with fly ash lime Gysum brick (FALG Bricks) conforming to IS : 12894, in super structure above plinth and upto floor two level. |  |  |
| 6.15.1 | Having 100 kg/cm2 average compressive strength |  |  |
| 6.15.1.1 | Cement mortar 1;3 (1 Cement:3 Sand) | Sqm | 720.00 |
| 6.15.1.2 | Cement mortar 1;4 (1 Cement:4 Sand) | Sqm | 696.00 |
| 6.15.2 | Having 75 kg/cm2 average compressive strength |  |  |
| 6.15.2.1 | Cement mortar 1;3 (1 Cement:3 Sand) | Sqm | 662.00 |
| 6.15.2.2 | Cement mortar 1;4 (1 Cement:4 Sand) | Sqm | 638.00 |
| 6.15.3 | Having 50 kg/cm2 average compressive strength |  |  |
| 6.15.3.1 | Cement mortar 1;3 (1 Cement:3 Sand) | Sqm | 604.00 |
| 6.15.3.2 | Cement mortar 1;4 (1 Cement:4 Sand) | Sqm | 580.00 |
| 6.16 | Providing and laying autoclaved aerated cement blocks masonry with 100mm thick AAC blocks in super structure above plinth level up to floor II level in cement mortar 1:4 (1 cement : 4 sand ) The rate includes providing and placing in position 2 Nos. 8 mm dia M.S. bars at every third course of  masonry work |  |  |
| 6.17 | Extra for AAC block masonry in superstructure above floor II level for every floor or part there of respective item. | Sqm | 11.00 |

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| 6.18 | Extra for providing and placing in position 2 Nos. 8mm dia. M.S. bars at every third course of half brick masonry | Sqm | 127.00 |
| 6.19 | Honey-comb brick work 10 cm thick with well burnt chimney bricks manufactured by ghol process crushing strength not less than o40 kg/sqcm and water absorption not more than 15% in cement mortar 1:4 (1 cement : 4 sand). | Sqm | 456.00 |
| 6.20 | Extra for forming cavity 5cm to 7.5cm 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 300mm long of 25x3mm section at not less than 3 ties per sqm as per approved design. | Sqm | 75.00 |
| 6.21 | Brick work in plain arches in superstructure including centering and shuttering complete for span up to 6 metres with chimney bricks having crushing strength not less than 40kg/cm2 and water absorption not more than 15% in cement mortar 1:3 (1 cement : 3 sand). | Cum | 8507.00 |
| 6.22 | Brick work in gauged arches in superstructure in cement mortar 1:3 (1 cement : 3 sand) including centering and shuttering complete, for span up to 6 meters with chimney bricks having crushing strength not less than 40kg/cm2 and water absorption not more than 15% | Sqm | 9691.00 |
| 6.23 | 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 | 451.00 |
| 6.24 | Providing half Brick masonry with kiln burnt clay bricks of 40kg/cm2 and water absorption not more than 15% in cement mortar 1:3 (1 Cement : 3 Sand) in superstructure for closing cavity 5 to 7.5 cm wide in cavity wall complete with 10 cm wide bitumen felt type 3 grade 1.above plinth level and up to floor two level i/c curing etc complete. | metre | 210.00 |
| 6.25 | 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.  **NOTE:-** The quantity will be or calculated by multiplying the depth measured from sub-soil water level up to the center of gravity of brick work under sub-water with the quantity of brick work in cum executed under the sub-soil water. The depth of center 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 ignored. | Cum per metre depth | 297.00 |
| 6.26 | Extra for laying brick work in or under foul position. | cum | 109.00 |

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| 6.27 | Providing and laying cellular concrete masonry blocks having density ranging from 800kg/m3 in super structure above plinth level up to floor two level in cement mortar 1:4 (1Cement : 4 Sand ) the nominal dimensions of the concrete block shall be as follows in additional block shall be of half lengths of 200,250 or 300mm to correspond to the full lengths. The size of the blocks specified other than those specified may also be used. | Cum | 5052.00 |

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| 7.1 | Random rubble masonry with hard stone in foundation and plinth including leveling up with cement concrete 1:6:12 (1 cement : 6 Sand : 12 graded stone aggregate 20mm nominal size) at plinth level with : |  |  |
| 7.1.1 | Cement mortar 1:6 (1 cement : 6 sand) | Cum | 3647.00 |
| 7.2 | Extra for random rubble masonry with hard stone in superstructure above plinth level and upto floor two level, including leveling up with cement concrete 1:6:12 (1 cement : 6 sand : 12 graded stone aggregate 20mm nominal size) at window sills, ceiling level and the like. |  |  |
| 7.2.1 | Cement mortar 1:6 (1 cement : 6 sand) | Cum | 3851.00 |
| 7.3 | Extra for random rubble masonry with hard stone in superstructure above floor II level for every floors or part thereof | Cum | 92.00 |
| 7.4 | Extra for random rubble masonry with hard stone in : |  |  |
| 7.4.1 | Square or rectangular pillars | Cum | 213.00 |
| 7.4.2 | Circular pillars. | Cum | 894.00 |
| 7.5 | Extra for random rubble masonry with hard stone curved on plan for a mean radius not exceeding 6 m. | Cum | 354.00 |
| 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 sand) | Cum | 4103.00 |
| 7.7 | Coursed rubble masonry (second sort) with hard stone in foundation & plinth with : |  |  |
| 7.7.1 | Cement mortar 1:6 (1 cement : 6 sand) | Cum | 3842.00 |
| 7.8 | coursed rubble masonry with hard stone (first or second sort) in superstructure above plinth level and floors two level. |  |  |
| 7.8.1 | masonry work (first sort), in cement mortar 1:6 (1 cement : 6 sand) | Cum | 4303.00 |
| 7.8.2 | masonry work (second sort), in cement mortar 1:6 (1 cement : 6 sand) | Cum | 4041.00 |
| 7.9 | Extra for coursed rubble masonry with hard stone (first or second sort) in superstructure II level for every floor or part thereof. | Cum | 92.00 |

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| 7.10 | Extra for coursed rubble masonry with hard stone (first or second sort) in : |  |  |
| 7.10.1 | Square or rectangular pillars | Cum | 235.00 |
| 7.10.2 | Circulars pillars | Cum | 1003.00 |
| 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 | 384.00 |
| 7.12 | Stone work in plain ashlar in super structure upto floor two level in cement mortar 1:6 (1 cement : 6 sand) including pointing with cement mortar 1:2 (1 white cement : 2 marble dust) with an admixture of pigment matching the stone shade : |  |  |
| 7.12.1 | One face dressed. |  |  |
| 7.12.1.1 | Red sand stone | Cum | 12905.00 |
| 7.12.1.2 | White sand stone | Cum | 12998.00 |
| 7.12.2 | Both face dressed. |  |  |
| 7.12.2.1 | Red sand stone. | Cum | 18003.00 |
| 7.12.2.2 | White sand stone | Cum | 18080.00 |
| 7.13 | Stone work in plain ashlar in arches in super structure upto floor two level in cement mortar 1:3 (1 cement : 3 sand) including cement, shuttering and pointing with white cement mortar 1:2 (1 white cement : 2 marble dust) with an admixture of pigment matching the stone shade : |  |  |
| 7.13.1 | One face dressed. |  |  |
| 7.13.1.1 | Red sand stone | Cum | 17182.00 |
| 7.13.1.2 | White sand stone | Cum | 17207.00 |
| 7.13.2 | Both face dressed. |  |  |
| 7.13.2.1 | Red sand stone. | Cum | 22264.00 |
| 7.13.2.2 | White sand stone | Cum | 22341.00 |
| 7.14 | Stone work in plain ashlar in arches in super structure upto floor two level in cement mortar 1:3 (1 cement : 3 sand) including cement, shuttering and pointing with white cement mortar 1:2 (1 white cement : 2 marble dust) with an admixture of pigment matching the stone shade :: |  |  |
| 7.14.1 | One face dressed. |  |  |

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| 7.14.1.1 | Red sand stone | Cum | 27834.00 |
| 7.14.1.2 | White sand stone | Cum | 27912.00 |
| 7.14.2 | Both face dressed. |  |  |
| 7.14.2.1 | Red sand stone. | Cum | 39693.00 |
| 7.14.2.2 | White sand stone | Cum | 39770.00 |
| 7.15 | Stone work ashlar punched (ordinary) in super structure upto above plinth level and upto floor two level in cement mortar 1:6 (1 white cement : 6 sand) including pointing with cement mortar 1:2 (1 white cement : 2 marble dust) with an admixture of pigment matching the stone shade : |  |  |
| 7.15.1 | One face dressed. |  |  |
| 7.15.1.1 | Red sand stone | Cum | 12190.00 |
| 7.15.1.2 | White sand stone | Cum | 12267.00 |
| 7.15.2 | Both face dressed. |  |  |
| 7.15.2.1 | Red sand stone. | Cum | 16541.00 |
| 7.15.2.2 | White sand stone | Cum | 16618.00 |
| 7.16 | Extra for stone work, plain ashlar or ashlar punched above floor two level for every floor or part thereof. | Cum | 123.00 |
| 7.17 | Extra for plain ashlar or ashlar punched in. |  |  |
| 7.17.1 | Square or rectangular pillars | Cum | 1771.00 |
| 7.18 | Extra for stone work, plain ashlar or ashlar punched curved on plan with a mean radius not exceeding 6m. | Cum | 1232.00 |
| 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 | 503.00 |
| 7.20 | Stone work sunk or moulded or sunk and moulded upto floor Two level in cement mortar 1:6 (1 cement : 6 sand) including pointing with white cement mortar 1:2 (1 white : 2 marble dust) with an admixture of pigment matching the stone shade |  |  |
| 7.20.1 | Red sand stone | Cum | 20629.00 |
| 7.20.2 | White sand stone | Cum | 19706.00 |
| 7.21 | Extra for Stone work sunk or moulded or sunk and moulded or carved in. |  |  |
| 7.21.1 | Triangular or Square or rectangular pillars | Cum | 2310.00 |

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| 7.21.2 | Circulars or polygonal pillars | Cum | 6545.00 |
| 7.22 | Extra for stone work sunk or moulded in cornices. | Per metre per cm girth | 14.00 |
| 7.23 | Stone work (machine cut edges) for wall lining etc. (veneer work) up to 10 meter height backing filled with a grout of 12mm thick cement mortar 1:3 (1 cement : 3 sand) inclutding 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 by means of cramps which shall be paid for separately) : |  |  |
| 7.23.1 | Red sand stone - exposed face fine dressed with rough  baking . |  |  |
| 7.23.1.1 | 70 mm thick. | Sqm | 1321.00 |
| 7.23.1.2 | 60 mm thick. | Sqm | 1299.00 |
| 7.23.1.3 | 50 mm thick | Sqm | 1276.00 |
| 7.23.1.4 | 40 mm thick. | Sqm | 1257.00 |
| 7.23.1.5 | 30 mm thick. | Sqm | 1230.00 |
| 7.23.2 | Red sand stone - Exposed face machine cut and table rubbed with rough backing. |  |  |
| 7.23.2.1 | 70 mm thick. | Sqm | 1808.00 |
| 7.23.2.2 | 60 mm thick. | Sqm | 1785.00 |
| 7.23.2.3 | 50 mm thick | Sqm | 1762.00 |
| 7.23.2.4 | 40 mm thick. | Sqm | 1739.00 |
| 7.23.2.5 | 30 mm thick. | Sqm | 1717.00 |
| 7.23.3 | White sand stone - exposed face fine dressed with rough backing . |  |  |
| 7.23.3.1 | 70 mm thick. | Sqm | 1327.00 |
| 7.23.3.2 | 60 mm thick. | Sqm | 1303.00 |
| 7.23.3.3 | 50 mm thick | Sqm | 1580.00 |
| 7.23.3.4 | 40 mm thick. | Sqm | 1256.00 |
| 7.23.3.5 | 70 mm thick. | Sqm | 1233.00 |
| 7.23.4 | White sand stone - Exposed face machine cut and table rubbed with rough backing. |  |  |

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| 7.23.4.1 | 70 mm thick. | Sqm | 27834.00 |
| 7.23.4.2 | 60 mm thick. | Sqm | 27912.00 |
| 7.23.4.3 | 50 mm thick | Sqm | 1766.00 |
| 7.23.4.4 | 40 mm thick. | Sqm | 39693.00 |
| 7.23.4.5 | 30 mm thick. | Sqm | 39770.00 |
| 7.24 | Extra for Stone work (vencer work) curved on plan with a mean redius not exceeding 6m. | Cum | 1771.00 |
| 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 sand) including making the necessary chases in stone and holes in wall s wherever required. | Kg | 631.00 |
| 7.26 | Providing and fixing stone dowels of size 10x5x2.5 cm cut to double wedge shape as per design in cement mortar 1:2 (1 cement : 2 sand) including making the necessary chases. | Each | 35.00 |
| 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 sand) including making the necessary chases. | Each | 35.00 |
| 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 sand) with 12mm diameter anchoring steel bar 45 cm long fixed in each stone and supported on and including bricks cave in cement mortar 1:4 (1 cement : 4 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 bricks of 25 kg/cm2 compressive strength. | Sqm | 1196.00 |
| 7.28.2 | White sand stone |  |  |
| 7.28.2.1 | With common burnt clay bricks of 25kg/cm2 compressive strength. | Sqm | 1196.00 |
| 7.29 | Providing and fixing horizontal chajja of stone 40 mm thick and upto 80 cm project ion in cement mortar 1:4 (1 cement : 4 sand) including 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 |  |  |

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| 7.29.2 | White sand stone | Sqm | 744.00 |
| 7.30 | 30mm red sand stone sun-shade (chisel-dressed) supported on red sand stone brackets, fixed in walls with cement mortar 1:4 (1 cement : 4 sand) including finishing complete. | Sqm | 891.00 |
| 7.31 | Providing and fixing red sand stone brackets 55x22.5x45cm sunk and moulded including providing and fixing with 4 Nos. gun metal cramp 25x6mm 30 cm long and dowel bars 7.5 cm long 6 mm dia as per design. | Each | 1672.00 |
| 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 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 | 13187.00 |
| 7.32.2 | White sand stone | Cum | 13249.00 |
| 7.33 | Providing and fixing stone jali 40mm thick through out in cement mortar 1:3 (1cement :3 sand) including pointing in white cement mortar 1:2 (1white 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 | 5797.00 |
| 7.33.2 | White sand stone | Sqm | 5797.00 |
| 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.  NOTE:- The quantity will be calculated by multiplying the depth measured from sub-soil water level up to the center 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 center of gravity shall be reckoned correct to 0.1 m. 0.05 m or more shall be taken as 0.1m and less than 0.05 m ignored. |  |  |
| 7.35 | Extra for laying stone work in or under foul position. | Cum | 109.00 |
| 7.36 | Wall lining butch work upto 10m height with red/ white sand 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 75x75mm and by providing layer of 75mm thick strips i/c 12mm thick bed of cement mortar 1:3 (1 Cement : 3 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 | 1543.00 |

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| 7.37 | Stone work ( machine cut edges) for wall lining upto 10 m height etc. (Veneer work) backing filled with a group of 12mm thick cement mortar 1:3 (1 Cement : 3 sand) and jointed with Cement mortar 1:2 (1 cement : 2 stone dust) including rubbing and polishing complete. (To be secured to the backing by means of cramps which shall be paid for separately) |  |  |
| 7.37.1 | 25mm thick Kota stone slabs exposed face dressed and rubbed. | Sqm | 1222.00 |
| 7.37.2 | 25mm thick Kota Dholpur stone slabs exposed face dressed and rubbed. | Sqm | 1469.00 |
| 7.38 | Stone tile work for wall lining upto 10 m height with special adhesive over 12mm thick bed of cement mortar 1:3 (1 cement : 3 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 | 1524.00 |
| 7.38.1.2 | Raj Nagar plain white marble/ Udaipur green marble/  Zebra black marble. | Sqm | 1119.00 |
| 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 thereof. | Sqm | 67.00 |
| 7.40 | Providing and fixing dry cladding upto 10 metre heights with 30mm thick gang saw cut stone with (machine cut edges) of uniform colour and size upto 1mx1m, fixed to structural steel frame work and/ or wi th the help of cramps, pins etc. and sealing the joints wi th 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 | 1639.00 |
| 7.40.2 | White sand stone | sqm | 1706.00 |
| 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 supported in wall with the help of MS 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 sand :4 graded stone aggregate 20mm nominal size) of size 300x230x300mm including cost of necessary centring and shuttering and with approved expansion hold fasteners on CC/RCC surface including dril ling 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 execut ion). The frame work shall be fi xed in true hori zontal & verti cal lines/planes. (Only structural steel frame work shall be measured for the purpose of payment, stainless steel cramps shall be paid | Kg | 138.00 |

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| 7.42 | Providing and fixing adjustable stainless steel cramps of approved quality and of 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 | 208.00 |

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| **Item No.** | **Description** | **Unit** | **Rate (In Rs.)** |
| 8.1 | 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) | kg | 359.00 |
| 8.2 | 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:  (A) structural analysis and design and preparation of shop drawings of 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 aluminium sections for fixing glazing panels of various thickness, 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 euqalisation and drainage and protection against fire hazard including:  (B) Fabricating and supplying serrated M.S. hot dip galvanized/Aluminium alloy of 6005 T5 brackets of required sizes, sections and profiles etc. to accommodate 3 Dimentional 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 separator to prevent bimetallic contact with nuts and washers etc. of stainless steel grade 316, of the required capacity and in required numbers.  (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.  (D) Providing and fixing in position flashings of solid aluminium sheet 1 mm thick and of sizes, shpes 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.  (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, TandP, 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 th 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. | sqm | 2674.00  Page No.111 |
| 8.3 | 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 6 mm thick, of approved colour and shade with reflective soft coating on surface # 2 of approved colour and shade, an inner Heat strengthened clear float glass 6 mm thick, spacer tube 12 mm wide. dessicants, including primary seal and secondary seal (structural silicone sealant) etc. all complete for the required performances, as per the Architectural drawins, as per the approved shop drawings, as specified and as directed by the Engineer-in-charge. The IGUs shall be assembled in the factory/workship of the glass processor. (Payment for fixing of IGU Panels in the curtain glazing is included in cost of item No. 8.2) 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.  (i) Coloured tinted float glass 6 mm thick substrade with reflective soft coating on face # 2, + 12 mm Airgap + 6 mm 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 . | sqm | 3635.00 |
| 8.4 | Extra for openable side/top hung vision glass panels (IGUs) including providing and supplying at site all accessories and hardwares for the openable panel as specified and of the approved make such as heavy duty stainless stell friction hinges, min 4 point cremone locking sets with stainless steel plates, handles, buffers etc. including necessary stainless stell 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-charge. | Sqm | 3009.00 |
| 8.5 | 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-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 aluminium sheet backing using, 6 mm thick cement board including SS rivets, nuts, bolts, washers etc. complete. | Sqm | 1761.00  Page No.112 |
| 8.6 | 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 IGs 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 galss on face # 1 of te 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 relevant item) (i) Coloured tinted float glass 6 mm 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. | Sqm | 2174.00 |
| 8.7 | Designing, fabricatin, 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.  a) Structural analysis and design and preparation of shop drawings for pressure equalization or rain screen principle as required, proper drainage of water to make it watertight including checking of all the structural and functional design.  b) providing, fabricating and supplying and fixing panels of aluminium composite panel cladding in pan shape in metallic colour or approved shades. The aluminium composite panel cladding sheet shall be coil coated, with Kynar 500 based 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.  c) The fastening brackets of Aluminium alloy 6005 T5/MS with Hot Dip Galvanised with serrations and serrated washers |  |  |

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| **Item No.** | **Description** | | **Unit** | **Rate (in its.)** |
|  |  | |  |  |
| **9.1** | **Providing wood work in frames of doors, windows, clerestory windows and other flames, wrought framed and fixed in position with hold fist lugs or with dash fastmers of required din and length (hold fast lugs or dash fastener shall be paki for separately).** | |  |  |
|  | **9,1.1** | **Second class teak wood** | **CUM** | **90618.00** |
|  | **9,1.2** | **Sal wood** | **cum** | **71308.00** |
|  | **9.1.3** | **Kiln seasested and chemically treated Haldu, Kail, Etla wood** | **cum** | **72744.00** |
| **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 and length ( hold East lugs or dash fastener shall be paid for separately).** | | **cum** | **92195.00** |
| **9,3** | **Providing wood work in frames of false ceiling, partitions etc. sawn and fixed in position :** | |  |  |
|  | **9.3,1** | **Sal wood** | **Gum** | **76229.00** |
|  | **9.3,2** | **Kiln seasoned and chemically treated Haldu, Kail, Bija wood\_** | **cum** | **77538.00** |
| **9,4** | **Etxtna for additional labour for circular works, such as in frames of fsn light :** | |  |  |
|  | **9.4.1** | **Second class teak wood** | **Gum** | **9062.00** |
|  | **9.4.2** | **Sal wood** | **CUM** | **7131.00** |
|  | **9.4.3** | **Kiln seasoned and chnninally treated Haldu, Keil, Etija wood.** | **cum** | **7275.00** |
| **9.5** | **Providing and fixing panelled or panelled and glazed shutters for doors, windows and cleresbiry windows includin,g IR marked HS. pressed butt hinges bright finished of required size with necessary screws excluding, panelling/glazing which will be paid for separately, all complete as pa direction of Engineer-in‑**  **e.** | |  |  |
|  | **9.5.1** | **Second class teak wood** |  |  |
|  | **95.1,1** | **35 min thick stutters** | **sqm** | **2776.00** |
|  | **93.11** | **30 mm thick shutters** | **sqm** | **2448.00** |
|  | **93.2** | **Kiln seasoned and chnninally treated Haldn, Keil, Rija wood.** |  |  |
|  | **9.5,2.1** | **35 mm thick shutters** | **sqm** | **2205.00** |

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| **Item No.** | **Description** | | **Unit** | **Rate (in LW** |
|  |  | |  |  |
|  | **93.22** | **30 = thick skaters** | **sqm** | **1956.00** |
|  | **93.3** | **Kiln seasoned selected planks of sheesham wood.** |  |  |
|  | **93.3\_1** | **35 = thick shatters** | **sqm** | **2060.00** |
|  | **95,3.2** | **30 mm thick shutters** | **sqm** | **1816.00** |
| **9,6** | **Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed staters for doors, windows and clerestory windows (Area of opening for panel inserts =eluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 = to 40 = thick :** | |  |  |
|  | **9.6.1** | **Second class teak wood** | **sqm** | **2215.00** |
|  | **9.6.2** | **Kiln maimed and chrmirally treated Haldu, Kail, Bija wood** | **sqm** | **1763.00** |
|  | **9.6.3** | **Ply wood 5 ply, 9 mm thick •** |  |  |
|  | **9.6.3.1** | **Decorative plywood both side decorative *veneer* (Type -1) conforming to IS 1328 BWR type.** | **sqm** | **1439.00** |
|  | **9.6.32** | **Decorative plywood one side decorative veneer and commercial veneer on other face (Type 1) conforming to IS 1328 BWR Type** | **sqm** | **1369.00** |
|  | **9.6.4** | **Ply wood 7 ply, 9 mm thick •** |  |  |
|  | **9.6.4.1** | **Decorative plywood both side decorative *veneer* (Type -1) conforming to IS 1328 BWR type.** | **sqm** | **1861.00** |
|  | **9.6.42** | **Decorative plywood one side decorative veneer and commercial veneer on other face (Type 1) conforming to IS 1328 BWR Type** | **sqm** | **1650.00** |
|  | **9.6,5** | **Particle Board 12 mm thick** |  |  |
|  | **9.6,5.1** | **Plain particle board fiat pressed, 3 layer or graded wood particle board medium density Gmde I, IS : 3087 marked.** | **sqm** | **791,00** |
|  | **9.6.52** | **Veneered fiat pressed three layer or graded wood particle board with commercial veneering on both sides conforming to 15:3097, grade I.** | **sqm** | **1087.00** |
|  | **9.6,5.3** | **Pre-laminated particle board with decorative**  **lamination on one side and balancing lamination on other side, Grade I, Type 11 IS:12823 marked.** | **sqm** | **1333.00** |
|  | **9.6.5.4** | **Pre-laminated particle board with decorative**  **lamination on both sides, Grade I, Type II, IS:12823** | **sqm** | **1390.00** |
| **marked.** |
|  | **9.6,6** | **Coir Veneer Board (conforming to IS 14842)** |  |  |

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| Item No. | Description | | Unit | Rate (in Els.) |
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|  | 9.6.6.1 | 12 = thick | sqm | 1298.00 |
|  | 9.6,7 | Float glass pales |  |  |
|  | 9.6,7.1 | 4 trim thick glass pane | sqm | 973,00 |
|  | 9.6.72 | 5.5 mm dick glass pane | sqm | 1046.00 |
|  | 9.6.8 | Fly pmof stainless steel grade 304 wire gauge with 0,5 mm dia. Wire and 1.4 mm wide apetture with matching wood beading | sqm | 1532.00 |
| 9.7 | Providing and fixing 35 mm thick factory made laminated veneer lumber door shutter conformin,g to IS : 14616 and TADS 15:2001 (Part B) including ISI marked M\_S. pressed butt hinges bright finished of required size with necessary screws, all complete as per directions of Enginoer-in-charge and panelling with panels of | |  |  |
|  | 91.1 | 12mm thick plain grade - 1, medium density flat pressed three laya particle board FPT - I or graded wood particle board FFT - I IS : 3087 marked bonded with 11.1WP type synthetic rosin adhesive as ix/ IS : 848: | sqm | 2717.00 |
|  | 91.2 | 12 mm thick pre-laminated particle board  (decorative Lamination on both sides) grade - 1, medium density fiat pressed, three layer particle board FPT - I or graded wood particle board FPT - I, conforming to IS: 3087 bonded with MVP type synthetic resin adhesive as per IS : 848 and pre-lamination cord:arming to IS : 12823 Grade 1 Type -II marked: | sqm | 2868.00 |
|  | 91.3 | 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, throe layer particle board FPT - I ox graded wood particle board FP7-1 conforming to IS : 3087 bonded with BWP type synthetic resin adhesive as per IS : MS and prelamination conforming to IS: 12823 Grade -1, Type 11 marked: | sqm | 2775.00 |
| 9.8 | Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes including LSI marked M.S. pressed butt hinges bright finished of required size with necessary screws. | |  |  |
|  | 9.8.1 | Second class teak wood |  |  |
|  | 9.8.1.1 | 35 = thick | sqm | 3408.00 |
|  | 9.8.12 | 30 = thick | sqm | 3033.00 |
|  | 9.8.2 | Kiln seasoned and chrrnirally treated Haldn, Kail, Bija wood |  |  |

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| Item No. | Description | | Unit | Rate (in Rs.) |
|  |  | |  |  |
|  | 9.8.2.1 | 35 = thick | sqm | 2758.00 |
|  | 9.8.22 | 30 = thick | sqm | 2474.00 |
|  | 9.8.3 | Kin seasoned selected planks of sheesham wood. |  |  |
|  | 9.8,3.1 | 35 mm thick | sqm | 2594.00 |
|  | 9.8,3.2 | 30 mm thick | sqm | 2331.00 |
| 9.9 | Providing and fixing factory made laminated veneer lumber glazed shutter conforming to IS: 14616 and TADS 15:2001 (Part **B) , *using*** 4mm thick float glass panes **fir** doom, windows and clerestory windows including 1SI marked M.S. premed butt hinges bright finished of required size with necessary screws as per directions of Engineer-in-charge. | |  |  |
|  | 9.9.1 | 30 mm thick shutters | sqm | 2311.00 |
| 9.10 | Extra **fir** 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) | |  |  |
|  | 9.10.1 | 5.5 mm thick instead of 4 mm thick. | Kill | 73,00 |
| 9.11 | Extra for providing frosted glass panes 4 mm thick instead of ordinary float glass panes 4 mm thick in doors, windows and crematory window shutters. (Area of opening for glass panes excluding portion inside rebate shall be measured). | | sqm | 236.00 |
| 9.12 | Deduct for providing pin headed glass panes instead of ordinary float glass panes 4 mm thick in doors, windows and clerestory windows, shutters (Area of opening for glass panes excluding portion inside rebate shall be measured). | | sqm | 26.00 |
| 9.13 | 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 | 117,00 |
| 9.14 | Deduct for not providing hinges in doors, windows or clerestory window shutters with : | |  |  |
|  | 9.14A | Stainless steel butt hinges with stainless steel screws |  |  |
|  | 9.14A.1 | For 2nd class teak wood and other class of wood shutters. | sqm | 170.00 |
|  | 9.14.2 | 1SI masked M.S. pressed butt hinges bright finished of required size |  |  |
|  | 9.1421 | For 2nd class teak wood and other class of wood shutters. | sqm | 53.00 |

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| **Item No.** | **Description** | | **Unit** | **Rate (in Rs.)** |
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| **9.15** | **Providing and fixing 25 mm thick shutters for ap board etc. :** | |  |  |
|  | **9.15.1** | **Panelled or panelled and glazed shutters :** |  |  |
|  | **9.15.1.1** | **Second class teak wood including ISI marked anodised aluminium butt hinges with necessary screws.** | **sqm** | **2736.00** |
|  | **9.15.1.2** | **Second class teak wood including ISI marked nickel plated bright finished MS. piano hinges with necessary screws.** | **sqm** | **2753.00** |
|  | **9.15.2** | **Glazed shutters :** |  |  |
|  | **9.15.2.1** | **Second class teak wood including ISI marked anodised aluminium butt hinges with necessary screws.** | **sqm** | **2815.00** |
|  | **915.2.2** | **Second class teak wood including ISI marked nickel plated bright finished MS. piano hinges with necessary mews.** | **sqm** | **2759.00** |
| **9.16** | **Providing and fixing fiat 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) :** | |  |  |
|  | **9.16A** | **12 mm thick** | **sqm** | **555.00** |
|  | **916.2** | **18 = thick** | **sqm** | **654.00** |
| **9.17** | **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 1.1 exterior grade IS : 12823 marked m shelves with screws and fittings wherever required, edges to be painted with polyurethane primer (fittings to be paid separately).** | |  |  |
|  | **9.17A** | **18 mm thick** | **sqm** | **1270.00** |
|  | **9171** | **25 = thick** | **sqm** | **1383.00** |
| **9.18** | **Providing and fixing HI marked flush door shutters confining 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 thee veneers on both faces of shutters of such as duo board, century or equivelant make.** | |  |  |
|  | **9.18.1** | **35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.** | **Rim** | **3869.00** |
|  | **9.18.2** | **30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.** | **sqm** | **3660.00** |

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| Item No. | Description | | Unit | Rate (in its.) |
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|  | 9183 | 25 = thick (for cupboard) including ISI marked nickel plated bright finished M.S. Piano hinges IS : 3818 marked with necessary screws. | sqm | 3519.00 |
| 9.19 | Providing to IS: 2202 construction matched commercial cross bands duro board, |  |  |  |
| and fixing 151 marked flush door shutters conforming (Part I) non-decorative type, core of block board with frame of led class hard wood and well  3 ply veneering with vertical grains or and face veneers on both faces of shutters of such as century or equivelant make. |
|  | 9.191 | 35 mm thick including LSI marked Stainless ***Steel*** butt hinges with necessary screws. | sqm | 2423.00 |
|  | 9.19.2 | 30 mm thick including LSI marked Stainless Steel butt hinges with necessary screws. | sqm | 2237.00 |
|  | 9.193 | 25mm thick (for cupboard) including ISI marked nickel plated bright finished MS. piano hinges with necessary scams. | sqm | 2091.00 |
| 9.20 | Extra far Providing and fixing flush doom with decorative veneering instead of non decorative 151 marked flush door shutters conforming to LS: 2202 (Part I). | |  |  |
|  | 9.20.1 | On one side only. | sqm | 453,00 |
| 9.21 | 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). | | dim | 401,00 |
| 9.22 | Extra for providing vision panel not exceeding 0.1 sqm in all type of flush doors (cod of glass excluded) (overall area of door shutter to be measured) : | |  |  |
|  | 9.2/1 | Rectangular or square. | sqm | 157.00 |
|  | 9.22.2 | Circular. | sqm | 244.00 |
| 9.23 | Extra if louvers (not exceeding 0.2 sqm) arc provided in flush door shutters (overall area of door shutters to be measured). | | sqm | 418.00 |
| 9.24 | Extra for cutting rebate in flush door shutters (Total area of the shutter to be measured). | | sqm | 116,00 |
| 9.25 | Providing and fixing wire gauze shutters using galvanised MS. wire gauze of average width of aperture 1.4mm in both direction with wire of dia. 0.63 mm for doors, windows and clerestory windows with hinges and necessary screws: | |  |  |
|  | 9.25.1 | 35 mm thick shutters with ISI marked M.S. pressed butt hinges bright finished of required size. |  |  |
|  | 9251.1 | Second class teak wood, | sqm | 3174.00 |

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| **Item No.** | **Description** | | **Unit** | **Rate (in Rs.)** |
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|  | **925\_1.2** | **Kiln &resented and chemically treated Haldu, Keil, Bija wood.** | **sqm** | **2599.00** |
|  | **9.25A .3** | **Kiln seasoned selected class of sheesham wood.** | **sqm** | **2452.00** |
|  | **925.2** | **35 mm *thick* shutters with ISI marked stainless steel butt hinges of required size.** |  |  |
|  | **9.25.2.1** | **Second *class* teak wood.** | **sqm** | **3291.00** |
|  | **9.25.2.2** | **Kiln seasoned and chemically treated Halt', Kail, Bija wood\_** | **sqm** | **2716.00** |
|  | **925.2.3** | **Kiln seasoned selected class of sheesham wood.** | **sqm** | **2569.00** |
|  | **9.25.3** | **30 mm thick shutters with ISI masked M.S. pressed butt hinges bright finished of required size.** |  |  |
|  | **9253.1** | **Second class teak wood.** | **sqm** | **2797.00** |
|  | **9.25.3.2** | **Kiln seasoned and chrmirally treated Haiti, Kail, Bija wood\_** | **sqm** | **2306.00** |
|  | **9.253.3** | **Kiln seasoned selected chin of sheesham wood.** | **sqm** | **2179.00** |
|  | **925.4** | **30 mm thick shutters with ISI marked stainless steel butt hinges of required size.** |  |  |
|  | **925.4.1** | **Second class teak wood.** | **sqm** | **2914.00** |
|  | **9.25.4.2** | **Kiln seasoned and chernir.ally treated Halt', Kail, Bija wood\_** | **sqm** | **2423.00** |
|  | **9.25A.3** | **Kiln seasoned selected class of sheesham wood.** | **sqm** | **2296.00** |
| **9.26** | **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 rem in both directions with wire of dia 0.63 rem 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:** | |  |  |
|  | **9.26.1** | **35 mm thick starters** | **sqm** | **2427.00** |
|  | **9.26.2** | **30 mm thick stutters** | **sqm** | **2102.00** |
| **9.27** | **Providing 59x59x50mm 2nd class teak wood plugs including cutting brick work and fixing in cement mortar 1:3 (1 cement : 3 sand) and making good the walls etc.** | | **each** | **18.00** |
| **9.28** | **Providing and fixing expandable fasteners of specified size with *necessary* plate sleeves and galvanised M.S. strews including drilling holes in masonry work /CC/ R.C.C. and making good etc. complete.** | |  |  |
|  | **9.28.1** | **25 = long** | **each** | **16.00** |
|  | **9.28.2** | **32 mm long** | **each** | **18.00** |

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| Item No. | Description | | Unit | Rate (in lilx.) |
|  |  | |  |  |
|  | 9283 | 40 = long | each | 21.00 |
|  | 928.4 | 50 = long | each | 25.00 |
| 9.29 | Providing and fixing 2nd class teak wood plain lining tongued and grooved including wooden plugs complete with necessary screws and priming coat on =exposed surface. | |  |  |
|  | 9.29A | 40 mm thick\_ | sqm | 5407.00 |
|  | 929.2 | 25 = thick\_ | sqm | 3469.00 |
|  | 929.3 | 20 = thick | sqm | 2802.00 |
|  | 9.29.4 | 12 mm thick | sqm | 1768.00 |
| 9.30 | Providing and fixing in wall lining flat pressed three layer  (medium density) particle board or graded wood Pre-laminated  one side decorative lamination on 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 : | |  |  |
|  | 930.1 | 12 mm thick | sqm | 1174.00 |
|  | 930.2 | 18 = thick | sqm | 1410.00 |
|  | 9.30.3 | 25 mm thick | sqm | 1525.00 |
| 9.31 | Providing and fixing speced wood frame work consisting of battens 50x25mm fixed with mil plug and drilling necessary holes for rawl plug etc, including priming coat complete. | |  |  |
|  | 931.1 | Kiln seasoned and chnninally treated Haldu, Keil, Efija wood. | cum | 96415.00 |
| 9.32 | Providing and fixing plywood 4 mm thick one side decorative veneer conforming to IS: 1328 (type-1) for plain lining / chit ling with necessary screws, priming coat on unexposed surface with: | |  |  |
|  | 932.1 | Decorative veneer facings of approved  manufacture. | sqm | 1068.00 |
| 9.33 | 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 | 818.00 |
| 9.34 | Providing and fixing skirling of Pre-laminated with (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 : | |  |  |
|  | 934A | 18 = thick | sqm | 1626.00 |
|  | 9.34.2 | 25 mm thick | sqm | 1741.00 |

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| Item No. | Description | | Unit | Rate (in its.) |
|  |  | |  |  |
| 9.35 | Providing and thing wooden moulded beading to door and window frames with iron screws, plugs and priming coat on tram:posed surface etc. complete : | |  |  |
|  | 935.1 | 2nd class teak wood |  |  |
|  | 935.1.1 | 50x12 mm | metre | 102.00 |
|  | 935.1.2 | 50 x 20 mm | metre | 147.00 |
|  | 9312 | Kiln scanned and chrmirally treated Haldu, Knit, Bija wood. |  |  |
|  | 9.35.2.1 | 50x12 mm | metre | 85,00 |
|  | 9312.2 | 50x20 mm | metre | 119.00 |
| 9.36 | Providing and fixing plain jaffri of 35x10 mm laths placed 35 mm apart (frames to lit paid separately) including fixing 50x12 mm beading complete with : | |  |  |
|  | 936.1 | Second class teak wood. | sqm | 1773.00 |
| 9.37 | Providing and fixing 18 mm thick, 150 mm widc pelmet of flat pressed 3 layer or graded wood particle board medium density grade I, IS : 3087 marked, including top cows of 6 mm commercial ply wood conforming to IS: 303 BWR grade, nickel plated MS. pipe 20 mm dia (heavy type) curtain rod with nickel plated brackets, including fixing with 25x3 mm MS flat 10 cm long fixed to pelmet with Haldu, Rail, Bija wood cleats of sin HMI mm x 40 mm x 40 mm **011** bath inner side of pelmet and ntwl plugs 75 mm long etc, all complete. | | metre | 333.00 |
| 9.38 | Providing and fixing 18 mm thick, 150 mm wide pelmet of coin veneer board ISI marked IS : 14842, including top *cover* of 6 mm coin yenta board, nickle plated M.S. Pipe 20 ram dia. (heavy type) curtain rod with nickel plated brackets, including facing with 25x3 mm MS. Flat 10 cm long fixed to pelmet with Haldu, Rail, Bija 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 | 466,00 |
| 9.39 | Extra **for** Grade I, in |  |  |  |
| using veneered particle board confining to IS 3097 item of pelmet 18mm thick 150mm wide. |
|  | 939A | Non decorative veneer **on** both sides. | metre | 34.00 |
|  | 9.39.2 | Particle board with decorative veneering on both  sides. | metre | 102,00 |
| 9.40 | Providing and fixing teak wood lipping of size 25x3 mm in pelmet | | metre | 41.00 |
| 9.41 | 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 : | |  |  |

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| Item No. | Description | | Unit | Rate (in Elk) |
|  |  | |  |  |
|  | 9A1A | 12 mm dia. | metre | 289.00 |
|  | 9.41.2 | 20 mm dia. | metre | 377,00 |
|  | 9.413 | 25 mm dia. | metre | 382.00 |
| 9.42 | Providing and fixing nickel plated MS. pipe curtain rods with nickel plated brackets | |  |  |
|  | 9.42.1 | 20 mm dia (heavy type) | metre | 127,00 |
|  | 9.42.2 | 25 mm dia (heavy type) | metre | 141.00 |
| 9.43 | Providing and fixing MS. 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. | |  |  |
|  | 9A11 | Fixed to steel windows by welding. | Kg | 91.00 |
|  | 9Al2 | Fixed to openings /wooden frames with ravel plugs screws etc. | Kg | 100.00 |
| 9.44 | Providing and fixing expanded metal 20x60 mm strands 325 mm wide and 1.6 mm thick for windows etc. including 62 x19 mm beading of 11 nd *class* teak wood and priming coat with approved steel primer all complete. | | Rim | 952,00 |
| 9.45 | Providing and fixing hard drawn steel wire fabric 75125 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 | 1224.00 |
| 9.46 | 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. | |  |  |
|  | 9.46.1 | With 2nd class teak wood beading 62x19 mm | sqm | 1000.00 |
|  | 9.46.2 | With 12 mm mild steel U beading. | sqm | 681.00 |
| 9.47 | Deduct for fixing 75x2.5 mm hard drawn steel wire fabric of weight not less than 7.75 Kg, per sqm in panelled and glazed doer and window shutter instead of glass sheet 4 mm thick | | sqm | 166.00 |
| 9.48 | Providing 40x5 mm flat iron hold fast 40 cm long including fixing to frame with 10 mm diameter bolts, nuts and wooden Plugs and embeddings in cement concrete block 30x10x15cm 1:3:6 mix (1 cement : 3 sand - 6 graded stone aggregate 20mm nominal site) | | each | 95.00 |
| 9.49 | Providing beams including hoisting, fixing in position and applying wood preservative for the unexposed surfaces, etc. complete with : | |  |  |
|  | 9.49.1 | I Sal wood. | cum | 72550.00 |

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| --- | --- | --- | --- | --- |
| Item No. | Description | | Unit | Rate (in Rs.) |
|  |  | |  |  |
|  | 9.491 | Haldu, Kail, Bija wood. | an | 72550.00 |
| 9.50 | Providing and fixing ISI marked MS. pressed butt hinges bright finished with necessary screws etc. complete : | |  |  |
|  | 9\_50A | 125x-65x2.12= | each | 30.00 |
|  | 9.50.2 | 100x58x1.90 mm | each | 23.00 |
|  | 9.50.3 | 75x47x1.70 mm | each | 18.00 |
|  | 9.50.4 | 50x37x1.50 mm | ***each*** | 10.00 |
| 9.51 | Providing and fixing IS : 1341 marked M.S. heavy weight butt hinges with necessary scams etc. complete : | |  |  |
|  | 9.511 | 125x90x4.00 = | each | 53.00 |
|  | 9$L2 | 100x75x3.50 = | each | 35.00 |
|  | 95L5 | 75x60x3.10 mm | each | 21.00 |
|  | 9\_51.4 | 50x40r,2.50 mm | each | 13.00 |
| 9.52 | Providing and fixing ISI marked oxidised M.S. pressed butt hinges with necessary **SCUMS** etc. complete. | |  |  |
|  | 9.52.1 | 125)/65)/2,12 mm | each | 32,00 |
|  | 9.52.2 | 100x58x1.90 mm | each | 23.00 |
|  | 9.523 | 75x47x1.70 mm | each | 17.00 |
|  | 9.52.4 | 50x37x1.50 mm | each | 10.00 |
| 9.53 | Providing and fixing ISI marked oxidised MS. pressed Parliamentary hinges with necessary screws etc. complete : | |  |  |
|  | 9.53.1 | 150x125x27x2 80 mm | each | 58,00 |
|  | 9.53.2 | 125x125x27x2 80 mm | each | 55,00 |
|  | 9513 | 100x125x27x2.80 mm | each | 46.00 |
|  | 953.4 | 75x100x20x224 mm | each | 39.00 |
| 9.54 | Providing and fixing ISI marked oxidised M.S. single acting spring hinges with necessary screws etc. complete : | |  |  |
|  | 9.54A | 150 mm | each | 169.00 |
|  | 934.2 | 125 mm | each | 163.00 |
|  | 9\_54.3 | 100 mm | each | 131.00 |
| 9.55 | Providing and fixing oxidised M.S. double acting spring hinges with necessary screws etc. complete. | |  |  |

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| Item No. | Description | | Unit | Rate (in Rs.) |
|  |  | |  |  |
|  | 9311 | 150 mm | each | 174.00 |
|  | 9.55.2 | 125 mm | each | 163,00 |
|  | 9553 | 100 = | each | 137.00 |
| 9,56 | Providing M.S. Piano hinges ISI marked IS : 3818 finished with nickel plating and fixing with necessary strews ***de.,*** complete. | |  |  |
|  | 9.511 | Overall width 35 mm. | metre | 133.00 |
|  | 9.512 | Overall width 50 mm. | metre | 138.00 |
|  | 9\_56.3 | Overall width 65 mm. | metre | 141.00 |
| 9.57 | Providing and fixing ISI marked oxidised MS. sliding door bolts with nuts and screws etc. complete : | |  |  |
|  | 9.57.1 | 300x16 mm | each | 170,00 |
|  | 9.57.2 | 250x16 mm | *each* | 157.00 |
| 958 | Providing and fixing ISI marked oxidised M.S. tower bolt black finish, (Barrel type) with necessary screws etc. complete : | |  |  |
|  | 9.58.1 | 250x10 mm | each | 68.00 |
|  | 9.58.2 | 200x10 mm | each | 60.00 |
|  | 9.58.3 | 150x10 mm | each | 42.00 |
|  | 9.58.4 | 100x10 mm | each | 35.00 |
| 9.59 | Providing and fixing ISI marked 85x42mm oxidised M.S. pull bolt lock conforming to IS : 7534 with necessary screws bolts, nut and washers etc. complete. | | each | 71.00 |
| 9.60 | Providing and fixing ISI marked oxidised MS. door latches conforming to IS:5930 with screws etc. complete : | |  |  |
|  | 9.60.1 | 300x20x6 mm | each | 72,00 |
|  | 9.60.2 | 250x20x6 mm | each | 67,00 |
| 9.61 | Providing and fixing IR marked oxidised MS. handles conforming to IS:4992 with necessary screws etc. complete : | |  |  |
|  | 9.61\_1 | 125 mm | each | 27.00 |
|  | 9.61.2 | 100 mm | each | 25,00 |
|  | 9.61.3 | 75 mm | each | 24,00 |
| 9.62 | Providing and fixing oxidised M.S. hasp and staple (safety type) conforming to IS : 363 with necessary screws etc. complete : | |  |  |

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| Item No. | Description | | Unit | Rate (in Rs.) |
|  |  | |  |  |
|  | 9.62A | 150 mm | each | 2100 |
|  | 9.62.2 | 115 mm | each | 20.00 |
|  | 9.62.3 | 90 mm | each | 17.00 |
| 9.63 | Providing and fixing oxidised M S aucment stays (straight peg type) with necessary screws etc. complete. | |  |  |
|  | 9.63.1 | 300 mm weighing not less than 200 gms, | each | 4.0.00 |
|  | 9.63.2 | 250 mm weighing not less than 150 gins, | each | 34.00 |
|  | 9.633 | 200 mm weighing not less than 120 gins. | each | 28.00 |
| 9.64 | Providing and fixing oxidised MS. Safety chain with necessary fixtures for doors. (Weighing not less Than 450 gms.) | | each | 93.00 |
| 9.65 | Providing and fixing ISI masked stainless steel sliding door bolts with nuts and screws etc. complete : | |  |  |
|  | 9.611 | 300x16 rem | each | 389.00 |
|  | 9.65.2 | 250x16 mm | each | 326.00 |
| 9.66 | Providing and fixing ISI marked stainless steel tower bolt black finish, (Barrel type) with necessary screws etc. complete : | |  |  |
|  | 9.66A | 250x10 mm | each | 148.00 |
|  | 9.66.2 | 200x10 mm | each | 93.00 |
|  | 9.66.3 | 150x10 mm | each | 71.00 |
|  | 9.66.4 | 100x10 mm | each | 50.00 |
| 9.67 | Providing and fixing ISI marked 85x42mm stainless steel pull bolt lock with necessary screws bolts, nut and washers etc. complete. | | each | 86.00 |
| 9.68 | Providing and fixing ISI marked stainless steel door latches with screws etc. complete : | |  |  |
|  | 9.68.1 | 300x20x6 mm | each | 211.00 |
|  | 9.68.2 | 250x20x6 mm | each | 173.00 |
| 9.69 | Providing and fixing ISI marked stainless steel handles with necessary screws etc. complete : | |  |  |
|  | 9.69A | 125 = | each | 60.00 |
|  | 9.69.2 | 100 = | each | 54.00 |
|  | 9.69.3 | 75 mm | each | 48,00 |
| 9.70 | Providing and fixing stainless steel hasp and staple (safety type) conforming to IS specification with necessary screws etc. complete : | |  |  |

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| Item No. | Description | | Unit | Rate (in Rs.) |
|  |  | |  |  |
|  | 9.70.1 | 150 mm | each | 37.00 |
|  | 9/0.2 | 115 mm | each | 3100 |
|  | 9.70.3 | 90 mm | each | 26.00 |
| 9.71 | Providing and fixing stainless steel casement stays (straight peg type) conforming to IS specification with necessary screws etc. complete. | |  |  |
|  | 9.71.1 | 300 mm weighing not less than 200 gnu. | each | 79.00 |
|  | 9.71.2 | 250 mm weighing not less than 150 gins, | each | 61.00 |
|  | 9.71.3 | 200 mm weighing not less than 120 gms, | each | 55.00 |
| 9.72 | Providing and fixing stainless steel Safety chain with necessary fixtures for doors. conforming to IS specification (Weighing not less than 450 gins.) | | each | 272.00 |
| 9.73 | Providing and fixing IS : 12817 marked stainless steel butt hinges with stainless steel screws etc. complete : | |  |  |
|  | 9.711 | 125x64x1.90 mm | each | 67.00 |
|  | 9,712 | 100X58X1.90 mm | each | 59.00 |
|  | 9,713 | 75x47x1.80 mm | each | 39.00 |
|  | 933.4 | 5007x1.50 mm | each | 25.00 |
| 9.74 | Providing and fixing IS : 12817 marked stainless steel but hinges (heavy weight) with stainless steel screws etc. complete : | |  |  |
|  | 9.74A | 125x64x2 50 mm | each | 76.00 |
|  | 9.74.2 | 100x60x2 50 mm | each | 60.00 |
|  | 9.74.3 | 75x50a2.50 mm | each | 46,00 |
| 9.75 | Providing and fixing 50 mm Stainless steel cup board or wardrobe knob with necessary screws (best make of swerved quality) | | each | 62.00 |
| 9.76 | Providing and fixing Stainless steel hanging type floor door stopper with necessary screws, etc. complete. | | each | 103.00 |
| 9.77 | Providing and fixing bright finished brass butt hinges with necessary *screws* etc. complete : | |  |  |
|  | 9.77.1 | 125x85x5.5 mm (heavy type) | each | 456,00 |
|  | 917.2 | 125x70x4 mm (ordinary type) | each | 148.00 |
|  | 9.77.3 | 100x85x5.5 mm (heavy type) | each | 387.00 |
|  | 9.77.4 | 100x70x4 = (ordinary type) | each | 117.00 |

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| Item No. | Description | | Unit | Rate (in fla.) |
|  |  | |  |  |
|  | 9.77.5 | 75x65x4 nun (heavy type) | each | 145.00 |
|  | 9.77.6 | 75s40x2 5 mm (ordinary type) | each | 74.00 |
|  | 9.77.7 | 50x40x2 5 = (ordinary type) | each | 32.00 |
| 9.78 | Providing and fixing bright finished brass parliamentary hinges with necessary screws etc. complete : | |  |  |
|  | 9.78.1 | 150x125x27x5 mm | each | 385,00 |
|  | 9.78.2 | 125x125x27x5 mm | each | 345,00 |
|  | 9.78.3 | 100x125x27x5 mm | each | 304,00 |
|  | 9.78.4 | 75x100x20x3.2 mm | each | 239,00 |
| 9.79 | Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete : | |  |  |
|  | 9.79A | 250x10 mm | each | 329.00 |
|  | 939.2 | 200x10 mm | each | 261.00 |
|  | 9.79.3 | 150x10 mm | each | 221.00 |
|  | 9.79.4 | 100x10 mm | each | 142.00 |
| 9.80 | Providing and fixing bright finished brass door latch with necessary screws etc. complete. | |  |  |
|  | 9.80.1 | 300x16x5 mm | each | 237,00 |
|  | 9.80/ | 250x16x5 mm | each | 225 00 |
| 9.81 | Providing and fixing bright finished brass handles with  necessary screws etc. complete. | |  |  |
|  | 9.81.1 | 125 mm | each | 205.00 |
|  | 9.81.2 | 100 mm | each | 181.00 |
|  | 9.813 | 75 mm | each | 141.00 |
| 9.82 | Providing and fixing bright finished brass sliding door bolts with nuts and screws etc complete. | |  |  |
|  | 9.82.1 | 300x16mm | each | 407.00 |
|  | 9.82/ | 250x16mm | each | 374.00 |
| 9.83 | Providing and fixing bright finished brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles with necessary screws etc. complete (best make of approved quality). | | each | 539,00 |
| 9.84 | Providing and fixing bright finished brass 100 mm mat 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 with necessary screws etc. complete (Rest make of approved quality). | | each | 820.00 |

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| **Item No.** | **Description** | | **Unit** | **Rate (in fla.)** |
|  |  | |  |  |
| **9.85** | **Providing and fixing bright finished brass 100 mm mortice latch with one dead bolt and a pair of lever handles with necessary screws etc. complete (best make of approved quality).** | | 1 | **475.00** |
| **9,86** | **Providing and fixing bright finished brass night latch including necessary screws etc. complete (Erect make of approved quality).** | | **each** | **678,00** |
| **9.87** | **Providing and fixing special quality bright finished brass cupboard or wardrobe locks with four levees including necessary screws etc complete (best make of approved quality) :** | |  |  |
|  | **9.87.1** | **40 mm** | **each** | **144,00** |
|  | **9.87.2** | **50 mm** | **each** | **150,00** |
|  | **9.873** | **65 mm** | **each** | **162.00** |
|  | **9.87.4** | **75 =** | **each** | **185.00** |
| **9.88** | **Providing and fixing 50 mm bright finished brass cup board or wardrobe knob with necessary screws (best make of approved quality)** | | **each** | **51.00** |
| **9.89** | **Providing and fixing bright finished brass hanging type floor door stopper with necessary screws,** etc. **complete.** | | **each** | **91.00** |
| **9.90** | **Providing and fixing bright finished brass casement window Est= with necessary screws** etc. **complete.** | | **each** | **72.00** |
| **9.91** | **Providing and fixing bright finished brass casement stays (straight peg type) with necessary screws** dc. complete : | |  |  |
|  | 9.91.1 | 300 **mm weighing not less than 330 gins** | **each** | **184.00** |
|  | **991.2** | **250 mm weighing not less than 280 guts** | **each** | **147.00** |
|  | **991.3** | **200 mm weighing not less** than 240 **gins** | **each** | **136,00** |
| **9,92** | **Providing and fixing bright finished brass hasp and staple (safety type) with necessary screws etc.** complete: | |  |  |
|  | 9.92.1 | 150 mm | each | 115,00 |
|  | 9.92/ | 115 **mm** | **each** | **94.00** |
|  | **9.923** | **40 mm** | **each** | **80.00** |
| **9.93** | **Providing and fixing Cranium plated brass hanging type floor door stopper with necessary screws, etc. complete.** | | **each** | **92.00** |
| **9.94** | **Providing and fixing aluminium the 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** | **780.00** |

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| Item No. | Description | | Unit | Rate (in Rs.) |
|  |  | |  |  |
| 9.95 | Providing and fixing aluminium extruded seed= 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 | 1186.00 |
| 9.96 | Providing and fixing chromium plated brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles with necessary screws etc. complete (best make of approved qoality). | | each | 777.00 |
| 9.97 | Providing and fixing chromium plated brass 100 mm mortice latch with one dead bolt and a pair of lever handles with necessary screws etc. complete (best make of approved quality), | | each | 835.00 |
| 9.98 | Providing and fixing chromium plated brass night latch including necessary strews etc. complete (Rest make of approved qualil5)- | | each | 766.00 |
| 9.99 | Providing and fixing special quality chromium plated brass cupboard locks with six levers including necessary screws etc. complete (Best make of approved quality) of : | |  |  |
|  | 9.99.1 | Size 40 mm | each | 144.00 |
|  | 9.99.2 | Size 50 mm | each | 156,00 |
|  | 9.99.3 | Size 65 mm | each | 167.00 |
|  | 9.99A | Size 75 mm | each | 146.00 |
| 9.100 | Providing and fixing chromium plated brass 50 mm cupboard or wardrobe knobs with nuts complete. | | each | 68.00 |
| 9.101 | Providing and fixing chromium plated brass sliding door bolts ISI marked with nuts and screws etc complete. | |  |  |
|  | 9.101,1 | 300x16mm | each | 268,00 |
|  | 9.101,2 | 250x16mm | each | 245,00 |
| 9.102 | Providing and fixing chromium plated brass tower bolts ISI marked with nuts and screws etc complete. | |  |  |
|  | 9.102.1 | 300x lOmm | each | 198.00 |
|  | 9102.2 | 250x10mm | each | 164.00 |
|  | 9102.3 | 200x10 mm | each | 113.00 |
|  | 9.102.4 | 150x10 mm | each | 91.00 |
|  | 9.102.5 | 100x10 mm | each | 73.00 |
| 9.103 | Providing and fixing chromium plated brass door latch ISI marked with necessary a**cmes** etc complete. | | each |  |

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| Item  No. | Description | | Unit | Rate (in fla.) |
|  |  | |  |  |
|  | 9103.1 | 300x16x5= | each | 255.00 |
|  | 9.103.2 | 250x16x5mm | each | 243.00 |
| 9.104 | Providing and fixing chromium plated brass night latch ISI marked with necessary screws etc complete. | | each | 249.00 |
| 9,105 | Providing and fixing chromium plated brass handles with necessary screws etc. complete: | |  |  |
|  | 9.105.1 | 125 ram | each | 241.00 |
|  | 9.105.2 | 100 mm | each | 206.00 |
|  | 9.105,3 | 75 mm | each | 182,00 |
| 9,106 | Providing and fixing chromium plated brass casement window *fastener* with necessary screws etc. complete. | | each | 137,00 |
| 9,107 | Providing and fixing chromium plated brass casement stays (straight peg type) with necessary screws etc. complete | |  |  |
|  | 9.107.1 | 300 mm weighing not less than 330 gms | each | 207.00 |
|  | 9.107.2 | 250 ram weighing not less than 280 gins | each | 178.00 |
|  | 9.107.3 | 200 mm weighing not less than 240 gins | each | 149.00 |
| 9.108 | Providing and fixing ISI marked aluminium butt hinges anodised (anodic coating not less than grade AC 10 as pa IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete:  Note :- Aluminum hinges shall not be used in wooden shutters. | |  |  |
|  | 9.108.1 | 125x75x4 mm | each | 115.00 |
|  | 9.108.2 | 125:63x4 = | each | 108.00 |
|  | 9.108.3 | 100x75x4 = | each | 95.00 |
|  | 9.108,4 | 100x63x4 mm | each | 93,00 |
|  | 9.108.5 | 100x63x3.2 mm | each | 90.00 |
|  | 9.108k | 75x63x4 min | each | 77.00 |
|  | 9.108.7 | 75x63x3 2 = | each | 75.00 |
|  | 9.108,8 | 75x45x3 2 mm | each | 67,00 |
| 9,109 | 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 *Sc.* complete : | |  |  |
|  | 9.109.1 | 300x16 = | each | 241.00 |
|  | 9.109,2 | 250x16 mm | each | 195,00 |

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| Item No. | Description | | Unit | Rate (in Rs.) |
|  |  | |  |  |
| 9.110 | Providing and fixing aluminium tower bob 1SI marked anodised (anodic coating not less than grade AC 10 as pa IS : 1868 ) transparent or dyed to required colour or shade with necessary screws etc. complete : | |  |  |
|  | 9.1101 | 300x10 mm | each | 114,00 |
|  | 9110.2 | 250x10 mm | ***each*** | 102.00 |
|  | 9110.3 | 200x10 mm | ***each*** | 82.00 |
|  | 9110.4 | 150x10 mm | ***each*** | 69.00 |
|  | 9110.5 | 100x10 mm | ***each*** | 5100 |
| 9,111 | Providing and fixing aluminium pull bolt lock anodised ISI marked (anodic coaling not less than grade AC 10 as pa IS : 1868) transparent or dyed to required colour and shade with necessary screws bolts, nut and washers etc. complete. | | 1 | 74,00 |
| 9.112 | Providing and fixing 50cm long aluminium kicking plate 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. | | 1 | 167.00 |
| 9.113 | Providing and fixing aluminium handles LSI 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: | |  |  |
|  | 9113.1 | 125 mm | each | 75.00 |
|  | 9113.2 | 100 mm | each | 55.00 |
|  | 9113.3 | 75 = | each | 46.00 |
| 9.114 | 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. | |  |  |
|  | 9.114.1 | Single rubber stopper | each | 35.00 |
|  | 9.114,2 | Twin rubber stopper | each | 86.00 |
| 9,115 | 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. | | 'I | 67,00 |
| 9.116 | Providing and fixing aluminium tee channels (heavy duty) with rollers, stop end in pelmets as curtain rod\_ | | metre | 68.00 |
| 9.117 | Providing and fixing aluminum U beading of required size to Pit-laminated /flush door shutter including fixing etc. complete as per direction of Engineer-in-charge. | | Kg | 441.00 |

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| **Item No.** | **Description** | | **Unit** | **Rate (in Rs.)** |
|  |  | |  |  |
| **9.118** | **Providing and fixing PTMT handles with necessary screws etc. complete.** | |  |  |
|  | **9118.1** | **125x34x24 rum weighing not less *than* 23 gins.** | **each** | **44.00** |
|  | **9118.2** | **150x34x24 rum weighing not less than 26 gins.** | **each** | **48.00** |
| **9.119** | **Providing and fixing PTMT Butt hinges with necessary screws etc, complete,** | |  |  |
|  | **9.119,1** | **75x60x10 mm fitted with 5.5 mm dig M.S. Bright Bar Rod weighing not less than 34 gms.** | **each** | **62,00** |
|  | **9.119.2** | **100x75x10 mm fitted with 5.5 mm dia MS Bright Bar Rod weighing not less than 53 gins.** | **each** | **82.00** |
| **9.120** | **Providing and fixing PTMT Tower Bobs with 12 ram one piece rod inside and necessary screws etc., complete.** | |  |  |
|  | **9120.1** | **152x42x18 mm weighing not less than 60 gins.** | **each** | **87.00** |
|  | **9.120,2** | **202x42x18 mm weighing not less than 78 gins.** | **each** | **106,00** |
| **9,121** | **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** | **37.00** |
| **9.122** | **Providing and fixing PTMT hanging type floor door eloper with necessary screws etc complete.** | | **each** | **35.00** |
| **9.123** | **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:** | |  |  |
|  | **9.123,1** | **35 mm thick shutters with ISI masked M.S. pressed butt hinges bright finished of required size.** |  |  |
|  | **9.123.1.1** | **Second class teak wood.** | **sqm** | **3583.00** |
|  | **9.123.1.2** | **Kiln seasoned and chemically treated Haldn, Kali, Bija wood\_** | **sqm** | **3008.00** |
|  | **9.123,13** | **Kiln seasoned selected class of sheesham wood.** | **sqm** | **2862.00** |
|  | **9.123,2** | **35 mm thick shutters with ISI marked stainless steel butt hinges of required size.** |  |  |
|  | **9.123.2.1** | **Second class teak wood.** | **sqm** | **3700.00** |
|  | **9.123.22** | **Kik seasoned and chnnirally treated Halal, Keil, Bija wood.** | **sqm** | **3125.00** |
|  | **9.123,2,3** | **Kiln seasoned selected class of sheesham wood.** | **sqm** | **2979.00** |
|  | **9123.3** | **30 mm thick shutters with ISI marked M.S. pressed butt hinges bright finished of required size.** |  |  |

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| **Item No.** | **Description** | | **Unit** | **Date (in Re.)** |
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|  | **9.123.3.1** | **Second dam teak wood.** | **sqm** | **3206.00** |
|  | **9.123.32** | **Kiln =scaled and chemically trrated Haldu, Keil, Bija wood.** | **sqm** | **271100** |
|  | **9.123.3.3** | **Kiln seasoned selected class of sheesham wood.** | **sqm** | **2589.00** |
|  | **9.123.4** | **30 ram thick shutters with IS! marked stainless steel butt hinges of required size.** |  |  |
|  | **9.123.4.1** | **Second class teak wood.** | **sqm** | **3323.00** |
|  | **9.123.42** | **Kiln seasoned and chemically treated Haldu, Kail, Bija wood\_** | **sqm** | **2832.00** |
|  | **9.123.4.3** | **Kiln seasoned selected class of sheesham wood.** | **sqm** | **2706.00** |
| **9.124** | **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.** | |  |  |
|  | **9.124,1** | **With 2nd class teak wood beading 62x19 mm.** | **sqm** | **1689.00** |
|  | **9.124.2** | **With 12 mm mild steel U beading.** | **sqm** | **1370.00** |
| **9.125** | **Providing and fixing Bamboo Safgery/ firming consisting of superior quality 25mm dia (Average) half cut bamboo placed vertically and fixed together with three numbers horizontal running members of Haldu, Kail, Bija wood in scantling of section 50x25mm fixed with nails and G 1 wire on existing support complete as per direction of Engineer-in-charge.** | | **sqm** | **379.00** |
| **9.126** | **Providing and fixing wooden moulded comer beading of triangular shape to the junction of panelling ac. with iron strews, plugs and priming cod on unexposed surface etc, complete 2nd class teak wood.** | |  |  |
|  | **9.126.1** | **50x5Omm (base and height).** | **metre** | **182.00** |
| **9.127** | **Providing and fixing 2nd *class* teak wood lipping/ moulded beading or Taj beading of size 18x5mm 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-**  **ahallre.** | | **metre** | **47,00** |
| **4.128** | **Providing and fixing bright finished 100mm mortice lock with 6 levers without pair of handles for aluminium door with necessary screws etc complete (Best make of approved quality) as per direction of Engineer-in-charge,** | | I | **480.00** |
| **9.129** | **Providing and fixing magnetic c.stcha in cupboard / ward robe shutters including fixing with necessary screws etc. complete (Best make of approved quality).** | |  |  |
|  | **9.129.1** | **Triple strip vertical type.** | **each** | **28.00** |

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| Item No. | Description | | Unit | Rate (in LW |
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|  | 9129.2 | Double strip (horizontal type). | each | 23.00 |
| 9.130 | Providing and fusing magic eye m door shutters including  fixing, complete (Best make of approved quality), | | each | 329.00 |
| 9,131 | Providing and fixing powder coated telescopic drawer channels with necessary screws etc. complete as per directions of Engineer-in-chaige, | |  |  |
|  | 9.131.1 | 300mm long | each set | 209.00 |
|  | 9.131.2 | 450mm long | each set | 256.00 |
|  | 9.131.3 | 500mm long | each set | 302.00 |
| 9.132 | Providing and fixing sliding arraignment in racks/  cupboards/cabinets shutter by P/F stainless steel rollers to run inside C or E aluminium channel section (The payment of C or E channel shall be made separately) | | I | 14.00 |
| 9.133 | Providing and fixing 12mm 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 fir panelled or panelled and glazed shutters 25mm to 40mm thick. | |  |  |
|  | 9.133,1 | Marine plywood conforming to IS: 710 | sqm | 1591.00 |
|  | 9.133.2 | Fire retardant plywood conforming to IS: 5509. | sqm | 1660.00 |
| 9.134 | Providing and Fixing decorative high pressure laminated sheet of plain / wood grain in gloss / man / suede finish with high density protective surface layer and reverse side of adhesive bonding quality confirming to IS : 2046 Type S including cost of adhesive of approved quality. | |  |  |
|  | 9.134,1 | 1.5 mm thick. | sqm | 851,00 |
|  | 9.13.4.2 | 1.0 mm thick. | sqm | 691.00 |
| 9.135 | Providing and fixing cup board Elm-tiers 25mm thick, with Pm- laminated flat pressed three layer particle board or graded wood particle board IS: 12823 marked exterior grade (Grade 1 Type 11) having one side decorative laminatimi and other side balancing lamination including End *class* teak wood lipping of 25mm wide x12 mm thick with necessary screws and bright finished stainless steel piano hinges complete as per direction of the Engineer-in-Change. | | sqm | 1688.00 |
| 9.136 | Providing and fixing cup board shutters with 25mm thick veneered particle board IS : 3097 marked exterior grade (Grade I) of approved make including Ilnd class teak wood lipping of 25mm wide x 12 mm thick with necessary screws and bright finished stainless steel piano hinges complete as per direction of Engineer-in-Change. | |  |  |

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| Item No. | Description | | Unit | Rate (in fts.) |
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|  | 9136.1 | With decorative veneering on one side and  commercial veneering on other side. | sqm | 143100 |
|  | 9.136.2 | With non decorative veneering on both sides. | sqm | 1322.00 |
| 9.137 | Providing and fixing factory made shutters of Pre-laminated particle board flat pressed three layer or graded wood particle board with one side decorative dish and other side balancing lamination conforming to LS: 12823 Grade 1 Type 11, of approved design, and edges scaled 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 ¶F beading and hinges **will be paid for separately).** | |  |  |
|  | **9137.1** | **25 =thick\_** | sqm | 1412.00 |
| 9.138 | Providing IS: 14587:1998 Lamination **fixing arrangement** | and fixing in wall lining medium density fibre board  marked, Pre-laminated one side decorative  and other side balancing lamination, with necessary |  |  |
| **and** screws dc. complete. |
|  | 9.138.1 | 12 = thick\_ | sqm | 919.00 |
|  | 9.138,2 | 18 mm thick. | sqm | 1161.00 |
|  | 9.138,3 | 25 mm thick. | sqm | 1685.00 |
| 9.139 | Providing are board side decorative shutters edges mm thick plated bright necessary | and fixing 25mm thick pre-laminated medium density | sqm | 1726.00 |
| exterior grade (Grade-l) IS:14587:1998 marked one  and other side balancing lamination for cupboard  to be scaled with PVC edge bending tape 2.00 of approved brand including ISI marked nickeled  finishing M.S. piano hinges 1S:3818 marked with screwed complete |
| 9.140 | 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 **fca- raid plugs etc and edges** to be sealed with PVC edge bending tape 2.00 mm thick of approved brand complete. | |  |  |
|  | 9.140,1 | 18 mm thick | sqm | 1493.00 |
|  | 9.140.2 | 25 mm thick | sqm | 2017.00 |
| 9,141 | Providing and fixing partition upto ceiling height consisting of GI. frame and required board including providing and fixing of frame work made of special sectima power pressed/ roll form G.I. sheet with zinc coating of 120 gmsistpn(both side inclusive), consisting of floor and ceiling channel 50= 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 | |  |  |

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| **Item** No. | **Description** | | **Unit** | **Date (in Mt)** |
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|  | 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 vatically within flanges of floor and ceiling channel and placed at a spacing of 610mm centre to centre by 6 mm this 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 **cadre** to centre and fixing of boards to both side of frame work by 2.5 irmi 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 Darner (25 mm x 25 mm x 0.5 mm), joint finisher and two coats of primer suitable for board as per manufacture's specification and direction of engineer in charge all complete. | |  |  |
|  | 9.141,1 | 75 mm overall thickness partition with 12,5 mm thick double skin fire rated board conforming to IS: 2095: part I, | sqm | 1212.00 |
|  | 9141.2 | 75mm overall thickness partiticaa with 12.5 mm thick double skin tapered edged plain Gypsum board conforming to IS: 2095: part I | sqm | 905.00 |
|  | 9.141.3 | 66mm overall thickness Partition with 2mm thick double skin Calcium Silicate Board made with Calcareous and Siliceous materials reinforced with cellulose fiber manufactured through autoclaving process with Compressive Strength 225 kes4:14m, Bending Strength 100 kgl sq cm | sqm | 1491.00 |
|  |
|  | 9141.4 | 66mm overall thickness partition using 8mm thick double skin non- asbestos multipurpose **cement** board reinforced with cellulose fibre mamifactm-cd through autoclaving process (High pressure steam cured) as pa IS: 14862 with suitable fibre cement screw. | sqm | 1212.00 |
| 9.142 | Providing and fixing, in position concealed GI. section for wall paneling using board of required thickness fixed on the ''W profile (0.55mm thick ) having a knurled web of 51.55= and two flanges of 26mm each with lips of 10.55 mm, placed @ 610mm C/C in perimeter channel having **Cale** flange of 20mm and another flange of 30mm with thickness of 0.55mm and web of length 27mm\_ Perimeter channel is fixed on the floor and the ceiling with the nylon sleeves @ 610mm CIC with fully threaded self-tapping dry wall screws. Board is fixed to the NV profile with 25 mm countersunk ribbed head screws @ 200mm | |  |  |

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| Item No. | Description | | Unit | Rate (in Rs.) |
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|  | C/C, all complete as per the drawing and directions of enginea­in-charge the joints of the boards are finished with specially formulated jointing compound and 48mm wide jointing tape to provide seamless finish, | |  |  |
|  | 9142.1 | Tapered edge calcium silicate board made with calcareous and siliceous materials reinforced with cellulose fibre marnifactared through autoclaving process to give stable crystalline structure, with compressive strength 225 kg/sq.cm, Bending strength 100 kg/sq.cm\_ |  |  |
|  | 9.142.1.1 | 10mm thick | sqm | 834.00 |
|  | 9.142,2 | Non-asbestos multipurpose cement board =forced with cellulose fibre manufactured through autoclaving process (high pressure steam cured ) as per IS 14862 with suitable fibre cement screw. |  |  |
|  | 9.142,2,1 | 8 mm thick, | sqm | 675,00 |
|  | 9.142.3 | Gypsum board conforming to IS: 2095 Part - I . |  |  |
|  | 9.142,3,1 | 12,5 mm thick, | sqm | 611,00 |
| 9.143 | Providing and fixing frame work for partitions/ wall lining etc. made of 50x50x1.6mm hollow MS tube, placed along the walls, ceiling and floor in a grid pattern with spacing @ 60 cm centre to centre both ways (vertically and 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 carts of approved steel primer etc. complete, all as per direction of Engineer-in-charge. | | Kg | 101,00 |
| 9.144 | 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 ram thick confirming to IS:14587 | | sqm | 1087.00 |
| 9,145 | Providing and fixing Pre -laminated medium density fibre board exterior grade {tirade-1) 15:14587:1998 marked, to frame, backing or studding with screws etc, complete ( Frames, backing or studding to be paid separately). | |  |  |
|  | 9.145.1 | Pre-laminated with decorative lamination on both side macrior Grade - I MDF Board 12 = thick confirming to IS:14587 | sqm | 811.00 |

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| **Item No.** | **Description** | | **Unit** | **Rate (in Rs.)** |
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|  | **9.145.2** | **Pre-laminated with decorative lamination on both side exterior Guide - I MDF Board 18 mm thick confirming to IS:14587** | **sqm** | **1166.00** |
| **9.146** | **Providing and fixing Pre-laminated medium density fibre board IS: 14587 1998 marked, with one side decorative lamination other side balancing lamination Grade-l(oderior grade) in shelves with screws and fittings wherever required, edges to be scaled with PVC edge bending tape 2.00 mm thick of approved brand (fittings to be paid separately)•** | |  |  |
|  | **9.146,1** | **Pre-laminated with decorative lamination one gide  and other side balancing lamination exterior Grade -** | **Rim** | **1179.00** |
| **I MDF Board 18 mm thick confirming to IS:14587** |
|  | **9.146.2** | **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** | **1682.00** |
| **9.147** | **Providing and Installation of acoustical wall panelling fabric finish hardened square edge, FR grade fabric (colour as approved by Egnineer in charge) wrapped soft fibre core (glass fibre) panel of size 600x2100x25mm having density 100- 120Kgs/ m3, weight 3.0kg/m2 NRC up to 0,9 installed by using impaling clip. Impaling clips are attached directly to the wall/frame work with the points odending outward Then panels shall positioned and pressed into place .** | | **sqm** | **7566.00** |
| **9.148** | **Providing and installation of acoustical wall panelling wood**  **finish Slats made out of HDF board , Melamine / veneer**  **Laminated finish, perforated wooden grooved slats (gym**  **grooves** g **8mm centers) / (2mm Slats g16mm pitch) / (2mm grooves** g **32mm centers) / (2mm grooves** g **64mm carters), backlined with black acoustical fleece, tongue-groove edge for a seamless look, FR grade, of lineal dimension size 128mm x 2440mm x 16mm thick having density 1000Kg /m3, weight 12.8Kgs/m2 installed by using GI strut system.**  **The GI strut systnn includes GI Cross channel having thickness 0.45mm, length 3600mm, knurled web 40mm, depth 10mm and equal flanges 15mm is fastened vertically/horizontally at every 600mm centers. Aluminium core cross channel having thickness 0.5mm, length 2400mm, web 15mm and 27mm, depth 18mm and flanges of 7mm with suitable edge and centre brackets is then fixed perpendicular to the cross channel with the help of fasteners at every 400mm centers. Contractor**  **to Provide expansion joints of 3mm at every 5mts  highways.** | | **sqm** | **5179.00** |
| **9.149** | **Providing and installation of paintble acoustic wall panelling consisting of Strand kerfed. edge paint finished as approved by Engineer in charge. magnesite bonded wood fiber panels of size 600x2400x2Omm having density 400kg/m3. weight 8-20kg/m2 which is fixed to GI strut system. The GI strut work includes** | | **sqm** | **1919.00** |

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| Item No. | Description | | Unit | Rate (in fla) |
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|  | Cross channel having thickness 0 45mm, length 3600mm,  knurled web 40, depth 10mm and equal flanges 15mm is  fastened to wall posit:Mated horizontally in a regular manner at 600mm centers. PVC Vinyl core UV treated H-Spline having thickness 2mm and length 2400mm to be fixed perpendicular to the Cross chimnel at 600mm centers. The Kerfed edge panels shall be then inserted into the fl-spline against wall to perfrct frt, | |  |  |
| 9.150 | Providing and fixing plain lining with necessary screws/nuts and 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-chnrge. (Frame work shall be paid for separately) | |  |  |
|  | 9.15111 | 12mm thick commercial ply conforming to IS : 1328 BWR type. | sqm | 1040.00 |
| 9.151 | Providing and installation of paintble acoustic wall panelling consisting of Strand square edge paint finished as approved by Engineer in charge. magnesite bonded wood fiber panels of size 600x2400x20nunthick having density 400kg/m3, weight 4- 20kg/m2 installed by using GI strut system.The GI strut work includes Cross channel having thickness 0 45mm, length 3600mm, knurled web 4-0, depth 10mm and equal flanges 15mm is fastened to wall positioned horizontally at 600mm centers. Then panels to be fixed on the Cross **channel with** suitable fasteners. Fastners to be ccamtersank and paint finished with suitable colour. | | sqm | 1870.00 |
| 9.152 | Providing and Installation of acoustic wall panelling consisting of Soak Gourd of selected colours as approved by Engineer in charge. roof edge Fabric wrapped wood fiber panels of size 600x2400x20mm having density 400Kgsfro3, weight 4-20kg/m2 installed by using GI strut system.  The GI strut works includes Cross channel having thickness 0.45mm, length 3600mm, Imm-led web 50, depth 50mm and equal flanges of 13mm is fastened to Wall positioned horizontally in a regular manner at 600mm centers. PVC Vinyl core IN treated H-Spline having thickness 2mm and length 2400mm to be fixed perpendicular to the Cross channels at 600mm centers. Kmfed edge Fabric wrapped panels shall be then inserted into the H-sp line against wall to perfect fit | | sqm | 3716.00 |
| 9.153 | Providing and Installation of acoustic wall panelling consisting of Soak Cord of selected colours as approved by Engineer in charge, square edge Fabric wrapped wood fiber panels of size 600x1200x1Oram having density 400Kgs/m3, weight 4-20kg/m2 installed by using GI struts,Z bars. The GI strut systems  includes Cross channel having thickness 0 45mm, length 3600mm, knurled web 4-0, depth 10mm and equal flanges 15mm is fastened to wall positioned vertically in a regular manner at 600mm c/c.GI Z bars having 40mm height, thickness 12mm is first fixed behind the panels by identifying resin spots by using | | sqm | 3358.00 |

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| Item No. | Description | Unit | Rate (in Rs.) |
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|  | suitable fasteners Clean exposed surfaces of wall and ensure  walls are in plumb line before installing on wall (provide  necessary packing **shims** if required) . Soak cord square edge  panels shall be glided into the Z bars fixed on wall. |  |  |
| 9.154 | Providing and installation of acoustic wall panelling consisting of Stretch NRC by using FR Gratin NRC fabric of size 1700mm width, shall be stretched by using wooden base 10mm thick, rigid vinyl Stretch Tracks half wrap/ frill wrap 25mm and Klemm 25mm , strand, synth PF with requisite accessories and tools. Woodenbase 10mm is first installed on the wall along the marking lines with metal fasteners at 300mm centers . tracks to be installed on wooden base, by using Base tape (by removing the protective cover) for a true and continuous secure grip, and heavy-duty fasteners at 15mm centers on one/both sides of Stretch Tracks. Strand square edge magnesite bonded wood fiber panels of size 600x1200x15mm having density 400kg/m3, weight 4-8kg which is fixed to wall Synth PF 10x1Omm thick adhered on strand panel by using Stick 7 adhesive. Fabric of width 1700mm is then aligned to the Stretch tracks by following the fabric thread hne or pattern. The fabric is stuck on the Align Tape (by removing the protective cover) at the same time as being stretched and tricked into the Stretch tracks and secure into the locking jaws so that it will be smooth, free of wrinkles with the tucking took Note -minimum 50mm additional fabric is required for tucking hence maximum module width would be 1600mm. | sqm | 3348.00 |
| 9.155 | Providing and Installation of wall panelling ***consisting*** of  Square edge Magnesia core panels of size 1100x2400x8mmmm having density 1000k,gafm3, weight 8kg/m2 installed by using GI Strut system. The GI strua system includes Cross channel having thickness 0.45mm, length 3600mm, knurled web 40, depth 10mm and equal flanges of 15= is fastened to wall positioned horizontally in a regular mama at 600mm de, The panels to be fixed on the cross channel with suitable fasteners. | sqm | 771.00 |
| 9.156 | Supplying and installation of magnesia block 66 mm thick drywall partition including Framework includes Floor/ Head GI channels having thickness 0,5mm, length 3600mm, equal flanges of 32mm and web of 50mm fixed to floor and ceiling with suitable fasteners at 300mm centers staggered. Noise and fire rated silicon bead sealant to be milked along the perimeter of the partition frame before fixing channel& Then Stud channel having thickness 0.45mm, length 3600mm, unequal flanges of 34/36mm and web of 48mm should be placed into the floor/head channel positioned vertically at 600mm centers. Extra reinforcement to be provided at openings (doors, windows, etc.,)The first layer of magenesia oxide block 8mm thick should be fixed on one side of the Stud framework in a staggered Pattern by using suitable metal fasteners at 300mm centers. Second layer of magenesia oxide block 8mm thick should be fixed other side of the frame work similar fashion as the first layer. 3mm gap should be maintained between boards.3 mm gap shall be filled with jointing compound. | sqm | 1578.00 |

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| Item No. | Description | Unit | Rate (in Rs.) |
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|  | Magnesia oxide block shall have following physical  chareetenties.   * Core - Magnesia' Fire Rating - upto 150mins • Acoustics - STC upto 44-50• Climate (0C RH) - 50, 99 * Moisture Absorption - 6.8% after 2hrs and 11 3% after 24hrs soaking * Wet Expansion - < 0.02% from ambient to saturation * Dry Contraction - 5 0.02% from evaporation * Moisture Movemcnt - 0.02%. Light reflectance - 80 ***Yr*** Green (RC %) - 30• Strength - Aiding * Impact - 4kg hammer 175mm |  |  |
| 9.157 | Supplying and installation of magnesia block 70 mm thick drywall partition including Framework includes Floor/ Head GI ehannels having thiekness 0,5mrn, length 3600mm, equal flanges of 32mm and web of 50mm fixed to floor and ceiling with suitable fasteners at 300mm centers staggered Noise and fire rated silicon bead sealant to be milked along the perimeter of the partiticat frame before fixing channels. Then Stud channel having thickness 0.45mm, length 3600mm, unequal flanges of 34/36mm and web of 48mm should be placed into the floor/head channel positioned vertically at 600mm centers. Extra reinforcement to be provided at openings (doors, windows, etc.,)The first layer of magenesia oxide block 10mm thick should be fixed on one side of the Stud framework in a staggered pattern by using suitable metal fasteners at 300mm centers. Second layer of magenesia oxide block 10mm thick should be fixed other side of the frame work similar thshion *as* the first layer. 3mm gap should be maintained between boards.3 mm gap shall be filled with jointing compound.  Magnesia oxide block shall have following physical  charecterstics.   * Core - Magnesia' Fire Rating - upto 150mins • Acoustics - SW upto 44-50• Climate (OC RH) - 50, 99 * Moisture Absorption - 6.8% after 2hrs and 11.3% after 24hn soaking * Wet Expansion - < 0.02% from ambient to saturation * Dry Contraction - 5 0.02% from evaporation * Moisture Movement - 0.02%. Light reflectance - 80 O4. Green (RC %) - 30• Strength - Antisag * Impact - 4k,g hammer 175mm | sqm | 1868.00 |
| 9.158 | Supplying and installation of magnesia block 74 mm thick drywall partition including Framework includes Floor/ Head GI channels having thickness 0.5mm, length 3600mm, equal flanges of 32mm and web of 50mm fixed to floor and ceiling with suitable fasteners at 300mm centers staggered. Noise and fire rated silicon bead sealant to be caulked along the perimeter of the partition frame before fixing channels Then Stud channel having thickness 0.45mm, length 3600mm, unequal flanges of 34/36mm and web of 48mm should be placed into the floor/head channel positioned vertically at 600mm centers. Extra reinforcement to be provided at openings (doors, windows, etc.,)The first layer of magenesia oxide block 12mm thick | sqm | 1984.00 |

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| Item No. | **Description** | **Unit** | **Rate (in LW** |
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|  | should be fired on one side of the Stud framework in a staggered pattern by using suitable metal fasteners at 300mm centers. Second layer of magenesia oxide block 12mm thick should be fixed other side of the frame work similar fashion as the first layer. 3mm gap should be maintained between boerds.3 mm gap shall be filled with jointing compound.  Magnesia oxide block shall have following physical  charectentics.   * Core - Magnesia. Fire Rating - upto 150mins • Acoustics - STC upto 44-50• Climate (0C RH) - 50, 99 * Moisture Absorption - 6.8% after 2hrs and 11.3% after 24hrs soaking * Wet Expansion - < 0.02% from ambient to saturation * Dry Contraction - S 0.02% from evaporation * Moisture Movement - 0 02%. Light reflectance - 80 %• Green (RC %) - 30• Strength - Antisag * Impact - 4kg hammer 175mm |  |  |
| 9.159 | Supplying and installation of magnesia block 94 mm thick drywall partition including Framework includes Floor/ Head GI channels having thickness 0 5mm, length 3600mm, equal flanges of 32mm and web of 50mm fixed to floor and ceiling with suitable fasteners at 300mm centers staggered\_ Noise and fire rated silicon bead sealant to be caulked along the perimeter of the partition frame before fixing channels. Then Stud channel having thickness 0 45mm, length 3600mm, unequal flanges of 34/36mm and web of 48mm should be placed into the floor/head channel posit:ice:led vertically at 600mm centers. Extra reinforcanent to be provided at openings (doors, windows, etc.,)The first layer of magcncsia oxide block 12mm thick should be fixed on one side of the Stud framework in a staggered pattern by using suitable metal fitsteners at 300mm centers. Second layer of magenesia oxide block 10mm thick should be fixed aver 1st layer in staggered manner than other side of the frame work similar fashion as the previous Layers. 3mm gap should be maintained between beards.3 mm gap shall be filled with jointing compound\_  Magnesia oxide block shall have following physical  chanctentics.   * Core - Magnesia. Fire Rating - upto 150mins • Acoustics - SW upto 44-50• Climate (0C RH) - 50, 99 * Moisture Absorption - 6.8% after 2hrs and 11.3% after 24hn soaking * Wet Expausicsi - < 0.02% from ambient to saturation * **Dry Contraction - 5** 0.02%finm evaporation * Moisture Movement - 0.02%. Light reflectance - 80 %. Green (RC %) — 30• Strength - Antisag * Impact - 4k,g hammer 175mm | sqm | 3320.00 |
| 9.160 | Add extra **for** providing and fixing **Thermal insulation** by providing 50mm thick synth PF having =city 1000 GSM within the cavity held in position by using chicken wire mesh/ cross bracing/ pasting to the wall. | sqm | **768,00** |

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| Item No. | Description | | Unit | Rate (in Rs.) |
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| 9.161 | Providing and laying Gypsum panel partitions 100mm thick with watts proof Gypsum panels of size 666x500x100mm, made of calcite phosphor Gypsum fixed with tongue and groove, jointed with bonding plaster as per manufacturers specifications in superstructure above plinth level up to floor 11 level, Gypsum blocks will have a minimum compressive strength of 9,3 kg/cm2. | | sqm | 810.00 |
| 9.162 | Providing and fixing factory made UPVC door frame made of uPVC extruded sections having an overall dimension as below (tolerance ±1mm), with wall thickness 2.0 mm (± 0.2mm), 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 19mm and 1mm (f 0.1 mm) wall thickness and 3 nos. stainless steel hinges fixed to the frame complete as per manufacturers specification and direction of Engineer-in-  charge: | |  |  |
|  | 9.162.1 | Extruded section Profile size 48x40 mm. | metre | 203.00 |
|  | 9.162.2 | Extruded section Profile size 42,60 mm\_ | metre | 208.00 |
| 9,163 | Providing and fixing to existing door flames. | |  |  |
|  | 9.163,1 | 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 (+ 0.2 mm) with inbuilt edging on bath 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 (4 0.1 mm) wall thickness. The lock rail made up of 'Er section, a uPVC hollow section of size 100x24 mm and 2 mm (± 0.2 mm) wall thickness, fixed to the shutter styles by means of phisticikalvanised M.S. IT 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 (4 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 mamifacturces specification and direction of Engineer-in-charge. (For W.C. and bathroom door shutter). | sqm | 2888.00 |
|  | 9.163.2 | 30 mm thick factory made Polyvinyl Chloride (PVC) door shutter made of styles and rails of a uPVC hollow section of size 6000 mm and wall thickness 2 mm (+ 0.2 rem), with inbuilt decorative moulding edging on one side. The styles and rails mitred and joint at the contra by means of M.S. | sqm | 3121.00 |

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| Item No. | Description | | Unit | Rate (in Rs.) |
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|  |  | galvaniserlfplastk 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 ram (+ 0,1 ram) wall thickness The lock rail |  |  |
| made up of 'IT section, a uPVC hollow section of size 100x30 mm and 2 mm (+ 0.2 mm) wall thickness fixed to the shutter styles by means of plastic/ galvanised M.S. 77 cleats. The shutter fine 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 (f al 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 Engincer-in-charge. |
|  | 9.163,3 | 25mm thick PVC flush door shutters made out of a one piece Multi chamber extruded PVC section of the **size** of 762mmx25mra or less as per requirement with an ***average*** wall thickness of 1mm (+ 0.3mm). PVC foam end cap of size 23x10mra are provided on both vertical edges to ensure the overall thickness of 25mm. An M.S. tube having dimensions 19mm x 19mm and 1.0 mm (I 0.1mm) is inserted along the hinge side of the door. Core of the door shutter should be filled with Irish Density Polyurerlirme foam The Top and Bottom edges of the shutter are covered with an end-cap of the size 25mmx11mra, Door shutter shall be reinforced with special polymeric reinforcements as per manufactures' 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 | 3004.00 |
| 9.164 | Providing shutter, styles  with inbuilt and joint brackets stainless by inserting thickness 100mmx37mm, fixed to the beads and nos, tie bar washers complete, and direction | size 100mmx37mm  and fixing 37 mm thick factory made PVC door  and rails made of PVC hollow section of  with wall thickness 2mm (±0.2=),  bead on one side, styles and rails mitered cut at the corners by means of 2 nos. of plastic of the 75mm x 220 ram at each corner and *steel* screws, reinforcing the hinge side of style  PVC profile of size 2Smm x 30mm, with wall  2 mm ( +0 2mm) Lockrail of size | sqm | 3330.00 |
| wall thickness 2mm (+0.2mm) will be vertical styles. Providing with PVC snapfit  panel of size 100mmx20 mm, and inserting 2 of 6 mm dia and fastening with nuts and  all as per manufacturer's specification of Engineer-in-charge. |

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| Item No. | Description | Unit | Rate (in Rs.) |
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| 9.165 | Providing and Fixing, factory made, PVC door frame  made of PVC extruded sections of size 75mmx53 mm, having wall thickness 2.0mm (+0.2mm). Both verticals sides of the frame reinforced with PVC profile of cross section size 28mm x 30mm x2mm thickness (+ 0 2 mm) and 75mmx200 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 125mm long stainless steel hinges to frame, fixing the frame with jamb with required nos. and sizes of anchor dash fastener, all complete as per manufacturer's specification and direction of engineer-in-charge. | metre | 435.00 |
| 9.166 | Providing and fixing 37 mm thick factory made PVC Doer shutter, styles and nails made of PVC hollow extruded printed and laminated section having overall dimension 115mm x 37mm with wall thickness 2 mm (+0.2mm) 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 28mm x 30mm having wall thickness 2 mm (+0.2mm). Styles, rails and reinfizarements 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 110mm x 37mm having wall thickness 2 mm (+0.2mm) 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 and laminated and inserting 2 nos 6 = | sqm | 3335.00 |
| 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. |
| 9.167 | Providing and fixing factory made P V C door frame of size SOx47mm with a wall thickness of 5mm, made out of extruded 5mm rigid PVC foam sheet, mitred at corners and joined with 2 Nos. of 150mm long brats of 15x15= M.S. square tube, the vertical door frame profiles to be reinforced with 19x19mm MS. 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 MS. screws of 65/100mm size, complete as per manufacturers specification and direction of Engineer-in­Charge. | metre | 483.00 |
| 9.168 | Providing and thing factory made panel PVC door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19mm x 19mm for styles and 15x15mm **for** top and bottom rails. MS. frame shall have a coat of steel primers of approved make and manufacture . M.S. frame covered with 5mm thick heat moulded PVC 'C' channel of size 30mm thickness, 70mm width out of which 50mm shall be flat and 20mm shall be tapered in 45degree angle on both side firming styles. and 5mm thick, 95mm wide PVC sheet out of |  |  |

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| Item No. | Description | | Unit | Rate (in fla.) |
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|  | which 75mm shall be flat and 20mm shall be tapered in 45 degree on the inner side to form top and bottom rail and 115mm wide PVC sheet out of which 75mm shall be flat and 20mm shall be tapered on both sides to form lock rail. Top, bottom and lock rails shall be provided both side of the panel, 10mm (5mmx2) thick, 20mm wide cross PVC sheet be provided as gap insert Sr top rail and bottom rail\_ paneling of 5mm thick both side PVC shed to be fitted in the M.S. frame welded/ sealed to the styles and rails with 7= (5mm+7mm) thick x 15mm wide PVC shed beading **011** inner side, and joined together with solvent cement adhesive. An additional 5mm thick PVC tip of 20mm 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. Marnifactarer's specification and drawing. | |  |  |
|  | 9.1681 | 30 mm thick plain PVC door starters. | sqm | 3038.00 |
|  | 9.168.2 | 30 = thick pre laminated PVC door shutters. | sqm | 3778.00 |
| 9.169 | Providing and fixing factory made door frame (single rebate) made out of single piece extruded solid PVC foam profile with homogenous fine oelhilnr structure having smooth outer integral skin having 62 mm width and 32 mm thiclmess frame will be mitred and Jointed with self driven self tapping screws of size 38 mm x 4 mm and PVC solvent cement, including fixing the frame to wall with suitable dia and length anchor fastener as per marmfactunr's specification and direction of Engincer-in­charge. | | metro | 390.00 |
| 9.170 | Providing and fixing factory made 30 mm thick door emitter made of solid PVC **Br** profile. The styles and rails shall be of **size** 75 mmx30 mm having wall thickness 5 mm. The styles, top and 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 MS. tubes of size 33 mmx17 mmx 1 mm, painted with primer, all four corners of reinforcement to be welded or sealed\_ Solid PVC ortrodcd bidding (push fit type) will be sd 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 and self driven self tapping screws. Single piece extruded solid PVC lock rail of size 100 mm x 30 mm with wall thickness 5 mm and 15 mm integrally minded in the middle of the lock rail and fixed with styles with the help of PVC solvent cement and self driven self tapping screws of size 100 mmx8 mm complete as per maimfacturees specifications and direction of Engineer-in­charge: | |  |  |
|  | 9.170,1 | Non decorative finish. | sqm | 3038.00 |
|  | 9.170,2 | Decorative finish (both side wood grained finish). | sqm | 3619.00 |

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| Item No. | Description | | Unit | Rate (in its.) |
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| 9.171 | Providing and fixing PVC Door Frame of size 50x47mm with a wall thickness of 5 mm (+02 mm) made out of single piece extruded PVC profile, with mitred cut joints and joint with 2nos of PVC bracket of size 190 min x 100 mm long arms of cross section size 35x15mm and self driven self taping screws, the vertical door profiles to be reinforced with 40110mm M.S. rectangular tube of 0 8 mm , including providing EPDM rubber gasket weather seal throughout the frame, including jointing 5mm PVC frame strip with PVC solvent cement cm the back of the profile. The door frame to be fixed to the wall using 8x100mm long anchor fasteners complete, all as per manufacturer's specification and direction of Engineer -in-  charge. | | metre | 624.00 |
| 9.172 | 35 mm thick factory made Solid panel PVC Door shutter made out of single piece extruded mild PVC profiles, 5mm (±0.2mm) thick, having styles and 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 and rails to be mitered cut and joint with the help of PVC solvent cement, self driven self tapping screws and M.S. rectangular pipes bracket of size 190 mm x100 mm of cross section *size* 35 mm x 17 mm x 1 mm at each corner. Single piece extruded 5mm thick solid PVC Lock rail of size 115 = x 35 mm x 35 mm, out of vita 95 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 and rails with the help of solvent and self driven self tapping screws of 125 mm x11 mm, including providing 5mm Single piece solid PVC extruded sheet inserted in the door as panel, all complete as per mararfactunurs sped:acetic& and direction of Engineer-in­charge. | |  |  |
|  | 9.172.1 | Non decorative finish (matt finish). | sqm | 304.6.00 |
|  | 9.172,2 | Decorative finish (wood Staked finish). | sqm | 3163.00 |
| 9.173 | Providing and fixing PVC rigid **foam** sheet 1mm thick on existing door shutters (bathroom and W.C. doors) using synthetic rubber based adhesive. | | sqm | 626.00 |
| 9.174 | Providing and firing Fibre Glass Reinforced plastic (FRP) Door Frames of cross-section 90mm x 45mm having single rebate of 32romx15mm to receive shutter of 30mm thickness The laminate shall be moulded with fire resistant grade unsaturated polyester resin and chopped mat .Doorframe **birninstri** shall be 2mm thick and shall be filled with suitable wooden block in all the three legs. The frame shall be covered with fibreglass from all sides. MS stmt shall be provided at the bottom to sturdy the frame. | | metre | 535,00 |

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| **Item No.** | **Description** | | **Unit** | **Rate (in Rs.)** |
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| **9.175** | **Providing and fixing to existing door frames.** | |  |  |
|  | **9.175.1** | **30 mm thick Glass Fibre Reinforced Plastic (FRP) panelled doe/ 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 smile and styles, with wooden frame and suitable blocks of seasoned wood inside at required places for fixing of fittings, cast monolithically with 5mm thick FRP laminate for panels combining to IS: 14856 including fixing to frames.** | **sqm** | **2574.00** |
|  | **9.175.2** | **30mm thick Fiberglass Rein:final Plastic (FRP.) flush door shutter in different plain and wood finish made with fire retardant grade unsaturated polyester resin, moulded to 3mm thick FRP laminate all around, with suitable wooden blocks inside at required places for fixing of fittings and polyurethane foam (PUO/Polystyrene foam to be used as filler material throughout the hollow panel, carted monolithically with testing parameters of F.R-P. laminate conforming to table - 3 &IS: 14856, complete as per direction of Engineer-in-charge.** | **sqm** | **2806.00** |
| **9.176** | **Providing and fixing factory made Fibreglass Reinforced plastics (F.R\_P.) chaija 4mm thick of required colour, size and design made by Resin Transfer Moulding (RTM) Machine Technology, resulting in void free compact burlinstri in single piece, having smooth gradual slope curvature for easy drainage of water and duly reinforced by 2nos. vertically and Ines. horizontally 50x2mm thick M.S. flat with 12mm in built hole for grouting on the existing wall along with the 50mm flanges duly inserted and scaled in the wall complete in one single piece cashed monolithically, including all necessary fittings . The FRP Chiba should be manufactunx1 using =saturated Polyester resin as per IS: 6746 duly reinforced with fibre *glass* chopped strand mat (CSM) as per IS: 11551 complete with protective Gel coat UN coating on Top for complete resistance from the extreme of temperature, weather and sunlight,** | | **sqm** | **4625.00** |
| **9.177** | **Providing mm having coating not based concrete door shutters. of size 10x4 dash fastener coat of approved direction of separately).** | **and fixing fire resistant door frame of section 143x57  built in rebate made out of 16 SWG Glsheet (zinc  less than 120 gm/sqm) duly filled with vermuculite  mix, suitable for mounting 60 minutes fire rated  The frame is fitted with intumuscent fire seal strip** | **metre** | **1191.00** |
| **mm (minimum) almund the frame and fixing with  of approved size and make, including applying a  brand fire resistant primer etc. complete as per  Engineer-in-charge (Dash fastener to be paid for** |

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| Item No. | Description | | Unit | Rate (in Rs.) |
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| 9.178 | 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 pa laboratory approved by Engineer-in­charge with suitable mounting on door frame, consisting of vertical styles, lock rail, top rail 100mm wide, bottom rail 200mm wide, made out of 16 SWG alsheet (zinc coating not lees than 120 gm/m2) duly filled FR insulation material and fixing with necessary stainless steel ball bearing hinges of approved make, including applying a coal of approved fire resistant primer etc. all complete as pa direction of Engineer-in­charge (pannelin,g to be paid for separately), | | sqm | 620100 |
| 9.179 | Providing and fixing glazing m fire resistant door shutters, fixed panels, ventilators and partitions etc., with CiI. beading of appropriate size made out of 20 SWG G.I.shoct (zinc coating not less than 120 gm/m2), fire resistant sealant, including applying a coat of approved fire resistant primer on GI. beading etc, complete all as per direction of Engineer-in-charge. | |  |  |
|  | 9.179.1 | With clear fire resistant *glass* panes 6mm thick of approved brand, having minimum 60 minutes fire resistance. | sqm | 27797.00 |
| 9.180 | Providing a single body, Latch of reputed Engineer- in- | and fixing panic bar / latch (Double point) fitted with  Trim Latch and Lock on back side of the Panic  brand and manufacture to be approved by the | Not | 6091.00 |
| charge, all complete. |
| 9.181 | Providing and Fixing factory made uPVC door frame made of uPVC extruded sections, of size 65 mmx55 mm with wall thickness 2.0 mm ((0.2 mm), comers 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 mmx30 mm having wall thickness 2 mm (±0.2mm), including providing and fixing 3 nos. of 125 mm long stainless steel hinges to the frame, fixing the frame with jamb with required number and size of anchor dash fastness, all complete as per manufactmer's specification and direction of Engineer-in-charge, | | metre | 435.00 |
| 9.182 | Providing casement/sliding Profiles of welded at hardware fixing of hardware, steel profile fixed to the complete hardware hinges | and Fixing, uPVC factory made, white colour  window and door made of extruded profiles.  frames and sash will be mitered cut and fusion  all corners including drilling of holes for fixing  and drainage of ***water*** etc., making arrangement for  EPDM gasket, 1,2 + 0 2mm thick galvanised |  |  |
| to be inserted in required profile, frame will be  wall with 8 mmx100 mm long fasteners, all as per direction of Engineer-in-charge (Glazing,  and fitting etc. to be paid separately.) |
|  | 9.182.1 | Casement Window (Outward/Inward opening) with hinge System. |  |  |

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| Item No. | Description | | Unit | Rate (in Rs.) |
|  |  | |  |  |
|  | 9182.1.1 | Frame (50 = x 50mm) | metre | 422.00 |
|  | 9.182.12 | Sash (Style and Rail) (62 mm x 34 mm) | metre | 403.00 |
|  | 9.182.1.3 | Mullion (int=ediate Section) (66nim x 50 mm) | metre | 434.00 |
|  | 9182.1.4 | 'T Profile (one vertical length in between two shutters) (24mm x 34,5nma) | metre | 99.00 |
|  | 9.182,1,5 | Glazing bead (12ttim x 18mm) | metre | 130,00 |
|  | 9.182,2 | Casement Window (With friction hinge and outward opening) |  |  |
|  | 9.182.2.1 | Casement Frame (67= x 62mm) | metre | 495.00 |
|  | 9.182,2.2 | Casement Window Sash/Mullion (67mm x 75mm ) (style, rail and intermediate section) | metre | 519,00 |
|  | 9.182.2.3 | Casement filming head (35mm x 18 ram) | metre | 178.00 |
|  | 9.182.3 | Sliding Window (Two Track, 2/4 Shutters) |  |  |
|  | 9.182.3.1 | Two Track Sliding Frame (67mm x 52mm) | metre | 566.00 |
|  | 9.182.3.2 | Sliding window Sash (60mm x 44mm) | metre | 529.00 |
|  | 9.182.3.3 | Sliding Interlock for Window (one vertical length in each shutter)(45 5 mm x 28 mm) | metre | 139.00 |
|  | 9.182,3,4 | Sliding Glazing head (35 min x 18 mm) | metre | 178,00 |
|  | 9.182.4 | Sliding Door (Two Track, 2/4 Shutters) |  |  |
|  | 9.182.4.1 | Two Track Sliding Frame (67mm x 52mm) | metre | 539.00 |
|  | 9.182.4.2 | Sliding Door Sash (80= x 44mm) | metre | 653.00 |
|  | 9182.4.3 | Sliding Interlock for Door (one vertical length in each shutter) (45.5 mm x 28 mm) | metre | 139.00 |
|  | 9.182.4.4 | Sliding Cilazin,g head (35 mm x 18 mm) | metre | 178.00 |
| 9.183 | 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 pa direction of Engineer-I-charge. | |  |  |
|  | 9.183.1 | 200 x 19 x 1.9 mm | each | 321.00 |
|  | 9.183.2 | 250 x 19 x 19 mm | each | 369.00 |
|  | 9.183,3 | 300 x 19x 1 9 mm | each | 462,00 |
|  | 9.183.4 | 350 x 19x 1.9 mm | each | 526.00 |
|  | 9.183.5 | 400 x 19x 1 9= | each | 636.00 |
| 9.184 | Providing and fixing casement handle made of zinc alloyed (white powder coated) for uPVC casement window with necessary screws etc. complete. | | each | 214.00 |

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| Item No. | Description | | Unit | Rate (in lls.) |
| 9.185 | Providing and fixing zinc alloyed (white powder coated) touch lock for uPVC sliding window with necessary screws etc. complete. | | each | 144.00 |
| 9.186 | Providing and fixing steel roller for uPVC sliding window with necessary screws cte. complete. | | each | 74.00 |
| 9.187 | Providing and fixing steel roller fiu uPVC sliding door with necessary screws etc. complete. | | each | 115.00 |
| 9.188 | Providing and fixing steel (white powder coated) crescent lock &a- uPVC sliding window/ door with necessary screws etc. complete. | | each | 127.00 |
| 9.189 | Providing and fixing 30mm thick factory made solid panel prelaminated PVC internal does shutter consisting of frame made out of *M.S.* tubes of 19 gauge thickness and size of 40mm x 20mm fix styles top, lock and bottom rails. MS frame shall have a coat of steel primers of approved make and manufacture. M.S. frame shall be *covered* with 5mm thick prelaminated heat moulded PVC 'C' channel of size 30mmx100mm forming stiles and 5mm flick prelaminated 125mm wide PVC sheets for top rail, lock rail and bottom rail on eigjier side of panel and 15mm (5mmx3) thick, 20mm wide Cana PVC sheet as gap insert for top and bottom rail paneling of lOmm thick prelaminated PVC sheet to be fitted in the M.S. Frame welded/sealed to the stiles and rails with 30mm wideX5mm thick prelaminated. PVC sheet beading on eigher side and additional 30mm wide PVC beading as gap insert below top and bottom rail joined together using solvent cement adhesive. An additional 5mm thick Prelaminated PVC strip of 20mm width is to be stuck on the interior side of the 'C' channel using PVC solvent cant adhesive etc. complete as per direction of Engineer-in-charge. Manufacturer's specification and drawing. | |  |  |
|  | 91891 | 1 30 mm thick pre lammated PVC door shutters. | scim | 3908.00 |

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| **Item No.** | **Description** | | **Unit** | **Rate (in Rs.)** |
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| **10.1** | **Structural connecting and applying complete** | **steel work in single section fixed with or without plate including cutting, hoisting, fixing in position** | kg | **6530** |
| **a priming coat of approved steel primer all** |
| **10.2** | **Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting,hoistin,g, fixing in position and applying a priming coat of approved deal primer all complete,** | | **kg** | **68.70** |
| **10.3** | **Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2mm and braced with flat iron &Piles 2016mrn size with top and bottom rail of T-ittak 40x4Dx6mm with 40mm dia steel pulleys complete with bolts, mas, locking arrangement, stoppers,handles, including applying a priming coal of approved steel primes. Rate includes recess cutting in floor and making good the same wherever required.** | | **sqm** | **4131,90** |
| **10.4** | **Providing and fixing lmm thick M.S. sheet sliding-shutters with flame and diagonal braces of 40x40x6mm angle iron, 3mm M.S.gusset plates at the junction and comer 25mm dia pulley,40x40x6= angle and T-iron guide at the top and bottom respectively including applying a priming coat of approved steel primer.** | | **sqm** | **3155.0** |
| **10.5** | **Providing and fixing lmm thick M.S. sheet door with frame of 40x40x5mm angle iron and 3mm M.S. gusset plates at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer.** | |  |  |
|  | **10.11** | **Using Mi. angels 40x40x6mm fur diagonal braces** | **sqm** | **2604.60** |
|  | **10.5.2** | **Using flats 30x6mm for diagonal braces and central cross piece.** | **sqm** | **2474,70** |
| **10.6** | **Supplying and fixing rolling shutters of approved make, made of required size M.S. 12dhs 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 27.5cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to LS. 4454- part-1 and M S top *cover* of required thickness fir rolling Mutters,** | |  |  |
|  | **10.6.1** | **80x1,25mm M.S. laths with 1.25 mm thick top**  **WW1** | **Km** | **2200,10** |
|  | **10.6.2** | **80x1.20 mm MS laths with 120 mm thick top cover,** | **sqm** | **1849.75** |
|  | **10.63** | **80x0.90 mm MIS laths with 0.90 mm thick top**  **COVET.** | **sqm** | **1716.15** |

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| **Item** No. | **Description** | | **Unit** | **Rote** (in Rs.) |
|  |  | |  |  |
| 10.7 | Providing and fixing ball bearing for rolling shutters. | | each | 517.75 |
| **10.8** | **Extra** for providing suitable mechanical *device* chain and crank optaation for operating rolling shutters. | |  |  |
|  | 10.8.1 | Exceeding 10.00 sego and upto 16.80 seen in the area. | sqm | 746.85 |
|  | 10.8.2 | Exceeding **16.80 sqm** in area. | sqm | **781,70** |
| **10.9** | Extra fir providing grilled rolling shutters manufactured **Mt** of **8** mm die\_ M.S. bar instead of laths as per design approved by Engineer-in- charge. (area of grill to be measured). | | sqm | **307,80** |
| 10.10 | 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), | |  |  |
|  | 1030,1 | Fixing with **15x3** mm lugs 10 *ern.* long embedded in cement concrete block 15x10x10 cm of Cement Concrete 1:3:6 (1 Cement : 3 sand : 6 graded stone aggregate 20 mm nominal size). | kg | 106,85 |
|  | 10.10.2 | Fixing with carbon steel galvanised dash fastener of required die and size (to be paid for separately). | Kg | 93.00 |
| 10.11 | Extra for providing and fixing steel beading of size  10x10x1.6mm (box type) approved shape and section with screws instead of glazing clips and metal sash putty in steel doors, windows, ventilators and composite units. | | meta | 35.90 |
| 10.12 | 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. | |  |  |
|  | 10.12.1 | Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x1 0 cm of Cement Concrete 1:3:6 (1 Cement : 3 sand : 6 graded stone aggregate 20 mm nominal size). | kg | 79.90 |
|  | 10.12.2 | Fixing with carbon steel galvanised dash fastener of required die and size (to be paid for separately). | kg | 77.10 |
| 10.13 | Providing and fixing pressed steel door frames conforming to  IS: 4351 mamifactured from commercial mild steel sheet  including hinges, jamb, lock jamb, bead and if required angle | |  |  |

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| Item  No. | Description | | Unit | Rae  (in Rs.) |
|  |  | |  |  |
|  | threshold of mild steel angle of section 50x25mm, or base ties of 1.60 mm pressed mild steel welded or rigidly fixed together by mediates' means, including HS. pressed butt hinges, 2.5mm thick with mortar guards, lock strike-plate and shock absorbers as specified filling the frame with Cement Concrete 1:3:6 at *site* before fixing (cost of concrete to be paid separately) and applying a coat of approved steel primer after pre-treatment of the surface as directed by Engineer-in-charge: | |  |  |
|  | 10.13,1 | Profile 13 of 1.60mm thick single rebate of size 80mmx5Omm |  |  |
|  | 10.13.1.1 | Fixing with adjustable lugs with split end tail to each jamb. | meter | 402.35 |
|  | 10.13.12 | Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately). | meter | 394.45 |
|  | 10.13,2 | Profile C of 1.60mm thick single rebate of size 101:Immo Omm |  |  |
|  | 10.13.2.1 | Fixing with adjustable lugs with split end tail to each jamb. | meter | 431.40 |
|  | 10.13.22 | Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately). | meter | 423.50 |
|  | 10.13.3 | Profile E of 1.60mm thick double rebate of size 115mmx5Omm |  |  |
|  | 10.13.3.1 | Fixing with adjustable lugs with split end tail to each jamb. | meter | 472.05 |
|  | 10.13.32 | Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately). | meter | 464.15 |
|  | 10.13,4 | Profile 13 of 1.25mm thick single rebate of size 80mmx5Omm |  |  |
|  | 10.13.4.1 | Fixing with adjustable lugs with split end tail to each jamb. | meter | 355.90 |
|  | 10.13.42 | Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately). | meter | 348.00 |
|  | 10.13.5 | Profile C of 1.25mm thick single rebate of size 100ninro50mm |  |  |
|  | 10.13.5.1 | Fixing with adjustable lugs with split end tail to each jamb. | meter | 384.95 |
|  | 10.13.52 | Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately). | meter | 377.05 |
|  | 10.13,6 | Profile E of 1.25mm thick double rebate of size 115nmvoOmm |  | Page No.180 |
| **Item  No.** | **Description** | | **Unit** | **Rote  (in Rs.)** |
|  |  | |  |  |
|  | **10.13.6.1** | **Fixing with adjustable lugs with split mid tail to each jamb.** | **meta** | **414.00** |
|  | **10.13,62** | **Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid fat separately).** | **meter** | **406,05** |
| **10.14** | **Providing and fixing MS. Tubular frames for doors, windows, ventilators and cupboard with rectangular/ L-Type sections, made of 1.60 mm thick MS. Sheet, joints mitred, welded and grinded finiidi, with profiles of required size, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.** | |  |  |
|  | **10.14.1** | **Fixing with 15x3 mm lugs 10 cm\_ long embedded in cement concrete block 15x10x10 cm of Cement Concrete 1:3:6 (1 Cement : 3 sand : 6 graded stone aggregate 20 ram nominal size).** | **kg** | **141.90** |
|  | **10,14,2** | **Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately).** | **kg** | **135,15** |
| **10.15** | **Steel work in built up tubular ( round, square or rectangular hollow tubes etc.) trusses/frame wed 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.** | |  |  |
|  | **10.15.1** | **Hot finished welded type tubes** | **kg** | **107.85** |
|  | **10.15.2** | **Hot finished seamless type tubes** | **Kg** | **109.10** |
|  | **10.15.3** | **Electric resistance or induction butt welded tubes.** | **Kg** | **126.15** |
| **10,16** | **Providing and fixing M.S. fan clamp type I or II of 16 mm dia. MS. bar bent to shape with hooked ends in It\_C.C. slabs, beams during laying including painting the exposed portion of loop, all as per standard design complete.** | | each | **112,40** |
| **10.17** | **Providing and fixing circular/ Hexagonal cad iron or M.S.**  **sheet box for ceiling fan clamp of internal dia 140mm, 73mm height, top lid of 1.5mm thick M.S. shed with its top surface hacked for proper bonding, top lid shall be screwed into the cast iron/ MS. sheet box by means of 3.3mm dia. round headed screws, one lock at the comers. Clamp shall be made of 16mm dia. M.S. bar bent to shape as per standard drawing.** | | **each** | **148.40** |
| **10.18** | **Providing and fixing mild steel round holding down bolts with nuts and washer plates complete.** | | **kg** | **83.85** |
| **10,19** | **Providing and fixing bolts inclyding nuts and washers**  **complete.** | | **kg** | **10125** |
| **10.20** | **Providing and fixing M.S. rivets of sizes in position.** | | **kg** | **105.65**  Page No.181 |
| **Item  No.** | **Description** | | **Unit** | **Rae  (in Rs.)** |
| **\10.21** | **Welding by gas or tine plant including transport:Jinn of plant a site etc. complete.** | | **CM** | **4.60** |
| **10.22** | **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 22 1 | In stringers, treads, landings etc. of stair *cases* including use of chequered plate wherever required, all complete. | Kg | 85.85 |
|  |
|  | 10.22.2 | In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works. | Kg | 85.10 |
| 10.23 | Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying a priming coat of approved steel primer. | |  |  |
|  | 10.23.1 | M.S. tube. | Kg | 110.40 |
|  | 10.23.2 | E.R\_W. tubes. | Kg | 131.80 |
|  | 10.23.3 | G.I. pipes. | Kg | 128.55 |
| 10.24 | 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/mm2), counter sunk head, comprising of 10 mm dia polyamide PA 6 grade sleeve, including drilling of hole in frame, concreted masonry, etc. as per direction of Engineer-in-charge. | |  |  |
|  | 10.24,1 | 10 x60 mm | each | 56,75 |
|  | 10.24.2 | 10 x80 mm | each | 62.55 |
|  | 10.24.3 | 10 x120 mm | each | 78.00 |
|  | 10.24.4 | 10 x140= | each | 84.40 |
|  | 10.24.5 | 10 x160= | each | 109.70 |
| 10,25 | Providing and fixing gainless 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 and stainless steel dash fasteners , gainless steel bolts etc., eefrequired size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge. ( kr paymert purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.) | | Kg | 793.75 |
| 10.26 | Providing and fixing fly proof wire gauze to windows, clerestory windows and doors with M.S. Flat 15x3mm and nuts and bolts complete. | |  |  |

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| --- | --- | --- | --- | --- |
| Item  No. | Description | | Unit | Rae  (in Rs.) |
|  |  | |  |  |
|  | 10.26.1 | Galvanised M.S. Wire gauze with 0.63mm die  wire and 1.4 mm aperture on both sides | sqm | 64620 |
|  | 1026,2 | Stainless steel (grade 304) wire gauze of 0.5 mm die wire and 1 4 rum aperture on both shies. | sqm | 1334,50 |
| 10.27 | Providing and fixing *glass* panes/ steel sheet/ Fibre sheet with putty and glazing clips in steel doors, windows, clerestory windows all complete. | |  |  |
|  | 10.27.1 | With 4.0 mm thick glass panes. | sqm | 792.45 |
|  | 10.27.2 | With 5.5 mm thick glass panes. | sqm | 872.95 |
|  | 10.27.3 | with 1mm thick steel sheet i/c lOmmxlOmm x1.6mm box beading. | sqm | 915.90 |
|  | 1027,4 | with 2mm thick fibre reinforced polymer (FRP) sheet lie lOmmx1Omm x1.6mm box beading. | sqm | 611,80 |
|  | 10.27.5 | with 1mm thick Galvanised **deal** sheet i/c  10mmx10mm x1.6mm box beading, | sqm | 936.00 |
|  | 10.27.6 | with 4mm thick cement fibre board conforming to IS 14862:2000 of catogary type A grade i/c 10mmx10mm x1.6= box beading. | sqm | 750.00 |
|  | 10.27.7 | with 6mm thick cement fibre board confirming to IS 14862:2000 of catogary type A grade i/c lOmmx1Omm x1.6= box beading. | sqm | 800.00 |
|  | 1027,8 | with 8mm thick cement fibre board conforming to IS 14862:2000 of catogary type A grade i/c lOmmx1Omm x1.6= box beading. | sqm | 872,00 |
| 10.28 | Add extra for providing and fixing froasted *glass* instead of float glass | |  |  |
|  | 10.28.1 | With 4.0 mm thick glass panes. | sqm | 259.35 |
|  | 1028,2 | With 5,5 mm thick *glass panes.* | sqm | 261,90 |
| 10.29 | Supplying at site: | |  |  |
|  | 10.29.1 | R.C.C. Standards post/ struterails./ poles of mix 1:13:3 (1 cement : 1.5 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 including fixing (cost of earth works in excavation, concrete works in foundation to be paid separately). | cum | 16510.50 |
|  | 10.29.2 | Angle iron post and strut of required size including bottom to be split and been at right angle in opposite direction for 10 cm length and drilling holes upto 10 mm dia. etc. complete. (cost of earth | *kg* | 67.15  Page No.183 |
| Item  No. | Description | | Unit | Rate  (in Rs.) |
|  |  | |  |  |
|  |  | work in excavation and concrete work in  foundation to be paid separately) |  |  |
|  | 10.29.3 | Supplying at site -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 prima (Priming painting to be paid for separately). | Kg | 81.05 |
| 10.30 | Supplying and fixing tarn buskins and straining bolts for barbed wire fencing (Labour rate only). | | each set | 152.55 |
| 10.31 | 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 mad post one side only, provided with horizontal lines and two diagonals of barbed wire weighing 9,38 kg per 100 metres (minimun) between the two posts fitted and fixed with aL staples on wooden plugs or al, binding wire tied to 6 mm bar nibs fixed while *casting* the post (cost of R.C.C. posts, struts, earth work and concrete to be paid for separately) :- Payment to be made per metre cost of total length of barbed wire used. | |  |  |
|  | 10.31.1 | With CIL barbed wire | meter | 10.25 |
| 10.32 | 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 938 kg pa 100 m (minimum) between the two posts fitted and fixed with G.I. staples, tun 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. (Labour rate only). | |  |  |
|  | 10.32.1 | With G.L barbed wire | meter | 17.20 |
| 10.33 | Fixing Welded steel wire fabric fencing with posts of specified material and of standard design placed and embedded in cement concrete blocks 45x45x60cm of mix 1:5:10 (lcement :5 sand -10 graded stone aggregate 40mm nominal size) every 15th post, last but one end post and corner pod shall be strutted on both sides and end post on one side only and struts embedded in cement concrete blocks 70x45x50cm of the same mix, provided with welded steel wire fabric fixed between the posts fitted and fixed with GI. staples on wood= plugs or tied to 6 mm bar nibs with al, binding wire (cost of pods, painting, earth work in excavation and cement concrete to be paid for separately). (Labour rate only), | | sqm | 18.15 |
| 10,34 | Providing and fixing al. chain link fabric fencing of required  width and mesh size including strengthening with 2mm dia  wire or nuts, bolts and washers as required complete with | |  |  |

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| --- | --- | --- | --- | --- |
| Item No. | Description | | Unit | Rote (in Rs.) |
|  |  | |  |  |
|  | posts of specified material and of standard design placed and embedded in cement concrete blocks 45x45x60cm of mix 1:5:10 (lament :5 sand :10 graded stone aggregate 40mm nominal size) every 15th post, last but one end post and corner post than be strutted on both sides and end post on one side only and struts embedded in cement concrete blocks 70x45x50an of the same mix, as per the direction of En,gineer­in-charge. | |  |  |
|  | 10.34,1 | Made of G.!. wire. | **kg** | 133.00 |
|  | 10.34,2 | Made of Cl.!. wire, PVC coated to achieve outer dia. not less than 5mm in required colour and shade, | kg | 138,00 |
| 11135 | Providing and fixing GI. chain link fabric fencin,g of required width in mesh size 257(25 mm made of G.I. wire of dia. 3mm including strengthening with 2mm dia\_ wire or nuts, bolts and washers as required complete with posts of specified material and of standard design placed and embedded in cement concrete blocks 45x45x60cm of mix 1:5:10 (lccment :5 sand : 10 graded stone aggregate 40mm nominal size) every 15th post, last but one end post and corner **pact** than be strutted on both sides and end post on one side only and struts embedded in cement concrete blocks 70x45x50cm of the same mix, as per the direction of Engineerin- charge. | | sqm | 573.80 |
| 10.36 | Providing and fixing concertina cal fencing with punched tape concertina coil 699 mm dia 10 metre alienable length ( total length 9.0 m), having 50 nos rounds pa 6 metre length, upto 3 m height of wall with existing angle iron 'Y' shaped placed 2.4 m or 3.00m apart and with 9 horizonlal R\_B.T. reinforced arted wire, stud tied with G.I. staples and GT. clips to retain horizontal, including necessary bolts or G.L barbed wire tied to angle iron, all complete as per direction of Engineer-incharge, with reinforced barbed tape(R.B.T.) / Spring care (2.5 mm 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). | | meter | 275,00 |

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| Item  No. | Description | | Unit | Rite Cm  Rs.) |
|  |  | |  |  |
| 11.1 | Cement concrete flooring 1:2:4 (1 cement : 2 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. ccanplete.(Arva of panel not to exceed 2.0 sqm) | |  |  |
|  | 11.1.1 | 40= thick with 20mm nominal size stone aggregate. | sqm | 270.00 |
| 112 | 52 mm thick cement concrete flooring with concrete hardener topping, under layer 40 mm thick cement concrete 1:2:4 (1 cement : 2 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 Acne aggregate 6 mm nominal size) by volume, hardening compound mixed ® 2 litre per 50kg of cement or as per manufacturers specifications. This includes cost of cement slurry, but excluding the cost of nosing of ***steps*** etc. complete. | | sqm | 399.00 |
| 113 | 62 mm thick cement concrete flooring with concrete hardener topping, under layer 50 mm thick cement concrete 1:2:4 (1 \*anent : 2 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 50kg of cement or as per manufactures specifications. This includes cost of cement slurry, but excluding the cost of nosing of ***steps etc.*** complete. | | sqm | 431.00 |
| 11.4 | Cement plaster skirting (upto 30 cm height) with cement mortar 1:3 (1 cement : 3 sand) finished with a floating coat of neat cement | |  |  |
|  | 11.4.1 | 18 = thick | sqm | 246.00 |
| 11.5 | Cement concrete pavement with Cement concrete 1:2:4 (1 cement : 2 sand : 4 graded stone aggregate 20 mm nominal **gin)** including finishing complete. | | 0 | 4654.00 |
| 11.6 | Extra for making chequers of approved pattern on cement concrete floors, steps, howling, pavements etc. | | sqm | 21.00 |
| 11.7 | 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 sand : 4 graded stone aggregate 12\_5mm nominal size) and top layer 6mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from lmm to 4= nominal size laid in =man 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 : (Area. of panel not to exceed 2.0 sqm) | |  |  |
|  | 11.7.1 | Dark shade pigment with ordinary cement | sqm | 493.00 |
|  | 11.72 | Light shade pigment with white cement . | sqm | 550.00 |

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| --- | --- | --- | --- | --- |
| Item  No. | Description | | Unit | Rite (in  Hs.) |
|  |  | |  |  |
|  | 1133 | Medium shade pigment with 50% white cement and 50% ordinary cement. | sqm | 521.00 |
|  | 11,7.4 | White cement without any pigment | sqm | 511.00 |
|  | 11,7.5 | Light shade pigment with ordinary cement. | sqm | 499.00 |
|  | 11.7.6 | Ordinary cement without any pigment | sqm | 4.68.00 |
| 11.8 | 40 mm thick marble chips flooring, rubbed and polished to gmnolithic finish, under layer 3 lmm thick cement concrete 1:2:4 (1 cement : 2 sand • 4 graded stone aggregate 12.5mm nominal size) and top layer 9mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from 4mm to 7mm 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 shiny *etc.* complete. (Area of panel not to exceed 2.0 sqm) | |  |  |
|  | 11,8.1 | Dark shade pigment with Ordinary cement. | sqm | 526.00 |
|  | 11,8.2 | Light shade pigment with white cement | sqm | 607,00 |
|  | 11.8.3 | Medium shade pigment with 50% white cement and 50% ordinary cement. | sqm | 566.00 |
|  | 11,8.4 | White cement without any pigment. | sqm | 570.00 |
|  | 1115 | Light shade pigment with ordinary cement | sqm | 532.00 |
|  | 1116 | Ordinary cement without any pigment. | sqm | 493.00 |
| 11.9 | 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 sand : 4 graded stone aggregate 12.5mm nominal size) and top layer 12mm thick with white, black, chocolate, grey yellow or green marble chips of sizes from 7mm to 10mm 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 shiny etc. complete : (Area of panel not to exceed 2.0 sqm) | |  |  |
|  | 11.9.1 | Datic shade pigment with ordinary cement. | sqm | 563.00 |
|  | 11.92 | Light shade pigment with white cement | sqm | 677.00 |
|  | 11.93 | Medium shade pigment with 50% white cement and 50% ordinary cement. | sqm | 620.00 |
|  | 11,9.4 | White cement without any pigment | sqm | 620.00 |
|  | 11,9.5 | Light shade pigment with ordinary cement, | sqm | 576.00 |
|  | 11,9.6 | Ordinary cement without any pigment | sqm | 519.00  Page No.197 |
| **Item  No.** | **Description** | | **Unit** | **Rite (in  Rs.)** |
|  |  | |  |  |
| **11.10** | **Marble chips skirting (upto 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 31 (3 \*anent : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume :** | |  |  |
|  | **11.10.1** | **18 mm thick with under layer 12 mm thick in cement plaster 1:3 (1 cement : 3 sand) :** |  |  |
|  | **11.10.1.1** | **Dark shade pigment with ordinary cement.** | **sqm** | **572.00** |
|  | **11.10.12** | **Light shade pigment with white cement** | **sqm** | **629.00** |
|  | **11,1013** | **Medium shade pigment with 50% white cement and 50% ordinary cement.** | **sqm** | **601,00** |
|  | **11.10.1.4** | **White cement without any pigment.** | **sqm** | **602.00** |
|  | **11.10.1.5** | **Light shade pigment with ordinary cement** | **sqm** | **579.00** |
|  | **11.10.1.6** | **Ordinary cement without any pigment.** | **sqm** | **549.00** |
| **11.11** | **Providing and fixing glass strips in joints of terrazo/ cement concrete flows.** | |  |  |
|  | **11,11,1** | **40 mm wide and 4 mm thick.** | **meter** | **34.00** |
| **11,12** | **Extra for haying terrazo flooring on staircase treads not exceeding 30 cm in width including cost of forming, nosing etc.** | | **sqm** | **22.00** |
| **11.13** | **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 1mm to 4mm nominal size by volume), with under layer 25mm thick cement concrete 1:2:4 (1 cement : 2 sand : 4 graded stone aggregate 12\_5 mm nominal size), including rubbing, polishing and cement slurry etc. complete :** | |  |  |
|  | **11.13.1** | **18 mm thick crazy marble stone white, black or as specified** | **sqm** | **844.00** |
| **11.14** | **Precast terrazo tiles 22mm thick with graded marble chips of size upto 12mm, 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 sand) :** | |  |  |
|  | **11.14.1** | **Light shade wing white cement** | **sqm** | **813.00** |
|  | **11.14.2** | **Medium shade using 50%white cement and 50% ordinary cement.** | **sqm** | **756.00** |
|  | **11,14,3** | **Dark shade using ordinary cement,** | **sqm** | **700,00**  Page No.198 |
| **Item  No.** | **Description** | | **Unit** | **Rite (in  Rs.)** |
|  |  | |  |  |
|  | **11.14.4** | **Ordinary cement without any pigment.** | **sqm** | **700.00** |
| **11.15** | **Extra if terrazo tiles are laid in treads of *steps* not exceeding 30 cm in width.** | | **sqm** | **28.00** |
| **11,16** | **Precast terrazo tiles 22 mm thick with graded marble chips of sizes upto 12 mm m skirting and *than* of steps not exceeding 30 can in height on 12 mm thick cement plaster 1:3 (1 cement : 3 sand) jointed with neat cement slurry mixed with pigment to match the shade of the tiles, including rubbing and polishing complete with tiles of :** | |  |  |
|  | **11,16,1** | **Light shade pigment using white cement.** | **sqm** | **954,00** |
|  | **11.16.2** | **Medium shades pigment using 50% white cement and *50%* ordinary cement.** | **sqm** | **883.00** |
|  | **11.16.3** | **Dark shack pigment ruing ordinary cement,** | **sqm** | **811.00** |
|  | **11.16.4** | **Ordinary cement without any pigment.** | **sqm** | **750.00** |
| **11.17** | **Chequered Miran) tiles 22 mm thick with graded marble chips of size up to 6 mm in floors 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 sand) :** | |  |  |
|  | **11.17.1** | **Light shade pigment using white cement** | **sqm** | **889.00** |
|  | **11.17.2** | **Medium shade pigment using 50% white cement, 50% ordinary cement.** | **sqm** | **807.00** |
|  | **11.17.3** | **Dark shade pigment ruing ordinary cement.** | **sqm** | **732.00** |
|  | **11.17.4** | **Ordinary cement without any pigment.** | **sqm** | **686.00** |
| **11.18** | **Chequerred precast cement concrete tiles 22 mm thick in footpath and courtyard jointed with neat cement slurry mixed with pigment to match the shade of tiles including rubbing and rlpnoing etc, complete cm 20 mm thick bed of cement mortar 1:4 (1 cement: 4 sand),** | |  |  |
|  | **11,18,1** | **Light shade pigment using white cement.** | **sqm** | **754,00** |
|  | **11.18.2** | **Medium shade pigment using 50% white cement 50% Grey cement.** | **sqm** | **669.00** |
|  | **11.18.3** | **Dark shade pigment using ordinary cement** | **sqm** | **591.00** |
|  | **11.18.4** | **Ordinary cement without any pigment.** | **sqm** | **535.00** |
| **11,19** | **Marble stone flooring with 18 mm thick marble stone (sample of marble shall be approved by Engineer-in-charge) over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 sand) laid and jointed with grey cement slurry including rubbing and polishing complete with : (area of slabs over 0.5 sqm)** | |  | Page No.199 |
| **Item  No.** | **Description** | | Unit | Rite (m  Rs.) |
|  | 11.19.1 | Makrana white second quality. | sqm | 3051.00 |
|  | 11,192 | Riki Nagar Plait | sqm | 1381.00 |
|  | 11.19.3 | Agaria White/hlorgarh | sqm | 1882.00 |
|  | 11.19A | KAM ramble | sqm | 1555.00 |
|  | 11.19.5 | Black Zebra. | sqm | 1315.00 |
|  | 11.19.6 | Udaipur / Banda green marble | sqm | 1649.00 |
|  | 11.19.7 | Pink plain marble. | sqm | 1448.00 |
|  | 11,19.8 | Jaisalmer Yellow | sqm | 1582.00 |
| 11,20 | Marble stone 18 mm thick in riser of step, skirting, dado and pillar laid on 12 mm average thick cement mortar 1:3 (1 cement: 3 sand and jointed with white cement Amy mixed with pigment to match the shade of the slab *Ye* rubbing and polishing complete. (area of slab upto 0.50sqm.) | |  |  |
|  | 11.20.1 | Makrana white second quality. | sqm | 3675.00 |
|  | 11.20.2 | Rai Nagar Plaim | sqm | 1932.00 |
|  | 11.20.3 | Agaria Whitcadorgarla | sqm | 2455.00 |
|  | 11,20,4 | Ketni marble | sqm | 2113.00 |
|  | 11,20,5 | Black Zebra, | sqm | 1863.00 |
|  | 11.20.6 | Udaipur / Banda green marble | sqm | 2211.00 |
|  | 11.20.7 | Pink plain marble | sqm | 2002.00 |
|  | 11.20.8 | Joisalmer Yellow | sqm | 2141.00 |
| 11.21 | 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 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 seaweed to the backing by moans of cramps, which shall be paid for separately), (area of slabs over 0.50 sqm,) | |  |  |
|  | 11.21.1 | Makrana white second quality. | sqm | 3773.00 |
|  | 11.21.2 | Rai Nagar Plain- | sqm | 2737.00 |
|  | 11,21.3 | Aglaia White/Morgarh | sqm | 2553.00 |
|  | 11.21.4 | ICatni marble | sqm | 2219.00 |
|  | 1121.5 | Back Zebra. | sqm | 1961.00 |
|  | 11.21.6 | Udaipur / Banda green marble | sqm | 2309.00 |
|  | 11.21.7 | Pink plain marble. | sqm | 2100.00 |
|  | 11,21.8 | Jaiaalmer Yellow | sqm | 2240.00 |

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| --- | --- | --- | --- | --- | --- |
| Item  No. | Description | | | Unit | Rite (us  Rs.) |
|  |  | | |  |  |
| 11.22 | Providing and fixing 18mm thick gang saw cut mirror polished (premoulded and prepolished) machine cut for kitchen platforms, vanity counters, window sills , ficias and similar locations of required size of approved shade, colour and texture laid over 20mm thick base cemera mortar 1:4 (1 cement : 4 sand) with joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing moulding and polishing to edge to give high gloss finish wherever required etc. complete at all levels. samples approved by Engineer-in-charge. | | |  |  |
|  | 11 22 1 | Raj Nagar plain/Vihite Marble/Udaipur Green Marble /Zebra black | | sqm | 1797.00 |
|  |
|  | 11.22.2 | Granite of any colour and shade | | sqm | 3322.00 |
|  | 11.22.3 | Cuthipah stone | | sqm | 1279.00 |
| 11.23 | Extra for prefmishal nosing to treads of steps of marble stone. | | | meter | 164.00 |
| 11.24 | Extra for marble stone flooring in treads of steps and risers using single length upto 2,00 metre . | | | sqm | 191.00 |
| 11.25 | Providing and laying machine art, 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 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 Engine.a-in-Charge.  a) 18 mm thick Italian Marble stone slab,Perlato, Rosso emus, Fire Red or Dark Emperadort etc, | | | sqm | 4717.00 |
| 11.26 | Providing and fixing machine art, mirror / eggshell polished, Marble stone work for wall lining (veneer work) including dado, skirting, risen 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 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,Ferlain, **Rosso** verona, Fire Red or Dark Emperadort etc, | | | sqm | 5566.00 |
| 11,27 | Providing and laying machine cut, mirror polished Italian Marble stone flooring, in required design (Simple geometrical, abstract etc.) and in patterns in combination with Italian marble stones of dif6aent 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 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 | | | sqm | 4915.00  Page No.201 |
| Item  No. | Description | | | Unit | Rite (in  Rs.) |
|  | the Enginea-in-Charge.  a) 18 mm thick Italian Marble stone slab,Perlato, Rosso verona, Fire Rod or Dark Emperadore etc. | | |  |  |
| 11.28 | Granite work gang saw cut (polished and machine cut) of thickness 18mm for wall lining (veneer work), backing filled with a grout of avaagc 12 mm thick in cement mortar 1:3 (1 cement - 3 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 barking by means of cramps, which shall be paid for separately). | | |  |  |
|  | 11.28.1 | Black | |  |  |
|  | 11.2811 | Arca of slab upto 0.50 sqm | | sqm | 3483.00 |
|  | 11,28.1.2 | Area of slab over 0.50 sqm | | sqm | 3720.00 |
|  | 11.28.2 | All Shades /colour other than black | |  |  |
|  | 11.28.2.1 | Arca of slab upto 0.50 sqm | | sqm | 3100.00 |
|  | 1128.2.2 | Area of slab over 0.50 sqm | | sqm | 3344.00 |
| 11,29 | Providing and laying gang saw cut 18 mm thick, **mirror** polished pre moulded (wherever required) and pm polished machine cut granite stone of required size and plume of approved shade, colour and texture in flooring laid *over* 20mm thick base of cement mortar 1:4 (lament : 4 sand) including grouting the joints with white cement mixed with matching pigment, epoxy touch ups etc, complete as per direction of Engineer-in-Charge. | | |  |  |
|  | 1129.1 | Black | |  |  |
|  | 11.29.1.1 | Area of slab less than 0 50 *sqm.* | | sqm | 3477.00 |
|  | 11.29.12 | Area of slab more ***than*** 030 sqm. | | sqm | 3720.00 |
|  | 1129.2 | All Shades /colour other than black | |  |  |
|  | 11.29.2.1 | Area of slab less Than 0 50 sqm. | | sqm | 3598.00 |
|  | 11.29.2.2 | Area of slab mom than 0.50 sqm. | | sqm | 3695.00 |
| 11.30 | 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 ova 20mm thick base of cement mortar 1:4 (lcement : 4 sand) including grouting the joints with white cement mixed with matching pigment, epoxy touch ups etc, complete as per direction of Engineer-in-Charge. | | |  |  |
|  | 11.30.1 | Granite of any colour and shade (area of slab more than 0 50 sqm) | | sqm | 3317.00 |
| 11,31 | Providing and fixing 10x10x7.50 cm Granite Acne block hand cut and chisel dressed on top, fix paving in floors, drains etc. laid ova 20mm thick base mortar 1:4 (Icement:4 sand) with joints 10mm wide filled with same mortar mixed with matching pigment including ruled pointing etc, complete as per direction of engineer-in charge. | | | Rim | 1241.00  Page No.202 |
| 11.32 | Providing and laying flamed finish granite stone flooring in required design and patterns, in linear as per well as curvilinear portions of the building all complete as per the architectural drawings with 18mm thick stone slab over 20mm (average) thick base sluryand 1:4 (1 cement : 4 sand) laid and jointed with cement slury 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:  Flamed finish granite stone slab jet Black, Chery Red, Elite Brown, Cat Eye or equivalent. | |  | |  |
| 11.33 | Pre polished Granite stone work 18mm thick of any colour in riser of steps, skirting, dado and pillars laid on 12mm average thick cement mortar 1:3 (1 cement :3 sand) and jointed with white cement slurry mixed with pigment to match the shade of slab | | 3413.00 | |  |
| 11.34 | Kota stone slab flooring over 20mm (average )thick base laid over and jointed with grey cement slurry mixed with pigment to match the shadeof the including  rubbing polishing completedwith base of cement mortar 1:4 (1 cement : 4 sand)  11.34.1 25mm thick | |  | |  |
| 11.35 | Kota stone slabs 20mm thick in risers of steps, skirting, dado and pillars laid on 12mm (average) thick cement mortar 1:3 (1 cement : 3 sand) and jointed with grey cement slury mixed with pigment to match the shade of the slabs, including rubbing and polishing complete. | | Sqm | | 1012.00 |
| Page No.203 | | | | | |
| Item  No. | Description | | | Unit | Rite (in  Rs.) |
|  |  | | |  |  |
| 11.36 | Provding edge molding to 18mm thick marble stone counters vanities window sills etc. including maching polishing to edge to sto give high gloss fifinish etc. complete as per design approved by Engineering-in-charge  11.36.1 Marbl e work  11.36.2 Granite work | | | R/m  R/m | 160.00  269.00 |
| 11.39 | Mirror polishing on marble work/Granite work /stone work where ever required to give high gloss finish complete. | | | Sqm | 164.00 |
| 11.40 | 40mm thick fine dressed stone flooring over 20mm (average) thick base of of cement mortar 1:5 (1 cement : 5 sand) with jints finished flush.  11.40.1 red sand stone  11.40.2 white sand stone | | | Sqm  sqm | 578.00  578.00 |
| 11.49 | Providing and laying rectified Glazed Ceramic floor tiles 300x300 mm or more (having thickness 9 to 10mm) of 1st quality conforming to IS : 15622 of approved make m colours White, Ivory, Grey, Fume Red Brown, laid on 20mm thick cement mortar 1:4 (1 Cement : 4 sand) including grouting the joints with white cement and matching pigments etc., complete. | | | sqm | 961.00 |
| 11.50 | Providing and laying rectified Glazed Ceramic wall tiles 300x450  mm or more (thickness to be specified by the mamifacturer) of 1st quality conforming to IS : 15622 of approved make in colours White, Ivory, Grey, Fume Red Brown, laid on 12 mm thick cement mortar 1:3 (1 Cement : 3 sand) including grouting the joints with white cement and matching pigments etc., complete. | | | sqm | 1009.00 |
| 11.51 | Providing and laying rectified Glazed Ceramic floor tiles 300x300 mm or more (having thickness 9 to 10mm) 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 sand) including pointing the joints with white cement and matching pigments etc., complete. | | | sqm | 997.00 |
| 11.52 | Providing and laying rectified Glazed Ceramic wall tiles 300x450 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, Fame Red Brown, laid on 12 mm thick Cement Mortar 1:3 (1 Cement : 3 sand) including pointing the joints with white cement and matching pigments etc., complete. | | | sqm | 1044.00 |
| 11.53 | Providing and laying vitrified floor tiles in different sizes with water absorption's less than 0.08% and conforming to IS : 15622 of approved make m all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 sand) including grouting the joints with white cement and matching **pigmcaris de.,** complete. | | |  |  |
|  | 11.53.1 | Size of Tile 500x500x9-10mm | | sqm | 864.00 |
|  | 11.53.2 | Size of Tile 600x600x9-10 mm | | sqm | 894.00 |
|  | 11,53.3 | Size of Tile 800x800x 10-12mm | | sqm | 1452.00 |
|  | 11.53.4 | Size of Tile 1000x1000x 10-12 mm | | sqm | 1620.00 |
| 11.54 | Providing and laying Vitrified tiles in different sizes, with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make in all colours and shade in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement 3 sand), including grouting the joint with white cement and matching pigments **etc.** complete. | | |  |  |
|  | 11.54.1 | Size of Tile 500x500x9-10mm | | sqm | 859.00 |
|  | 11.54.2 | Size of Tile 600x600x9-10 mm | | sqm | 888.00 |
|  | 11,54.3 | Size of Tile 800x800x 10-12mm | | sqm | 1450.00 |
|  | 11,54.4 | Size of Tile 1000x1000x 10-12 mm | | sqm | 1620.00  Page No.205 |
| Item  No. | Description | | | Unit | Rite (in  Rs.) |
|  |  | | |  |  |
| 11.55 | Providing and laying Vitrified tiles in floor with different sizes, with water absorption less than 0.08% and conforming to IS:15622 , of approved brand and manufacturer in all colours and shade, laid with cement based high polymer modified quick set the 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). | | |  |  |
|  | 11.55.1 | Size of Tile 500x500x9-10mm | | sqm | 1014.00 |
|  | 1135.2 | Size of Tile 600x600x9-10 mm | | sqm | 1043.00 |
|  | 11.55.3 | Size of Tile 800x800x 10-12mm | | sqm | 1650.00 |
|  | 11,55,4 | Size of The 1000x1000x 10-12 mm | | sqm | 1820,00 |
| 11,56 | Providing and laying Vitrified tiles in different sizes, with water absorption less than 0.08% and conforming to IS: 15622, of approved brand and 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, m average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately). | | |  |  |
|  | 11,56,1 | Size of The 500x500x9-10mm | | sqm | 1051,00 |
|  | 11.56.2 | Size of Tile 600x600x9-10 mm | | sqm | 1081.00 |
|  | 11.56.3 | *Size* of Tile 800x800x 10-12mm | | sqm | 1655.00 |
|  | 11.56.4 | *Size* of Tile 1000x1000x 10-12 rum | | sqm | 1825.00 |
| 11.57 | Grouting the joints of flooring /skirling, risers of step of vitrified 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 020 kg of resin per kg), including filling/ grouting and finishing complete as per direction of Engineer-in-charge | | |  |  |
|  | 11,57.1 | Size of The 500x500 mm | | sqm | 256,00 |
|  | 11,572 | Size of The 600x600 mm | | sqm | 218,00 |
|  | 11.57.3 | Size of Tile 800x800 mm | | sqm | 180.00 |
|  | 11.57.4 | *Size* of Tile 1000x1000 mm | | sqm | 132.00 |
| 11,58 | Providing and laying matt finished vitrified tile of size  100x100x16mm having water absorption less than 0.05% and conforming to IS: 15622 of approved make in all colours and shades for out door floors such as footpath, court yard multi models location etc., laid on 20mm thick base of cement mortar 1:4 (lament : 4 sand) in all shapes and patterns including grouting the joints with white cement mixed with matching pigments etc. complete as per direction of Engincer-in-Charge. | | | Rim | 1379,00 |

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| Item  No. | Description | | Unit | Rite (in  Rs.) |
|  |  | |  |  |
| 11.59 | Providing and laying matt finished vitred tile of sizes having water absorption less than 0.05% and conforming to IS: 15622 of approved make in all colours and shades for outdoor floors such as footpath, court yard, multi modals location etc., laid on 20mm thick base of cement mortar 1:4 (1e rent : 4 sand) in all shapes and patterns including pouting the joints with white cement mixed with matching pigments etc. complete as per direction of Engineer-in-Charge. | |  |  |
|  | 11.59.1 | 300x300x9. 8mm | sqm | 891.00 |
|  | 11.59.2 | 500x500x9.8mm | sqm | 949.00 |
|  | 11,59.3 | 600x600x9, amm | sqm | 1547.00 |
|  | 11,59.4 | 800x8007.9, amm | sqm | 1983.00 |
| 11.60 | Providing and laying Antiskid endura floor tiles of any sizes, 12 mm thiclmess with water absorption's less than 0.08% and conforming to 15:15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement :4 sand) including grouting the joints with white cement with matching pigments etc., complete. | | sqm | 880.00 |
| 11,61 | Deduct for not grouting the joints with white cement and matching pigment in the itcms of fixing of vitrified -tiles. | | sqm | 8.00 |
| 11.62 | Deduct for not using 20mm thick cement mortar 1:4 (1 cement : 4 staid) bedding in laying of floor ides. | | sqm | 359.00 |
| 11.63 | Fixing glazed/ Ceramic/Rectified/ Vitrified floor tiles with cement based high polymer modified quick-set tile adhesive (Water based) conforming to IS: 15477, in average 3mm thickness. | | sqm | 350.00 |
| 11.64 | Providing and laying tactile tile (far vision impaired persons as pa standards) of size 300x300x9.8mm having water absorption less than 0.05% and conforming to IS: 15622 of approved make in all colours and shades for outdoor floors such as footpath, court yard, multi modals location etc., laid on 20mm thick base of cement mortar 1:4 (lcement : 4 sand) in all shapes and patterns including pouting the joints with white cement mixed with matching pigments etc. complete as per directimi of Engineer-in-Charge. | | sqm | 1307.00 |
| 11.65 | Providing and fixing Glass mossaic 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 cm 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 | 1556.00 |
| 11.66 | Crazy =mak tile flooring, with under layer 12 mm thick cement mortar 1:4 (1 cement 4 sand), with joints not exceeding 5 mm, including filling the gaps with ordinary cement mixture and mixing with synthetic polyester fibre, triangular in shape having specific gravity of 134 to 1.40, cross section size ranging from 10 to 40 micron and length upto 6 mm , mixing fibre g 125 grams per 50 | | sqm | 360.00  Page No.207 |
| Item  No. | Description | | Unit | Rite (in  Rs.) |
|  | kg of cement in cement mortar, including providing and mixing water proofing material in mortar g 1 kg per 50 kg of cement , all complete as per direction of Engineer- in-charge. | |  |  |
| 11.67 | Providing and laying 500x500x4Omm thick Turf paver (Turfpave  XD) on 150mm thick sub grade of compacted bed of 20mm nominal  sin stone aggregate and base cause with 50mm thick sand and  filling joints with sand including spreading, well ramming,  consolidating and finishing smooth etc. all complete as per  direction of Engineer-in-charge. | | sqm | 1457.00 |
| 11.68 | Providing and fixing 10mm 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. | |  |  |
|  | 11,68,1 | In flooring on a bed of 10 mm thick mortar 1:4 (1 acid proof cement : 4 sand). |  |  |
|  | 11.68.1.1 | Acid and alkali resistant tile. | sqm | 1262.00 |
|  | 11.68.2 | In dade/skirting on 12 mm thick mortar 1:4 (1 acid proof cement : 4 sand). |  |  |
|  | 11,68.2.1 | Acid and alkali resistant tile. | sqm | 1368,00 |
| 11.69 | Tile work in skirting, risers of steps and dado (upto 2 m height) over 12 ram thick bed of cement mortar 1:3 (1 cement :3 sand) and jointed with grey cement slurry (a) 33 kg/sqm including pointing in white cement mixed with pigment of matching shade complete. | |  |  |
|  | 11.69.1 | 8 mm thick.stones |  |  |
|  | 11.6911 | Marble tiles (polished) Raj Nagar. | sqm | 1119.00 |
|  | 11,69,12 | Grainite tile of any colour /shade | sqm | 1524,00 |
| 11.70 | Providing and fixing cramps of required size and shape in RCC/ CC / Brick masonry backing with cement mortar 1:2 ( 1 cement :2 sand) including drilling necessary hole in stones and embedding the cramp in the hole (fastener to be paid separately). | |  |  |
|  | 11,70,1 | Gunmetal cramps. | kg | 589.00 |
|  | 11.70.2 | Stainless steel cramps. | kg | 631.00 |
| 11,71 | Providing and fixing expansion hold fasteners on C.C. / R.C.CJ Brick masonry surface backing including drilling accessary holes and the *cost* of bolt etc complete. | |  |  |
|  | 11.71.1 | Wedge expansion type |  |  |
|  | 11.7111 | Fastener with threaded dill 6 inn | each | 25.00 |
|  | 11,71.12 | Fastaia with threaded dia 10 mm. | each | 29.00 |

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| **Item  Na** | **Description** | | **Unit** | **Rite (in  Rs.)** |
|  |  | |  |  |
|  | **11.71.13** | **Fastener with threaded dia 12 mm.** | **each** | **461)0** |
| **11.72** | **Providing and fixing stone slab table rubbed on both faces edges rounded and polished of size as required and 1.8 an thick fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the abase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 sand : 4 graded stone aggregate 6 mm nominal size) as per direction of Engineer-in-charge and finished smooth** | |  |  |
|  | **11.72.1** | **White Agaria Marble State.** | **sqm** | **3046.00** |
|  | **11.72.2** | **Granite Stone of approved shade.** | **sqm** | **3422.00** |
| **11.73** | **Providing and system and its height with possible modular load stinger frame architectural drawings, charge consisting**   1. **Providing pedestals made mm outer diameter, 100mmx100mmx3mm pedestal head threaded stud 16mm on the stud for the pedestal head be fixed to the adhesive of approved** 2. **Stringers system rectangular size for securing the screws ensuring formed by the panel, this system access floor uninterrupted clearance conduits and drawings, as specified** 3. **Providing and medium grade 800H grade (F580011). construction with hemispherical 0 6 mm and bottom welds in each should be Corroresist cavity formed noncombustible foaming compound\_ Anti-static High** | **fixing removable raised/false access flooring with  components of approved make for different plenum**  **height adjustment upto 50 mm, comprising of bearing floor panels supported on G.I. rectangular work and G.I. Pedestal etc. all complete, as per the**  **as specified and as directed by Engineer-in-**  **of :**  **at required spacing to form modular framework, out of GI tube of thickness minimum 2 mm and 25**  **fray welded on to the GI. Base plate of size**  **at the bottom of the pedestal tube, GI. of size 75mmx75mmx3.5 mm welded with GI fully**  **outer diameter with two GI Check nuts screwed level adjustment upto 50mm, locking and stabilizing**  **in position at the required level. The pedestals shall subfloor (base) through base plate using epoxy based**  **make or the machine screw with nawl plug.**  **in all steel construction hot dipped galvanized of**  570x20x30x0.80mm **thick having holes at both Mitt stringers on to the pedestal head using filly threaded**  **maximum lateral stability in all directions, the grid pedestal and stringer assembly shall receive the floor**  **shall provide adequate solid, rigid support for Noel, the system shall provide a minimum clear**  **between the bottom of the floor for electrical wiring etc. all complete as per the architectural**  **and as directed by the Engineer-in-charge.**  **fixing Access Floor panel of 600x600x32 mm Filled Steel anti static high pressure Larninstir01 of** |  | Page No.209 |
| **Access Floor panel shall be steel welded  an enclosed bottom pan with uniform pattern of 64  cones.The top and bottom plates of Steel Gauges: top  0 7 mm fused spot welded together (minimum 64  dome and 20 welds along each flange). The panel  epoxy coated for lifetime rust protection and  by the top and bottom plate is filled with Pyrogrip  Portland cementitious core mixed with lightweight  The access floor shall be factory finished with  Pressure laminate with Non Warp technology upto** |
| Item  No. | Description | | Unit | Rite **(m  Rs.)** |
|  |  | |  |  |
|  | **imm** 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 **cadre** of the panel which is placed on four steel blocks. The panel will withstand and Uniformly Distributed Load (UDL) minimion 1250 kg/sqm and an impact load of 50kg all complete as per the approved manufacturers specification and as per the direction of Engineer-in­charge. All specification must be printed **on** the side of the panel to ensure the quality of the product | |  |  |
|  | 11.73.1 | 300 ram Finished Floor Height (FFH) | sqm | 4002.00 |
|  | 11.73.2 | 450 ram Finished Floor Height (FFH). | sqm | 4044.00 |
| 11.74 | Providing and laying factory made coloured chamfered edge Cement Concrete paver blocks of required strength, thickness and size/shape, made by table vibratory method using PU mould, laid in required colour and pattern over 50mm thick compacted bed of stone dust, compacting and proper embedding/laying of inter locking paver blocks into the bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand including locking edges with M 15 cement concrete in footpath, parks, lawns, drive ways or light traffic parking etc. complete as per manufacturer's specifications and direction of Enginecrin- Charge. 60mm thick C.C. paver block of M-35 grade with approved colour, design and pattern. | | sqm | 702.00 |
| 11,75 | Providing and laying 60mm thick factory made cement concrete nteriocking paver block of M-30 grade made by block making machine with strong vibratory compaction, of approved size, design and shape, laid in required colour and pattern over and including 50mm thick compacted bed of stone dust, filling the joints with sand etc. all complete as per the direction of Engineer-in-charge. | | sqm | 586.00 |
| 11.76 | Providing Epoxy flooring self levelling type on strong base in desired colour/design as approved by engineer in charge. Resin for epoxy is to be of floor grade type i/c appropriate hardner and filler material. with 5 year defect liability period (This item is to be used only for operation theaters in hospitals) | |  |  |
|  | 11.76.1 | 1 mm thick | sqm | 1198.00 |
|  | 11.76.2 | 2 mm thick | sqm | 1825.00 |
|  | 11.76.3 | 3 mm thick | sqm | 2452.00 |
| 11.77 | Providing and applying in two coats of 250 micron thick each layer of epoxy coating on prepared surfece (cost includes preparing the plastered surfacer smooth ready to receive epoxy coating) for operation theater walls in desired colour as per direction of engineer in charge. | | sqm | 899.00 |

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| Item  No. | Description | | | Unit | Rite (in  Rs.) |
|  |  | | |  |  |
| 11.78 | Providing fixing 2mm thick conductive vinyl flooring in rewired colour suitable for use in areas where static electricity required to be discharge to protect sensitive Electronic equipments conductive flooring is to be layed on sub floors, that are smooth level fixed by recommended adhesive cutting fixing etc. complete as per direction of Engineer-in-charge, | | | sqm | 701.00 |
| 11,79 | Providing and fixing 2,0mrn thick resilient vinyl flooring confirming **to** EN 649 with flexibility confirming to EN 435 in the form of wood finish planks of size 225mm X914.4 mm (9"3036")/roll in colour/plain/wood finish and finish as selected by the architects / clients fixed with water based adhesives (low VOC). | | | sqm | 578.00 |
| 11.80 | Providing and fixing 4.5mm thick homogenous single layered vinyl flooring, glass fiber tissues reinforced. The flooring shall be laid in a manner to provide comfortable and jerk free surface for places e.g. gym and like. | | | sqm | 1724.00 |
| 11.81 | Providing and fixing 8mm thick tongued and grooved AC-4 grade prelaminated wooden flaring made on HDF of approved brand, (Green panel max/Armstrong/Century or equivelent) colour and shade laid over levelled floes with aprooved adhesive and under layer including polishing *edge* profile and termination profile for skirting and adjecent floor, PU polish malt finish etc with seamless joint, scratch resistant, moisture resistant strong and durable, We providing 125 micron thick membrane layer followed by under layer of supreme profile 12mm thick polyurathene sheet on levelled finished floor complete as per design and drawing. nothing extra shall be payble for proration of surface which includes leveling of floor with POP. | | | sqm | 1453.00 |
| 11.82 | 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 burrito\* non modular bricks | | |  |  |
|  | 11.82.1 | | **16** 11 cement : 6 sand) | sqm | 583.00 |
| 11.83 | Providing and laying factory made coloured chamfered edge Cement Commie paver blocks of required strength, thickness and size/shape, made by table vibratory method using PU mould, laid in required colour and pattern over 50mm thick compacted bed of stone dust, compacting and proper embedding/laying of inter locking paver blocks into the bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand including locking edges with M 15 cement concrete in footpath, parks, lawns, drive ways or light traffic parking etc, complete as per mem:lecturer's specifications and direction of Engine erin- Charge. 80mm thick C C paver block of M-35 grade with approved colour, design and pattern. | | | sqm | 840.00 |
| 11.84 | 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 sand), | | | cum | 6775.00  Page No.211 |
| Item  No. | Description | | | Unit | Rite (in  Rs.) |
|  | 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 directima of Engineer-in-charge (length of finished kerb edging shall be measured for payment). (Precut C.C. kerb sane shall be approved by Engineer-in-charge). | | |  |  |
| 11,85 | Providing and fixing at or near ground level factory made RCC pavement slab of M-30 grade of size 450x450r50 mm, including reinforcement with 6 mm dia M. S. bars 4 as 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 sand), homing 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 | 518.00 |
| 11.86 | Providing and fixing 16mm thick gang saw cut mirror polished premoulded and prepolished machine cut Granite of approved shade, colour and texture of Granite Door frame, in cement mortar 1:3 (1 cement :3 sand) including pointing with an admixture of pigment to match the elude including fixing of granite stone door frame with epoxy resin based adhesive including secured to the backing by moans of cramps, drilling of hole with rawl plugs and screws 75mm long cleaning etc. complete. Including rubbing, curing, moulding and polishing edges to give high glossy finish and drilling of hole for fixing stainless steel hinge, aldrop, towerbolt do complete at all levels as per instruction of Engineer-in-charge. | | |  |  |
|  | **11,86.1** | **Grand Door frame for 100mm thick wall Thickness.** | | **metre** | **1122.00** |
|  | **11,86.2** | **Grand Door frame for 200mm thick wall Thickness.** | | **metre** | **1680.00** |

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| Item No. | Description | | Unit | Rate tin Rs.) |
|  |  | |  |  |
| 12.1 | Providing corrugated G.S. sheet roofing including vertical/ carved surface fixed with polymer coated J or L hooks, bolts and nuts 8 mm diameter with bitumen and GI limpet washers or with GI. limpet washers filled with white lead and including a coal of approved steel primer and two coats of approved paint on overlapping of sheets complete upto any pitch in horizontal/ vatical or curved surfaces) excluding the cost of puffins, rafters and trusses and including cutting to size and shape wherever required. | |  |  |
|  | 12.1.1 | 1.00mm thick with *zinc* coating not less than 275gm1m2 | &Ira | 102100 |
|  | 12.1.2 | 0.80mm thick with *zinc* coating not lass than 275gm1m2 | sqm | 863.00 |
|  | 12.1.3 | 0.63 mm thick with zinc coating not less than 275gm/m2 | sqm | 726.00 |
| 12.2 | Extra for straight cutting in C.C.S. shed roofing for making opening of area exceeding 40 sq. decimetre for chimney stacks, sky light etc. | |  |  |
|  | 12.2.1 | 1,00 mm thick | meter | 25.00 |
|  | 12.21 | 0.80 mm thick | meter | 20.00 |
|  | 12.23 | 0.63 mm thick | meter | 20.00 |
| 123 | Extra for circular cutting in C.G.S. sheet roofing for making opening of area exceeding 40 same decimetre : | |  |  |
|  | 12.11 | 1.00 mm thick | meter | 150.00 |
|  | 12.31 | 0.80 mm thick | meta | 120.00 |
|  | 12.3.3 | 0.63 mm thick | meta | 120.00 |
| 12.4 | Providing ridges or hips of width 60 cm over all width plain G.S. sheet fixed with polymer coated I or L hooks, bolts and nuts 8 mm dia. GI. limpet and bitumen washers complete. | |  |  |
|  | 12.4A | 0.80mm thick with *zinc* coating not less than 275grn1m2 | meter | 500.00 |
|  | 12.4.1 | 0.63mm thick with zinc coating not less than 275iiii/m2 | meta | 431.00 |
| 12.5 | Providing valleys of 90cm wide overall in plain G.S. *died* fixed with polymer coated I or L hooks, bolts and nuts 8mm dia. GI, limpet and bitumen washers complete : | |  |  |
|  | 12.11 | 1.60mm thick with zinc coating not less than 350grn1m2 | meter | 994.00 |
| 12.6 | Providing and Fixing of 40 cm ova all width flashing in plain, as. sheet fixed with polymer coated ***I*** or L hooks, bolts and nuts, GI limpet and bitumen washer complete, ban to shape and fixed in wall with cement mortar 1:3 (1f:anent : 3 sand). | |  |  |
|  | 12.6.1 | 1,00mm thick with zinc coaling not less than 275gm/m2 | meter | 35100 |
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| Item  No. | Description | | Unit | Rate (in  Rs.) |
|  |  | |  |  |
| 12.7 | Providing and fixing 15 cm wide 45 cm over all semi circular plain G.S. shod gutter with iron brackets 40x3iimi size, bolts, nuts and washers S. including making necessary connections with rain ***water*** pipes complete. | |  |  |
|  | 12.7.1 | 0.80mm thick with zinc coating not less than 275gm/m2 | meter | 459.00 |
|  | 12.7.2 | 0.63mm thick with zinc coating not less than 275gm/m2 | meter | 402.00 |
| 12.8 | Providing ncaa-asbestos high impact Polypropylene reinforced cement 6mm thick corrugated sheets (as per IS: 14871) roofing up to any pitch and fixing with polymer coated J, or L hooks, bolts and nuts 8mm dia.\_ G.I. plain and bitumen washers or with self dulling fastener and EPDM washers etc. complete (excluding the cost of purlins, rafters and trusses), including cutting sheets to size and shape wherever required\_ | | sqm | 389.00 |
| 12S | Extra for straight citing in non- asbestos polypropylene mitred cement °ea-regaled, semi-corrugated 6 mm thick sheet roofing fca­making openings of area exceeding 4-0 square decimetre for chimney stacks, skylights etc. | |  | 20.00 |
| 1210 | Extra for circular cutting in non-asbestos polypropylene reinforced cement corrugated✓ semi-cormgatod 6 mm thick shod roofing for making openings of area exceeding 40 square decimetre. | | meter | 56.00 |
| 12.11 | Extra for providing and fixing wind ties of 40x 6mm flat iron section. | | meter | 121.00 |
| 1212 | Providing and fixing ridges and hips in non-asbestos fibre cement high impact polypropylene reinforced roofing with suitable fixing accessories or self dulling fastener and EPDM washer etc. complete. | |  |  |
|  | 12.12.1 | Corrugated serrated adjustable ridges | meter | 367.00 |
|  | 12.12.2 | Plain wing adjustable ridges | meter | 311.00 |
|  | 12.12.3 | Close fitting adjustable ridges | meter | 420.00 |
|  | 12.12.4 | Unserrated adjustable hips | meter | 506.00 |
| 1213 | Providing and fixing non asbestos fibre cement high impact  polypropylene markt-cod roofing accessories in all colours with polymer coated J or L hooks, bolts and nuts and or G.I. seam bolts and mite, GI. plain and bitumen washers or with self dnl fastener and EPDM washer etc. complete: | |  |  |
|  | 12.13.1 | C,orrugated apron pieces | meter | 340.00 |
|  | **12.13.2** | **Fan's fax pica,** | meter | 232.00 |
|  | **12.13.3** | NOtek **light curves** | meter | 500.00 |
|  | **12.13.4** | **ventilator coves** | meter | 622 00 |
|  |
|  | **12.13.5** | Barge boards | meter | 623.00 |

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| **Rem  No.** | | | Description | | | | Unit | | Rate (in  **Rs.)** | |
|  | | |  | | | |  | |  | |
|  | | | **12.13.6** | | Ridge finials | | pair | | 229.00 | |
|  | | | 12.133 | | Special north light curves | | each | | 753.00 | |
|  | | | 12.13,8 | | S type louvers | | meter | | 418.00 | |
| 12,14 | | | Providing flat iron brackets 50x3mm size with necessary bolts, mita and washers etc. for fixing non asbestos cement/G.S. shads gutters with purlins. | | | | metre | | 49.00 | |
| 12,15 | | | Providing and fixing precasted 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 pm 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 while 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 55mm) with HPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces excluding the cost of purling, rafters and trusses and including cutting to size and shape wherever required. | | | | sqm | | 652.00 | |
| 12,16 | | | Providing and fixing precoated galvanised steel sheet roofing  accessories 0.50 mm + 0.05 % total coated thickness, Zinc, coating 120gem as per IS: 277 in 24.0 mpa steel grade, 5-7 microns epoxy primer on both side of the shed and polyester top coat 15-18 microns using self, drilling/ self tapping screws complete : | | | |  | |  | |
|  | | | 12.16.1 | | Ridges plain (500 - 600mm). | | meta | | 722.00 | |
|  | | | 12.162 | | Flashing& Aproiv3.( Upto 600 mm) | | meter | | 706.00 | |
|  | | | 12.16,3 | | North light curves. | | meta | | 777.00 | |
|  | | | 12.16,4 | | Barge board (Upto 300 rnm). | | meter | | 669.00 | |
|  | | | 12.16.5 | | Crimp curve | | sqm | | 738.00 | |
|  | | | 12.16.6 | | Gutter .(600 mm over all girth). | | meter | | 848.00 | |
| 12.17 | | | Providing and fixing UV stabilised fibreglass reinforced plastic sheet roofing upto any pitch including fixing with polymer coated T or V hooks, bolts and nuts 8mm dia. G.I plain/bitumen washers complete but excluding the cost of pralins, 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 aired. They shall be of unifiarm pigmentation and thickness without air pockets and shall conform to IS 10142 and IS 12866.The sheets shall be opaque or translucent, clear or pigmented, textured or smooth as specified. | | | |  | |  | |
|  | | | 12.17.1 | | 2mm thick corrugated (29 or 42" or 6') or step-down (Tor 3"or 6") as specifie  d. | | sqm | | 1031.00 | |
|  | | | 12.172 | | 2mm thick flat. | | Rim | | 955.00  Page No.220 | |
| Item No. | | Description | | | | Unit | | Rate (in Rs.) | |
|  | |  | | | |  | |  | |
| 12.18 | | Providing Polyearbonate (minimum) constructed Standing connector locking meaanism of same color welded panels finish) fca- compound  specified by The rate includes and tests (as and labour scaffolding, etc. complete in charge. structure shall be measured | | purlins perpendicular  and Fixing of sky lights consisting of Multi ccll/tight cell  Panel System of approved colour, 16 mm thick  having uniform in color with an integral light-Cell core  not to exceed 4minx4min in a cross section, Vertical Seam marmitetured at both rides of the panel. Snap-on to interlock the panels shall have a grip-lock double tooth  to ensure maximum uplift capability and shall be  as that of panel. Panel shall bc factory scaled/end  with additional End-cap/Aluminium U-Profile (mill ends. Panel shall be co-onruded with special anti glare and UV protected. The full system shall be fitted on MS  to direction of sheeting with purlin spacing as  Manufacturer.  cost of all the operations, labour and all materials | |  | |  | |
| applicable) involved such as bolls nuts and screws etc. for cutting bending to required profile, necessary hoisting in position ***etc.*** for proper completion of the work as per specification drawings and direction of Engineer  Finished surface area of roofing fixed over steel tublar be measured for payment. MS tabular frame work shall separately ***for*** payment. | |
|  | | 12.18.1 | | 10= thick | | sqm | | 310100 | |
|  | | 12.182 | | 16mm thick | | sqm | | 3546.00 | |
| 12.19 | | Providing sand stone slab for roofing and laying them in cement mortar 1 : 4 (1 cement : 4 sand) *over* wooden !carries or R.C.C. battens or structural steel sections (Karnes or battens or structural steel sections to be paid separately) including pointing the ceiling joints with cement mortar 1:3(1 cement :3 sand ) complete : | | | |  | |  | |
|  | | 12.19.1 | | Red sand stone slab | |  | |  | |
|  | | 12.19.1.1 | | 40 to 50 mm thick | | sqm | | 441.00 | |
|  | | 12.19.2 | | White sand stone slab : | |  | |  | |
|  | | 12.19.2.1 | | 40 to 50 mm thick | | sqm | | 504.00 | |
| 12.20 | | Painting top of roofs with bitumen of approved quality gj 17Icg per 10 sqm impregnated with a coat of sand at 60 cudm per 1 Dsqm int-frilling cleaning the slab surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil complete : | | | |  | |  | |
|  | | 12.20.1 | | VTith residual type petroleum bitumen of grade VG 10 | | sqm | | 132.00 | |
| 12.21 | | Providing and applying two coals of High Albedo paint having minimum Solar Reflective Index (SRI) 108 (with solar reflectance and 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 be strictly as per mamfacturees specifications and as approved by engineer In charge. Surface preparation includes rimming with metal wire brush to remove all dust, | | | | sqm | | 239.00  Page No.221 | |
| Item  No. | | Description | | | | Unit | | Rate (in  Rs.) | |
|  | |  | | | |  | |  | |
|  | | fungus etc washing with water all complete. The contractor shall give 5 years guanmtee for the perfcananee of SRI and *also* the durability of coaling, all complete as per direction of Engineer-in-charge | | | |  | |  | |
| 12\_22 | | 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 emittmee >0.75 on waterproof and sloped surface of terrace, laid on 20 mm thick Demon sand mortar in the ratio of 1:4 (1 cement : 4 sand) and grouting the joints with mix of white cement and 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 | | 1218.00 | |
| 1223 | | Providing and laying pressed clay tiles (as per approved pattern 20 mm nominal thickness and of approved size) on roofs jointed with cement mortar 1:4 (1 cement • 4 sand) mixed with 2% integral water proofing compound laid over a bed of 20 mm thick cement mortar 1:4 (1 cement : 4 sand) and finished neat complete. | | | | sqm | | 473.00 | |
| 12.24 | | Providing and fixing on roof pressed clay tile (Mangalor tile) 20 mm nominal thickness and of approved size and as per approved pattern on ***stcd*** frame work complete (steel frame work to be paid separately) | | | | **sqm** | | 275.00 | |
| 12.25 | | Providing ***and*** laying on roof pressed clay tile ridge (Mangalore tile) of 20mm thickness of approved pattern on **steel** frame work complete (steel frame work to be paid separately) | | | | sqm | | 155.00 | |
| 12/6 | | Providing gels. 75x75 mm in cement concrete 1:2:4 (1 cement : 2 sand : 4 stone aggregate 10mm and down grade) including finishing with cement mortar 1:3 (1 cement : 3 sand) as per standard design : | | | |  | |  | |
|  | | 12.26.1 | | In 75x75mm deep chase | | meta | | 99.00 | |
| 12/7 | | Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 sand : 4 graded done aggregate of 20 mm nominal size) over P.V.C. sheet lmxlmx400micron, finished with 12mm cement plaster 1:3 (1 cement : 3 sand) and a coat of neat cement rounding the edge and making and finishing the outlet complete. | | | | each | | 156.00 | |
| 12/8 | | 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 10x10x10cm of Cement accrete 1:2:4 mix (1 cement : 2 sand : 4 graded stone aggregate 20 mm nominal size) and cost of cutting holes and making good the walls etc | | | |  | |  | |
|  | | 1228,1 | | 100 mm diameter | | each | | 107.00 | |
|  | | 12.28/ | | 150 mm diameter | | each | | 112.00 | |
| 12,29 | | Providing and fixing sand ***cast*** iron ***rain*** water pipes. | | | |  | |  | |
|  | | 12.29.1 | | 1 100 mm die minimum wall thickness 5mm | | meter | | 871.00 | |

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| Item  No. | Description | | Unit | Rate (in  Rs.) |
|  |  | |  |  |
|  | 12.29.2 | 150 mm dia minimum wall thiclmess 5= | meta | 1081.00 |
| 1230 | Providing lead caulked joints to sand cast iron rain water pipes and fittings : | |  |  |
|  | 1230,1 | 100 mm dia. Pipe | each | 221.00 |
|  | 12.30,2 | 150 mm dia. Pipe | each | 309.00 |
| 12.31 | Providing, fixing and embedding sand cast iron accessories for rain ***water*** pipes in the masonry surrounded with 12 mm thick Demon mortar of the same mix, as that of masonry (lead raulking will be paid for separately) : | |  |  |
|  | 12.31,1 | Sand easel iron bend : |  |  |
|  | 12.31.1.1 | 150 mm diameter | each | 470.00 |
|  | 12.31.12 | 100 mm diameter | each | 383.00 |
|  | 12.31,2 | Sand easel iron plain shoes : |  |  |
|  | 12.31,2,1 | 150 mm diameter | each | 488.00 |
|  | 12.31.22 | 100 mm diameter | each | 412.00 |
| 12.32 | 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 | |  |  |
|  | 12.32.1 | 75 mm diameter (minimum wall thickness 1.8mm) | each | 136.00 |
|  | 12.32.2 | 110 mm diameter (minimum wall Thiclmess 2.2mm) | each | 238.00 |
| 12.33 | Providing and fixing on wall face Unplasticised - PVC moulded fittings/ accessceies 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\_ | |  |  |
|  | 12.33.1 | Coupler |  |  |
|  | 12.33,1.1 | 75 mm (minimum wall thickness 1.8mm) | each | 117.00 |
|  | 12.33,12 | 110 mm (minimum wall thickness 22mm) | each | 154.00 |
|  | 12.33.2 | Single push fit Coupler : |  |  |
|  | 12.33.2.1 | 75 mm (minimum wall thickness 1.8mm) | each | 140.00 |
|  | 12.33.22 | 110 mm (minimum wall thickness 2 2mm) | each | 195.00 |
|  | 12.33,3 | Single tee with door |  |  |
|  | 12.33,3.1 | 75s75s75 mm (minimum wall thickness 1.8mm) | each | 230,00 |
|  | 12.33.32 | 110x110x110 mm (minimum wall thickness 2.2mm) | each | 346.00 |
|  | 12.33.4 | Single tee without door |  | Page No.223 |
| Item  No. | Description | | Unit | Rate (in  Rs.) |
|  |  | |  |  |
|  | 12.33.4.1 | 75x75x75 ram (minimum wall thickness 1.8mm) | each | 201.00 |
|  | 12.33.4.2 | 110x110x110 mm (minimum wall thickness 22mm) | each | 266.00 |
|  | 12.33.5 | Bend 87.5° |  |  |
|  | 12.33,5,1 | 75 mm bend (minimum wall thickness 1,8mm) | each | 117.00 |
|  | 12.33.52 | 110 mm bend (minimum wall thickness 2.2mm) | each | 172.00 |
|  | 12.33.6 | Shoe (Plain) |  |  |
|  | 12.33.6.1 | 75 mm Shoe (minimum wall thickness 1.8mm) | ***each*** | 175.00 |
|  | 12.33.62 | 110 mm Shoe (minimum wall thickness 2.2mm) | each | 300.00 |
| 12,34 | Providing and fixing Unplastieised -PVC pipe clips of approved design to Unplasticised - PVC rain water pipes by means of bombay nail of required length including making good the wall etc, complete, | |  |  |
|  | 12,34,1 | 75 mm (minimum wall thickness 1.8mm) | each | 97.00 |
|  | 12.34,2 | 110 mm (minimum wall thickness 2.2mm) | each | 114.00 |
| 12.35 | Providing and fixing to the inlet mouth of mm water pipe cast iron grating 15 cm diameter and weighing not less than 440 grams. | | each | 43.00 |
| 12.36 | Providing and fixing to the inlet mouth of rain water pipe FINT ***(an*** Engineering Thermoplastic) grating square (Slit) 150 mm square with a height of 8 mm and was not less than 100 gnu. | | each | 95.00 |
| 12,37 | Providing and fixing 100 mm diameter and 60 can long rain water spout in cement mortar 1:4 (1 cement : 4 sand) | |  |  |
|  | 12.37,1 | Stone ware spout | each | 72.00 |
| 12,38 | Providing and fixing thermal insulation of ceiling (under deek insulation) with Resin Bonded Fibre glass wool conforming to IS : 8183 density 24k,g/m% 50mm thick, wrapped in 200 0 Virgin Polythene bags fixed to ceiling with metallic cleats (50x50x3 mm) *(4* 60 can and wire mesh of 12.5mm x 24 gauge wire mesh, for top most ceiling of building. | | sqm | 484.00 |
| 12.39 | Providing and fixing thermal insulation with Resin Bonded Fibre glass wool conframingto IS : 8183, density 164,/m3, 50mm thick, wrapped in 2000 Virgin Polythene bags placed over existing ***false*** ceiling and held in position by criss-crossing GI wire. | | sqm | 259.00 |
| 12.40 | Thermal Insulation of roofing with Expanded polyestyrene fixed with suitable adhesive to the false ceiling ***as* per** the directions of the Engineer-in-charge : | |  |  |
|  | 12.40,1 | With Type N - Normal 50 mm thick | sqm | 233.00 |
|  | 12.40,2 | With Type SE - Self Extinguishing type 50 mm thick | sqm | 271.00  Page No.224 |
| Item  No. | Description | | Unit | Rate (in  Rs.) |
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| 12.41 | Providing and laying roof insulation with 40 mm thick  impervious sprayed, closed cell free Rigid Polyurethane foam over deck insulation Gotha-ming to IS - 12432 Pt. DI (density of foam being 40-45 kg/cum), over a coat of polyurethane primer applied g 6-8 sqm per litre, laying 400 0 polythene sheet ***over*** PUF spray and providing a wearing course of 40 mm thick cement screed 1: 2 : 4 (1 cement : 2  sand : 4 stone aggregate 20 mm nominal size) in chequered rough  finish, in panels of 2.5 mx2.5 m and embedding with 24 G wire  netting and pealing the joints with polymerized mastic, all complete as per direction of Engineer-in-Charge. | | sqm | 1136.00 |
| 12.42 | Providing and firing thermal insulation with Resin Bonded Fthre glass wool conforming to IS: 8183 having density 24 kg./m% 50 mm thick, wrapped in 2000 Virgin Polythene Bags fixed to wall with screw, rowel plug and washers and held in position by trigs crossing GI wire etc. complete as per directions of Engineer-in-Charge. | | sqm | 359.00 |
| 12.43 | Providing and fixing thermal insulation of ceiling (under deck insulation) with Resin Bonded Rockwool conforming to IS: 8183. density 48 kg/ m3, 50 mm thick, wrapped in 200 0 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 | 574.00 |
| 12.44 | Providing and fixing thermal insulation with Resin bonded rock wool conforming to IS: 8183, density 48 kgim3, 50 mm thick, wrapped in 200 0 virgin Polythene bags placed ***over*** existing false ceilng and held in position by miss- crossing GI wire. | | sqm | 444.00 |
| 12.45 | Providing and fixing thermal insulation with Resin Bonded rock wool conforming to IS: 8183, having density 48 kg/m. 50 mm thick,wrapped in 200 0 Virgin Polythene Bags fixed to wall with screw, rawl plug and washers and held and in position by cries tossing CH wire etc. complete as per directions of Engineer-in-Charge. | | sqm | 448.00 |
| 12.46 | 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 gmsfsgm (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 and 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 0.I. intermediate channel with connecting dips made out of 2.64 mm dia x 230 mm long al. 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 !awl plugs at 450 mm centre, with 25mm long dry wall screws 4230 mm interval, including | |  |  |

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| Item  No. | Description | | Unit | Rate (in  **Rs.)** |
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|  | fixing of ceiling section of size 3.5x25mm to a flush jointing compound for light fittings, channels suitably direction of | 10mm thick plaster of Paris (gypsum anhydrous) sheet to  and perimeter channels with the help of dry wall screws  at 230mm interval including jointing and finishing  finish of tapered and square edges of POP board with  (POP paste) including the cost of making openings  grills, diffusers cutouts made with frame of perimeter  fixed all complete as pa drawing, specifications and |  |  |
| the Engineer-in-chargc. |
|  | 12.46.1 | Flat surfaces | sqm | 676.00 |
|  | 12.46.2 | Curved surfaces | sqm | 748.00 |
| 12.47 | Extra for any sunk or raised mouldings in the plaster of Paris (Gypsum anhydrous) ceiling | | sqm | 175.00 |
| 12.48 | Extra for providing in the plaster of Paris (Gypsum anhydrous) ceiling above 5 metre hight from floor level. | |  | 59.00 |
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|  |
| 12.49 | 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 grasisqm (both side inclusive) as pa 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 die x 50mm long with 6mm die bolts other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts and 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 ca&c 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 cadre to cadre, 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 *g* 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 etc, including jointing and finishing to a fish finish of tapered and square edges of the board with recommended jointing compound , jointing tapes , finishing with jointing compound in 3 layers covering upbi 150 mm or both sides of joint and two coats of primer suitable for board, all as per manufacturer's speeffic.ation and also including the cost of making openings for light fittings, grills, diffuses, cutouts made with flame 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 | |  |  |
|  | 12.49.1 | 12.5 mm thick tapered edge gypsum plain board  conforming to LS: 2095- Part I. | sqm | 750.00 |

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| Item  No. | Description | | Unit | Rate (in  Rs.) |
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|  | 12.49.2 | 12.5 = thick tapered edge gypsum fire resistant board conforming to IS: 2095- Part I. | sqm | 866.00 |
|  | 12.49,3 | 12,5 mm thick tapered edge gypsum moisture resistant board\_ | Km | 920.00 |
|  | 12.49.4 | 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 Engineer­in-charge and as per manufactunx's specification, with all 4 side tapered and backed by acoustical tissue with NRC value not less than 0.60. | sqm | 1677.00 |
| 12.50 | Providing 595x595 mm grid of hot gsm/sqm, suitably spaced made from to center (minimum) center to odder "T" of length (minimum) panel to form mm and laying including, like diffiisers, "T' runners size 27 x 37 mm long butterfly level to center sections shall heights as ahailte. | and fixing tiled false ceiling of approved materials of size  in true horizontal level suspended on inter locking metal  dipped galvanized deal sections (galvanized @ 120  both side inclusive) consisting of main 'I' runner with  joints to get required length and of size 24x38mm  0.30mm thick (minimum) sheet, spaced at 1200mm caner  and cross 1"T` of size 24x25mm made of 0.30mm thick  sheet, 1200mm long spaced between main nr, at 600mm  to form a grid of 1200x600 mm and secondary cross  600mm and size 24x25mm made of 0.30 mm thick  sheet to be interlocked at middle of the 1200x600mm  grids of 600x600mm and wall angle of size 24x24x0.3  false ceiling tiles of approved texture in the grid  wherever, required, cutting/making, opening for services  grills, light fittings, fixtures, smoke detectors etc. Main  to be suspended from ceiling using GI slotted cleats of  x 25 x1.6 x mm fixed to ceiling with 12.5 mm die and 50  dash fasteners, 4mm GI adjustable rods with galvanised  clips of size 85 x 30 x 0.8 rem spaced at 1200mm center  along main T, bottom exposed width of 24 mm of all T-  be pre-painted with polyester paint, all complete for all  per specifications drawings and as directed by Engineer-in- |  |  |
|  |
|  | 12.50,1 | GI Metal Coaling Lay in plain miaolook edge Global  white color tiles of size 595x595 mm, and 0 5mm thick with 8mm drop; made of 0 I sheet having galvanizing of 100 gms/sqm (both sides inclusive) and electro statically polyester powder coated of thickness 60 microns (minim\*, including factory painted after bending. | sqm | 1431.00 |
|  | 12.50.2 | GI Metal Ceiling Lay in perforated microlook edge global white color tiles of size 595x595 mm and 0 5mm thick with 8mm drop; made of GI shed having galvanizing of 100 gros/sqm (both sides inclusive) and 20% perforation area with 1.8mm die 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 | 1553.00  Page No.227 |
| Item  No. | Description | | Unit | Rate (in  Rs.) |
|  |  | |  |  |
|  | 12.50.3 | 12.5 mm thick square edge PVC Laminated Gypsum Tile of size 595x595mm, made of Gypsum plasterboard; manufactured from natural gypsum as pa IS 2095 part I and laminated with white 0,16mm thick fire retardant PVC film on the face side and 12micron metalized polyester at 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 metalizcd polyester film so *as* to make the tile a completely sealed unit. | sqm | 1004.00 |
|  | 12.50.4 | 12.5 mm thick fully Perforated Gypsum Board tile made from plasterboard having glass fibre confiarming to IS: 2095 part I , of size 595x595 mm, having perforation of 9.7x9.7 = at 19.4 mm c/c with center borders of 48 mm and the side borders of 30 mm, backed with non woven tissue **Oa** the back side, having **an** NRC ( Noise Reduction Coefficient) of 0,79, with 50 mm resin bonded glass wool backing. | sqm | 1047.00 |
| 12.51 | Providing friendly light approved 595 mm in of hot dipped sqm including at joints to 033 mm thick  nr, | and Fixing 15 mm thick clarified tcgular edged eco  weight calcium silicate false ceiling tiles of texture spintonc/cosmos / Hen or equivalent of size 595 x true horizontal level suspended on inter locking metal grid  galvanised steel **g006041/3** (galvanising ® 120 grams per  both side) consisting of main T runner suitably spaced get required length and of size 24x38mm made from  (minima\* sheet, spaced 1200mm centre to centre, and of size 24x28mm made out of 0.33mm (Minimum) sheet,  spaced between main T at 600mm centre to centre to  of 12003/600mm and secondary cross T of length 600mm  24 x28mm made of 0 33mm thick (Minimum) sheet to be  at middle of the 1200x 600mm panel to from grid of size  resting on periphery walls /partitions on a Perimeter wall  coated steel of size 24x24X3000 mm made of 0.40 (minim\* sheet with the help of rawl plugs at 450mm  with 25mm long dry wall screws ig 230mm interval 15mm thick densified edges calcium silicate ceiling tiles of  (Spintone /fine tissured and finhole/ Cosmos/hen) in  cutting/ making opening for services like diffusers, fittings, fixtures, smoke detectors etc., whenever required,  to be suspended from ceiling using GI slotted cleats  fixed to ceiling with 12 5 mm die and 50mm fisteners, 4mm GI. adjustable rods with galvanised steel of size 85 x 30 x 0.8 mm, spaced at 1200mm centre to  main T , bottom exposed with 24mm of all T-scctions  with polysfer baked paint, for all heights, as per  drawings and as directed by engineer-in- charge.  calcium silicate false ceiling area will be measured from  No deduction shall be made for exposed frames/opening having area less than 0 30 smaThe calcium silicate ceiling  NRC value of 0,50 (Minimum), light reflection > 85%,  as per B.S. 476 part IV, 100% humidity resistance  thermal conductivity <0,043 w/m 0 RC.  of size 25x35x1.6mm | sqm | 1612.00 |
| no  1200mm long form a grid and size inter locked 600x600mm, angle pre-  mm thick  centre to centre and laying approved texture the grid including, grills,light  Main T runners  long dash level clips centre along shall be pre-painted specifications, Note :- Only wall to wall. (cut outs) tile shall have **DIM** combustible and also having |

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| **Item** No. | **Description** | | **Unit** | **Rate (in** Rs.) |
|  |  | |  |  |
| 12.52 | Providing and fixing GI Clip in/swing down Metal Ceiling System of 600x600 nmi module which includes providing and fixing 'C' wall angle of size 20x30x2Omm made of 0.5mm thick pre painted steel **along the perimetv of the room with help of nylon sleeves and wooden screws at 300mm center to centre, suspending the main C carrier of size 10238alinnm made of GJ steel 0 7 mm thick from the soffit with help of soffit cleat 37x27x25x1.6 mm, raw/ plugs of size 38x12 mm and C carrier suspensirm clip and main carrier bracket at 1000mm etc, Inverted triangle shaped Spring Tee having height of** 24 mm and width of 34mm made of GI steel 0.45 mm thick is **then fixed to the main C conier and in direction perpendicular to it at 600mm centers with help of suspension brackets. Wherever the main C carrier and spring T have to join, C carrier and spring T ccamectors have to be used All sections to be galvanized @ 120 g;msfsqm (both side inclusive) Fixing with clip in/swing down tiles into spring** T with : | |  |  |
|  | **12.52.1** | **GI Metal Ceiling Clip in /swing down plain Beveled edge global white color tiles of size 600x600 and 0 5mm thick with 25mm height, made of 0 I sheet having galvanizing of 100 gmsisqm (both sides inclusive) and elccstro**  **statically polyester powder coated of thickness 60**  **microns (minimum), including factory painted aftcr  bending.** | **sqm** | **1748.00** |
|  | **12.52,2** | **GI Metal Ceiling Clip in (swing down plain** Beveled **edge global white color tiles of size 600x600 and 0 5mm thick with 25mm height, made of G I sheet having galvanizing of 100 gmsfsqm (both sides inclusive) and 20% perforation area with 1.8mm dia holes and having NRC of 0,5, electro stAirally polyester powder coated of thickness 60 microns (minimum), including factory painted aftcr bending and perforation.** | **sqm** | **1975.00** |
| **12.53** | **Providing and flaring 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** "r **nmncr with suitably spaced joints to get required length and of size 24x38 mm made from 030 mm thick (minimami) sheet, spaced at 1200 ram caner to caner** and cross "r' **of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main** "r **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) shed to be interlocked at middle of the 1200x600 mm panel to them 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 diffusens, grills, light fittings, fixtures, smoke detectors etc. Main** "r **runners to be suspended from ceiling using GI slotted cleats of** size **27 x 37 x25 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 a 30 a 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** | |  |  |

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| **Item  No.** | **Description** | | **Unit** | **Rate (in  Rs.)** |
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|  | **polyester paint, all complete for all heights as per specification, drawings and as directed by Engineer-in-chargc.** | |  |  |
|  | **1253,1** | **8 mm thick fully perforated calcium silicate board made with Calcareous and 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**  **,** | **sqm** | **1255.00** |
| **10 mm with minimum palmated area 18 % with non woven tissue on the back side, having an NRC ( Noise Reduction Coefficient) of 015, with 50 mm thick rockwool of 48 kg /cum backing,** |
| **12,54** | **Providing and fixing false ceiling at all height including providing and fixing of framework made of special section, power pressed from M.S. sheets and galvanised with zinc coating of 120 gins/ 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 bolls, other flange of cleat fixed to the angle hangers of 25 x10 x0.50mm of required length with nuts and bolts of required size and other end of angle hanger fixed with intermediate G.I ethAnels 45 x15 x 0.90mm running at the spacing of 1200 man** *de,* **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 GI intermediate channel with ommectin,g clip made out of 2.64= dia x 230mm long** *GI* **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 g 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 de, including jointing and 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 mamifactme's specification and also including the cost of making opening for light fittings, grills, diffusers, cut outs made with frame of perimeter channels suitably fixed, all complete as pa drawings, specificaton and direction of the Engineer in charge but excluding the cost of painting with:** | |  |  |
|  | **12.54.1** | **8 mm thick Calcium Silicate Board made with Calcareous and Siliceous materials reinforced with cellulose fiber manufactured through autoclaving process.** | **sqm** | **944.00** |
| **12.55** | **Providing and fixing insulating board ceiling of approved quality with necessary nails etc. complete (frame work to be paid separately) :** | |  |  |
|  | **12.55.1** | **Natural colour insulating board** |  |  |
|  | **12.55.1,1** | **12 mm thick** | **sqm** | **550.00** |

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| Item  No. | Description | | Unit | Rate (in  Rs.) |
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|  | 12.55.2 | White face insulating board |  |  |
|  | 12,55,2,1 | 12 mm thick | sqm | 614.00 |
|  | 12.55,3 | Flame retardant face insulating board |  |  |
|  | 12.55.3.1 | 12 =thick | sqm | 614.00 |
| 12.56 | Providing and fixing fiat 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) : | |  |  |
|  | 12.56.1 | 12 mm thick | sqm | 633.00 |
| 12.57 | Providing and fixing plain Muhipurpose Cement board ( High Pressure steam cured ) as pa IS : 14862, with suitable screws for fibre cement board in ceiling *etc.* complete (frame work to be paid eparately) : | |  |  |
|  | 1257,1 | 6 mm thick cement board | sqm | 428.00 |
| 12.58 | Extra for Circular cutting and wastages in ceiling with: | |  |  |
|  | 12.58.1 | Natural colour insulating board |  |  |
|  | 12.58.1.1 | 12 mmthick | meter | 150.00 |
|  | 12.58.2 | White face insulating board: |  |  |
|  | 12.58.2.1 | 12 mm thick | meta | 158.00 |
|  | 12.58,3 | Flame retardant face insulating board: |  |  |
|  | 12.58.3.1 | 12 mmthick | meter | 158.00 |
| 12,59 | Extra for providing and fixing ceiling to curved surfaces in narrow widths | | sqm | 100.00 |
| 12.60 | Providing and fixing false ceiling with 12 mm thick plain/ semi perforated or with design ceiling tiles of HWP type phenol formaldehyde synthetic rain bonded pressed particle board conforming to IS:3087, finished with a coat of aluminium primer on both sides and 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 xl5x1.5 mm size main runners and cross nmncrs 23.5x19x1 5 mm fixed to main runners placed 600 mm centre to cadre beds ways so as to form a grid of 600 mm square. The flame walk shall be uspended from ceiling by level adjusting hangers of 6 mm dia MS 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* SCUMS** and applying a priming coat of zinc chromate yellow prima (aluminium frame work shall be paid separately). | | sqm | 667.00 |

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| **Item  No.** | **Description** | **Unit** | **Rate (in  Rs.)** |
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| **12.61** | **Extra for providing 3 mm thick translucent white acrylic plastic sheets of approved quality m false ceiling instead of 12 mm thick plain or design particle board ceiling tiles.** | **sqm** | **430.00** |
| **12,62** | **Providing and fixing of Mineral Fibre Acoustical Suspended Ceiling System with 16mm thick Molar edge tiles of size 595x595mm as approved by Engineer-in-charge, in true horizontal level suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 120 gsm/sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38mm made from 0.30mm thick (minimum) shed, spaced at 1200mm center to center and cross "T" of size 24x25mm made of 030mm thick (minimum) shed, 1200mm long spaced between main "T" at 600mm center to center to form a grid of 1200x600 mm and secondary cross "V' of length 600mm and size 24x25mm made of 030 mm thick (minimum) sheet to be interlocked at middle of the 1200x500mm panel to form grids of 600x600mrn and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture m the grid including, wherever, required, cutting/making, opening for services like diffusers, grills, light fittings, Mantras, smoke detectors etc. Main "T" rumens to be suspended from ceiling using GI slotted cleats of size 27x37x25x1.6 x mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4= GI adjustable rods with galvanised butterfly level clips of size 85x30x0.8 mm spaced at 1200mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, an complete for all heights as per specifications drawings and as directed by Engineer-in-charge.**  **The tiles should have Humidity Resistance (RH) of 99%, NRC 0.5, Light Reflectance ?83%, 'Thermal Conductivity k — 0.052 - 0.057 w/m K, Colour White, Fire Performance UK Class 0 / Class 1 (BS 476 pt -6 and?) in module size of 600 x 600 x 16mm with Bio Block coating on the face of the tile, suitable for Green Building application, with Recycled content of 38 - 41%. The Tile and Grid system used together should carry a 15 year warranty.** | **sqm** | **1843,00** |
| **12,63** | **Providing and fixing of Mineral Fibre Acoustical Suspended Coaling System with 16mm thick microlook edge tiles of size 595x595= as approved by Engineer-in-charge, in true horizontal level suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized (@ 120 gsm/sqm, both side inclusive) consisting of main** nr, **runner with suitably spaced joints to get required length and of size 15x38mm made from 0.30mm thick (minimum) shed, spaced at 1200mm center to center and cross "T" of size 24x25mm made of 030= thick (minimum) shed, 1200mm long spaced between main "T" at 600mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600mm and *size* 24x25mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600mm panel to form grids of 600x600mm and wall angle of size 24x24x0.3 mm and *laying* false ceiling tiles of approved texture in the grid including, wherever, 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 27x37x25x1.6 x mm fixed to ceiling with 12.5 mm dia** | **sqm** | **2009,00** |

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| Item  No. | Description | Unit | Rate (in  Rs.) |
|  |  |  |  |
|  | and 50 mm long dash fasteners, 4mm GI adjustable rods with galvanised but/taffy level clips of size 85x30x0.8 = spaced at 1200mm center to center along main T, bottom exposed width of 24 mm of all T-seclions shall be pre-painted with polyester paint, an complete for all heights as per specifications drawings and as directed by Engineer-in-charge.  The tiles should have Humidity Resistance (RH) of 99%, NRC 0.5, Light Reflectance ?83VG, Thermal Conductivity k — 0.052 - 0.057 w/m K, Colour White, Fire Performance UK Class 01 Class 1 (BS 476 pt -6 and7) in module size of 600 x 600 x 16mm with Bio Block coating on the face of the tile, suitable for Green Building application, with Recycled content of 38 - 41%. The Tile and Grid system used together should carry a 15 year warranty. |  |  |
| 12,64 | Providing and fixing of Glass fiber Acoustical Suspended Ceiling System with 16mm thick legular edge tiles of size 595x595mm as approved by Engineer-in-charge, in true horizontal level suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 120 gsm/sqm, both side inclusive) consisting of main ET, runner with suitably spaced joints to get required length and of size 24x38mm made from 0.30mm thick (minimum) sheet, spaced at 1200mm center to center and cross "T" of size 24x25mm made of 030= thick (minimum) sheet, 1200mm long spaced between main "T" at 600mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600mm and size 24x25mm made of 030 mm thick (minimum) sheet to be interlocked at middle of the 1200x600mm panel to form grids of 600x600mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, wherever, required, cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "I'" runners to be suspended from ceiling using GI slotted cleats of size 27x37x25x1.6 x mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4mm GI adjustable rods with galvanised butterfly level clips of size 85x30x0.8 mm spaced at 1200mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, an complete for all heights as per specifications drawings and as directed by Engineer-in-charge.  The tiles should have Humidity Resistance (RH) of 99%, NRC 0.5, Light Reflectance ?83%, Thermal Conductivity k= 0,052 - 0.057 w/m K, Colour White, Fire Performance UK Class 01 Class 1 (BS 476 pt -6 and7) in module size of 600 x 600 x 16mm with Bio Block coating on the face of the tile, suitable for Green Building application, with Recycled content of 38 - 41%. The Tile and Grid system used together should carry **a** 15 year warranty. | sqm | 2461.00 |
| 12.65 | Providing and fixing of Glass Fiber Acoustical Suspended Ceiling System with 16mm thick microlook edge tiles of size 595x595mm as approved by Engineer-in-charge, in true horizontal level suspended on inter locking metal grid of hat dipped galvanized steel sections (galvanized @ 120 gsrescim, both side inclusive) consisting of main **"T"** runner with suitably spaced joints to get required length and of size 15x38mm made from 0,30mm thick (minimum) sheet, spaced at 1200mm center to center and cross "T" of size 24x25mm made of | sqm | 2598.00 |

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| Item  No. | Description | Unit | Rate (in  Rs.) |
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|  | 0.30= thick (mininnim) sheet 1200mm long spaced between main "T" at 600mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600mm and size 24x25mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600mm panel to form grids of 600x600mm and wall angle of size 24x24x0,3 mm and laying false ceiling tiles of approved texture in the grid including, wherever, required, cutting/making, opening for services like diffusers, grills, light fittings, factures, smoke detectors etc. Main "1' runners to be suspended from ceiling using GI slotted cleats of size 27x37x25x1 6 x mm fixed to ceiling with 12.5 mm die and 50 mm long dash fasteners, 4mm GI adjustable rods with galvanised butterfly level clips of size 85x30x0.8 mm spaced at 1200mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pm-painted with polyester paint, all complete for all heights as per spedfications drawings and as directed by Engineer-in-charge  The tiles should have Humidity Resistance (RH) of 99%, NRC 0.5, Light Reflectance ?83%, Thermal Conductivity k = 0,052 - 0.057 w/m K, Colour White, Fire Performance UK Class 0 / Class 1 (BS 476 pt -6 and7) in module size of 600 x 600 x 16mm with Bio Block coating on the face of the tile, suitable for Green Building application, with Recycled content of 38 - 41%. The Tile and Grid system used together should carry a 15 year warranty. |  |  |
| 12.66 | Providing and Firing colour coated profile sheet of minimum 1015 mm effective cover width and nominal 28 5 mm deep **ribs** with subtle square fluting in the five pan at nominal 203 mm centre-to-centre. The end rib shall be designed for anti-capillary action, to avoid any seepage of water through the lateral overlap. The profile sheet of 0 5 mm thick, Eli-strength steel with min, 550 Iv1Pa yield straurdi, metallic hot dip coated with Aluminium-Zino alloy (55% Aluminium, 45% Zinn) as per AS 139? - Zinnahune AZ150 (Mn\_ 150 gmegetral total on both sides) with steel quality paint coat. The paint shall have a total coaling thickness of nominal 35 um, comprising of nominal 20 p.m exterior coot ou top mince sad nominal 5 pm reverse coat cm back surface over nominal S trm primer coat on both outface. The sheet shall have brand marking of the manuEsztm-er giving product details on the back of the sheet at ***every 1*** meter We for confirming genuinity of the material The sheet shall be | Sqm | 712.00 |
| fixed using self drilling /self tapping screws of size (5 5x 55mm) with RPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces excluding the cost of purling, rafters and trusses and including cutting to size and shape wherever required. |
| 12.67 | Providing and fixing of un-perforeted Aluminium panel ceiling of approved colour consisting of panel 300mm wide x 30 mm deep x 0 7mm ***thick*** with bevel ***edge,*** panel length up to 6 mar, Coil Coated on a Continuous Paint Line, Double baked and roll formed from enamelled corrosion resister= aluminium alloy AA 3005 (AL Mg) for higlur strength and good roll forming characteristics. The Panels shall about each caber with a narrow V grove. Panel shall be clipped to a baked enamelled aluminium panel carrier of 41 Smm wide x 62mm deep r 0 95mm thick in standard length of 5 mtr made of doubled baked black enamelled aluminium alloy AA 5050 (AL Mg) with out ouch to hold the panels in a module of 300mm closed at a distance 24 rear Panel carrier | semi | 4898.00 |
| shall be suspended by moans of G.I. nispenaiem **rod** 4mm diameter and a  Galvanised suspausion spring clip at a distance of 1.7 mir c/c. |

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| Item  No. | Description | | Unit | Rate (in  Rs.) |
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|  | Paint Finish; Aluminium panels shall be climmatisal fur maximum bond between metal and paint, enamelled twice under high temperature, one side with a full prima and finish coat tic other side (inner side) with a primer coating and Skin Coat on a Continuous Paint Line. | |  |  |
| 12.68 | Aluminium Magnesium Alloy metal ceiling of approved colour consisting of panel 300m wide x 30mm deep x 0 7rom thick with bevel edge having panel length upto 6 Mtrs. coil coated on a contimmus paint line. Double baked and roll famed for higher straight and good roll forming characteristics. The panel ends are raised upto 29mm\_ The panel about each other with a narrow 11/' groove. Palle shall be clipped to a baked enamelled ahmiinium panel carrier of 41 5mm wide x 62mm deep x 0.95mm thick in atendard length of 5 Mtm made of double baked enamelled aluminium magnesium alloy AA3005 black with cut outs to hold panels module pf 300mm and at distance of 2.4 mtrs. the carrier shall be suspended by means of GI suspension rod 4mm diameter and suspension clip at 1.3 nitr distance.  Paint Finish: Aluminium panels shall be dramatised for maximum bond between metal and paint, enamelled twice under high temperature one side with full prima and Luxacote finish, the other side (inner side) with a primer coat and skin **COSI** on aContimmus Paint Line. | | sqm | 5277.00 |
| 12.69 | Providing and fixing expanded polyestrene (thermacol) false ceiling (frame work to be paid separately) : | |  |  |
|  | 12.691 | With Type N - Nca-mal 50 mm thick | sqm | 230.00 |
|  | 12.69.2 | With Type SE - Self Extinguishing type 50 mm thick | sqm | 270.00 |
| 12.70 | Providing and fixing fake ceiling with fabric costing upto 70/- per metre, fixing with nail etc (frame work and beading to be paid separately). | |  | 97.00 |
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| Item  No. | Description | | | Unit | Rate (in Rs.) |
|  |  | | |  |  |
| 13.1 | 12mm cement plaster of mix. | | |  |  |
|  | 13.1.1 | | 1:4 (1 cement: 4 sand | Sqm | 123.00 |
|  | 13.1.2 | | 1:6 (1 cement: 6 sand) | Sqm | 110.00 |
| 13.2 | 15 mm cement plaster on rough side of single or half brick wall of mix : | | |  |  |
|  | 13.2.1 | 1:4 (1 cement: 4 sand) | | Sqm | 143.00 |
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|  |  |  | |  |  |
|  | 13.2.2 | 1:6 (1 cement: 6 sand) | | Sqm | 128.00 |
| 13.3 |  | 20 mm cement plaster of mix : | | Sqm | 175.00 |
|  | 13.3.1 | 1:4 (1 cement: 4 sand) | | Sqm | 156.00 |
|  | 13.3.2 | 1:6 (1 cement: 6 sand) | |  |  |
| 13.4 | 12 mm cement plaster finished with a floating coat of neat cement of mix:  neat cement. | | |  |  |
|  | 13.4.1 | 1:3 (1 cement : 3 sand) | | Sqm | 164.00 |
|  | 13.4.2 | 1:6 (1 cement : 6 sand) | | Sqm | 151.00 |
| 13.5 | 15 mm cement plaster on rough side of single of half brick wall finished with a floating coat of neat cement of mix:  cement of mix:  neat cement on the rough side of single or half brick wall. | | |  |  |
|  | 13.5.1 | 1:3 (1 cement : 3 sand) | | Sqm | 186.00 |
|  | 13.5.2 | 1:4 (1 cement: 4 sand) | | Sqm | 171.00 |
| 13.6 | 18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement: 5 sand) finished with a top layer 6mm thick cement plaster 1:4 (1 cement: 4 sand)  (1 cement: 6 fine sand). | | | Sqm | 171.00 |
| 13.7 | 18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement: 5 sand) and a top layer 6mm thick cement plaster 1:3 (1 cement: 3 sand) finished rough with sponge. | | | Sqm | 183.00 |
| 13.8 | 6 mm cement plaster of mix : | | |  |  |
|  | 13.8.1 | 1:3 (1 cement : 3 sand) | | Sqm | 96.00 |
| 13.9. | 6 mm cement plaster 1:3 (1 cement: 3 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 | 130. |
| 13.10 | Neat cement punning | | | Sqm | 30.00 |

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| Item  No. | Description | | | Unit | Rate (in Rs.) |
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| 13.11 | Rough cast plaster upto 10m height above ground level with a mixture of sand and gravel or crushed stone from 6mm to 10mm nominal size dashed over and including the fresh plaster in two layers, under layer 12mm cement plaster 1:4 (1cement: 4sand) and top layer 10mm cement plaster 1:3 (1cement:3 sand) mixed with 10% finely grounded hydrated lime by volume of cement. | | |  |  |
|  | 13.11.1 | Finished with ordinary cement. | | Sqm | 296.00 |
| 13.12 | Pebble dash plaster upto 10m height above ground level with a mixture of washed pebble or crushed stone 6mm to 12.5mm nominal size dashed over and including fresh plaster in two layers under layer 12mm cement plaster 1:4 (1cement: 4 sand) and top layer 10mm cement plaster with cement mortar 1:3 (1cement: 3 sand) mixed with 10% finely grounded hydrated lime by volume of cement.  volume of cement. | | | Sqm | 284.00 |
| 13.13 | Providing sand faced plaster to concrete or brick masonry surfaces in all positions in two coats, base coat of 13 mm thick in cement mortar 1:4 (1 cement : 4 sand), clearing the surface by combing it and finishing coat of 8 mm. thick in cement mortar 1:3 (1 cement: 3 sand) and surface taking out grains by mechanical arrangement by with cost of all material, labour, and T & P including all lead, lift and scaffolding etc. complete. | | | Sqm | 314.00 |
| 13.14 | 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 | 79.00 |
| 13.15 | 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 | 27.00 |
| 13.16 | Extra for plastering on circular work not exceeding 6 m in radius: | | |  |  |
|  | 13.16.1 | | In one coat | Sqm | 11.00 |
|  | 13.16.2 | | In two coat | Sqm | 18.00 |
| 13.17 | Extra for plastering done on moulding cornices or architraves including neat finish to line and level: | | |  |  |
|  | 13.17.1 | | In one coat | Sqm | 158.00 |
|  | 13.17.2 | | In two coat | Sqm | 260.00 |
| 13.18 | Extra for plastering : | | |  |  |
|  | 13.18.1 | | Spherical ceiling | Sqm | 42.00 |
|  | 13.18.2 | | Groined ceiling | Sqm | 47.00 |
|  | 13.18.3 | | Flewing soffits | Sqm | 28.00 |

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| Item  No. | Description | | Unit | Rate (in Rs.) |
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| 13.19 | Washed stone grit plaster on exterior walls of height upto 10 M. above level in two layers, under layer 12mm cement plaster 1:4 (1 cement: 4 sand ) furrowing the under layer with scratching tool, applying cement slurry on the under layer @ 2 Kg of cement per square metre top layer 15mm cement metre, plaster 1:1/2:2 (1 cement: 1/2 sand : 2 stone chipping 10mm 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 | 378.00 |
| 13.20 | 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 :volume of cement. | |  |  |
|  | 13.20.1 | 15 mm wide and 15 mm deep groove | Metre | 23.00 |
|  | 13.20.2 | 20 mm wide and 15 mm deep groove | Metre | 24.00 |
| 13.21 | Extra for washed grit plaster on exterior walls of height more than 10m from  ground level for every additional height of 3 m or part thereof. | | Sqm | 67.00 |
| 13.22 | Extra for washed stone grit plaster on circular work not exceeding 6m in  radius (in two coats). | | Sqm | 36.00 |
| 13.23 | Forming groove of uniform size from 12x12mm and upto 25x15mm in plastered surface as per approved pattern using wooden battens, nailed to the under layer including removal of wooden battens, repairs to the edges of  plaster panel and finishing the groove complete as per specifications and  direction of the Engineer-in-Charge. | | Metre | 69.00 |
| 13.24 | Extra for using white cement in place of ordinary cement in the top layer of the item of washed stone grit plaster. | | Sqm | 124.00 |
| 13.25 | 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 | 161.00 |
| 13.26 | Extra for addition of synthetic polyester triangular fibre of length 6mm, effective diameter 10-40 microns and specific gravity of 1:34, to 1.40 in cement plaster/mortar by using 125gms. 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 cement | 64.00 |

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| Item  No. | Description | | | Unit | Rate (in Rs.) |
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| 13.27 | Providing & fixing chicken mesh as per ISI specification and in the required with 50mm long Bombay nails on vertical and horizontal junctions of RCC and brick wall including scaffolding and all lead and lift etc. complete before plastering upt 10 meter height. | | | Sqm | 62.00 |
| 13.28 | 12mm thick plain cement mortar bands in cement mortar 1:4 (1 cement: 4 sand) | | |  |  |
|  | 13.28.1 | | Flush Band | Cm per metre | 2.10 |
|  | 13.28.2 | | Sunk Band | Cm per metre | 2.25 |
|  | 13.28.3 | | Raised Band | Cm per metre | 2.50 |
|  | 13.28.4 | | Moulded Band | Cm per metre | 4.00 |
| 13.29 | 18m thick plain cement mortar bands in cement mortar 1:4 (1 cement: 4 sand) | | |  |  |
|  | 13.29.1 | | Flush Band | Cm per metre | 2.65 |
|  | 13.29.2 | | Sunk Band | Cm per metre | 2.85 |
|  | 13.29.3 | | Raised Band | Cm per metre | 3.20 |
|  | 13.29.4 | | Moulded Band | Cm per metre | 5.50 |
| 13.30 | 18mm thick moulded cement mortar band in two coats under layer 12mm thick with cement mortar 1:5 (1 cement : 5 sand) top layer 6mm thick with cement mortar 1:4 (1 ement : 4 sand) | | | Cm per metre | 5.40 |
| 13.31 | Pointing on brick work or brick flooring with cement mortar 1:3 (1 cement : 3 sand) | | |  |  |
|  | 13.31.1 | Flush/Ruled/struck/ or weathered pointing | | Sqm | 70.00 |
|  | 13.31.2 | Raised and cut pointing | | Sqm | 112.00 |
| 13.32 | Pointing on stone work with cement mortar 1:3 (1 cement : 3 sand) | | |  |  |
|  | 13.32.1 | Flush/Ruled/ pointing | | Sqm | 96.00 |
|  | 13.32.2 | Raised and cut pointing | | Sqm | 172.00 |
| 13.33 | Raised and cut pointing on stone work in white cement mortar 1:3 (1 white cement : 3 marble dust) | | | Sqm | 196.00 |
| 13.34 | Pointing on stone slab ceiling with cement mortar 1:2 (1 cement : 2 sand) | | |  |  |
|  | 13.34.1 | Flush/Ruled pointing | | Sqm | 56.00 |

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| Item  No. | Description | | | Unit | Rate (in Rs.) |
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| 13.35 | 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 | 5.00 |
| 13.36 | Providing and fixingbroken glass in cement mortar 1:3 including cost of mortar, over compound walls. | | | Sqm | 139.00 |
| 13.37 | Providing and fixing writing board green writing with chalk (regular modified polyster coared steel surface) of size. | | |  |  |
|  | 13.37.1 | | Size 1200mmx18000mm | Each | 7436.00 |
|  | 13.37.2 | | Size 1200mm x2400mm | Each | 9730.00 |
|  | 13.37.3 | | Size 1200mmx3000mm | Each | 12126.00 |
| 13.38 | Providing and applying plaster of paris putty of 2mm thickness over plastered surface to prepare the surface even and smooth complete. | | | Sqm | 77.00 |
| 13.39 | Providing and applying plaster of paris pumming of 10 mm average thickness over plastered surface to prepare the surface even and smooth complete. | | | Sqm | 130.00 |
| 13.40 | Extra for lining out plaster to imitate stone or concrete block walling. | | | Sqm | 25.00 |
| 13.41 | Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, like birla white/ JK white or equivalent, over the plastered wall surface to prepare the surface even and smooth i/c all cost of material, labour and scaffold etc. in all position complete. | | | Sqm | 74.00 |
| 13.42 | Providing and applying special putty in two coats based materials varnish, Belgium chalk, turpentile oil, white paint,shafeda including sand papering for making the surface smooth for applying any or vinyl paints including all cost of material and labour etc complete. | | | Sqm | 52.00 |
| 13.43 | White washing with lime to give an even shade: | | |  |  |
|  | 13.43.1 | New work (three or more coats) | | Sqm | 10.70 |
| 13.44 | Colour washing such as green, blue or buff to give an even shade: | | |  |  |
|  | 13.44.1 | New work (two or more coats) with a base coat of white washing with lime | | Sqm | 14.75 |
|  | 13.44.2 | New work (two or more coats) with a base coat of washing | | Sqm | 14.40 |
| 13.45 | Distempering with dry distemper of approved brand and manufacture (two or more coats) and of required shade on new work, over and including priming coat of whiting to give an even shade. | | | Sqm | 46.90 |

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| Item  No. | Description | | | | | | | Unit | Rate (in Rs.) |
| 13.46 | Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface: | | | | | | |  |  |
|  | 13.46.1 | Water thinnable cement primer. | | | | | | Sqm | 24.00 |
| 13.47 | Distempering with oil bound wasable distemper of approved brand and manufacture to give an even shade. | | | | | | |  |  |
|  | 13.47.1 | | New work (two or more coats) over and including water thinnable priming coat with cement primer. | | | | | Sqm | 60.00 |
| 13.48 | Distempering With 1St Quality acrylic distemper (ready mixed) of approved manufacturer of required shade and colour complete as per manufacturer`s specification . | | | | | | |  |  |
|  | 13.48.1 | | Two or more coats on new work. | | | | | Sqm. | 34.00 |
| 13.49 | Wall painting with plastic emulsion paint of approved brand and manufacturer to give an even shade. | | | | | | |  |  |
|  | 13.49.1 | | | Two or more coats on new work. | | | | Sqm. | 64.00 |
| 13.50 | Distempering with 1st quality acrylic distemper ,having VOC(VolatileOrganic Compound) content less than 50 grams/litre,of approved brand and manufacture including applying additional coats wherever required to achieve even shade and colour. | | | | | | |  |  |
|  | 13.50.1 | | | | | | One coat. | Sqm. | 20.00 |
|  | 13.50.2 | | | | | | Two coat. | Sqm. | 32.00 |
| 13.51 | 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. | | | | | | |  |  |
|  | 13.51.1 | | | | One Coat. | | | Sqm. | 37.00 |
|  | 13.51.2 | | | | Two Coats. | | | Sqm. | 56.00 |
| 13.52 | Wall painting with premium acrylic emulsion paint of interior grade having VOC(volatile organic Compound) Cement Less than 50 grams/ litre of approved brand and manufacture including applying additional coats wherever required to achieve evev shade and colour. | | | | | | |  |  |
|  | 13.52.1 | | | | | One Coat | | Sqm. | 37.00 |
|  | 13.52.2 | | | | | Two Coats. | | Sqm. | 57.00 |
| 13.53 | Finishing walls with water proofing cement paint of required shade. | | | | | | |  |  |
|  | 13.53.1 | | | | | New Work (Two or more coats applied@3.84Kg/10Sqm). | | Sqm. | 48.00 |
| 13.54 | Finishing walls with textured exterior paint of required shade: | | | | | | |  |  |
|  | 13.54.1 | | | | | New Work (Two or more coats [applied@3.28](mailto:applied@3.28) ltr/10 Sqm)over and including priming coat of exterior primer applied @ 2.20 Kg/10 Sqm. | | Sqm. | 132.00 |

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| Item  No. | Description | | | | | | | | | | | | | | | Unit | Rate (in Rs.) |
| 13.55 | Finishing Wall with Acrylic Smooth exterior paint of required shade: | | | | | | | | | | | | | | |  |  |
|  | 13.55.1 | New Work (Two or more coats [applied@1.67](mailto:applied@1.67) ltr/10 Sqm)over and including priming coat of exterior primer applied @ 2.20 Kg/10 Sqm. | | | | | | | | | | | | | | Sqm. | 87.00 |
| 13.56 | Finishing walls with premium Acrylic Smooth exterior paint with Silicone additives of required shade | | | | | | | | | | | | | | |  |  |
|  | 13.56.1 | New Work (Two or more coats [applied@1.43](mailto:applied@1.43) ltr/10 Sqm)over and including priming coat of exterior primer applied @ 2.20 Kg/10 Sqm. | | | | | | | | | | | | | | Sqm. | 84.00 |
| 13.57 | Finishing walls with Deluxe Multi surface paint system for interiors and exteriors using Primer as per manufacturers specifications: | | | | | | | | | | | | | | |  |  |
|  | 13.57.1 | Two or more coats applied on walls @ 1.25 ltr/10Sqm.over and including one coat of special primer applied @ 0.75 ltr/10 Sqm.) | | | | | | | | | | | | | | Sqm. | 81.00 |
|  | 13.57.2 | 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 or manufacture | | | | | | | | | | | | | | Sqm. | 69.00 |
|  | 13.57.3 | 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 or manufacture. | | | | | | | | | | | | | | Sqm. | 71.00 |
| 13.58 | Applying priming coat: | | | | | | | | | | | | | | |  |  |
|  | 13.58.1 | With ready mixed pink or Grey primer of approved brand and manufacture on wood work (hard and soft wood) | | | | | | | | | | | | | | Sqm | 25.00 |
|  | 13.58.2 | With ready mixed aluminium primer of approved brand and manufacture on resinous wood and plywood | | | | | | | | | | | | | | Sqm | 26.00 |
|  | 13.58.3 | With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanized iron/steel works | | | | | | | | | | | | | | Sqm | 19.00 |
|  | 13.58.4 | With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel work (second coat) | | | | | | | | | | | | | | Sqm | 11.00 |
| 13.59 | Painting with silicon and acrylic emulsion based water thinnable sealer of approved brand and manufacture on wet or patchy portion of plastered surfaces. | | | | | | | | | | | | | | |  |  |
|  | 13.59.1 | One coat | | | | | | | | | | | | | | Sqm | 63.00 |
|  | 13.59.2 | Two coat | | | | | | | | | | | | | | Sqm | 101.00 |
| 13.60 | Finishing with Epoxy paint ( two or more coats) at all locations prepared and applied as per manufactures specifications including appropriate priming coat preparation of surface etc complete. | | | | | | | | | | | | | | |  |  |
|  | 13.60.1 | One Steel Work | | | | | | | | | | | | | | Sqm | 109.00 |
|  | 13.60.2 | One Concrete work | | | | | | | | | | | | | | Sqm | 113.00 |
| 13.61 | Painting on G.S.Sheet with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade: | | | | | | | | | | | | | | |  |  |
|  | 13.61.1 | New Work (Two or more coats) including a coat of approved steel primer but excluding a coat of mordant solution. | | | | | | | | | | | | | | Sqm. | 55.00 |
|  |  | | | | | | | | | | | | | | |  |  |
| Item  No. | Description | | | | | | | | | | | | | | | Unit | Rate (in Rs.) |
| 13.62 | Applying a coat of mordant solution on G.S. sheet: | | | | | | | | | | | | | | |  |  |
|  | 13.62.1 | | With a solution of 38 gms of copper acctatc in a litre of soft water | | | | | | | | | | | | | Sqm. | 19.00 |
|  | 13.62.2 | | With a solution made of 13gms 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. | 18.00 |
| 13.63 | Painting (two or more coats) on rain water soil waste and vent pipes and fittings with black anticorrosive bitumastic paint approved brand and manufacture over and including a priming of ready mixed zinc chromate yellow primer on new work. | | | | | | | | | | | | | | |  |  |
|  | 13.63.1 | | | 75 mm. diameter pipes | | | | | | | | | | | | meter | 19.00 |
|  | 13.63.2 | | | 100 mm. diameter pipes | | | | | | | | | | | | meter | 25.00 |
|  | 13.63.3 | | | 150 mm. diameter pipes | | | | | | | | | | | | meter | 37.00 |
| 13.64 | Painting (two or more coats) on rain water soil waste and vent pipes and fittings with synthetic cnamel paint of approved brand and manufacture and required colour over a priming coat of approved steel primer on new work. | | | | | | | | | | | | | | |  |  |
|  | 13.64.1 | | | | 75 mm. diameter pipes | | | | | | | | | | | meter | 22.00 |
|  | 13.64.2 | | | | 100 mm. diameter pipes | | | | | | | | | | | meter | 29.00 |
|  | 13.64.3 | | | | 150 mm. diameter pipes | | | | | | | | | | | meter | 43.00 |
| 13.65 | Painting with oil type wood preservative of approved brand and manufacture. | | | | | | | | | | | | | | |  |  |
|  | 13.65.1 | | | | | New Work(two or more coats) | | | | | | | | | | Sqm. | 21.00 |
| 13.66 | 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 recommendation of manufacturer to make the surface fire retardant. | | | | | | | | | | | | | | | Sqm. | 246.00 |
| 13.67 | Coal tarring two coats on new work using 0.16 and 0.12 litre coal tar per sqm in the first coat and second coat respectively. | | | | | | | | | | | | | | | Sqm. | 25.00 |
| 13.68 | Painting with synthetic enamel paint of approved brand and manufacture to give an even shade. | | | | | | | | | | | | | | |  |  |
|  | 13.68.1 | | | | | | Two or more coats on new work. | | | | | | | | | Sqm. | 53.00 |
| 13.69 | Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade. | | | | | | | | | | | | | | |  |  |
|  | 13.69.1 | | | | | | | Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture. | | | | | | | | Sqm. | 77.00 |
| 13.70 | 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. | | | | | | | | | | | | | | |  |  |
|  | 13.70.1 | | | | | | | | One Coat | | | | | | | Sqm. | 35.00 |
|  | 13.70.2 | | | | | | | | Two Coat | | | | | | | Sqm. | 53.00 |
| 13.71 | Applying priming coats with primer of approved brand and manufacture having low VOC (Volatile Organic Compound )Content. | | | | | | | | | | | | | | |  |  |
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| Item  No. | Description | | | | | | | | | | | | | | | Unit | Rate (in Rs.) |
|  | 13.71.1 | | | | | | | | | | | With ready mixed pink or grey primer on wood work (hard and soft wood ) Having VOC Content less than 50 grams/ litre. | | | | Sqm. | 28.00 |
|  | 13.71.2 | | | | | | | | | | | With ready mixed red oxide zinc chromatic on steel/iron works having VOC Content less than 250 grams/litre. | | | | Sqm. | 24.00 |
|  | 13.71.3 | | | | | | | | | | | With water thinnable cement primer on wall surface having VOC content less than 50 grams/litre. | | | | Sqm. | 24.00 |
| 13.72 | Painting with aluminium paint of approved brand and manufacture to give an even shade. | | | | | | | | | | | | | | |  |  |
|  | 13.72.1 | | | | | | | | | | Two or more coats on new work | | | | | Sqm. | 45.00 |
| 13.73 | Painting with acid proof paint of approved brand and manufacture of required colour to give an even shade. | | | | | | | | | | | | | | |  |  |
|  | 13.73.1 | | | | | | | | | | | | Two or more coats on new work. | | | Sqm. | 58.00 |
| 13.74 | Painting with black anti-corrosive bitumastic paint of approved brand and manufacture to give an even shade. | | | | | | | | | | | | | | |  |  |
|  | 13.74.1 | | | | | | | | | | | | | | Two or more coats on new work | Sqm. | 42.00 |
| 13.75 | Floor painting with floor enamel paint of approved brand and manufacture of required colour to give an even shade. | | | | | | | | | | | | | | |  |  |
|  | 13.75.1 | | | | | | | | | | | | | Two or more coats on new work | | Sqm. | 62.00 |
| 13.76 | Varnishing with varnish of approved brand and manufacture: | | | | | | | | | | | | | | |  |  |
|  | 13.76.1 | | | | | | | | | | | Two or more coats of glue sizing with copal varnish over an under coat of flatting varnish. | | | | Sqm. | 77.00 |
|  | 13.76.2 | | | | | | | | | | | Two or more coats of glue sizing with spar varnish or an under coat of flatting varnish. | | | | Sqm. | 78.00 |
| 13.77 | French spirit polishing | | | | | | | | | | | | | | |  |  |
|  | 13.77.1 | | | | | | | | | | | | Two or more coats on new works including a coat of wood filler. | | | Sqm. | 125.00 |
| 13.78 | Polishing on wood work with ready mixed wax polish of approved brand and and manufacture: | | | | | | | | | | | | | | |  |  |
|  | 13.78.1 | | | | | | | | | New Work | | | | | | Sqm. | 54.00 |
|  |  | | | | | | | | |  | | | | | |  |  |
| 13.79 | Lacqer polishing on door windows by preparing the surface applying putty base course. Prepare the surface smooth by sand papering and then applying lacqer polish with air compressor. | | | | | | | | | | | | | | |  |  |
|  | 13.79.1 | | | | | | | | | Two or more coats on new works including a coat of wood filler. | | | | | | Sqm. | 674.00 |
| 13.80 | Mealamine polishing on door windows by preparing the surface applying putty base course . prepare the surface smooth by sand papering and then applying mealamine polish with air compressor. | | | | | | | | | | | | | | |  |  |
|  | 13.80.1 | | | | | | | | | Two or more coats on new works including a coat of wood filler. | | | | | | Sqm. | 807.00 |
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| Item  No. | Description | Unit | Rate (in Rs.) |
|  |  |  |  |
| 13.81 | Floor polishing on masonry or concrete floors with wax polish of approved brand and manufacture. | Sqm. | 25.00 |
| 13.82 | Lettering with black japan paint of approved brand and manufacture. | Per latter per Cm Height | 1.45 |
| 13.83 | Providing and applying flakes textured homogeneous wall finishing system consisting of a two component system of dry flakes (9.5 Kgs. Per/pack) made of a special grade of heat treated China clay with rigid homopolymer coated with fade resistant pigments and a 100% acrylic polymer bonding agent (5 Kgs/pack) applied thickness |  |  |

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| Item  No. | Description | | Unit | Rate (in Rs.) |
|  |  | |  |  |
| 14,1 | Repairs to plaster of thickness 12mm to 20mm in patches of area 2.5 sq. metres 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 damping ground within 50metres lead : | |  |  |
|  | 14.1.1 | With *cement* mortar 1:4 (1 cement : 4 sand) | aim | 180.00 |
| 14,2 | Fixing chowkhats in existing opening including embedding chowkhats in floors or walls cutting masonry for holdfusts, embedding hold fasts in cement concrete blocks of size 15 x 10 x 10 cm with cement concrete 1:3:6 (1 cement : 3 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 | 544,00 |
|  | 14.2.2 | Window chowkhats | each | 325.00 |
|  | 1423 | Clerestory window chowkhats | each | 238.00 |
| 14.3 | Fixing chowkhat in existing opening in brick / RCC wall with dash fasteners/ chemical fastener of appropriate size (3nos on each vertical member of door chowkhat and 2 nos. on each vertical member of window chowkhats) including cost of dash fastener-9f chemical fastener. | | each | 146.00 |
| 14.4 | Making the opening in brick masonry including dirmintling 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 melba/ rubbish as directed by Engineer-in-charge. | |  |  |
|  | 14.4.1 | For door/ window/ derestca-y window. | sqm | 323.00 |
| 14.5 | Renewing glass panes, with putty and nails wherever necessary including racking out the old putty: | |  |  |
|  | 14,5.1 | Float glass panes of thiclmess 4 mm | sqm | 679.00 |
|  | 14,5.2 | Float glass panes of thicimess 5.5 mm | sqm | 759.00 |
| 14,6 | Renewing glass panes, with wooden fillets wherever necessary: | |  |  |
|  | 14,6.1 | Float glass panes of thiclmess 4 mm | sqm | 801.00 |
|  | 14.62 | Float glass panes of thickness 55 mm | sqm | 882.00 |
| 14.7 | Renewing glass panes and refitting existing wooden fillets: | |  |  |
|  | 14.7.1 | Float glass panes of thickness 4 mm | sqm | 697.00 |

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| Item  No. | Description | | Unit | Rite (m Rs.) |
|  |  | |  |  |
|  | 14.72 | Float glass pants of thidmess 5\_5 mm | sqm | 778.00 |
| 14.8 | Supplying and fixing new wooden fillets *wharves. necessary:* | |  |  |
|  | 14.81 | 2ad class teak wood fillets | meter | 30.0 |
|  | 14.82 | Haldu/Bija/Kail wood fillets. | meter | 26.00 |
| 14.9 | Renewal of old putty of glass panes (length) | | meter | 15.0 |
| 14.10 | Refitting old glass panes with putty and nails | | sqm | 199.041 |
| 14.11 | Fixing old glass panes with wooden fillets (excluding cost of fillets) | | sqm | 162.00 |
| 1412 | Providing and fixing 16 mm HS. Fan clamps of standard shape and sin in existing R.C.C. slab including cutting chase, anchoring clamp to reinforcement bar, including rlenning, refining, making good the chase with matching concrete, plastering and painting the exposed portion of the clamps complete. | | each | 165.00 |
| 14.13 | Replacing sand stone slabs in roofing laid in cement mortar 1:4 (1 cement : 4 sand) including accessary repairs and cement pointing with same mortar complete including disposal of rubbish to dumping ground within 50 metres of lead : | |  |  |
|  | 14.13.1 | Red/ white sand stone slabs 30 to 50 mm thick. | sqm | 631.00 |
| 14.14 | 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 : | |  |  |
|  | 14.14.1 | Sal wood battens. | cum | 74943.00 |
| 14.15 | 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 : | |  |  |
|  | 14.15.1 | Not exceeding 4.00 metres in length\_ |  |  |
|  | 14.15.1.1 | Sal wood beams | cum | 76349.00 |
|  | 14.15.12 | Haldu/Bija/Kail wood fillets. | cum | 76349.00 |
|  | 14.15.2 | Above 4.00 metres and upto 5.00 metres length. |  |  |
|  | 14.15.21 | Sal wood beams | cum | 78106.00 |
|  | 14.152.2 | Haldu/Bija/Kail wood fillets. | cum | 78101.00 |
| 14.16 | 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 | 17.00  Page No.260 |
| Item  No. | Description | | Unit | Rite (m Rs.) |
| 1417 | Taking out wind tics from roof including cutting out rusted bolts, nuts etc. and removing materials to any distance within compound and stacking. | | kg | 120 |
| 1418 | Fixing of old wind tie with new fittings including painting two or more coats with anticorrosive bitumastic paint of approved brand and manufacturer over and including priming coat of ready mixed zinc chromate yellow primer of approved brand. | | i | 61.00 |
| 1419 | 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 mamifacturcr. | | kg | 119.00 |
| 14\_20 | Renewing Wrought iron or M.S. Wheel or roller of steel door or gate and fining and fixing the same with necessary damps, inns and bolts/welding and erection etc. complete. | |  |  |
|  | 1420.1 | Wheel 50 mm dia. and below. | per wheel | 136.00 |
|  | 1420.2 | Wheel above 50 mm din | per wheel | 211.00 |
| 14.21 | Providing and fixing 25 mm thick shutters for cup board etc, | |  |  |
|  | 1421.1 | Panelled or panelled and glazed shutters : |  |  |
|  | 1421.1.1 | Superior *class* teak wood including nickel plated bright finished M.S. piano hinges with necessary screws. | sqm | 3794.00 |
|  | 1421.11 | 1st class teak wood including nickel plated bright finished M.S. piano hinges with necessary toms. | sqm | 3413.00 |
|  | 1421.2 | Glazed shutters : |  |  |
|  | 1421.21 | Superior class teak wood including nickel plated bright finished M.S. piano hinges with necessary screws. | sqm | 4021.00 |
|  | 1421.2.2 | 1st class teak wood including nickel plated bright finished MS. piano hinges with necessary screws. | sqm | 3611.00 |
| 1422 | Providing and fixing plain jaffii door and window shutters including bright Sand black enamelled MS. butt hinges with necessary screws 35x1Omm laths placed 35mm apart (flames to be paid separately) including fixing 50x12mm beading complete with : | |  |  |
|  | 14.22 1 | Second class teak wood. | sqm | 3105.00 |
|  |
| 1423 | Providing and fixing curtain rods of 1,25mm thick brass plates with two brass brackets fixed with brass screws and wooden plugs etc. wherever necessary complete. | |  |  |

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| **Item** No. | **Description** | | **Unit** | **Rite (in** Rs.) |
|  |  | |  |  |
|  | 1423.1 | 20 mm diameter. | muter | 265.00 |
|  | 1423.2 | 25 mm diameter. | muter | 294.00 |
| 1424 | 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 | 6720 |
| 14.25 | Providing joists (karries) including hoisting fixing in position and applying wood preservative on unexposed surface ***etc.*** complete with: | |  |  |
|  | 14.25.1 | Sal wood\_ | cum | 73829.00 |
|  | 1425.2 | Halthaija/Kail wood\_ | cum | 73829.00 |
| 1426 | White washing with lime to give an even shade : | |  |  |
|  | 1426.1 | Old walk (two or mare coats) | sqm | 6.55 |
|  | 14.26.2 | Ohl work (one or more coats) | **aim** | **4.10** |
| **14.27** | **Removing** white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches **etc.** complete | | **sqm** | **5.10** |
| 1428 | 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 | 19.70 |
| 1429 | Distempering with oil bound washable distemper of approved brand and maratfaeture to give an even shade : | |  |  |
|  | 1429.1 | Old work (one or more coats) | sqm | 21,60 |
| 14,30 | Removing dry or on 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 | **6.75** |
| 14,31 | Painting on G.S. sheet with synthetic enamel paint of approved brand and maratfacture of required colour M give an even shade : | |  |  |
|  | 14,31.1 | Old work (one or more coats) | sqm | 28,45 |
| 14,32 | Painting (one or more coats) on rain water, soil, waste and vent pipes and fillings with black anticorrosive bitumastic paint of approved brand and manufacture on old work : | |  |  |
|  | 14.32.1 | 75 mm diameter pipes | muter | 9.05 |
|  | 14.32.2 | 100 mm diameter pipes | muter | 1190 |

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| Item  No. | Description | | Unit | Rite (m Rs.) |
|  |  | |  |  |
|  | 14.32.3 | 150 mm diameter pipes | muter | 16.85 |
| 1433 | Painting (one or more coats) on rain water, soil, waste and vent pipes and fittings with aluminium paint of approved brand and manufacture on old work : | |  |  |
|  | 14,33.1 | 75 mm diameter pipes | meter | 21.00 |
|  | 14.33.2 | 100 mm diameter pipes | meter | 31.00 |
|  | 14.33.3 | 150 mm diameter pipes | muter | 4625 |
| 14.34 | 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 : | |  |  |
|  | 14.34.1 | 75 mm diameter pipes | muter | 10.50 |
|  | 14,342 | 100 mm diameter pipes | meter | 13.50 |
|  | 14,343 | 150 mm diameter pipes | meter | 19.20 |
| 14.35 | Painting with oil type wood preservative of approved brand and mamtfactare : | |  |  |
|  | 14,35.1 | Old work (one or more coats) | sqm | 20,85 |
| 14.36 | Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade - | |  |  |
|  | 14.36.1 | One or more coats On old work. | sqm | 41.35 |
| 14.37 | Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade : | |  |  |
|  | 14.37.1 | One or more coats on old work. | sqm | 34.65 |
| 14.38 | Painting with aluminium paint of approved brand and  manufacture to give an even shade : | |  |  |
|  | 14.38.1 | One or more coats on old work\_ | sqm | 32.70 |
| 14.39 | Painting with acid proof paint of approved brand and manufacture of required colour to give an even shade : | |  |  |
|  | 14.39.1 | One or more coats on old work\_ | sqm | 41.80 |
| 14.40 | Painting with black anti-corrosive bitumastic paint of approved brand and manufacture to give an even shade : | |  |  |
|  | 14.40.1 | One or more coats on old work\_ | sqm | 2790 |
| 14.41 | French spirit polishing : | |  |  |

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| Item  No. | Description | | Unit | Rite (m Rs.) |
|  |  | |  |  |
|  | 14.41.1 | One or more coats on old work\_ | sqm | 59.30 |
| 1442 | Mealamine polishing on wood work by preparing the surface  applying putty base course. prepare the surface smooth by sand  papering and then applying Willa/nine polish with air  ccanpressor. | |  |  |
|  | 14.42.1 | One or more coats on old work | aqm | 807.00 |
| 1443 | Larger polishing on wood work by preparing the surface applying putty base course. prepare the surface smooth by sand papering and then applying Lacqs polish with air compressor | |  |  |
|  | 14.43.1 | One or more coats on old work\_ | sqm | 674.00 |
| 1444 | Polishing on wood work with ready made wax polish of approved brand and manufacture | |  |  |
|  | 14,44.1 | Old work | sqm | 27,80 |
| 14,45 | Re-lettering with black Japan paint of approved brand and manufacture. | | per letter  per cm  height | 0.90 |
| 14.46 | Painting (one or more coats) with black Japan paint of approved brand and manufacture to give an even shade. | | sqm | 30.40 |
| 14.47 | Providing and fixing C.P. brass chain and rubber plug complete for sink or wash basin : | |  |  |
|  | 14,47.1 | 32 mm dia | each | 72,00 |
|  | 14,472 | 40 mm dia | each | 74,00 |
| 14.48 | Distempering with 1st quality acrylic washable distemper (ready mixed) of approved manufacturer and of required shade and colour complete. as per manufucturees specification. | |  |  |
|  | 14,48.1 | One or more coats on old work. | sqm | 20,00 |
| 14.49 | Finishing walls with ***water*** proofing cement paint of required shade : | |  |  |
|  | 14.49.1 | Old work (one or more coats applied @ 2.20 kg/10 sqm) ova priming coat of prima applied @ 0.80 litrs/10 Kim complete including cost of Priming coat. | sqm | 42.20 |
|  | 14.49.2 | Old work (one or more coats @ 2.20 kg/10 sqm) ccanplete. | sqm | 29.75 |
| 14.50 | Finishing walls with textured onc:rior paint of required shade : | |  |  |
|  | 14.50.1 | Old work (Two or more coats on existing cement paint surface applied g 3.28 ha/l0 sqm. | sqm | 112.30  Page No.264 |
| Item  No. | Description | | Unit | Rite (m Rs.) |
|  |  | |  |  |
|  | 14.50.2 | Old work (One or more coats) applied @ 1.82 ltr/10 sqm. | sqm | 66.55 |
| 14.51 | Finishing walls with Acrylic Smooth exterior paint of required shade : | |  |  |
|  | 14.51.1 | Old work (Two or more coat applied ® L67 ltr/ 10 sqm) on °Listing cement paint surface). | sqm | 86.70 |
|  | 14.51.2 | Old work (One or more coat applied g 0.90 111/10 sqm). | sqm | 51.90 |
| 14.52 | Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade | |  |  |
|  | 14.52.1 | Old work. (Two or more coats applied ig 1A3 hr/ 10 sqm) over existing cement paint surface. | sqm | 64.80 |
|  | 14,52.2 | Old work (one or more coats applied g 0.83 1tr/10 sqm). | sqm | 4145 |
| 14,53 | Finishing walls with Deluxe Multi surface paint system for interiors and exteriors using Primer as per manufitethren specifications : | |  |  |
|  | 14.53.1 | One or more coats applied on walls g 0.85 111/10 KPIE | sqm | 58.05 |
|  | 1453.2 | Painting wood work with Deluxe Multi Surface Paint of required shade. One or more coat applied go:70 IM/10 sqm | sqm | 52,65 |
|  | 14.53.3 | Painting Steel work with Deluxe Multi Surface Paint to give an even shade. One or more coat applied (g0.70 Itel 0 sqm | sqm | 52.65 |
| 14.54 | Varnishing with varnish of approved brand and manufactue: | |  |  |
|  | 14.54.1 | One or more coats with copal varnish. | sqm | 32.60 |
|  | 14.54.2 | One or more coats with spar vamidi\_ | sqm | 33.25 |
| 14.55 | Melamine polishing on wood work (one or more coat). | | sqm | 90.00 |
| 14.56 | Varnishing with flatting varnish of approved brand and msaufnture one or more coats on old work, | | sqm | 30.35 |
| 14.57 | Floor painting with floor enamel paint of approved brand and manufacture of required colour to give an even shade, | |  |  |
|  | 14.57.1 | I One or more coat on old work. | sqm | 50.35 |

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| Item  Na | Description | | Unit | Rite (m Rs.) |
|  |  | |  |  |
| 14.58 | 40 mm thick stone flooring over 20 mm (avaage)thick base of cement mortar 1:5 (1 cement : S sand) including pointing with cement mortar 1:2 (1 cement : 2 sand) with an admixture of pigment to match the shade of stone. Red sand stone / White sand done) stone to be supplied by the department. | |  |  |
|  | 14.58.1 | Rough chiselled dressed stone | sqm | 177.00 |
|  | 14.58.2 | Fine dressed stone | sqm | 207.00 |
| 14.59 | Coursed rubble masonry (second sort) with hard steam in Cement mortar 1:6 (1 cement : 6 sand) (Stone shall be supplied by the department) | | cum | 2112.00 |
| 14.60 | Laying old cement cocrete interlocking paver blocks of **any** design/shape laid in required line, level, curvature, colour and pattern over and including 50mm thick compacted bed of sand, filling the joints with 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 | 142.00 |
| 14.61 | 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 sand) including making joints with or without grooves (thiclmess of joints, except at sharp curve, shall not be more than 5mm) 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) | | meter | 27.00 |

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| Item  No. | Description | | Unit | Rite Cm Rs.) |
|  |  | |  |  |
| 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 | 202.00 |
| 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). | cam | 578.00 |
|  | 15.22 | Nominal concrete 1:4:8 a leaner mix (i/c  equivalent design mix). | cam | 356.00 |
| 15.3 | Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 mares lead as per direction of Engineer-in­charge. | | cum | 844.00 |
| 15.4 | Extra for cutting reinforcement ban manually/ by =Manic...1j means in R.C.C. work (Payment shall be made on the crass sectional area of R.C.C. work) as per direction of Engineer-in­charge. | | sqm | 276.00 |
| 15.5 | Extra for scrapping, cleaning and straigltanng reinforcement from P,C.C. work. | | Kg | 2.25 |
| 15.6 | 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. | |  |  |
|  | 15.6.1 | In lime mortar with old mughal bricks | cum | 421.00 |
|  | 15.62 | In lime mortar | cum | 202.00 |
|  | 15.6.3 | In cement mortar | **GUM** | 487.00 |
| 153 | Removing mortar from bricks and cleaning bricks including stacking within a lead of 50 m (stacks of cleaned bricks shall be measured) : | |  |  |
|  | 15.7.1 | From brick work in lime mortar | 1000 nos | 1254.00 |
|  | 15.72 | From brick work in cement mortar | 1000 nos | 1560.00 |
| 15.8 | Demolishing stone rubble masonry manually/ by merhaniral means including stacking of serviceable material and disposal of unserviceable material within 50 metes lead as per direction of Engineer-in-charge: | |  |  |
|  | 15.8.1 | In lime mortar | aim | 275.00 |

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| Item  No. | Description | | Unit | Rite (m Rs.) |
|  |  | |  |  |
|  | 15.8\_2 | In cement mortar | cum | 582.00 |
| 15.9 | Dismantling dressed stone work ashlar Este stone work, marble work or precast concrete work manually/ by mechanical **means** including stacking of serviceable and disposal of unserviceable material within 50 mares lead as per direction of Engineer-in­charge: | |  |  |
|  | 15.91 | In lime mortar | cum | 348.00 |
|  | 15.9.2 | In cement mortar | cum | 680,00 |
| 15.10 | Removing mortar from and cleaning stones and concrete articles (net quantity of stacks of cleaned materials will be mrcl) : | |  |  |
|  | 15.101 | In lime mortar | cum | 112.00 |
|  | 15.102 | In cement mortar | cum | 162.00 |
| 15.11 | Dismantling tile/ Kota stone/ Marble / Granite work in floors/walls and roofs laid in cement mortar including stacking material within 50 metres lead. | |  |  |
|  | 15.11.1 | For thickness of tiles 10 mm In 25 mm | sqm | 17.00 |
|  | 15.11.2 | For thickness of tiles above 25 mm and upto 40 mm | sqm | 26.00 |
| 1112 | Dismantling including stacking unserviceable | stone slab flooring laid m cement mortar  of serviceable material and disposal of material within 50 metres lead | sqm | 64.00 |
|  |
| 15.13 | Taking out existing CC interlocking paver blocks from footpath/ central verge, including removal of rubbish *etc.,* disposal of unserviceable material to the damping ground for which payment shall be made separately and stacking of serviceable material within 50 metre lead as pa direction of Engineer-in-charge. | | sqm | 31,00 |
| 15.14 | Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead : | |  |  |
|  | 15.14.1 | Of area 3 sq. metres and below | each | 85.00 |
|  | 15,14.2 | Of area beyond 3 sq. metres | each | 117.00 |
| 15.15 | Taking out doors, windows and clerestory window shutters (steel or wood) including stacking within 50 metres lead. | |  |  |
|  | 15.15.1 | Of area 3 sq, metres and below | each | 33,00 |

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| Item  No. | Description | | Unit | Rite (m Rs.) |
|  |  | |  |  |
|  | 15.15.2 | Of area beyond 3 sq. metres | each | 44.00 |
| 15.16 | Dismantling wood work in frames, trusses, purlins and rafters upto 10 mares span and 5 metres height including stacking the material within 50 metres lead: | |  |  |
|  | 15.16.1 | Of sectional area 40 square centimetres and above. | arm | 1023.00 |
|  | 15,16,2 | Of sectional area below 40 square centimetres. | meter | 4.10 |
| 15.17 | Extra **for** dismantling trusses, rafters, purlins etc. of wood work for every additional span of one *metre* or part thereof beyond 10 metres . | |  |  |
|  | 15.17.1 | Of sectional area 40 square ceniimetres and above, | cum *pa* meter span | 151.00 |
|  | 15.17.2 | Of sectional arca below 40 square centimetres. | cunt pa  meter span | 0.45 |
| 15.18 | Extra for dismantling trusses, rafters, purlins *etc.* of wood work for every additional height of one metre or part thereof beyond 5 metres : | |  |  |
|  | 15,18,1 | Of sectional area 40 square centimetres and above. | cum per  muter  heiftht | 213.00 |
|  | 15,182 | Of sectional arca below 40 square centimetres. | cum per  muter  heiftht | 0,80 |
| 15.19 | Dismantling steel work in single sections including  dismembering and stacking within 50 metes lead in: | |  |  |
|  | 15.19.1 | RS. Joists | Kg | 0.80 |
|  | 15.19.2 | Channels, angles, tees and flats | Kg | 0.55 |
| 15.20 | Dismantling steel work in built up sections with span upto 10 meter and hieght 5 meter in angles, tees, flats and channels including all gusset plates, bolts, nuts, cutting rivets, welding etc. including dismembering and stacking within 50mertres lead\_ | | Kg | 1,30 |
| 15.21 | Dismantling steel work manually/ by mechanical means in built up sections with span upto 10 meter and hieght 5 meter without dismembering and stacking within 50 metres lead as pa direction of Engineer-in-charge. | | *2* | 0.90 |
| 15.22 | Extra fir dismantling trusses, rafters, purling etc. of steel work for *every* additional span of one metre or part thereof beyond 10 metres | | Kg per  meter span | 020 |

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| Item  No. | Description | | Unit | Rite (m Rs.) |
|  |  | |  |  |
| 1523 | Extra Sr dismantling trusses, rafters, purling *etc.* of **steel** work for every additional height of one metre or part thereof beyond 5 metres. | | Kg per  meter  height | 0\_20 |
| 15.24 | Extra for masking of structural steel work required to be re- erected. | | Kg | 1.00 |
| 1525 | Removal of old Tatfett i/c disposal as directed by Engineer in charge | | per sqm | 8.70 |
| 15.26 | Demolishing brick tile covering in terracing including stacking of serviceable material and disposal of =serviceable material within 50 metres lead. | | sqm | 24.00 |
| 15.27 | Dismantling roofing including ridges, hips valleys and gutters de., and stacking the material within 50 metres lead of. | |  |  |
|  | 1527.1 | G.S . Sheet | sqm | 39.00 |
|  | 1527.2 | Asbestos/ Nom asbestos sheet | sqm | 18.00 |
| 1528 | Dismantling stone slab roofing ***over*** wooden kinks or R.C.C. battens (dismantling karries and battens to be paid for separately) including stacking of serviceable material and disposal of unserviceabk material within 50 metres lead. | | cum | 636.00 |
| 1529 | Dismantling including unserviceable | tiled roofing with battens boarding S. complete stacking of serviceable material and disposal of material within 50 metres lead | sqm | 50.00 |
|  |
| 15.30 | Dismantling stacking within | wooden bullies in posts and struts including 50 metes lead | meter | 5,00 |
|  |
| 15.31 | Dismantling and stacking within 50 metres lead, fencing posts or struts including all earth work and dismantling of concrete de. in base of | |  |  |
|  | 15,31.1 | T' or `I.' iron or pipe | each | 73,00 |
|  | 15.31.2 | R\_C.C. | each | 87.00 |
| 15.32 | Cutting bellies or wooden posts of fencing at the point of projection above the concrete or ground and stacking the same within 50 metres lead. | | each | 8.00 |
| 1533 | Dismantling barbed wire or flexible wire rope in fencing including making rolls and stacking within 50 metres Iced. | | Kg | 9.00 |
| 1534 | Dismantling wooden trellis work excluding frames but including stadcing the serviceable material within 50 metres lead\_ | | sqm | 15.00  Page No.274 |

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| Item  No. | Description | | Unit | Rite (m Rs.) |
|  |  | |  |  |
| 1535 | Dismantling expanded metal or I.R.C. fabrics with necessary battens and beading including stacking the serviceable material within 50 metres lead. | | sum | 18.00 |
| 15.36 | Dismantling wooden boardings in **lining** of walls and  partitions, exchuling supporting members but including  stacking within 50 metres lead - | |  |  |
|  | 15.36.1 | Upto 10 mm thick | sqm | 15.00 |
|  | 15.36.2 | Thickness above 10 = upto 25 mm | sqm | 19.00 |
|  | 15,363 | Thickness above 25 mm upto 40 mm | sqm | 22,00 |
| 1537 | Dismaraling precast concrete oi stone slabs in walls, partition walls etc. including stacking within 50 metres lead: | |  |  |
|  | 15,37.1 | Thickness upto 40 mm | sqm | 69,00 |
|  | 15.37.2 | Thickness above 40 mm upto 75 mm | sqm | 104.00 |
| 1538 | Dismantling cant asbestos or other hard board ceiling or partition walls including stacking of serviceable materials and disposal of **=CP&** cable materials within 50 mama lead\_ | | sqm | 13.00 |
| 15.39 | Dismantling C.I. or asbestos rain water pipe with fittings and clamps including stacking the material within 50 metes lead - | |  |  |
|  | 1539.1 | 75 to 80 mm din pipe. | meter | 18,00 |
|  | 15.39.2 | 100 mm din pipe | meter | 19.00 |
|  | 15.39.3 | 150 ram clia pipe | meter | 19.00 |
| 15.4-0 | 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 : | |  |  |
|  | 15.40.1 | 15 mm to 40 mm nominal bore | meter | 40.00 |
|  | 15.40.2 | Above 40 ram nominal bore | meter | 47.00 |
| 15.41 | Dismantling C.I. pipes including owavation 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 and lead at site within 50 metre lead as per direction of Engineer-in-charge: | |  |  |
|  | 15 *41.1* | Upto 150 mm diameter | meter | 114.00 |
|  | 1541.2 | Above 150 mm Ea unto 300 mm din. | meter | 153.00 |
|  | 1541.3 | Above 300 mm diameter | meter | 198.00 |

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| **Item  No.** | **Description** | | **Unit** | **Rite (m Rs.)** |
|  |  | |  |  |
| **15.42** | **Taking out manholes of work mamiAlly/ materials materials within charge.** | **C.I. cover with frame from R.C.C. top slab of  various sizes including demolishing of R.C.C.  by mechanical means and stacking of useful** | **each** | **174.00** |
| **near the site and disposal of unserviceable**  **50 metres lead as per direction of Engineer-in-** |
| **15.43** | **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-in­charge.** | | **each** | **103.00** |
| **15.44** | **Dinntling of road gully chamber of various sizes including Cl glaring with frame including stacking of useful materials near the site and disposal of unserviceabk materials within 50 metres lead including refilling the excavated gap.** | | I | **236.00** |
| **15.45** | **Dismantling of flushing cistern of all types (C.I./PVCAntrious China) including stacking of usefid materials near the site and disposal of unserviceable materiels within 50 metres lead.** | | **each** | **223 00** |
| **15.46** | **Dismantling of CL sluice valve including stacking of useful materials within a lead of 50 mitts** | |  |  |
|  | **15.46.1** | **Upto 150 mm diameter** | **each** | **83.00** |
|  | **1546.2** | **Above 150 mm diameter** | **each** | **276.00** |
| **15.47** | **Dismantling of spindle fire hydrant including stacking of usefial materials within 50 metres lead.** | | **each** | **163.00** |
| **15.48** | **Dismantling cleaning the the dumping** | **old plaster or skirting raking out joints and surface for plaster including disposal of rubbish to ground within 50 maim lead** | **sqm** | **13.00** |
|  |
| **15.49** | **Dismantling akminiam/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable surplus material and sticking of serviceable material with in SO meters lead as directed by Engineer-in­charge.** | | **sqm** | **13.00** |
| **1550** | **Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of usefil materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps:** | |  |  |
|  | **15.50.1** | **100 mm diameter** | **muter** | **21.00** |
|  | **15,50,2** | **150 mm diameter** | **meter** | **23,00** |
|  | **15,50,3** | **200 mm diameter** | **meter** | **25,00** |
|  | **15,50,4** | **250 mm diameter** | **meter** | **26,00** |

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| **Item  No.** | **Description** | | **Unit** | **Rite (m Rs.)** |
|  |  | |  |  |
|  | **15.50.5** | **300 mm diameter** | **meter** | **28.00** |
|  | **15.50.6** | **350 mm diameter** | **meter** | **32.00** |
|  | **15.50.7** | **400 rum diming** | **meter** | **35.00** |
|  | **15.50.8** | **440 mm diameter** | **meter** | **36.00** |
| **15.51** | **Dismantling of manhole including R.C.C. top slab, C.I. cover with frame including stadcing of useful materials near the site and disposal of unserviceable materials into municipal dumps within 50 m lead :** | |  |  |
|  | **15.51.1** | **Rectangular manhole 90x80 em and 45 can deep** | **each** | **611,00** |
|  | **15.51.2** | **Rectangular manhole 120X90 can and 40 cm deep** | **each** | **1069.00** |
|  |
|  | **15.51.3** | **Rectangular arch type manhole 140x90cm and 2.45m deep** | **each** | **2023.00** |
|  | **1531.4** | **Circular manhole 122 cm diameter and 1,68 in deep** | **each** | **1553.00** |
| **1552** | **Extra for depth of manholes diqmPridrid:** | |  |  |
|  | **15.52.1** | **Rectangular manhole 90x20 cm and beyond 45 cm depth** | **muter** | **486.00** |
|  | **15.52.2** | **Rectangular manhole 1202[90 cm and beyond** 90 **cm depth** | meter | **579.00** |
|  | **15.52.3** | **Rectangular arch type manhole 140x90 cm and beyond 2.45m deep (upto 4.25 m depth).** | **muter** | **468.00** |
|  | **15.52.4** | **Circular manhole 122 cm diameter and beycmd 1.6S m deep (upto 2.29 m depth)** | **muter** | **322.00** |
| **1553** | **Taking out existing kerb stones of all types from footpath/** central **verge, including removal of mortar etc., disposal of unscrviccabk material to the damping ground and stacking of** serviceable material **within 50 metre lead as pm direction of Enginem-in- Charge.** | | **muter** | **9.00** |

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| **Item  No.** | **Description** | | **Unit** | **Rate (in  Rs.)** |
|  |  | |  |  |
| **16,1** | **Boring/drilling** bore **well of required dia perfectly vertical to receive 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 and miming charges of all equipments, tools, plants and machineries required for the job, all complete as per direction of Engineer —in-charge, upto 90 metre depth below ground level\_** | |  |  |
|  | **16.1.1** | **All types of soil** |  |  |
|  | **16.111** | **100 ram dia.** | **meter** | **378.00** |
|  | **16111** | **150 mm dia.** | **muter** | **413.00** |
|  | **16.1.1.3** | **200 mm dia.** | **meter** | **451,00** |
|  | **16.1.2** | **Rocky strata including Boulders,** |  |  |
|  | **16.1.2.1** | **100 ram dia.** | **meter** | **554.00** |
|  | **16121** | **150 tom dia.** | **muter** | **625.00** |
|  | **16.1.23** | **200 mm dia.** | **muter** | **690.00** |
| **16,2** | **Boring/drilling bore well of required dia perfectly vertical to receive casing/ strainer pipe, by suitable method prescribed in IS: 2800 (part 1), including collecting samples from different strata, preparing and submitting strata chart/bore log, including hire and miming charges of all equipments, tools, plants and machineries required for the job, an complete as per direction of Engineer —in-charge, beyond 90 metre depth below ground level.** | |  |  |
|  | **162.1** | **All types of soil** |  |  |
|  | **162.1.1** | **100 mm dia.** | **muter** | **385.00** |
|  | **16.2.1.2** | **150 ram dia.** | **meter** | **428,00** |
|  | **16.213** | **200 ram dia.** | **meter** | **495.00** |
|  | **162.2** | **Rocky strata including Boulders.** |  |  |
|  | **162.2.1** | **100 ram dia.** | **meter** | **572.00** |
|  | **162.22** | **150 mm dia.** | **muter** | **656.00** |
|  | **162.2.3** | **200 nom dia.** | **muter** | **716.00** |
| **16.3** | **Supplying, assembling, lowering and fixing in vertical position in bore well, unplaatitized PVC medium well easing (CM) pipe of required dia, conforming to IS: 12818, including required hire and labour charges, fittings and accessories etc. all complete, for all depths, as per direction of Engineer-in-charge.** | |  |  |
|  | **16.3.1** | **100 mm nominal dia. (minimum wall thickness 5mm)** | **meter** | **376.00** |
|  | **16.3.2** | **150 mm nominal dia(minimum wall thickness 7 5mm)** | **meter** | **423.00** |
|  | **16.3.3** | **200 mm nominal dia(minimum wall thickness 10mm)** | **muter** | **559.00** |

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| I=  Na | Description | | Unit | Rate (in  Rs.) |
|  |  | |  |  |
| 16.4 | Supplying, assembling, lowering and fixing in vertical position in bore well unplasticinx1 PVC medium well screen (RMS) pipes with ills, conforming to IS: 12818, including hire and labour charges, fittings and accessories etc. all complete, for all depths, as per direction of Engineer-in-charge. | |  |  |
|  | 16.4.1 | 100 ram nominal size dia. | muter | 446.00 |
|  | 16.4.2 | 150 ram nominal size dia. | meter | 551,00 |
|  | 16.4.3 | 200 ram nominal size dia\_ | meter | 878.00 |
| 16,5 | 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 die, conforming to IS: 4270, of reputed and approved make, including painted with outside surface with two coats of anticorrosive paint of approved brand and mararfacture, including required hire and labour charges, finings and accessories, all complete, for all depths, as per direction of Engineer- in-charge. | |  |  |
|  | 16.5.1 | 100 mm nominal the din having minimum wall thickness 4 50 = | meter | 795.00 |
|  | 163.2 | 150 mm nominal the din having minimum wall thickness 4 85 mm | muter | 1191.00 |
|  | 16.5.3 | 200 mm nominal size dia having minimum wall thickness 5 40 mm | meter | 1611.00 |
| 16,6 | Supplying, assembling, lowering and fixing in vertical position in bore well, ERW (Electric Resistance Welded) FE 410 plain slotted (having slot of size 1,613.2 mm) mild steel threaded and socketed /plain bevel ended pipe (type A) of required dia, conforming to IS: 8110, of reputed and approved make, having wall thickness not less than 5.441 mm, including painted with outside surface with two coats of anticorrosive bitumestic paint of approved brand and manufacture, including hire and labour charges, finings and accessories, all complete, for all depths, as per direction of Engineer —in-charge. | |  |  |
|  | 16.6.1 | 100 mm nominal size dia. | muter | 855.00 |
|  | 16.6.2 | 150 ram nominal size die.. | meter | 1271.00 |
|  | 16.6.3 | 200 ram nominal size dia. | meter | 1691.00 |
| 16.7 | Gravel packing in tubewell construction in accordance with IS: 4097, Mc tiding providing gravel fine/ medium/ coarse, in required grading and sizes as per actual requirement, all complete as per direction of Engineer-in-charge. | | N | 947.00 |

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| Item  No. | Description | | Unit | Rate (in  Rs.) |
|  |  | |  |  |
| 16.8 | Development  without sand required required time by "V' notch static level collecting laboratory, including accessories in-charge. | and is 11189,  of tube well in accordance with IS : 2800 (part I)  to establish maximum rate of usable water yield  content (beyond permissible limit), with  capacity air compressor, miming the compressor for  till wall is filly developed, measuring yield of well  method or any other approved method, measuring and draw down *etc.* by **dap** draw down method, **water** samples and getting tested in approved  We disinfection of tubewell, all complete,  hire and labour charges of air compressor, tools and | hour | 478.00 |
| etc., all as per requirement and direction of Engineer- |
| 16,9 | 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, | |  |  |
|  | 16.9.1 | 100 mm dis. | each | 244.00 |
|  | 16.9.2 | 150 mm dia | each | 366,00 |
|  | 16.9.3 | 200 mm dia | each | 488,00 |
| 16.10 | Providing and fixing M.S. clamp of required dia made of 100 x10 mm flat to the top of casing/ housing pipe of tubewell as per IS: UN (part 1), including necessary bolts and nuts of required size complete. | |  |  |
|  | 16.10.1 | 100 ram clamp. | each | 11368.00 |
|  | 16.10.2 | 150 ram clamp. | each | 1129.00 |
|  | 16.10.3 | 200 mm clamp, | each | 1281.00 |
| 16.11 | Providing and fixing Bail plug/ Bottom plug of required dia to the bottom of pipe assembly of tubewell as per 15:2800 (part I). | |  |  |
|  | 16,11,1 | 100 mm dia | each | 196,00 |
|  | 16.112 | 150 mm dia. | each | 242,00 |
|  | 16.11.3 | 200 mm dia | each | 265.00 |
| 16.12 | Boring with 100 mm diameter casing pipe for hand pump/ tube well in all soils except ordinary hard rocks requiring blasting including lowering the casing pipe. | |  |  |
|  | 16.12.1 | Upto 6 metres depth. | meter | 236.00 |
|  | 16.122 | Beyond 6 m and upto 12 m depth. | meter | 280.00 |
|  | 1612.3 | Beyond 12 m and upto 18 m depth\_ | meter | 326.00 |
| 16.13 | Providing and placing in position filters of 40 mm diameter G.I. pipe with brass strainer of approved quality. | |  |  |
|  | 16.13,1 | Filter of 32 mm dia meter | meter | 545,00  Page No.283 |
| Item  No. | Description | | Unit | Rate (in  Rs.) |
|  |  | |  |  |
| 16.14 | Providing and fixing to filter and lowering to proper levels 40 mm 0,1, pipe for tube well including cleaning and priming the tube well. | |  |  |
|  | 16.14,1 | Filter of 32 min dia meter | meter | 386,00 |
| 16,15 | Providing and placing in position hand pump of India mark II of approved quality for 40 mm diametcr G I pipe complete with all accessories, | | each | 841,00 |
| 16.16 | Supplying, filling, spreading and leveling stone boulders of size  range 5 cm to 20 cm, in recharge pit, in the required thickness, for  all leads and lifts, all complete as per direction of Enginca-in-  charge. | | Cum | 760.00 |
| 16,17 | Supplying, filling, spreading and 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 and lifts, all complete as per direction of Engineer-in-charge. | | Cum | 877,00 |
| 16.18 | Supplying, filling, spreading and leveling coarse sand of size range 1.5 mm to 2 mm in recharge pit, in required thickness over grind layer, for all leads and lifts, all complete as per direction of Engineer-in-charge, | | Cum | 819.00 |
| 16.19 | 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 no longitudinal and 9 nos moss sectional T.M.T. hoop ban, including providing 50 mm dia perforations 000 to 125 mm *de,* including providing edge binding with MS. flats of size 50 m=14 mm complete, an as per direction of Engineer-in­charge | | each | 959.00 |

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| Item  No. | Description | | Unit | Rate (in  Rs.) |
|  |  | |  |  |
| 171 | Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100mm sand cast Inn P or S trap, uPVC 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 580x440mm with integral type foot rests. | each | 2995,00 |
|  | 17.1.2 | Stainless Steel AlS1-304(18/8) Orissa pattern W.C. pan of size 585x480 mm with flush pipe and integrated type foot rests. | each | 7031.00 |
| 172 | Providing and (European type P.V.C. fl"ching controlled device fittings and walls and floors | fixing white vitreous china pedestal type water closet  W.C. pan) with seat and lid, 10 litre low level white  cistern, including flush pipe, with manually  (handle lever), conforming to IS : 7231, with all fixtures complete including cutting and molting good the |  |  |
| wherever required : |
|  | 172.1 | W.C. pan with ISI marked white solid plastic scat and lid | each | 3036.00 |
|  | 172,2 | WC, pan with ISI marked black solid plastic seat and lid | each | 3013,00 |
| 173 | Providing and fixing white vitreous china pedestal type water closet (European type) with scat and lid, 10 litre low level white vitreous china flushing cistern and C.P. flush bend with fittings and C.I.brackets, 40mm flush baud, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete including painting of fittings and brackets, crating 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 | 4613.00 |
|  | 17.3.2 | W.C. pan with ISI marked black solid plastic seat and lid. | each | 4590.00 |
| 17.4 | Providing and fixing vitreous china dual purpose closet suitable for use as squatting pan or European type water closet (Anglo Indian W.0 pan) with seat and lid fixed with CP, brass hinges and rubber buffers, 10 litre low level flushing cistern with fitting and brackets, 40mm flush bald, 20mm 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 : | |  |  |
|  | 17.4.1 | White vitreous china dual purpose WC pan with white solid plastic seat and lid with 10 liter low level flushing cistern i/c C.P. flush bend. | each | 5120.00 |

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| **Item  No.** | **Description** | | **Unit** | **Rate (in  Rs.)** |
|  |  | |  |  |
| **173** | **Providing and fixing white vitreous china extended wall mounting  water closet of the 780x370x690 mm of appmved shape inchidin,g  providing and fixing white vitreous china cistern with dual flush**  **fitting, of flushing capacity 3 litre/6 litre (adjustable to 4 litrei8**  **hires), including scat cover and cistern fillings, nuts, bolts and**  **gasket etc complete.** | | **each** | **10761.00** |
| **17.6** | **Providing and fixing white vitreous china flat bark or wall comer type lipped front urinal basin of 430x260x350mm and 340x410x265mm sizes respectively with automatic flushing cistern with standard flush pipc and C P brass sprcadens with brass unions and al clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :** | |  |  |
|  | **17 ,6, 1** | **One urinal basin with 5 litre white P.V.C. automatic flushing cistern.** | **each** | **2754,00** |
|  | **17.6.2** | **Range of two urinal basins with 5 litre white P.V.C. automatic flushing cistern.** | **each** | **4458.00** |
|  | **17,6,3** | **Range of three urinal basins with 101itre white P.V.C. automatic flushing cistern.** | **each** | **6312,00** |
|  | **17.6.4** | **Range of four urinal basins with 10 litre white P.V.C. automatic flushing cistern.** | **each** | **8384.00** |
| **17.7** | **Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350mm 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 filling as per IS : 2556, C.I. trap with outlet grating and other couplings in C.P, brass including painting of fittings and cutting and making good the walls and floors wherever required** | |  |  |
|  | **17.7.1** | **Single half stall urinal with 5 litre P.V.C. automatic flushing cistern.** | **each** | **5567.00** |
|  | **17,7,2** | **Range of two half stall urinals with 5 litre P.V.C. aromatic flushing cistern.** | **each** | **8660,00** |
|  | **17.7.3** | **Range of three half stall urinals with 10 litre P.V.C. automatic flushing cistcm.** | **each** | **12764.00** |
|  | **17.7.4** | **Range of four half stall minas with 10 litre P.V.C. automatic flushing cistern.** | **each** | **15547.00** |
| **17.8** | **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, al clamps and C.P. brass coupling complete including painting of fittings and cutting and making good the walls and floors etc. wherever rewired** | |  |  |
|  | **17.8.1** | **Single squatting plate with 5 hire P.V.C. automatic**  **flushing cistern.** | **each** | **3478.00**  Page No.291 |
| Item  No. | Description | | Unit | Rate (in  Rs.) |
|  |  | |  |  |
|  | 17.8.2 | Range of two squatting plates with 5 litre P.V.C. automatic fhishing cistern. | each | 5128,00 |
|  | 17.8.3 | Range of three squatting plates with 10 litre P.V.C. automatic fleshing cistern. | each | 7151.00 |
|  | 17.8.4 | Range of four squatting plates with 10 litre P.V.C. automatic flushing cistern. | each | 8689.00 |
| 17.9 | Providing and fixing white vitreous china water less urinal of size 600x330x315 mm having antibacterial /germs ***free ceramic*** surface, fixed with cartridge having debris catcher and hygiene scat | | each | 23676.00 |
| 1710 | Providing and fixing white vitreous china battery based infrared sensor operated urinal of approx. size 610 x 390 x 370 mm having pm and post flushing with water ( 250 ml and 500 ml consumption), having water inlet from back side, including fixing to wall with suitable brackets all as per manufacturers specification and direction of Engines-in-charge. | | each | 17985.00 |
| 17.11 | Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps,32 mm C.P. bran waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require : | |  |  |
|  | 17.11.1 | White Vitreous China Wash basin size 630x450 mm wide a pair of 15 mm C.P. brass pillar taps | each | 2460.00 |
|  |
|  | 17.11.2 | White Vitreous China Wash basin size 630x450 mm with a single 15 mm C.P. brass pillar tap. | each | 2187.00 |
|  | 17.11.3 | White Vitreous China Wash basin size 550x400 mm with a pair of 15 mm C P brass pillar taps | each | 1938.00 |
|  |
|  | 17.11.4 | White Vitreous China Flat back wash basin size 550x400 mm with single 15 mm C.P, brass pillar Up. | each | 1664.00 |
|  | 17,11,5 | White Vitreous China Angle back wash basin size 600x480 mm with single 15 mm C.P. bass pillar tap. | each | 1775,00 |
|  | 17.11.6 | White Vitreous China Angle back wash basin size 400x400 mm with single 15 mm C.P. brass pillar tap. | each | 1502.00 |
|  | 17.11.7 | White Vitreous China Flat back wash basin size 450x300 mm with single 15 mm C.P. bass pillar tap. | each | 1525.00 |
|  | 17,11,8 | 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 lever ISI marked. | each | 3761,00 |
|  | 17.11.9 | 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 | 2907.00 |
|  | 17.11.10 | Stainless Steel AISI-304(18/8) Round basin 405x355 mm with single 15 mm C.P. brass pillar tap | each | 3308.00  Page No.292 |
| Item  No. | Description | | Unit | Rate (in  Rs.) | |
|  |  | |  |  | |
|  | 17.11.11 | Stainless Steel AISI-304(18/8) Wash basin 530x345 mm with single 15 mm C.P. brass pillar tap. | each | 2948,00 | |
|  | 17.11.12 | Oval shape wash basin *over* counter/ander counter  with 15 mm C.P brass pillar tap (Counter to be paid  WM) | each | 7948.00 | |
| 17.12 | Providing and fixing white vitreous china pedestal far wash basin completely recessed at the back fat the reception of pipes and fittings | | each | 1065.00 | |
| 17.13 | Providing and fixing kitchen sink with CL brackets, C.P. brass chain with rubber plug, 40 mm C.P. brass waste complete, including painting the fittings and ***brackds, cutting*** and making good the walls wherever required : | |  |  | |
|  | 17,13.1 | White glazed fire clay kitchen sink of size  600x4503[250 mm. | each | 2492,00 | |
| 17.14 | Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS 13983 with C.L brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required : | |  |  | |
|  | 17.14.1 | Kitchen sink with drain board |  |  | |
|  | 17.14.1.1 | 510x1040 mm bowl depth 250mm\_ | each | 8074.00 | |
|  | 17.14.12 | 510x1040 mm bowl depth 225mm\_ | each | 7609.00 | |
|  | 17.14.1.3 | 510x1040 mm bowl depth 200mm\_ | each | 7493.00 | |
|  | 17,14.1.4 | 5102[1040 mm bowl depth 178mm. | each | 5286,00 | |
|  | 17,14.2 | Kitchen sink without drain board |  |  | |
|  | 17,14.2.1 | 6102[510 mm bowl depth 200 mm, | each | 4583,00 | |
|  | 17,14.2.2 | 610x460 mm bowl depth 200 mm, | each | 4351,00 | |
|  | 17,142.3 | 470x420 mm bawl depth 178 mm, | each | 3422 00 | |
|  | |
| 17.15 | Providing and fixing white vitreous china laboratory sink with C.I. brackets, C.P. *brass* chain with rubber plug 40mm 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 whenever required : | |  |  | |
|  | 17,15.1 | Size 4502300x150mm | each | 2341,00 | |
|  | 17.15.2 | Size 600x450x200mm | each | 3328.00 | |
| 17.16 | Providing and fixing draining board with C.I. brackets including painting of brackets, cutting and making good the *walls* wherever required : | |  | Page No.293 | |
|  |  | |  |  | |
| Item  No. | Description | | Unit | Rate (in  Rs.) | |
|  |  | |  |  | |
|  | 17.16.1 | White glazed fire clay draining board of size  600x450x25mm | each | 1043,00 |
| 17,17 | Providing and fixing white vitreous china water closet squatting pan (Indian type) | |  |  |
|  | 17.17.1 | Long pattern W.C. pan of size 580 mm | each | 765.00 |
|  | 17.17.2 | Orissa pattern W.C. pan of size 580x440 mm | each | 1322.00 |
| 17.18 | Extra for using coloured W.C. pan instead of white W.C. pan | |  |  |
|  | 17.18.1 | Orissa pattern W.C. pan 580x440 mm | each | 842.00 |
| 17.19 | Providing and fixing white vitreous china pedestal type (European type/ wash down type) water closet pan. | | each | 1235.00 |
| 17.20 | Extra for using coloured pedestal type W.0 pan (European type) with low level cistern of same colour instead of white vitreous china W.0 pan and cistern. | |  | 1452.00 |
| 17.21 | Providing and fixing a pair of white vitreous china foot rests of standard pattern for squatting pan water closet | |  |  |
|  | 17.21.1 | 250x130x30 mm | pair | 200.00 |
|  | 1721.2 | 250x125x25 = | pair | 142.00 |
| 17.22 | Providing and fixing P .V.C. low level flushing Stem with manually controlled device (handle lever) conforming to IS : 7231, with all fillings and fixtures complete. | |  |  |
|  | 17,22,1 | 10 litre capacity - White | each | 945,00 |
|  | 17,222 | 10 litre capacity - coloured | each | 1037,00 |
| 17.23 | Providing and fixing controlled flush, low level cistern made of vitreous china with all fillings complete. | |  |  |
|  | 17.23.1 | 10 litre (full flush) capacity-white | each | 1615.00 |
|  | 1723.2 | 10 litre (full flush) capacity-coloured | each | 2146.00 |
| 17.24 | Providing and fixing solid plastic seat with lid for pedestal type W.C. pan complete : | |  |  |
|  | 1724.1 | White solid plastic seat with lid | each | 456.00 |
|  | 1724.2 | Black solid plastic seat with lid | each | 433.00 |
|  | 17,243 | Coloured (other than black and white) solid plastic seat with lid | each | 688,00 |
| 17/5 | Providing and fixing G.I. inlet comedic& for flush pipe connecting with W. C. pan. | | each | 114.00 |

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| **Item  No.** | **Description** | | **Unit** | **Rate (in  Rs.)** |
|  |  | |  |  |
| **17.26** | **Providing and fixing white vitreous china flat back or wall COMET type lipped front urinal basin of 430x260x350mm or 340x410x265mm sizes respectively.** | | I | **733,00** |
| **17.27** | **Providing and fixing white vitreous china fiat back half stall urinal of size 580a380x350mm.** | | **each** | **2243.00** |
| **17.28** | **Providing and fixing white vitreous china squatting plate urinal with integral rim longitudinal flush pipe,** | | **each** | **1564.00** |
| **17,29** | **Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fittings :** | |  |  |
|  | **1729.1** | **Flat back wash basin of size 630x450mm.** | **each** | **1379.00** |
|  | **17.29.2** | **Flat bask wash basin of size 559x400mm.** | **each** | **857.00** |
|  | **1729.3** | **Angle back wash basin of size 600x480mm.** | **each** | **967.00** |
|  | **1729.4** | **Angle back wash basin of size 400x400mm,** | **each** | **694,00** |
|  | **1729.5** | **Flat back wash basin of Size 45 0x300mm.** | **each** | **717,00** |
|  | **1729.6** | **Surgeon type wash basin of size 660a460mm,** | **each** | **1519,00** |
| **17.30** | **Providing and fixing kitchen sink including making all comnectie®s excluding cost of fittin,gs,** | |  |  |
|  | **17.30.1** | **White glazed fire clay sink of size 600x450x250mm\_** | **each** | **1843.00** |
| **17.31** | **Providing and fixing white vitreous china laboratory sink including making all connections excluding cost of fittings:** | |  |  |
|  | **17,31,1** | **Size 450x300x150 mm.** | **each** | **1263,00** |
|  | **17,31.2** | **Size 600x450x200 mm.** | **each** | **2250,00** |
| **17.32** | **Providing and fixing soil, *waste* and vent pipes :** | |  |  |
|  | **17,32.1** | **100 mm dia Pipe minimum wall thickness 5mm** |  |  |
|  | **17.3211** | **Sand cast iron S WAS pipe as per IS: 1729.** | **meter** | **879.00** |
|  | **17.32.1.2** | **Centrifugally cast (spun) iron socket and spigot (SaruiS) pipe as per LS: 3989.** | **meter** | **955.00** |
|  | **17,32.2** | **75 mm dia Pipe minimum wall thickness 5mm** |  |  |
|  | **17.32.2.1** | **Sarni test iron SandS pipe as per IS: 1729.** | **meter** | **717.00** |
|  | **17.32.22** | **Centrifugally cast (spun) iron socketed pipe as per LS: 3989.** | **meter** | **803.00** |
| **17.33** | **Providing and filling the joints with spun yarn cement slurry and Demean mortar 1:2 ( 1 cement : 2 sand) in S.C.IJ C.I. Pipes :** | |  |  |

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| **Item  No.** | **Description** | | **Unit** | **Rate (in  Rs.)** |
|  |  | |  |  |
|  | **17.33.1** | **75 mm dia pipe** | **each** | **39.00** |
|  | **17.33.2** | **100 mm & pipe** | **each** | **46.00** |
| **17.34** | **Providing and fixing MS. holder-bat clamps of approved design to Sand Cast iron/cast iron (spun) pipe *embedded* in and including cement concrete blocks 10x10x1Ocin of Cement Concrete 1:2:4 mix (1 cement : 2 sand : 4 graded stone aggregate 20mm nominal size) including cod of cutting holes and making good the walls etc. :** | |  |  |
|  | **17.34.1** | **For 100 = dia. Pipe** | **each** | **66.00** |
|  | **17,34.2** | **For 75 mm dia. Pipe** | **each** | **37.00** |
| **17,35** | **Providing and fixing bend of required degree with access door, insertion robber washer 3 mm thick, bolts and nuts complete.** | |  |  |
|  | **17.35.1** | **100 mm dia minimum wall thickness 6 5mm** |  |  |
|  | **17.35.11** | **Sand test iron SandS as per IS - 1729** | **each** | **364.00** |
|  | **17.35.12** | **Sand cast iron San& as per IS - 3989** | **each** | **408.00** |
|  | **17.35.2** | **75 mm dia minimum wall thickness 6.5mm** |  |  |
|  | **17.35.2.1** | **Sand test iron San& as per IS - 1729** | **each** | **294.00** |
|  | **17.35.22** | **Sand test iron San& as per IS- 3989** | **each** | **341.00** |
| **17.36** | **Providing and fixing plain bend of required degree.** | |  |  |
|  | **17.36.1** | **100 mm dia minimum wall thickness 6 5mm** |  |  |
|  | **17.36.1.1** | **Sand cast iron SandS as per IS - 1729** | **each** | **445.00** |
|  | **17.36.12** | **Sand test iron SandS as per IS : 3989** | **each** | **346.00** |
|  | **17.36.2** | **75 mm dia minimum wall thickness 6.5mm** |  |  |
|  | **17.36.2.1** | **Sand cast iron SandS as per IS -1729** | **each** | **230.00** |
|  | **17.36.22** | **Sand cast iron San& as per IS - 3989** | **each** | **259.00** |
| **17,37** | **Providing and fixing heel rest sanitary bend** | |  |  |
|  | **17.37.1** | **100 mm dia minimum wall thickness 6 5mm** |  |  |
|  | **17.37.1.1** | **Sand test iron SandS as per IS - 1729** | **each** | **329.00** |
|  | **17.37.12** | **Sand test iron SandS as per IS - 3989** | **each** | **387.00** |
|  | **17.37.2** | **75 mm dia minimum wall thickness 6.5mm** |  |  |
|  | **17.37.2.1** | **Sand cast iron SandS as per IS - 1729** | **each** | **288.00** |
|  | **17.37.22** | **Sand cast iron SandS as per IS - 3989** | **each** | **329.00** |

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| **Item  No.** | **Description** | | **Unit** | **Rate (in  Rs.)** |
|  |  | |  |  |
| **17.38** | **Providing and fixing double equal junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and mats complete :** | |  |  |
|  | **17.38.1** | **100x100x100x100mm minimum wall thickness 6.5mm** |  |  |
|  | **17.38.1.1** | **Sand cast iron San& as per IS - 1729** | **each** | **744.00** |
|  | **17.38.11** | **Sand cast iron SandS as per IS - 3989** | **each** | **820.00** |
|  | **17.38.2** | **75x75x75x75 mm minimum wall thickness 6 5mm** |  |  |
|  | **17,38.2.1** | **Sand cast iron SandS as per IS - 1729** | **each** | **590,00** |
|  | **17382.2** | **Sand cast UM SandS as per IS - 3989** | **each** | **654,00** |
| **17.39** | **Providing and fixing doable equal plain junction of required degree.** | |  |  |
|  | **17.39.1** | **100x100x100x100mm minimum wall thiclmess 6.5mm** |  |  |
|  | **17.39.1.1** | **Sand cast iron SandS as per IS - 1729** | **each** | **666.00** |
|  | **17.39.12** | **Sand cast iron San& as per IS - 3989** | **each** | **782.00** |
|  | **17.39.2** | **75x75x75x75 mm minimum wall thickness 6.5mm** |  |  |
|  | **17,39.2.1** | **Sand cast iron SandS as per IS - 1729** | **each** | **434,00** |
|  | **17.39.22** | **Sand cast iron SandS as per IS - 3989** | **each** | **573.00** |
| **17,40** | **Providing and fixing single equal junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and mats complete.** | |  |  |
|  | **17.40.1** | **100x100x100 mm minimum wall thickness 6.5mm** |  |  |
|  | **17.40.1.1** | **Sand cast iron SandS as per IS -1729** | **each** | **495.00** |
|  | **17.40.11** | **Sand cast iron San& as per IS - 3989** | **each** | **640.00** |
|  | **17.40.2** | **75x75x75 mm minimum wall thickness 6.5mm** |  |  |
|  | **17.40.2.1** | **Sand cast iron San& as per IS -1729** | **each** | **387.00** |
|  | **17,40.2.2** | **Sand cast irou SandS as per IS - 3989** | **each** | **533,00** |
| **17.41** | **Providing and fixing single equal plain junction &required degree :** | |  |  |
|  | **17.41.1** | **100x100x100 min minimum wall thickness 6.5mm** |  |  |
|  | **17.41.1.1** | **Sand cast iron SandS as per IS -1729** | **each** | **578.00** |
|  | **17.41.12** | **Sand cast iron SandS as per IS - 3989** | **each** | **607.00** |
|  | **17,41,2** | **75x75x75 mm minimum wall thickness 6 5mm** |  |  |
|  | **1741.2.1** | **Sand test iron SandS as per IS - 1729** | **each** | **352.00** |
|  | **1741.22** | **Sand test iron SandS as per IS - 3989** | **each** | **428.00** |

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| **Item  No.** | **Description** | | **Unit** | **Rate (in  Rs.)** |
|  |  | |  |  |
| **17.42** | **Providing and fixing double unequal junction of required degree with access door, insertion rubber washer 3 mm** *thick,* **bolts and nuts complete :** | |  |  |
|  | **17.42.1** | **100x100x75x75 ram minimum wall thickness 6 5mm** |  |  |
|  | **17.42.11** | **Sand cast iron SandS as per IS - 1729** | **each** | **745.00** |
|  | **17.42.12** | **Sand cast free SandS as pa IS - 3989** | **each** | **1093.00** |
| **17.43** | **Providing and fixing double unequal plain junction of required degree:** | |  |  |
|  | **17.43.1** | **100r100x75x75 mm minimum wall thickness 6.5mm** |  |  |
|  | **17,43,1.1** | **Sand cast iron Sands as per IS - 1729** | **each** | **724,00** |
|  | **17,43.1.2** | **Sand cast iron SandS as per IS - 3989** | **each** | **1014,00** |
| **17.44** | **Providing and fixing single unequal \*action of reclaimed degree with access door, imitation rubber washer 3 mm thick, bolts and nuts complete :** | |  |  |
|  | **17.44.1** | **100r100x75 ram minimum wall thickness 6 5ram** |  |  |
|  | **17 A4,1.1** | **Sand cast iron SandS as per IS - 1729** | **each** | **541,00** |
|  | **17,44,1.2** | **Sand cast iron SandS as per IS - 3989** | **each** | **832,00** |
| **17,45** | **Providing and fixing single unequal plain junction of required degree** | |  |  |
|  | **17.45.1** | **100x100x75 ram minimum wall thickness 6 5ram** |  |  |
|  | **17.45.1.1** | **Sand test iron SandS as per IS - 1729** | **each** | **491.00** |
|  | **17.45.1.2** | **Sand cast free SandS as per IS - 3989** | **each** | **724.00** |
| **17.46** | **Providing and fixing double equal plain invert branch of required degree:** | |  |  |
|  | **17.46.1** | **100x100x100x100 mm minimum wall thickness 6.5mm** |  |  |
|  | **17.46.1.1** | **Sand east free SandS as per IS -1729** | **each** | **724.00** |
|  | **17,46,1.2** | **Sand cast iron SandS as per IS - 3989** | **each** | **700,00** |
|  | **17.46.2** | **75x75x75x75 mm minimum wall thickness 6.5mm** |  |  |
|  | **17.46.2.1** | **Sand east free San& as per IS -1729** | **each** | **544.00** |
|  | **17.46.22** | **Sand east iron SandS as per IS - 3989** | **each** | **573.00** |
| **17.47** | **Providing and firing single equal plain invert branch of required degree:** | |  |  |
|  | **17.47.1** | **100x100x100 mm minimum wall thickness 6 5nim** |  |  |
|  | **17.47.1.1** | **Sand east iron SandS as per IS -1729** | **each** | **549.00** |
|  | **17,47,1.2** | **Sand cast iron SancIS as per IS - 3989** | **each** | **549,00** |

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| **Item  No.** | **Description** | | **Unit** | **Rate fin  Rs.)** |
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|  | **17.47.2** | **75x75x75 mm minimum wall thickness 6 5mm** |  |  |
|  | **17.47.2.1** | **Sand east iron SimdS as per IS - 1729** | **each** | **428.00** |
|  | **17.47.22** | **Sand cast iron SandS as per IS - 3989** | **each** | **434.00** |
| **17.48** | **Providing and fixing double unequal Salt branch of required degree :** | |  |  |
|  | **17,48,1** | **100x100x75x75 Iran minimum wall thickness 6 5mm** |  |  |
|  | **17,48.1.1** | **Sand cast iron SandS as per IS - 1729** | **each** | **724,00** |
|  | **1748.12** | **Sand cast iron SandS as per IS - 3989** | **each** | **927.00** |
| **17,49** | **Providing and fixing single unequal plain invert branch of required degree :** | |  |  |
|  | **17.49.1** | **100x100x75 rum minimum wall thickness 6 5mm** |  |  |
|  | **17.4911** | **Sand cast iron SandS as per IS - 1729** | **each** | **636.00** |
|  | **17,4912** | **Sand cast** inn **SandS as per IS - 3989** | **each** | **695,00** |
| **17.50** | **Providing and faring sand cast iron SandS off seta as per IS: 1729** | |  |  |
|  | **17.50.1** | **76 rom off seta** |  |  |
|  | **17.50.1.1** | **With 75 mm dia. Pipe minimum wall thickness 5mm** | **each** | **300.00** |
|  | **17,50,12** | **With 100 mm dia. Pipe minimum wall thickness 5mm** | **each** | **474,00** |
|  | **17,50,2** | **114 mm offsets** |  |  |
|  | **17.50.2.1** | **With 75 mm die\_ Pipe minimum wall thickness 5mm** | **each** | **410.00** |
|  | **17.50.22** | **With 100 mm dia. Pipe minimum wall Thickness 5ram** | **each** | **503.00** |
|  | **17.50.3** | **152 = offsets** |  |  |
|  | **17.50.31** | **With 75 mm dia. Pipe minimum wall thickness 5mm** | **each** | **477.00** |
|  | **17,50,32** | **With 100 mm dia. Pipe minimum wall thickness 5mm** | **each** | **605,00** |
| **17.51** | **Providing and faring sand cast inn SandS off seta as per IS: 3989.** | |  |  |
|  | **17.51.1** | **75 mm off seta** |  |  |
|  | **17,51,1.1** | **With 75 mm die. Pipe minimum wall thickness 5mm** | **each** | **312,00** |
|  | **17.51.12** | **With 100 mm dia. Pipe minimum wall Thickness 5mm** | **each** | **370.00** |
|  | **17.51.2** | **150 mm offsets** |  |  |
|  | **17.51.2.1** | **With 75 mm dia. Pipe minimum wall thickness 5mm** | **each** | **392.00** |
|  | **17,51,2.2** | **With 100 mm dia. Pipe minimum wall thickness 5mm** | **each** | **508,00** |
| **17.52** | **Providing and fixing door piece, inserticai rubber washes 3mm thick, bolts and nuts complete :** | |  |  |

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| Item  No. | Description | | Unit | Rate (in  ELL) |
|  |  | |  |  |
|  | 17.52.1 | 100 = |  |  |
|  | 17,52,1,1 | Sand cast iron SandS as per IS - 1729 | each | 541,00 |
|  | 17,521,2 | Sand cast iron SandS as per IS - 3989 | each | 547,00 |
|  | 17.52.2 | 75 mm |  |  |
|  | 17,52.2.1 | Sand cast lite SancIS as per IS - 1729 | each | 387,00 |
|  | 17,522.2 | Sand cast Um SandS as per IS - 3989 | each | 387,00 |
| 17.53 | Providing and fixing terminal guard: | |  |  |
|  | 17.53.1 | 100 = |  |  |
|  | 17,53.1.1 | Sand cast iron SandS as per IS - 1729 | each | 259,00 |
|  | 17.53.12 | Sand cast iron SandS as per IS - 3989 | each | 480.00 |
|  | 17.53.2 | 75 mm |  |  |
|  | 17.53.2.1 | Sand cast iron SandS as per IS - 1729 | each | 196.00 |
|  | 17.53.22 | Sand cast iron SandS as per IS - 3989 | each | 439.00 |
| 17.54 | Providing and fixing collar | |  |  |
|  | 17.54.1 | 100 = |  |  |
|  | 17,54.1.1 | Sand cast iron SandS as per IS - 1729 | each | 201,00 |
|  | 17,54.1.2 | Sand cast iron SandS as per IS - 3989 | each | 317,00 |
|  | 17,54.2 | 75 mm |  |  |
|  | 17.54.21 | Sand *cast* iron SandS as per IS -1729 | each | 149.00 |
|  | 17.54.22 | Sand cast iron SandS as per IS- 3989 | each | 219.00 |
| 17.55 | Providing lead caulked joints In sand cast iron/ centrifugally cast (spun) iron pipes and fittings of diameter: | |  |  |
|  | 17.55.1 | 1()0 = | each | 234.00 |
|  | 17.55.2 | 75 mm | each | 201.00 |
| 17.56 | Providing and fixing M.S. stays and clamps for sand cast iron/ centrifugally cast (spin) iron pipes of diameter : | |  |  |
|  | 17.56.1 | 100mm | each | 62.00 |
|  | 17.56.2 | 75 mm | each | 50.00 |
| 17.57 | Providing and fixing trap of self cleansing design with screwed down ca hinged grating with or without *vcnt* ami complete, including cost of cutting and making good the walla and floors : | |  |  |
|  | 17,57,1 | 100 mm inlet and 100 mm outlet |  |  |

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| Item  No. | Description | | Unit | Rate (in  Rs.) |
|  |  | |  |  |
|  | 17.57.11 | Sand cast iron SandS as per IS: 3989. | each | 825.00 |
|  | 17.5712 | Sand Cast it= SandS as per IS: 1729. | each | 610,00 |
|  | 17.57.2 | UN mm inlet and 75 tom outlet |  |  |
|  | 17.57.2.1 | Sand cast iron SandS as per IS - 3989 | each | 854.00 |
|  | 17.57.22 | Sand Cast iron SandS as per IS- 1729. | each | 540.00 |
| 17.58 | Providing and fixing =plasticised Rigid PVC soil and waste pipes conforming to IS: 13592 Type B including jointing with seal ring confirming to IS : 5382 leaving 10 mm gap for thermal expansion. Single socketed pipes for working pressure of 4 kg/Rem. | |  |  |
|  | 17.58.1 | 75 mm diameter (minimum wall thickness 3.2mm) |  | 136.00 |
|  | 17.58.2 | 110 = diameter (minimum wall thickness 3.2mm) |  | 238.00 |
| 17.59 | Providing and fixing =plasticised PVC moulded fittings/  accessories fir =plasticised Rigid PVC soil and waste pipes conforming to IS: 13592 Type A including jointing with seal ring confirming to IS : 5382 leaving 10 mm gap fir thermal expansion. | |  |  |
|  | 17.59.1 | Coupler |  |  |
|  | 17.59.11 | 75 mm | each | 117.00 |
|  | 17.59.12 | 110 mm | each | 154.00 |
|  | 17.59.2 | Single push& Coupler |  |  |
|  | 17.59.2.1 | 75 mm | each | 140.00 |
|  | 17.59.2.2 | 110 = | each | 195.00 |
|  | 17.59.3 | Single tee with door |  |  |
|  | 17,59.3.1 | **75x75x75** mm | each | 219,00 |
|  | 17.59.32 | 110x110x110mm | each | 346.00 |
|  | 17.59.4 | Single the without door |  |  |
|  | 17.59.4.1 | 75x75x75 mm | each | 201.00 |
|  | 17.59.42 | 110x110x110mm | each | 266.00 |
|  | 17.59.5 | Bend 87.50 |  |  |
|  | 17.59.5.1 | 75 mm bend | each | 117.00 |
|  | 17.59.5.2 | 110 mm bend | each | 172,00 |

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| **Item  No.** | **Description** | | **Unit** | **Rate (in  Rs.)** |
|  |  | |  |  |
| **17.60** | **Providing and fixing Unplasticised -PVC pipe clips of approved design to Unplasticised - PVC soil and waste pipes by means of bombay nail of required length including and making good the wall etc. complete.** | |  |  |
|  | **17.60.1** | **75 mm** | **each** | **33,00** |
|  | **17,60,2** | **110 mm** | **each** | **50,00** |
| **17,61** | **Providing and fixing uPVC trap of self cleaning design ccanplet. Including cost of cutting and making good the wall and floors.** | |  |  |
|  | **17.61.1** | **100 = inlet and 75 mm outlet** | **each** | **517.00** |
| **17.62** | **Providing and fixing M.S. bolder bat clamp of approved design to sand *cast* iron/ cast iron (spin) pipes comprising of MS. flat brackets made of 50x5mm flat of specified shape, projecting 75mm outside the wall surface and fixed on wall with 4nos, 6mm dia expansion hold fasteners including drilling necnsmry 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 30mm x1.6mm galvanised M.S. flats of specified shape and of total length 420mm and shall be fixed with M.S. nuts, bolts, and washers of size 25x6mm, one bolts on each side elite pipe.** | |  |  |
|  | **17.62.1** | **Total bracket length 580mm of approved shape and design (for single, 100mm dia pipe).** | **each** | **180.00** |
|  | **17.62.2** | **Total bracket length 810mm of approved shape and design (for two, 100mm dia pipes).** | **each** | **224.00** |
|  | **17.62.3** | **Total bracket length 1040mm of approved shape and design (for three, 100mm dia pipes).** | **each** | **265,00** |
| **17.63** | **Cutting chases in brick masomy walls for following diameter sand east iron/ centrifugally east (spun) iron pipes and making good the same with cement *concrete* 1:3:6 ( 1 cement : 3 sand :6 graded stone aggregate 12.5 mm nominal size ) including necessary plaster and pointing in cement mortar 1:4 (1 cement : 4 sand) :** | |  |  |
|  | **17.63.1** | **100 mm dia.** | **meter** | **222 00** |
|  | **17.63.2** | **75 mm dia.** | **meter** | **159.00** |
|  | **17.63.3** | **50 mm dia** | **meter** | **101.00** |
| **17.64** | **Providing and fixing P.V.C. waste pipe for sink or wash basin including P V C waste fittings complete.** | |  |  |
|  | **17.64.1** | **Semi rigid pipe** |  |  |
|  | **17.64.1.1** | **32 mm dia** | **each** | **87.00** |
|  | **17.64.12** | **40 mm dia** | **each** | **98.00** |
|  | **17.64.2** | **Flexible pipe** |  |  |
|  | **17.64.2.1** | **32 mm din** | **each** | **87.00** |

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| **Item  No.** | **Description** | | **Unit** | **Rate (in  Rs.)** |
|  |  | |  |  |
|  | **17.64.21** | **40 mm dia** | **each** | **98.00** |
| **17,65** | **Providing and fixing 100 mm sand east Iron grating for gully trap.** | | **each** | **43.00** |
| **17.66** | **Providing and fixing in position 25mm diameter mosquito proof coupling of approved municipal design.** | | **each** | **44.00** |
| **17,67** | **Providing and fixing 600x450 mm beveled edge minor 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.** | | I | **659,00** |
| **17,68** | **Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shape with 6 mm thick hard board backing :** | |  |  |
|  | **17.68.1** | **Circular shape 450mm dia.** | **each** | **806.00** |
|  | **17.68.2** | **Rectangular shape 453x357mm** | **each** | **642.00** |
|  | **17.68.3** | **Oval shape 450x350mm (outer dimensions)** | **each** | **697.0** |
|  | **17.68.4** | **Rectangular shape 15001450 mm** | **each** | **1311.00** |
| **17.69** | **Providing and fixing 600x120x5ram glass shelf with edges round of supported on anodised aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40 mm long sorry's, rawl plugs** etc., complete. | | I | **474.00** |
| 17.70 | Providing **and fixing toilet paper holder :** | |  |  |
|  | 17.70.1 | C.P. **brass** | **each** | 340.00 |
|  | **17.70.2** | **Vitreous china** | **each** | **324.00** |
| 17.71 | Providing and fixing **CP brass waste coupling of approved quality and make for sink and wash basin.** | |  |  |
|  | **17.71.1** | **Waste coupling 3 lmm of 79= length and 62mm breadth** | **each** | **330.00** |
|  | 17.71.2 | Waste coupling 38mm **of** 83mm **length and** 77mm **breadth** | **each** | 348.00 |
| 17.72 | Providing and fixing CP **brass bottle trap of approved quality and make for sink and wash basin.** | | **each** | 853.00 |
| **17.73** | **Providing and fixing CP brass towel rail of approved quality and** make | |  |  |
|  | 17,73.1 | 600x2Omm | **each** | 952,00 |
|  | 17,73.2 | 450s2Omm | **each** | 836,00 |
| **17.74** | **Providing and fixing CP brass towel ring of approved quality and** make | |  |  |

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| Item  No. | Description | | Unit | Rate fin  ELL) |
|  |  | |  |  |
|  | 17.74.1 | 200= dia ring | each | 679.00 |
| 17,75 | Providing and fixing CP brass soap dish of approved quality and make | | each | 422.00 |
| 17,76 | Providing and fixing CP brass Urinal spreader of approved quality and make | | each | 304,00 |
| 17.77 | Providing and fixing C P. ***brass*** soap container 109 mm wide, 125 high and 112 mm distance from wall of standard shape with bracket of the same material with all fittings etc, of approved quality and make like jaguar or equivalent confimming to IS: specification\_ | | each | 1175.00 |
| 17.78 | Providing and fixing C.P. brass grating of approved quality and  make conforming to IS:specifieation. | |  |  |
|  | 17.78.1 | 100= dia | each | 74.00 |
| 17.79 | Providing and fixing PTMT Waste Coupling for wash basin and sink, of approved quality and colour. | |  |  |
|  | 17.79.1 | Waste coupling 31mm dia of 79mm length and 62mm breadth weighing not less than 45gms. | each | 113.00 |
|  | 17,79,2 | Waste coupling 38mm dia of 83mm length and 77mm breadth, weighing not less than 60gms | each | 131,00 |
|  |
| 17.80 | Providing and fixing PTMT Bottle Trap for Wasik basin and sink | |  |  |
|  | 17,80,1 | Bottle trap 31mm single piece moulded with height of 270mm, effective length of tail pipe 260mm from the centre of the *waste* coupling 77mm breadth with 25mm minimum water seal, weighing not less than 260gras. | I | 499,00 |
|  | 17.80.2 | Bottle trap 38= single piece moulded with height of 270mm, effective length of tail pipe 260mm from the centre of the waste coupling 77mm breadth with 25mm minimum water seal, weighting not less than 263gms. | I | 522.00 |
| 17.81 | Providing and fixing PTMT liquid soap container 109mm wide, 125mm high and 112mm 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 gins. | | each | 217.00 |
| 17.82 | Providing and fixing PTMT towel ring trapezoidal shape 215mm long, 200mm wide with a minimum distances of 37mm from wall fact with concealed fillings arrangement of approved quality and colour. Weighing not less than 88 gins, | | I | 203.00 |
| 17.83 | Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of approved quality and colour, | |  |  |
|  | 17.83.1 | 450mm long towel rail with total length of 495mm, 78mm wide and effective height of 88mm, weighing not less than 170gms. | each | 412.00 |

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| **Item  No.** | **Description** | | **Unit** | **Rate (in  ELL)** |
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|  | **17.83.2** | **600= long towel rail with total length of 645mm, width 78mm and *effective* height of 88mm, weighing not less than 190gms.** | I | **459,00** |
| **17.84** | **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.** | | I | **511.00** |
| **17.85** | **Providing and fixing PTMT 15 rem Urinal spreader size 95x69x100  mm with UT' BSP Thread and shapes. Weighing not less than 60**  **gm&** | | **each** | **176.00** |
| **17.86** | **Providing and fixing PTMT urinal cock of approved quality and colour.** | |  |  |
|  | **17.86.1** | **15 mm nominal bore, 80mm long. 42 mm high and 30mm wide with BSP female threads weighing not less than 48 gins.** | **each** | **144.00** |
| **17.87** | **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 gins.** | | **each** | **119.00** |
| **17.88** | **Painting CI cistern with bitumastic or any other anti-corrosive paint inside and white pairit 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,** | | I | **327.00** |
| **17.89** | **Re-painting CL cistern with bitumastic or any other anti-corrosive paint inside and white paint on the outside surface of the cistern, flush pipe, other fillings, etc. complete inchuling polishing of wooden seat and lid and cleaning of W.C. pan with acid wherever necessary.** | | **each** | **235.00** |
| **17.90** | **Repainting CI, cistern with synthetic enamel paint of approved colour brand and manufacture on the outside surface of cistern flush pipe, other fittings etc. complete.** | | I | **98.00** |
| **17.91** | **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 :** | |  |  |
|  | **17.91.1** | **100 = diameter pipe** | **meter** | **29.00** |
|  | **17,91.2** | **75 mm diameter pipe** | **meter** | **22.00** |
| **17.92** | **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 :** | |  |  |
|  | **17.92.1** | **100 mm diameter pipe** | **meter** | **14.00** |
|  | **17.92.2** | **75 mm diameter pipe** | **meter** | **11.00** |

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| Item No. | Description | | Unit | Rate (in Rs.) |
|  |  | |  |  |
| 17.93 | Repainting bath tub of size 1700x730x430mm with enamel paint. | | each | 302.00 |
| 17.94 | Providing and laying Ceramk glazed half round pipe chain (having thickness 9 to lOmm) of approved make in colours such as White, Ivory, Grey, or any other colour, laid on 20 mm thick Cement Mortar 1:4 (1 Cement : 4 sand) including pointing the joints with white cement and matching pigment etc., complete. | |  |  |
|  | 17.94.1 | 100 mm ilia half mind pipe | metre | 195.00 |
|  | 17.94.2 | 150 mm dia half nomad pipe | metre | 260.00 |

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| **Item  No.** | **Description** | | ***US*** | **Rate (in  Rs,)** |
|  |  | |  |  |
| **18.1** | **Providing and fixing Polyethelene-Aluminium-Polyethelene (PE­AL-PE) Composite Pressure Pipes conforming to IS - 15450 U.V. stabilised with carbon black having thermal stability far hot and cold water supply, capable to withstand temperatire 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 and connectors etc. with clamps at 1.00 metre spacing, this includes testing of joints complete as per direction of the Engineer in charge.**  **Internal work - Exposed on wall** | |  |  |
|  | **18,1.1** | **1216 (16 nun OD) pipe (minimum wall thickness 1 751nm)** | **metre** | **193.00** |
|  | **18.12** | **1629 (20 mm 01)) pipe (minimum wall thickness 2mm)** | **metre** | **242.00** |
|  | **18,1.3** | **2025 (25 mm 01)) pipe (minimum wall thickness 2 45mm)** | **metre** | **307.00** |
|  | **18.1.4** | **2532 (32 mm 01)) pipe (minimum wall thickness 2.8mm)** | **metre** | **398.00** |
|  | **18.1.5** | **3249 (40 mm 013) pipe (minimum wall thickness 3 4mm)** | **metre** | **618.00** |
|  | **18.1.6** | **4059 (50 mm 013) pipe (minimum wall thickness 4mm)** | **metre** | **679.00** |
| **18,2** | **Providing and fixing Polyethehme-Aluminium-Polyethelene (PE­AL-PE) Composite Pressure Pipes conforming to IS - 15450 U.V. stabilised with carbon black having thermal stability for hot and 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 and connectors etc. with clamps at L00 metre spacing, including the *cost* of cutting chases and testing of joints complete as per direction of the engineer in charge.**  **Concealed work including cutting chases and making good the wall etc.** | |  |  |
|  | **18.2.1** | **1216 (16 mm 01)) pipe (minimum wall thickness 1 75mm)** | **metre** | **299.00** |
|  | **18,2.2** | **1620 (20 mm OD) pipe (minimum wall thickness 2mm)** | **metre** | **360.00** |
|  | **18,2.3** | **2025 (25 mm 01)) pipe (minimum wall thickness 2 45mm)** | **metre** | **441.00** |
|  | **18.2.4** | **2532 (32 mm 013) pipe (minimum wall thickness 2.8mm)** | **metre** | **553.00** |
| **18.3** | **Providing and firing Polyethelene-Aluminiam-Polyetlaelene (PE­AL-PE) Composite Pressure Pipes conforming to IS - 15450 U.V. stabilized with carbon black having thermal stability for hot and 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 and connectors etc. with trenching, refilling and testing of joints complete as per direction of the engineer in charge. External work** | |  |  |
|  | **18.3.1** | **1216 (16 mm OD) pipe (minimum wall thickness 1 75mm)** | **metre** | **190.00** |

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| **Item  No.** | **Description** | | | **Unit** | **Rate (in  Rs.)** |
|  |  | | |  |  |
|  | **183.2** | **1620 (29 mm 01)) pipe (minimum wall thiclmess 2mm)** | | **metre** | **235.00** |
|  | **18.3.3** | **2025 (25 mm 01)) pipe (minimum wall thickness 2 45mm)** | | **metre** | **295.00** |
|  | **18.3.4** | **2532 (32 mm 01)) pipe (minimum wall thickness 2.8mm)** | | **metre** | **378.00** |
|  | **18,3,5** | **3240 (40 mm 01)) pipe (minimum wall thickness 3 4mm)** | | **metre** | **588.00** |
|  | **183.6** | **4050 (59 mm 01)) pipe (minimum wall thickness 4mm)** | | **metre** | **649.00** |
| **18.4** | **Providing and fixing 3 layer PP-R (Poly propylene Random**  **copolymer) pipes SDR 7.4 U V stabilized and anti - microbial fusion welded, having thermal stability for hot and cold water supply including all PP - It plain and 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.**  **Internal work - Exposed on wall** | | |  |  |
|  | **18.4.1** | | **PN - 16 Pipe, 16 rem OD** | **metre** | **102.00** |
|  | **18.42** | | **PN - 16 Pipe, 20 mm OD** | **metre** | **137.00** |
|  | **18.4.3** | | **PN -16 Pipe, 25 mm OD** | **metre** | **186.00** |
|  | **18.4.4** | | **PN -16 Pipe, 32 mm OD** | **metre** | **285.00** |
|  | **18.43** | | **PN -16 Pipe, 40 mm OD** | **metre** | **437.00** |
|  | **18.4.6** | | **PN - 16 Pipe, 50 mm OD** | **metre** | **596.00** |
| **18.5** | **Providing and fixing 3 layer PP-II (My propylene Random**  **copolymer) pipes SDR 7.4 U V stabilized and anti - microbial fusion welded, having thermal stability fur hot and cold water supply including all PP - R plain and 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**  **Concealed work including cutting chases and making good the walls etc.** | | |  |  |
|  | **18.51** | | **PN -16 Pipe, 16 mm OD** | **metre** | **177.00** |
|  | **18.52** | | **PN -16 Pipe, 20 mm OD** | **metre** | **217.00** |
|  | **18,5.3** | | **PN - 16 Pipe, 25 mm OD** | **metre** | **278.00** |
|  | **185.4** | | **PN - 16 Pipe, 32 rem OD** | **metre** | **400.00** |
| **18.6** | **Providing and fixing 3 layer PP-R (Poly propylene Random**  **copolymer) pipes U V stabilized and anti - microbial fusion welded, having thermal stability for hat and cold water supply including all PP - R plain and brass threaded polypropylene random fittings i/c trenching, refilling and testing of joints complete as per direction of Engineer in Charge.**  **External work** | | |  |  |
|  | **18.6.1** | | **PN -16 Pipe, 16 mm OD (SDR 7.4)** | **metre** | **99.00**  Page No.315 |
| Item  No. | Description | | | Unit | Rate (in  Rs.) |
|  |  | | |  |  |
|  | 18.6.2 | | PN - 16 Pipe, 20 mm OD (SDR 7.4) | mein | 129.00 |
|  | 18.6,3 | | PN - 16 Pipe, 25 mm OD (SDR 7,4) | metre | 178.00 |
|  | 18.6.4 | | PN - 16 Pipe, 32 rum OD (SDR 7.4) | metre | 268.00 |
|  | 18.6.5 | | PN - 16 Pipe, 40 mm OD (SDR 7.4) | metre | 407.00 |
|  | 18.6.6 | | PN - 16 Pipe, 50 mm OD (SDR 7.4) | metre | 566.00 |
|  | 18.6,7 | | PN - 16 Pipe, 63mm OD (SDR 7.4) | metre | 863.00 |
|  | 18.6.8 | | PN - 16 Pipe, 75 mm OD (SDR 7.4) | metre | 1225.00 |
|  | 18.6.9 | | PN - 16 Pipe, 90 mm OD (SDR 7.4) | metre | 1960.00 |
|  | 18.6.10 | | PN -10 Pipe, 110 mm OD (SDR - 11) | metre | 2066.00 |
|  | 18.6,11 | | PN - 10 Pipe, 160 mm OD (SDR - 11) | metre | 4264,00 |
| 18,7 | Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having -thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings lie fixing the pipe with damps at 1.00 m spacing. This includes jointing of pipes and fittings with **MU** step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.  Internal work - Exposed on wall | | |  |  |
|  | 183.1 | | 15 mm nominal outer dia .Pipes. | metre | 129.00 |
|  | 18.72 | | 20 mm nominal outer dia .Pipes. | metre | 153.00 |
|  | 18.7.3 | | 25 mm nominal outer die .Pipes. | metre | 177.00 |
|  | 18.7.4 | | 32 mm nominal outer die .Pipes. | metre | 254.00 |
|  | 18,7,5 | | 40 mm nominal outer dia..Pipes. | metre | 354.00 |
|  | 18.7.6 | | 50 mm nominal outer die .Pipes. | metre | 528.00 |
| 18,8 | Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes and fittings with one step CPVC solvent °email and the cost of cutting chases and making good the same including testing of joints complete as pa direction of Engineer in Charge.  Concealed worts including cutting chases and making good the walls etc., | | |  |  |
|  | 18.8.1 | | 15 mm nominal outer dia .Pipes. | metre | 207.00 |
|  | 18.82 | | 20 mm nominal outer dia .Pipes. | metre | 234.00 |
|  | 18,0 | | 25 mm nominal outer dia .Pipes. | metre | 288.00 |
|  | 18.8.4 | | 32 mm nominal outer dia .Pipes. | metre | 360.00 |

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| Item  No. | Description | | Unit | Rate (in  Rs.) |
|  |  | |  |  |
| 18.9 | Providing and fixing Chlorinated Polyvinyl Chkaide (CPVC) pipes, having thermal stability for hot and cold water supply including all CPVC plain and brass Threaded fittings. This included jointing of pipes and fittings with one step CPVC solvent cement, trenching, refilling and testing of joints complete as per direction of Engineer in Charge.  External work | |  |  |
|  | 18.91 | 15 mm nominal outer dia..Pipes. | metre | 122.00 |
|  | 18.92 | 20 mm nominal outer dia ,Pipes, | metre | 141.00 |
|  | 18.93 | 25 mm nominal outer dia .Pipes. | metre | 185.00 |
|  | 18.9.4 | 32 mm nominal outer dia .Pipes. | metre | 238.00 |
|  | 18.93 | 40 mm nominal outer din .Pipes. | metre | 324.00 |
|  | 18.9.6 | 50 mm nominal outer dia .Pipes. | metre | 498.00 |
|  | 18.9.7 | 62.50 mm nominal inner dia Pipes. | metre | 1429,00 |
|  | 18.9.8 | 75 mm nominal inner dia .Pipes. | metre | 2018.00 |
|  | 18.9.9 | 100mm nominal inner dia \_Pipes. | metre | 2791.00 |
|  | 18.910 | 150 = nominal inner dia Pipes. | metre | 3358.00 |
| 18,10 | Providing and fixing G.I. pipes complete with G.I. fittings and clamps, including cutting and makin,s good the walls etc.  Internal work - Exposed on wall | |  |  |
|  | 18.10.1 | 15 mm din nominal bore | metre | 211.00 |
|  | 18.10.2 | 20 mm din nominal bore | metre | 255.00 |
|  | 18.10.3 | 25 mm dia. **Morainal** bore | metre | 300.00 |
|  | 18,10.4 | 32 mm dia. nominal bore | metre | 361.00 |
|  | 18,10.5 | 40 mm dia. nominal bore | metre | 479.00 |
|  | 18,10.6 | 50 mm dia. nominal bore | metre | 596.00 |
| 18,11 | Providing and fixing G.I. pipes complete with G.I. fittings and clamps including cutting and 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 din nominal bore | metre | 269.00 |
|  | 18,112 | 20 mm dia nominal bore | metre | 309.00 |
| 18.12 | Providing and fixing G.I. pipes coumlete with GI. finings including trenching and refilling ete,Extomol work : | |  |  |

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| Item  No. | Description | | Unit | Rate (in  Rs.) |
|  |  | |  |  |
|  | 18.12.1 | 15 mm dia. nominal bore | metre | 188.00 |
|  | 18.12.2 | 20 mm dia, nominal bore | metre | 223.00 |
|  | 18.12.3 | 25 mm dia, nominal bore | metre | 263.00 |
|  | 18.12.4 | 32 mm dia. nominal bore | metre | 310.00 |
|  | 18 12.5 | 40 mm dia. nominal bare | metre | 402.00 |
|  | 18 12.6 | 50 mm dia. nominal bore | metre | 492.00 |
|  | 18.12.7 | 65 mm dia. nominal bore | metre | 533.00 |
|  | 18.12.8 | 80 mm dia nominal bore | metre | 622,00 |
|  |
| 18,13 | Providing and fixing Stainless Steel pipe and fitting of grade AISI 304 as pa -IS 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 filling shall not be measured for payment)  Inernal work - Exposed on wall | |  |  |
|  | 18.13.1 | 15,88 mm outer diapipe | metre | 243.00 |
|  | 18.13.2 | 22.22 ram outer ilia Pipe | metre | 375.00 |
|  | 18.13.3 | 28.58 mm outer dia Pipe | metre | 467.00 |
|  | 18.13.4 | 34 00 mm outer dia Pipe | metre | 636.00 |
|  | 18135 | 42.70 mm outer dia Pipe | metre | 774.00 |
|  | 1813.6 | 48.60 mm outer dia Pipe | metre | 896.00 |
| 18,14 | Providing and fixing Stainless Steel pipe and fitting of grade AISI 304 as pa -IS standard 3448 complete with press type fitting (fitting shall be paid for separately) lie 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 | |  |  |
|  | 18.14.1 | 15.88 mm outer dia .Pipes. | metre | 297.00 |
|  | 18.14.2 | 22.22 mm Outer dia pipes | metre | 428.00 |
| 18.15 | Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 confirming to -WWA 0116 standard with V-profile or M-profile and with 0-ring sealing gasket of EPDM material of required **dia as** per &lotion of Engineer-in­charge.  Coupling/Socket | |  |  |
|  | 18.15.1 | For 15 88 mm outer dia pipe | each | 66.00 |
|  | 18.15.2 | For 22.22 mm outer dia. Pipe | each | 102.00 |

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| Item  No. | Description | | Unit | Rate fin  Rs.) | |
|  |  | |  |  | |
|  | 18.15.3 | For 28.58 mm out= dia Pipe | each | 125.00 | |
|  | 18.15.4 | For 34 00 = aura dia Pipe | each | 268.00 | |
|  | 18.15.5 | For 42 70 min outer dia Pipe | each | 383.00 | |
|  | 18,15.6 | For 48 60 mm outer dia Pipe | each | 518.00 | |
| 18,16 | Providing and fixing required Stainless Steel Fitting of press fit design of grade AIM 304 conforming to -WWA 0116 standard with V-profile or M-profile and with 0-nug sealing gasket of EPDM material of Providing and fixing required Stainless Steel Fining of press fa design of grade AISI 304 conforming to JYWA 0116 standard with V-proftle or M-profile and with 0-ring sealing gasket of EPDM material of required dia as per dirction of Engineer-in-charge.  Reducer | |  |  | |
|  | 18.16.1 | For 22.22 mm x 15.88 mm outer dia pipe | each | 120.00 | |
|  | 18.16.2 | For 28.58 mm x 15.88 mm outer dia pipe | each | 164.00 | |
|  | 18,163 | For 28 58 mm x 22.22 mm outer dia pipe | each | 168.00 | |
|  | 18,16.4 | For 34,00 mm x 15.88 min outer **dia** pipe | each | 272.00 | |
|  | 18.16.5 | For 34.00 mm x 22.22 ram outer dia pipe | each | 275.00 | |
|  | 18.16.6 | For 34.00 mm x 2858 mm outer dia pipe | each | 275.00 | |
|  | 18.16.7 | For 42.70 mm x 15.88 mm outer dia pipe | each | 417.00 | |
|  | 18.16.8 | For 42 70 mm x 2222 mm outer dia pipe | each | 420.00 | |
|  | 18,16.9 | For 42 70 mm x 2858 mm outer dia pipe | each | 420,00 | |
|  | 18,1630 | For 42,70 mm x 34.00 mm outer dia pipe | each | 450.00 | |
|  | 18.16.11 | For 48.60 mm x 15.88 mm outer dia pipe | each | 544.00 | |
|  | 18.16.12 | For 48 60 mm x 2222 mm outer dia pipe | each | 546.00 | |
|  | 18.16.13 | For 48 60 mm x 28\_58 mm outer dia pipe | each | 551.00 | |
|  | 18,16.14 | For 48,60 mm x 34.00 mm outer dia pipe | each | 556.00 | |
|  | 18,1635 | For 48,60 mm x 42.70 mm outer dia pipe | each | 606.00 | |
| 18.17 | Providing and fixing required Stainless Steel Filling of press fit design of grade AISI 304 conforming to **SIIWA** G116 standard with V-profile or M-profile and with 0-nug sealing gasket of EPDM material of required dia as per dirction of Engineer-in­charge  Elbow 9O | |  |  | |
|  | 18.17.1 | For 15 88 mm aura dia pipe | each | 100.00 | |
|  | 18,172 | For 22.22 mm outer die Pipe | each | 178.00 | |
|  | 18.17.3 | For 28.58 mm outer dia Pipe | each | 245.00 | |
|  | 18.17.4 | For 34.00 mm outer dia Pipe | ***each*** | 498.00  Page No.319 | |
|  |  |  |  |  | |
| Item  No. | Description | | Unit | Rate (in  Rs.) |
|  |  | |  |  |
|  | 18.17.5 | For 42 70 mm outer dia Pipe | each | 763.00 |
|  | 18.17.6 | For 48 60 mm outer dia Pipe | each | 938.00 |
| 18.18 | Providing and fixing required Stainless Steel Filling of press fit design of grade AISI 304 conformin,g to JAWA 0116 standard with V-praftle or M-predle and with 0-ring sealing gasket of EPDM material of required dia as per &caw of Engineer-in­charge  Reducing Elbow 90° | |  |  |
|  | 18.18.1 | For2222 mm x 15 88 mm outer dia pipe | each | 172.00 |
|  | 18.18.2 | For 28.58 mm x 15.88 mm outer dia pipe | each | 251.00 |
|  | 18.18.3 | For 28 58 mm x 22.22 ram outer dia pipe | each | 257.00 |
|  | 18.18.4 | For 34 00 mm x 22.22 mm outer dia pipe | each | 374.00 |
|  | 18.18.5 | For 34.00 mm x 2858 mm outer dia pipe | each | 460.00 |
|  | 18.18.6 | For 42.70 mm x 34.00 mm outer ilia pipe | each | 811.00 |
| 18,19 | Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to JA/WA G116 standard with V-profile or M-proftle and with 0-ring sealing gasket of EPDM material of required dia as per dirction of Engineer-in­charge.  Equal Tee | |  |  |
|  | 18.19.1 | For 15 88 mm outer dia pipe | each | 185.00 |
|  | 18,192 | For 22.22 ram outer dia Pipe | each | 268.00 |
|  | 18.19.3 | For 28.58 ram outer dia Pipe | *each* | 344.00 |
|  | 18.19.4 | Details of Cost for caw no. | each | 717.00 |
|  | 18.19.5 | For 42.70 mm outer dia Pipe | each | 1004.00 |
|  | 18,19.6 | For 48 60 mm outer dia Pipe | each | 1194,00 |
| 18,20 | Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to -WWA 0116 standard with V-profile or M-profile and with 0-ring sealing gasket of EPDM material of required dia as per dirction of Engineer-in­charge.  Reducing Tee | |  |  |
|  | 18.20.1 | For 22.22 mm x 15 88 mm outer dia pipe | each | 261.00 |
|  | 18,202 | For 28,58 mm x 15.88 ram outer dia pipe | each | 325.00 |
|  | 18,20.3 | For 28 58 mm x 22.22 mm outer dia pipe | each | 338.00 |
|  | 18.20.4 | For 34.00 mm x 15.88 mm outer dia pipe | each | 637.00 |
|  | 18.20.5 | For 34.00 mm x 22.22 mm outer dia pipe | each | 648.00 |
|  | 18.20.6 | For 34 00 mm x 28\_58 mm outer dia pipe | each | 655.00 |

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| --- | --- | --- | --- | --- |
| Item  No. | Description | | Unit | Rate fin  **Rs.)** |
|  |  | |  |  |
|  | 18/0.7 | For 42.70 mm x 15.88 mm outer dia pipe | each | 951.00 |
|  | 18.20,8 | For 42 70 mm x 22.22 mm outer ***dia*** pipe | each | 954,00 |
|  | 1820.9 | For 42 70 mm x 2858 = outer dia pipe | each | 955.00 |
|  | 18/0.10 | For 42.70 mm x 34.00 mm outer dia pipe | ***each*** | 964.00 |
|  | 18/0.11 | For 48.60 mm x 15.88 mm outer dia pipe | each | 1038.00 |
|  | 1820.12 | For 48 60 mm x 2222 mm outer dia pipe | each | 1060.00 |
|  | 1820.13 | For 48 60 mm x 28\_58 mm outer dia pipe | each | 1069.00 |
|  | 18.20,14 | For 48,60 mm x 34.00 mm outer dia pipe | each | 1113,00 |
|  | 18.20,15 | For 48,60 mm x 42.70 mm outer dia pipe | each | 1153,00 |
| 18.21 | Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to ***-1711WA*** G116 standard with V-profile or M-profile and with 0-ring sealing gasket of EPDM material of required dia as per dirction of Engineer-in­change  Male 'Thread Tee | |  |  |
|  | 18,21,1 | For 15 88 mm out dia x 15 mm nominal dia threaded | each | 332,00 |
|  | 18/1.2 | For 22.22 rum outer dia x 15 mm nominal dia threaded | ***each*** | 400.00 |
|  | 18,21,3 | For 22 22 mm out dia x 20 mm nominal dia threaded | each | 427,00 |
|  | 18,21,4 | For 28 58 mm out dia x 15 mm nominal dia threaded | each | 481,00 |
|  | 18/1.5 | For 28.58 mm outer dia x 20 mm nominal dia threaded | each | 502.00 |
|  | 18/1.6 | For 28.58 rum outer dia x 25 mm nominal dia threaded | each | 561.00 |
|  | 18/1.7 | For 34.00 mm outer dia x 15 mm nominal dia threaded | each | 699.00 |
|  | 18/1.8 | For 34.00 mm outer dia x 20 mm nominal dia threaded | each | 756.00 |
|  | 1821.9 | For 34 00 mm outer dia x 25 mm nominal dia threaded | each | 902.00 |
|  | 18,21,10 | For 34 00 mm out dia x 32 mm nominal dia threaded | each | 1139,00 |
|  | 18,21,11 | For 42 70 mm outer dia x 15 mm nominal dia threaded | each | 1067,00 |
|  | 18/1.12 | For 42.70 mm outer dia x 20 mm nominal dia threaded | each | 1092.00 |
|  | 1821.13 | For 42 70 mm outer dia x 25 mm nominal dia threaded | each | 1189.00 |
|  | 1821.14 | For 42 70 mm outer dia x 32 mm nominal dia threaded | each | 1321.00 |
|  | 18,21,15 | For 42 70 mm out dia x 40 mm nominal dia threaded | each | 1604,00 |
|  | 18/1.16 | For 48.60 mm outer dia x 15 mm nominal dia threaded. | each | 1162.00 |
|  | 18/1.17 | For 48.60 mm outer dia x 20 mm nominal dia threaded | each | 1196.00 |
|  | 18.21.18 | For 48 60 mm outer dia x 25 mm nominal dia threaded | each | 1247.00 |

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| Item  No. | Description | | Unit | Rate (in  **Rs.)** |
|  |  | |  |  |
|  | 18\_21.19 | For 48 60 mm outer dia x 32 mm nominal dia threaded | each | 1498.00 |
|  | 18.2120 | For 48 60 mm out dia x 40 mm nominal dia threaded | each | 1662,00 |
|  | 18.2121 | For 48 60 mm out dia x 50 mm nominal dia threaded | each | 2031,00 |
| 18,22 | Providing and fixing requited Stainless Steel Fitting of press fit design of grade AIM 304 conforming to -WWA 01116 standard with V-profile or M-profile and with 0-ring sealing gat of EPDM material of required die as per dirction of Engineer-in­charge.  Female Thread Tee | |  |  |
|  | 18/2.1 | For 15 88 mm outer dia x 15 mm nominal dia threaded | each | 339.00 |
|  | 18,22,2 | For 22 22 mm out dia x 15 mm nominal dia threaded | each | 400,00 |
|  | 18/2.3 | For 22.22 mm outer dia x 20 mm nominal dia threaded | each | 413.00 |
|  | 18/2.4 | For 28.58 mm outer dia x 15 mm nominal dia threaded | each | 517.00 |
|  | 18/2.5 | For 28 58 mm outs dia x 20 mm nominal dia threaded | each | 528.00 |
|  | 18,22,6 | For 28 58 non out dia x 25 mm nominal dia threaded | each | 578,00 |
|  | 18,22,7 | For 34 00 mm outer dia x 15 mm nominal dia threaded | each | 776,00 |
|  | 18/2.8 | For 34.00 mm outer dia x 20 mm nominal dia threaded | ***each*** | 789.00 |
|  | 18/2.9 | For 34 00 rum outer dia x 25 mm nominal dia threaded | each | 890.00 |
|  | 18/2.10 | For 34 00 rum outer dia x 32 mm nominal dia threaded | each | 1057.00 |
|  | 18,22,11 | For 42 70 mm outer dia x 15 mm nominal dia threaded | each | 1038,00 |
|  | 18/2.12 | For 42.70 mm outer dia x 20 mm nominal dia threaded | ***each*** | 1057.00 |
|  | 18/2.13 | For 42.70 mm outer dia x 25 mm nominal dia threaded | ***each*** | 1187.00 |
|  | 18/2.14 | For 42 70 mm outer dia x 32 mm nominal dia threaded | each | 1239.00 |
|  | 18,22,15 | For 42 70 mm outer dia x 40 mm nominal dia threaded | each | 1350,00 |
|  | 18,22,16 | For 48 60 mm out dia x 15 mm nominal dia threaded | each | 1237,00 |
|  | 18/2.17 | For 48.60 mm outer dia x 20 mm nominal dia threaded | each | 1250.00 |
|  | 18/2.18 | For 48 60 mm outer dia x 25 nun nominal dia threaded | each | 1295.00 |
|  | 18,12.19 | For 48 60 mm outer dia x 32 mm nominal dia threader' | each | 1375.00 |
|  | 18,22,20 | For 48 60 mm outer dia x 40 mm nominal dia threaded | each | 1432,00 |
|  | 18/2.21 | For 48.60 mm outer dia x 50 mm nominal dia threaded | each | 1432.00 |
| 18.23 | Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to -WWA 01116 standard with V-profile or M-profile and with 0-ring sealing gasket of EPDM material of required dia as per dirction of Engineer-in­charge Female Thread Connector/ Adapter | |  |  |
|  | 18,23,1 | I For 15,88 mm outer dia x 15 mm nominal dia threaded | each | 221,00 |

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| Item  No. | Description | | Unit | Rate (in  **Rs.)** |
|  |  | |  |  |
|  | 18\_23.2 | For 22 22 mm outer dia x 15 mm nominal dia threaded | each | 267.00 |
|  | 18.233 | For 22 22 mm out dia x 20 mm nominal dia threaded | each | 275.00 |
|  | 18.23.4 | For 28 58 mm out dia x 15 mm nominal dia threaded | each | 322.00 |
|  | 18\_23.5 | For 28.58 mm outer dia x 20 mm nominal dia threaded | each | 332.00 |
|  | 1823.6 | For 28 58 mm outer dia x 25 mm nominal dia threaded | each | 391.00 |
|  | 1823.7 | For 34 00 mm auto dia x 25 mm nominal dia threaded | each | 475.00 |
|  | 18.218 | For 34 00 mm out dia x 32 mm nominal dia threaded | each | 625.00 |
|  | 18.233 | For 42,70 mm outer dia x 32 mm nominal dia threaded | each | 669,00 |
|  | 1823.10 | For 42.70 mm outer dia x 40 mm nominal dia threaded | each | 791.00 |
|  | 1823.11 | For 48 60 mm outer dia x 40 mm nominal dia threaded | each | 973.00 |
|  | 18.2332 | For 48 60 mm outer dia x 50 mm nominal dia threaded | each | 973.00 |
| 18.24 | Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to \_WWA 0116 standard with V-profilc or M-profilc and with 0-ring sealing gasket of EPDM material of required dia as per dirction of Engineer-in­change  Male Thread Connector/ Adapter | |  |  |
|  | 18.24.1 | For 15 88 mm outer dia x 15 mm nominal dia threaded | each | 224.00 |
|  | 18.24.2 | For 22 22 mm outer dia x 15 mm nominal dia threaded | each | 264.00 |
|  | 18.24.3 | For 22 22 mm out dia x 20 mm nominal dia threaded | each | 288.00 |
|  | 18.24.4 | For 28 58 mm outer dia x 20 mm nominal dia threaded | each | 364.00 |
|  | 18.245 | For 28 58 mm outer dia x 25 mm nominal dia threaded | each | 372.00 |
|  | 18.24.6 | For 34.00 mm outer dia x 25 mm nominal dia threaded | *each* | 535.00 |
|  | 18.24.7 | For 34.00 mm outer dia x 32 mm nominal dia threaded | each | 656.00 |
|  | 18.24.8 | For 42 70 mm auto dia x 32 mm nominal dia threaded | each | 754.00 |
|  | 18.24.9 | For 42 70 mm outer dia x 40 mm nominal dia threaded | each | 843.00 |
|  | 18.24.10 | For 48 60 mm out dia x 40 mm nominal dia threaded | each | 976.00 |
|  | 18.24.11 | For 48 60 mm outer dia x 50 mm nominal die threaded | each | 1322,00 |
| 18,25 | Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 «affirming to JYWA G116 standard with V-profile or M-profile and with 0-ring stealing gat of EPDM material of required dia as per dirction of Engineer-in­charge.  Valve Connector | |  |  |
|  | 18,253 | For 15 88 mm outer dia x 15 mm nominal dia threaded | each | 272.00 |
|  | 18.25.2 | For 22.22 mm outer dia x 15 mm nominal dia threaded | each | 321.00 |
|  | 18.25.3 | For 22.22 nun outer dia x 20 mm nominal dia threaded | each | 343.00 |

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| Item  No. | Description | | Unit | Rate (in  Rs.) |
|  |  | |  |  |
|  | 18\_25.4 | For 28 58 mm outer dia x 25 mm nominal dia threaded | each | 492.00 |
|  | 18.25.5 | For 34 00 mm out dia x 32 mm nominal dia threaded | each | 731.00 |
|  | 1825.6 | For 42 70 mm outer dia x 40 mm nominal dia threaded | each | 1016.00 |
|  | 18\_25.7 | For 48.60 mm outer dia x 50 mm nominal dia threaded | *each* | 1366.00 |
| 18,26 | Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to JYWA G116 standard with V-prefile or M-profile and with 0-ring sealing gasket of EPDM material of required dia as per diction of Engineer-in­charge.  Female Threaded Elbow 90° | |  |  |
|  | 18.26.1 | For 15.88 rum outer dia x 15 mm nominal dia threaded | each | 238.00 |
|  | 18.26.2 | For 22 22 mm outer dia x 15 mm nominal dia threaded | each | 319.00 |
|  | 18.26.3 | For 22 22 mm outer dia x 20 mm nominal dia threaded | each | 330.00 |
|  | 18,26.4 | For 25 58 mm outer dia x 25 mm nominal dia threaded | each | 489,00 |
|  | 18,26.5 | For 34 00 mm out dia x 32 mm nominal dia threaded | each | 851.00 |
|  | 18.26.6 | For 42.70 mm outer dia x 32 mm nominal dia threaded | each | 1069.00 |
|  | 18.26.7 | For 42.70 mm outer dia x 40 mm nominal dia *threaded* | *each* | 1156.00 |
|  | 18.26.8 | For 48 60 mm outer dia x 40 mm nominal dia threaded | each | 1281.00 |
|  | 18,26.9 | For 48 60 mm out dia x 50 mm nominal dia threaded | each | 1494,00 |
| 18.27 | Providing and fixing required Stainless Steel Filling of press fit design of grade AISI 304 conforming to -WWA G116 standard with V-profile or M-proftle and with 0-ring sealing gasket of EPDM material of required dia as per &dim of Engineer-in­charge.  Male Threaded Elbow 90° | |  |  |
|  | 18,27.1 | For 15 88 mm outer dia x 15 mm nominal *dia* threaded | each | 251.00 |
|  | 18.27.2 | For 22.22 rum outer dia x 15 mm nominal dia *threaded.* | each | 317.00 |
|  | 18.27.3 | For 22 22 mm outer dia x 20 mm nominal dia threaded | each | 335.00 |
|  | 18,27.4 | For 28 58 mm out dia x 25 mm nominal dia threaded | each | 438.00 |
|  | 18,275 | For 34 00 mm out dia x 25 mm nominal dia threaded | each | 703.00 |
|  | 18.27.6 | For 34.00 mm outer dia x 32 mm nominal dia threaded | each | 855.00 |
|  | 18.27.7 | For 42 70 cum outer dia x 32 mm nominal dia threader' | each | 1085.00 |
|  | 18,27.8 | For 42 70 mm out dia x 40 mm nominal dia threaded | each | 1231.00 |
|  | 18.27.9 | For 48.60 mm outer dia x 40 mm nominal dia threaded | each | 1382.00 |
|  | 18.27.10 | For 48.60 mm outer dia x 50 mm nominal dia threaded | each | 1683.00 |

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| Item  No. | Description | | Unit | Rite (in  Rs.) |
|  |  | |  |  |
| 18.28 | Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to JNWA G116 standard with V-profile or M-profile and with 0-ring sealing gasket of EPDM material of required dia as per diretion of Engineer-in­charge. Cap | |  |  |
|  | 18.28.1 | For 15.88 ram outer dia pipe | each | 52.00 |
|  | 18.28.2 | For 22.22 mm outer dia Pipe | each | 74.00 |
|  | 18.28,3 | For 28,58 ram outer dia Pipe | each | 98.00 |
|  | 18.28.4 | For 34.00 mm outer dia Pipe | each | 201.00 |
|  | 18.28.5 | For 42.70 mm outer dia Pipe | each | 294.00 |
|  | 18.28.6 | For 48 60 mm outer dia Pipe | each | 383.00 |
| 18.29 | Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to JNWA G116 standard with V-profile or M-profile and with 0-ring sealing gasket of EPDM material of required dia **as per** diretion of Engineer-in­charge  Pipe Bridge | |  |  |
|  | 18.29.1 | For 15 88 mm outer dia pipe | each | 249.00 |
|  | 18.29.2 | For 22.22 mm outer dia. Pipe | each | 315.00 |
|  | 18.29.3 | For 28.58 ram outer dia Pipe | each | 473.00 |
| 18.30 | Providing and fixing required Stainless Steel Filling of press fit design of grade AISI 304 conforming to JNWA G116 standard with V-profde or M-profile and with 0-ring sealing gasket of EPDM material of required dia as per diretion of Engineer-in­charge  Slip Coup ing/ Soeket | |  |  |
|  | 18.30.1 | For 15.88 mm outer dia pipe | each | 131.00 |
|  | 18.30.2 | For 22 22 mm outer dia pipe | each | 214.00 |
|  | 18.303 | For 28 58 mm outer dia pipe | each | 274.00 |
|  | 18,30.4 | For 34 00 mm outer dia pipe | each | 405.00 |
|  | 18.30.5 | For 42.70 mm outer dia pipe | each | 569.00 |
|  | 18.30.6 | For 48 60 mm outer dia pipe | each | 707.00 |
| 18.31 | Fixing water meter and gimp cock in G.L pipe line including Gutting and threading the pipe and making long screws etc. complete (cost of water meter and stop cock to be paid separately). | | 1 | 189.00 |
| 18.32 | Providing and fixing gun metal gate valve with C.L wheel of approved quality (screwed end) : | |  |  |
|  | 18323 125 mm nominal bore | | each | 486.00 |
|  | 18.32.2 | 32 mm nominal bore. | each | 558.00 |

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| Item  No. | Description | | Unit | Rite (in  **Rs.)** |
|  |  | |  |  |
|  | 1832.3 | 40 mm nominal bore | each | 677.00 |
|  | 18.32.4 | 50 mm nominal bore | each | 976.00 |
|  | 18,32.5 | 65 mm nominal bore | each | 1339,00 |
|  | 18.32.6 | 80 mm nominal bore | each | 2302.00 |
| 18,33 | Providing and fixing gun metal gate valve with brass lever handle of approved quality. | |  |  |
|  | 18.33.1 | 25 mm nominal bore | each | 341.00 |
|  | 18.33.2 | 32 mm nominal bore. | each | 419.00 |
|  | 18.33.3 | 40 mm nominal bore | each | 491.00 |
|  | 18.33.4 | 50 mm nominal bore | each | 639.00 |
| 18.34 | Providing and fixing CPVC gate valve with knob of approved quality. | |  |  |
|  | 18.34.1 | 25 mm nominal bore | each | 428.00 |
|  | 18,34,2 | 32 mm nominal bore, | each | 500.00 |
|  | 18.34.3 | 40 mm nominal bore | each | 584.00 |
|  | 18.34.4 | 50 mm nominal bore | each | 749.00 |
| 18.35 | Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete : | |  |  |
|  | 18,353 | 15 mm nominal bore | each | 316.00 |
|  | 18.35.2 | 20 mm nominal bore | each | 431.00 |
|  | 18.35.3 | 25 mm nominal bore | each | 499.00 |
| 18.36 | Providing and fixing gun metal non- return valve of approved  quality (screwed end) : | |  |  |
|  | 18,36.1 | 25 mm nominal bore |  |  |
|  | 18.36.1.1 | Horizontal | each | 4.62.00 |
|  | 18.36.1.2 | Vertical | each | 474.00 |
|  | 18,362 | 32 mm nominal bore |  |  |
|  | 18.36.2.1 | Horizontal | each | 587.00 |
|  | 18.36.2.2 | Vertical | each | 715.00 |
|  | 18,363 | 40 mm nominal bore |  |  |
|  | 18.36.11 | Horizontal | each | 746.00 |
|  | 18.36.32 | Vertical | each | 990.00 |
|  | 18.36.4 | 50 mm nominal bore |  |  |
|  | 18,36.4.1 | Horizontal | each | 1138.00 |
|  | 18.36.42 | Vertical | each | 1353.00 |

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| Item  No. | Description | | Unit | Rate (in  Rs.) |
|  |  | |  |  |
|  | 1836.5 | 65 non nominal bat |  |  |
|  | 18,365,1 | Horizontal | each | 2012,00 |
|  | 18,36.5,2 | Vertical | each | 2360,00 |
|  | 18.36.6 | 80 mm nominal bore |  |  |
|  | 1836.6.1 | Horizontal | each | 2886.00 |
|  | 18.36.6.2 | Vertical | each | 3699.00 |
| 18,37 | Providing and fixing brass ferrule with C.I. mouth cover including boring and tapping the main : | |  |  |
|  | 18.37.1 | 15 mm nominal bas | each | 236.00 |
|  | 18.37.2 | 20 nun nominal bore | each | 285.00 |
|  | 18,37.3 | 25 mm nominal bore | each | 391.00 |
| 18,38 | Providing and fixing uplasticised PVC connection pipe with brass unions : | |  |  |
|  | 18.38.1 | 30 cm length |  |  |
|  | 18.38.1.1 | 15 mm nominal bore | each | 88.00 |
|  | 18.38.1.2 | 20 mm nominal bore | each | 129.00 |
|  | 18,38/ | 45 can length |  |  |
|  | 18.38.2.1 | 15 mm nominal bore | each | 149.00 |
|  | 18.38.21 | 20 mm nominal bore | each | 184.00 |
| 18.39 | Constructing masonry Chamber 30x30x50 cm inside, in brick work in cement mortar 1:4 (1 cement :4 sand) for stop cock, with C. I. surface box 100x100 x75 mm (inside) with hinged cover fixed in cement concrete slab 12-4 mix (1 cant / sand : 4 graded stone aggregate 20 mm nominal size), i/c necessary excavation, foundation *concrete* 1:5:10 ( 1 cement :5 sand:10 graded *done* aggregate 40mm nominal size ) and Side plastering with cement mortar 1:3 (1 cement .3 sand) 12mm thick finished with a floating coat of nest cement complete as per standard design : | |  |  |
|  | 18.39.1 | With **common** burnt clay bricks of 25 kg /sqcm compressive strength. | 1 | 916.00 |
| 18.40 | Constructing masonry Chamber 60x60x75 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 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 sand : 4 graded stone aggregate 20mm nominal size ) , i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 sand) 12 ram thick finished with a floating coat of neat cement complete as pa standard design : | |  |  |

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| Item  No. | Description | | Unit | Rate (in  Rs.) |
|  |  | |  |  |
|  | 18.40.1 | With common burnt clay bricks of 25 kg /sqcm compressive strength. | each | 5416.00 |
| 18,41 | Constructing masonry Chamber 60x60x75 cm, inside in brick work in cement mortar 1:4 (1 cement : 4 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 sand : 4 graded stone aggregate 20 mm nominal size) , i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 sand:10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design | |  |  |
|  | 18,41,1 | With common burnt clay bricks of 25 kg /sqcm compressive strength. | each | 5168,00 |
| 18.42 | Constructing masonry Chamber 60x45x50 an inside, in brick work in cement mortar 1:4 (1 cement : 4 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 sand • 4 graded stone aggregate 20 mm nominal size) , i/c necessary ***excavation,*** foundation concrete 1:5:10 ( 1 cement : 5 sand:10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement • 3 sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design : | |  |  |
|  | 18.42.1 | With common burnt clay bricks of 25 kg /sqcm compressive strength. | each | 4870.00 |
| 18.43 | Painting GI. pipes and fittings with synthetic enamel white paint with two coats over a ready mixed priming coat, both of approved quality for new work : | |  |  |
|  | 18,43,1 | 15 mm diameter pipe. | metre | 8.00 |
|  | 18.43.2 | 20 mm diameter pipe. | metre | 9.00 |
|  | 18.43.3 | 25 mm diameter pipe. | metre | 12.00 |
|  | 18,43,4 | 32 mm diameter pipe. | metre | 14,00 |
|  | 18,43,5 | 40 mm diameter pipe. | metre | 16,00 |
|  | 18.43.6 | 50 mm diameter pipe. | metre | 19.00 |
| 18.44 | Repainting G.I. pipes and fittings with synthetic enamel white paint of approved quality : | |  |  |
|  | 18.44.1 | 15 mm diameter pipe. | metre | 4.00 |
|  | 18.44.2 | 20 mm diameter pipe. | metre | 5.00 |
|  | 18,44,3 | 25 mm diameter pipe | metre | 6.00 |
|  | 18,44,4 | 32 mm diameter pipe | metre | 7.00  Page No.328 |
| **Item  No.** | **Description** | | **Unit** | **Rate fin  Rs.)** |
|  |  | |  |  |
|  | **18.44.5** | **40 nun diameter pipe** | **metre** | **8.00** |
|  | **18.44.6** | **50 mm diameter pipe** | **metre** | **9.00** |
| **18.45** | **Painting G.I. pipes and fittings with two coats of anti-corrosivc bitumastic paint of approved quality :** | |  |  |
|  | **18.45.1** | **15 mm diameter pipe** | **metre** | **4.00** |
|  | **18.45.2** | **20 mm diameter pipe** | **metre** | **5.00** |
|  | **18.45.3** | **25 mm diameter pipe** | **metre** | **7.00** |
|  | **18.45.4** | **32 mm diameter pipe** | **metre** | **8.00** |
|  | **18.45.5** | **40 mm diameter pipe** | **metre** | **9.00** |
|  | **18.45.6** | **50 mm diameter pipe** | **metre** | **10.00** |
|  | **18.45.7** | **65 mm diameter pipe** | **metre** | **13.00** |
|  | **18.45.8** | **80 mm diameter pipe** | **metre** | **15.00** |
| **18.46** | **Providing and filling sand all-round the GI. pipes in external work.** | |  |  |
|  | **18.46.1** | **15 mm diameter pipe** | **metre** | **107.00** |
|  | **18.46.2** | **20 mm diameter** pipe | **metre** | **108.00** |
|  | **18.46.3** | **25 mm** diameter pipe | metre | **111.00** |
|  | **18.46.4** | **32 mm diameter pipe** | **metre** | **114.00** |
|  | **18.46.5** | **40 mm diameter pipe** | **metre** | **116.00** |
|  | **18.46.6** | **50 mm diameter pipe** | **metre** | **120.00** |
|  | **18.46.7** | **65 nun diameter pipe** | **metre** | **189.00** |
|  | **18.46.8** | **80 mm diameter** pipe | **metre** | **195.00** |
| **18.47** | **Providing and fixing G.1.** Union in **GI, pipe including cutting and threading the pipe and making long screws etc. complete (New work)** | |  |  |
|  | **18.47.1** | **15 mm nominal bore** | **each** | **117.00** |
|  | **18.47.2** | **20 mm nominal bore** | **each** | **148.00** |
|  | **18.47.3** | **25 mm nominal bore** | **each** | **158.00** |
|  | **18.47.4** | **32 mm nominal** | **each** | **204.00** |
|  | **18.47.5** | **40 mm nominal bore** | **each** | **321.00** |
|  | **18.47.6** | **50mm nominal bore** | **each** | **428.00** |
|  | **18.47.7** | **65mm flea:1311ml bore** | **each** | **625.00** |
|  | **18.47.8** | **80 mm nominal bore** | **each** | **718.00** |

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| Item  No. | Description | | Unit | Rate (in  **Rs.)** |
|  |  | |  |  |
| 18.48 | Providing and fixing GI 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 | |  |  |
|  | 18.48.1 | 15 min nominal bore. | each | 228.00 |
|  | 18,48.2 | 20 mm nominal bore, | each | 252.00 |
|  | 18,48.3 | 25 mm nominal bore, | each | 269.00 |
|  | 18.48.4 | 32 mm nominal bore. | each | 316.00 |
|  | 18.48.5 | 40 mm nominal bore. | each | 432.00 |
|  | 18.48.6 | 50 mm nominal bore. | each | 579.00 |
|  | 18.48.7 | 65 mm nominal bore. | each | 777.00 |
|  | 18.48.8 | 80 mm nominal bore. | each | 870.00 |
| 18.49 | 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 *had,* outlet and overflow pipes but without fittings and the base support for tank | | ~~ | 7.00 |
| 18,50 | Providing and fixing brass **bib** cock of approved quality : | |  |  |
|  | 18.50.1 | 15 mm nominal bore | each | 306.00 |
|  | 18.50.2 | 20 mm nominal bore | each | 338.00 |
| 18.51 | Providing and fixing brass stop cock of approved quality : | |  |  |
|  | 1831.1 | 15 min nominal bore | each | 318.00 |
|  | 18.51.2 | 20 mm nominal bore | each | 344.00 |
| 18,52 | Providing and fixing C.P, brass bib cock of approved quality conforming In IS:8931 | |  |  |
|  | 18.52.1 | 15 mm nominal bore. | each | 458.00 |
| 18.53 | Providing and fixing C.P. brass long nose bib cock of approved  quality conforming to IS standards and weighing not less than 810  gms, | |  |  |
|  | 18.53.1 | 15 mm nominal bore. | each | 526.00 |
| 18,54 | Providing and fixing C.P, brass long body bib cock of approved quality conframing to IS standards and wag not less than 690 gms, | |  |  |
|  | 18,543 | 15 mm nominal bore | each | 544.00 |
| 18.55 | Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931. | |  |  |

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| Item  No. | Description | | Unit | Rate fin  **Rs.)** |
|  |  | |  |  |
|  | 18.55.1 | 15 mm nominal bon. | each | 778.00 |
| 18.56 | Providing and fixing C.P. brass angle valve for basin mixer and Sera points of approved quality conforming to IS:8931 | |  |  |
|  | 18,56,1 | 15 mm nominal bore | each | 516,00 |
| 18,57 | Providing and fixing chrome plated brass battery based infrared sensor operated pillar cock, having foam flow technology. | |  |  |
|  | 18.57.1 | 15 mm nominal bore. | each | 8216.00 |
| 18.58 | Providing and fixing C.P. brass pillar cock approved quality and make conforming to IS:specification. 15 mm morainal bore 125 mm long foam flow. | | 1 | 829.00 |
| 18.59 | Providing  and make | and fixing C.P. brass basin mixer of approved quality conforming to IS:specification\_15 mm nominal bore. | 1 | 1769.00 |
|  |
| 18,60 | Providing and fixing C.P. bran wall mixer of approved quality and make conforming to IS:specification.  15 mm nominal bore. | | 1 | 3292,00 |
| 18.61 | Providing and fixing C.P. brass sink mixer of approved quality and make conforming to IS:specification,  15 mm nominal bore. | | 1 | 1724.00 |
| 18,62 | Providing and fixing C.P. brass elbow oprated bibeock of approved quality and make conforming to IS:specification.  15 mm nominal bore. | | 1 | 840,00 |
| 18.63 | Providing and fixing C.P. brass elbow oprated pillar cock of approved quality and make conforming to IS:specification.  15 mm nominal bore. | | "I | 1072.00 |
| 18.64 | Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet : | |  |  |
|  | 18,64,1 | 100 mm diameter | each | 130,00 |
|  | 18.64.2 | 150 mm diameter | each | 155.00 |
| 18.65 | Providing and fixing PTNIT bib cock of approved quality and colour. | |  |  |
|  | 18,65,1 | 15mm nominal bore, 86 mm long. Weighing not less than 88 gms. | each | 173,00 |
|  | 18.65.2 | 15 mm nominal bore, 122mm long. Weighing not less than 99 gms. | each | 208.00 |
|  | 18.65.3 | 15 mm nominal bore, 165mm long. Weighing not less than 110 gms. | each | 242.00 |
|  | 18,65,4 | 15mm nominal bore, 90mm long. Weighing not less than 93 gms. | 1 | 237,00 |

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| Item  No. | Description | | Unit | Rate fin  **Rs.)** |
|  |  | |  |  |
| 18.66 | Providing and fixing PTMT stop cock of approved quality and colour, | |  |  |
|  | 18.66.1 | 15 mm nominal bore, 86mm long, Weighing not less than 88 gms. | each | 173.00 |
|  | 18.66.2 | 20mm nominal bore, 89mm long. Weighing not less than 88 gms. | each | 213.00 |
|  | 18.66.3 | Concealed stop cock, 15mm nominal bore, 108mm long. Weighing not less than 108 gms. | each | 242.00 |
| 18.67 | Providing and fixing PTMT pillar cock of approved quality and colour, | |  |  |
|  | 18.67.1 | 15mm nominal bore, 107mm long. Weighing not less than 110 gms. | each | 251.00 |
|  | 18.67.2 | 15mm nominal bore, 125mm long foam flow.  Weighing not less than 120 gms. | 1 | 332.00 |
| 18.68 | Providing and fixing PTMT, push cock of approved quality and colour. | |  |  |
|  | 18.68.1 | 15 mm nominal bore, 98mm long. Weighing not less than 75 gms. | each | 144.00 |
|  | 18.68.2 | 15 mm nominal bore, 80mm long. Weighing not less than 46 gms. | each | 126.00 |
| 18.69 | Providing and fixing PTMT grating of approved quality and colour. | |  |  |
|  | 18.69.1 | Circular type. |  |  |
|  | 18.69.1.1 | 100= nominal dia. | each | 55.00 |
|  | 18,69.1.2 | 125 mm nominal din with 25 mm waste hole. | each | 60.00 |
|  | 18,692 | Rectangular type with openable circular lid. |  |  |
|  | 18.69.2.1 | 150 mm nominal size square 100 mm diameter of the inner hinged round grating . | "I | 148.00 |
| 18.70 | Providing and fixing PTMT angle stop cock 15 mm nominal bore. Wthghing not less than 85 gms. | | 1 | 208.00 |
| 18.71 | Providing and fixing PTMT swivelling shower, 15mm nominal bore. Weighing not less Than 40gms. | | each | 164.00 |
| 18.72 | 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 hall | |  |  |
|  | 1832.1 | 15 mm nominal bort, 105 mm long. Weighing not less than 138 *gms* | each | 234.00 |

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| **Item  No.** | **Description** | | **Unit** | **Rate (in  Rs.)** |
|  |  | |  |  |
|  | **1832.2** | **20 mm nominal bore, 120 mm long. Weighing not less than 198 gins.** | **each** | **314.00** |
|  | **18.72.3** | **25 mm nominal bore, 152mm long. Weighing not less than 440 gms.** | **each** | **615.00** |
|  | **18.72.4** | **40mm nominal bore, 206mm long. Weighing not less than 690 gins.** | **each** | **1016.00** |
|  | **18,72.5** | **50mm nominal bore, 242mm long. Weighing not less than 1240 gins** | **each** | **1469.00** |
|  |
| **18.73** | **Providing and fixing Unplasticised P.V.C. connection pipe with PTMT Nuts collar and bush of approved quality and colour.** | |  |  |
|  | **18.73.1** | **15 mm nominal bore with 30cm length.** | **each** | **61.00** |
|  | **18.73.2** | **15 mm nominal bore with 45 cm *length.*** | ***each*** | **79.00** |
| **18,74** | **Providing and fixing PTMT extension nipple for water tank pipe, fillings of approved quality and colour.** | |  |  |
|  | **18.74.1** | **15 mm nominal bore. Weighing not less than 32 gins.** | **each** | **59.00** |
|  | **18.74.2** | **20mm nominal bore. Weighing not less than 4Ogms.** | **each** | **65.00** |
|  | **18.74.3** | **25mm nominal bore. Weighing not less than 62 gins.** | **each** | **82.00** |
| **1835** | **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) :** | |  |  |
|  | **18.75.1** | **80 mm die nominal bore** | **each** | **3548.00** |
|  | **18.75.2** | **100 mm dia nominal bore** | **each** | **5200.00** |
|  | **18.75.3** | **150 mm dia nominal bore** | **each** | **7497.00** |
|  | **18.75.4** | **200 = dia nominal bore** | **each** | **8472.00** |
| **18.76** | **Providing and fixing C.I. dirt box strainer for bulk type water meter with nuts, bolts, rubber insertions etc, complete conforming to IS : 2373** | |  |  |
|  | **18.76.1** | **80 mm dia** | **each** | **4186,00** |
|  | **1836.2** | **100 mm dia** | **each** | **6562,00** |
|  | **18.76.3** | **150 min dia** | **each** | **8526.00** |
|  | **18.76.4** | **200 min dia** | **each** | **11766.00** |
| **18,77** | **Cutting holes upto 30x30 cm in walls including making good the same :** | |  |  |

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| Item  No. | Description | | Unit | Rate (in  Rs.) |
|  |  | |  |  |
|  | 1837.1 | With **common** burnt clay bricks of 25 kg /sqcm compressive strength. | each | 154.00 |
| 18,78 | Cutting holes upto 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 sand : 4 graded stone aggregate 20 mm nominal size) including finishing complete so as to make it leak proof | | each | 129.00 |
| 18.79 | Making chases ugh) 7.5x7.5 cm in walls including making good and **finishing** with matching surface after housing G.I. pipe **etc.** | | I | 54.00 |
| 18.80 | Making hole upto 20x20 cm and embedding pipes upto 150 mm diameter in masonry and filling with cement concrete 1:3:6 (1 cement : 3 sand : 6 graded **done aggregate 20 mm nominal size)** including disposal of malba. | | I | 94.00 |
| 18,81 | 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 : | |  |  |
|  | 18.81.1 | 25 to 40 rem nominal bore | each | 247.00 |
|  | 18,812 | 50 to 80 mm nominal bore | each | 644.00 |
| 18.82 | Providing and fixing CP jet assembly to including connection etc complete. | | each | 375.00 |
| 18,83 | Providing and fixing ferro-canent water storage tank with cover, having minimum thickness of 10mm\_ The wall to be reinforced with two layers of double galvanized annealed square woovcn wire mesh of 20 gauge wire spaced at 15mm for 300 litre capacity and 12mm for 450 to 2500 litres capacity finish with 3 layers of Cement mortar 1:2 duly modified with polymer based plastizers and hardening chemicals (Burogrout and Buroscal) The tank should coubarm to the specification prescribed by Structural Engineering Research Centre Roorkee/Gaziabad. The tanks to be painted with drinking water paint inside and aluminimum paint out side with prevision of outlet, inlet, overflow and cleaning including hoisting and placing in position upto floor two level oil M. height. | | litre | 7.00 |
| 18,84 | Add extra for additional floor lift beyond 5 .0M.height. | | litre | 020 |

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| Item  No. | Description | | Unit | Rate (in Rs.) |
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| 191 | 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 sand) including testing of joints etc. conwIctc : Excavation to be paid seperataly | |  |  |
|  | 19.1.1 | 100 mm diameter | metre | 195.00 |
|  | 191.2 | 150 mm diameter | metre | 260.00 |
|  | 19.1.3 | 200 mm diameter | metre | 337,00 |
|  | 19.1.4 | 230 mm diameter | metre | 461,00 |
|  | 19.15 | 250 mm diameter | metre | 507,00 |
|  | 19.1.6 | 300 mm diameter | metre | 680,00 |
| 19.2 | Providing and laying cement concrete 1:5:10 (1 cement : 5 sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete as pa standard design: | |  |  |
|  | 192.1 | 100 mm diameter S.W. pipe | metre | 475.00 |
|  | 192.2 | 150 mm diameter S.W. pipc | metre | 580.00 |
|  | 19.2.3 | 200 mm diameter S.W. pipe | metre | 677,00 |
|  | 19.2.4 | 230 mm diameter S.W. pipe | metre | 728,00 |
|  | 192.5 | 250 mm diameter S.W. pipe | metre | 782.00 |
|  | 192.6 | 300 mm diameter S.W. pipe | metre | 877.00 |
| 193 | Providing and laying cement concrete 1:5:10 (1 cement : 5 sand • 10 graded stone aggregate 40 mm nominal size) upto haunches of S.W. pipes including bed concrete as per standard design : | |  |  |
|  | 193.1 | 100 mm diameter S.W. pipe | metre | 226.00 |
|  | 193.2 | 150 mm diameter S.W. pips | metre | 366.00 |
|  | 193.3 | 200 mm diameter S.W. pips | metre | 430.00 |
|  | 19.3.4 | 230 mm diameter S.W, pipe | metre | 465,00 |
|  | 19.35 | 250 mm diameter SW, pipe | metre | 500,00 |
|  | 19.3.6 | 300 mm diameter S.W. pipe | metre | 577.00 |
| 19.4 | Providing and laying below ground =plasticised PVC pipe to with stand working pressure of 4 kgtcm2 soild waste pipes confirming to IS:13592 and IS-4985 including jointing with seal ring confirming to IS :5282 leaving lOmm gap for thermal expansion all necessary fittings etc. complete. Excavation to be paid seperataly. | |  |  |
|  | 19.4.1 | 110 rm diameter OD | RM | 234.00 |
|  | 19.4.2 | 160 mm diameter OD | RM | 477.00 |

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| Item  No. | Description | | Unit | Rate (in Rs.) |
|  |  | |  |  |
|  | 19.4.3 | 200 = diameter OD | RM | 751.00 |
|  | 19.4.4 | 250 mm diameter 01) | RM | 972,00 |
|  | 19.4.5 | 300 mm diameter 01) | RM | 1232.00 |
| 19.5 | Providing and laying cement concrete 1:3:6 (1 cement : 3 sand : 6 graded gime aggregate 20 mm nominal size) all-round PVC. pipes including bed concrete as per standard design: | |  |  |
|  | 19.5.1 | 110 mm diameter PVC. pips | RM | 576.00 |
|  | 19.5.2 | 160 mm diameter PVC. pipe | RM | 704,00 |
|  | 19.5.3 | 200 mm diameter PVC. pipe | RM | 821,00 |
|  | 19.5.4 | 250 mm diameter PVC. pipe | RM | 949,00 |
|  | 19.5.5 | 300 mm diameter PVC pipe | RM | 1078.00 |
| 19.6 | Providing and laying cement concrete 1:3:6 (1 cement : 3 sand : 6 graded stone aggregate 20 mm nominal dm) up to haunches of PVC. pipes including bed *concrete* as per standard design : | |  |  |
|  | 19.6.1 | 110 mm diameter PVC. pipe | **RM** | 274.00 |
|  | 19.6.2 | 160 mm diameter PVC. pipe | RM | 444,00 |
|  | 19.6.3 | 200 mm diameter PVC. pipe | RM | 521,00 |
|  | 19.6.4 | 250 mm diameter PVC. pipe | RM | 607.00 |
|  | 19.6.5 | 300 mm diameter PVC pipe | RM | 700.00 |
| 19.7 | Providing and fixing square-mouth S.W. gully trap class SP1 complete with C.I. grating brick masonry chat with water tight C.L cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and Dame to be not less than 2.70 kg as per standard design : | |  |  |
|  | 19.7.1 | 100x100 mm size P type |  |  |
|  | 19,7.1.1 | With wall burnt bricks | each | 1764.00 |
|  | 19.7.12 | With ***Sewer*** bricks conforming to IS : 4885 | each | 1668.00 |
|  | 19.7.2 | **150 x 100 = size P type.** |  |  |
|  | **19/.21** | **With well burnt briksc** | **cacti** | 1803.00 |
|  | 19.7.2.2 | With sewer bricks conforming to IS : 4885 | each | 1707.00 |
|  | 19.7.3 | 180x150 mm size P type |  |  |
|  | 19.7.3.1 | With wall burnt bricks | each | 1913.00 |
|  | 19.7.32 | With Sewn: bricks confining to IS : 4885 | each | 1818.00 |

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| Item  No. | Description | | IInit | Rate (in Rs.) |
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| 19J | Providing and laying ikon-pressure NP2 class (light duty) RC.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement • 2 sand) including testing of joints etc. complete : | |  |  |
|  | 19.8.1 | 100 mm dia. RC.C. pipe | metre | 243,00 |
|  | 19.8.2 | 150 mm dia. RC.C. pipe | metre | 285,00 |
|  | 19.8.3 | 250 rum dia. R.C.C. pipe | metre | 385.00 |
|  | 19.8.4 | 300 mm dia. ***R.C.C.*** pipe | metre | 480.00 |
|  | 19.8.5 | 450 mm dia. ***R.C.C.*** pipe | metre | 699.00 |
|  | 19.8.6 | 500 mm dia ILC.C. pipe | metre | 826.00 |
|  | 19.8.7 | 600 mm dia R\_C.C. pipe | metre | 1278.00 |
| 199 | Constructing brick masonry manhole in cement mortar 1:4 ( 1 canent : 4 sand ) R.C.C. top slab with Cement Concrete 1:2:4 mix (1 cement : 2 sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix. (1 cement : 4 sand : 8 graded stone aggregate 40mm nominal size) inside plastering 12mm thick with cement mortar 1:3 (1 cement -. 3 sand) finished with floating coal of neat cement and making charnels in cement concrete 1:2:4 (1 cement : 2 sand - 4 graded stone aggregate 20mm nominal size) flnitthed with a floating coat of neat cement complete as per standard design : | |  |  |
|  | 19.9.1 | Inside size 90x80 cm and 45 an 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) : |  |  |
|  | 19.9.1.1 | With well burnt bricks | each | 7997.00 |
|  | 19.9.12 | With ***Sewer*** bricks conforming to IS : 4885 | each | 7747.00 |
|  | 19.9.2 | Inside size 12000 an and 90 cm deep including C.L covet 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) : |  |  |
|  | 19.9.2.1 | With well burnt bricks | each | 18086.00 |
|  | 19.9.2.2 | With Sewer bricks conforming to IS : 4885 | each | 17402.00 |
|  | 19.9.3 | Inside size 120x90 can and 90 cm deep including CL cover with frame (heavy duty) 560 mm internal diameter, total weight of cover and frame to be not less than 208 kg (weight of coves 108 kg and weight of frame 100 kg) : |  |  |
|  | 19.9.3.1 | With well burnt bricks | each | 21816.00 |

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| Item No. | Description | | IInit | Rate (in Rs.) |
|  |  | |  |  |
|  | 19.9.31 | With Sewer bricks confca-ming to IS : 4885 | each | 21228.00 |
| 19.10 | Extra for depth for manholes | |  |  |
|  | 19.10,1 | Size 90x80 cm |  |  |
|  | 19.10,1,1 | With well burnt bricks | metre | 6176.00 |
|  | 1910.1.2 | With Sewer bricks confca-ming to IS : 4885 | metre | 5448.00 |
|  | 19,102 | Size 120x90 an |  |  |
|  | 19.10.2.1 | With well burnt bricks | metre | 7380.00 |
|  | 19.10.2.2 | With Sewer bricks confotming to IS : 4885 | metre | 6512.00 |
| 19.11 | Constructing brick masonry circular type manhole 0.91m internal dia *at* bottom and 0,56m dia *at* top in eanent mortar 1:4(1 cement : 4 sand), inside cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 sand) flatted with a floating coat of neat cement, foundation concrete 1:3:6 mix (1 cement : 3 sand : 6 graded stone ag,gregide 40= nominal size), and making necessary °hamlet in cement concrete 1:2:4(1 cement : 2 sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of nerd cement all complete as per standard design : | |  |  |
|  | 19.11.1 | 0.91 m deep with S.F.RC. cover and frame (heavy duty, HD-20 grade designatimi) 560Eam internal diameter conformin,g to I.S. 12592, total weight of cover and frame to bc not less than 182kg., fixed in cement concrete 1:2:4 (1 cement : 2 sand : 4 graded stone aggregate 20 mm nominal size) including centering shuttering all complete, (Foot rests and 12mm thick cement plaster at the external surface shall be paid for separately): |  |  |
|  | 19.11.1.1 | With well burnt bricks | each | 8418.00 |
|  | 19.11.1.2 | With Sewer bricks conforming to IS : 4885 | each | 7958.00 |
| 19.12 | Extra depth fur circular typc manhole 0.91m internal dia (at bottom) beyond 0,91m to 1.67m | |  |  |
|  | 1912.1 | With well burnt bricks | metre | 5257.00 |
|  | 19.122 | With Sewer bricks conforming IS :4R&5 | metre | 4648.00 |
| 19.13 | Constructing brick masonry circular manhole 122m internal dia at bottom and 0 56m dia at top in cement mortar 1:4(1 cement :4 sand) inside cement plaster 12mm thick with cement mortar 1:3(1 cement :3 sand) finished with a floating coat of neat cement foundation concrete 1:3:6 (1 cement : 3 sand : 6 graded stone aggregate 40mm nominal size) and making necessary And in canon concrete 1:2:4 (1 cement : 2 sand • 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement all complete as per standard design : | |  |  |

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| Item  No. | Description | | IInit | Rate (in Rs) |
|  |  | |  |  |
|  | 1913.1 | 1.68 m deep with SFRC Cover and frame (heavy day HD-20 grade designation) 560mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182kg. fixed in cement oancrete 12:4 (1 cement • 2 sand : 4 graded stone aggregate 20mm nominal size) including centering stuttering all complete. (Foot rests and 12 mm thick cement plaster at the edema surface shall be paid *for* separately) : |  |  |
|  | 19.13.1.1 | With well burnt bricks | each | 15915.00 |
|  | 19.13,12 | With Sewer bricks conforming IS : 4885 | each | 15067.00 |
| 19.14 | Extra depth for circular type manhole 1.22m internal dia (at bottom) beyond 1.68 m to 2.29 m : | |  |  |
|  | 19.14.1 | With well burnt bricks | metre | 6809.00 |
|  | 19142 | With Sewer bricks confirming IS : 4885 | metre | 6014.00 |
| 19.15 | 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 sand) inside cement plaster 12mm thick with cement mortar 1:3 (1 cement : 3 sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 (1 cement : 3 sand • 6 graded stone aggregate 40mm nominal size) and making necessary runnel in cement concrete 1:2:4 (1 cement : 2 sand • 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement all complete as per standard design : | |  |  |
|  | 19.15.1 | 2.30m deep with SFRC Cover and frame (heavy duty HD-20 grade designation) 560mm 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 sand : 4 graded stone aggregate 20mm nominal size) including centering shuttering all complete, (Foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately) : |  |  |
|  | **19.15.1.1** | With well burnt bricks | each | 3516100 |
|  | **19.15.12** | **With SOW=** bricks conforming IS : 4885 | each | 32659.00 |
| 19.16 | **Extra** depth for circular type manhole 1,52 m internal dia (at bottom) beyond 2 30 m : | |  |  |
|  | 19.16.1 | With well burnt bricks | metre | 16863.00 |
|  | 19.16.2 | With Sewer bricks conforming IS : 4885 | metre | 14806.00 |
| 19.17 | Providing MS. foot rests including fixing in manholes with 20x20x10 cm cement concrete blocks 1:3:6 (1 cement : 3 sand : 6 graded stone aggregate 20 mm nominal size) as per standard design : | |  |  |

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| Item No. | Description | | Unit | Rate (in Rs.) |
|  |  | |  |  |
|  | 1917.1 | With 20'20 uma square *bar* | each | 226.00 |
|  | 19.172 | With 20 mm diameter round bar | each | 187.00 |
| 19.18 | Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as pa IS: 10910 on 12mm clia steel bar conforming to IS : 1786 having minimmi cross section as 23 mmx.25mm and *over* all minimum length 263 ram and width as 165mm with minimum 112 ram space between protruded legs having 2 ram tread on top surface by ribbing or chequering besides necessary and adamant anchoring projections on tail length on 138 mm as per standard drawing and suitable to withstand the baid Mt and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even alter fixin,g, including fixing in manholes with 30x20x15 an cement concrete block 1:3:6(1 cement : 3 sand : 6 graded stone aggregate 20 mm nominal size) complete as per  design. | | each | 266,00 |
| 19.19 | Replacement of l'vLS. Slot rests in manholes including dismantling concrete blocks and fixing with 20x20x10 cm cement concrete blocks 1:3:6 (1 cement : 3 sand : 6 graded stone aggregate 20 mm nominal size) : | |  |  |
|  | 19.19.1 | With 20x20 mm square bar | each | 254.00 |
|  | 19.19.2 | With 20 mm diameter round bar | each | 214.00 |
| 19.20 | Supplying and fixing C.I. caves without frame for manholes : | |  |  |
|  | 19.20,1 | 455x610 mm rectangular C.I. cam (light duty) the weight of the cover to be not less than 23 kg. | each | 1437.00 |
|  | 19201 | 500 mm diameter CL cover (medium duty) the weight of the caves to be not less than 58 kg, | each | 3134.00 |
|  | 1920.3 | 560 mm diameter C.I. cover (heavy duty) the weight of the cover to be not less than 108 kg. | each | 6333.00 |
| 19.21 | Providing and fixing in position precast R.C.C. manhole cover and frame of required shape and approved quality | |  |  |
|  | 1911.1 | L D- 23 |  |  |
|  | 1921.1.1 | Rectangular shape 600x450mm internal dimensions | each | 1229.00 |
|  |
|  | 1921.12 | Square shape 450mm internal dimensions | each | 1045.00 |
|  | 1921.1.3 | Circular shape 450mm internal diameter | each | 987.00 |
|  | 19112 | M D - 10 |  |  |
|  | 19212.1 | Square shape 450mm internal dimension | each | 1183.00 |
|  | 19212.2 | Mader shape 500mm internal diameter | each | 1098.00 |
|  | 1921,3 | H D - 20 |  |  |

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| Item  No. | Description | | Unit | Rate (in Rs.) |
|  |  | |  |  |
|  | 1911.3.1 | Circular ***shape*** 560 = internal diameter | each | 1711.00 |
|  | 19.214 | F:HD - 35 |  |  |
|  | 19.214.1 | Circular shape 560 min internal dia. | each | 1885.00 |
| 19.22 | Supplying and fixing CL cover 300x300 mm without frame for gully trap (standard pattern) the weight of cover to be not less than 4,5k8. | | each | 274.00 |
| 19.23 | Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with content concrete 1:2:4 mix (1 cement : 2 sand : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 sand) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete : | |  |  |
|  | 1913.1 | For pipes 100 to 230 mm diameter | each | 238.00 |
|  | 19.23 .2 | For pipes 250 to 300 mm diameter | each | 292.00 |
|  | 19.23.3 | For pipes 350 to 450 mm diameter | each | 424.00 |
| 19.24 | Providing sand cast iron drop connection extanally 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 sand : 10 graded stone aggregate 40 mm nominal size) with all centring and shuttering required, cutting holes in walls and making good with brick work in cement mortar 1:4 (1 cement : 4 sand) plastered with cement mortar 1:3 (1 cement : 3 sand) on inside of the manhole wall lead caulked joints between sand cast iron pipes and finings, stiff cement mortar 1:1 (1 cement : 1 sand) joints between sand cast iron We and S.W. pipe, making required channels complete as per standard design and specifications : | |  |  |
|  | 19.24,1 | 100 mm dia. sand cart item drop connection | each | 4915.00 |
|  | 19.242 | 150 mm dia. sand cart iron drop connection | each | 6856.00 |
| 1925 | Extra for depths beyond 60 cm of sand cast iron drop connection complete : | |  |  |
|  | 1925.1 | For 100 mm dia\_ sand cast iron drop connection | metre | 2092.00 |
|  | 19.25 .2 | For 150 mm dia\_ sand cast iron drop connection | metre | 2399.00 |
| 19.26 | Raising manhole cover and frame slab to required level including dismantling existing slab and making good the damage as required (Brick work for Raising depth of manhole to be paid separately) | |  |  |

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| Item  No. | Description | | Unit | Rate (in Rs.) |
|  |  | |  |  |
|  | 1926.1 | Rectangular manhole 90x80 cm with rectangular cover 600x450 mm of grade LD - 2.5 | each | 1126.00 |
|  | 19262 | Rectangular manhole 120x90 cm with circular cover 500 mm dia of grade MD - 10 | each | 1758.00 |
|  | 1926.3 | Rectangular manhole 120x90 cm with circular cover 560 = din of grade HD - 20 | each | 1638.00 |
|  | 19.26,4 | Circular manhole 140 cm dia with circular cover 600 mm dia of grade EHD - 35 | each | 167,00 |
| 19.27 | Constructing brick masonry road gully chamber 50x45x60 an with bricks m cement mortar 1:4 (1 cement • 4 sand) including 500x450 mm precast R.C.C. horizontal grating with frame complete as per standard design : | |  |  |
|  | 1927.1 | With well burnt bricks | each | 3941.00 |
| 19.28 | Constructing brick masonry road gully chamber 45x45X77,5 can with bricks in cement mortar 1:4 (1 cement : 4 sand ) with precast R C.C. vertical grating complete as per standard design : | |  |  |
|  | 19.28,1 | With well burnt bricks | each | 4910.00 |
| 19.29 | Constructing brick masonry road gully chamber **110x50x77.5** can with bricks in cement mortar 1:4 (1 cement : 4 sand) including 500x450 mm precast R\_C.C. horizontal grating with frame and vertical grating complete as per standard design : | |  |  |
|  | 1929.1 | I With well burnt bricks | each | 6983.00 |
| 19.30 | Making soak pit 2.5 m diameter 3.0 metre deep with 45 x 45 an dry brick honey comb shaft with bricks of class designation 75 and S W drain pipe 100 mm diameter, 1.8 m long complete as per standard desiga | |  |  |
|  | 19.30.1 | With well burnt bricks | each | 20609.00 |
| 19.31 | C,cosstructing soak pit 120x1.20x1.20m filled with bridcbats including S.W. drain pipe 100 mm diameter and 120m long complete as per standard design. | | each | 3172.00 |
| 19.32 | Providing and fixing S.W. intercepting trap in manholes with stiff mixture of cement mortar 1:1 (1 cement : 1 sand) including testing of joints etc. complete : | |  |  |
|  | 19.32,1 | 100 mm dia | each | 298,00 |
|  | 19.322 | 150 mm dia | each | 411.00 |
| 19.33 | Providing, laying and jointing half round glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cant : 1 sand) including testing of joints etc. complete : Excavation to be paid seperataly | |  |  |
|  | 19.33.1 | 100 = dia (hRlf round SW pipe) | metre | 163.00 |
|  | 19.332 | 150 mm dia (hRlf round SW pipe) | metre | 221.00 |
|  | 1933.3 | 200 mm dia (hRlf round SW pipe) | Metre | 284.00 |

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| Item No. | Description | | IInit | Rate (in Rs.) |
|  |  | |  |  |
|  | 19334 | 230 = dia (ball round SW pipe) | Metre | 386.00 |
|  | 19.33,5 | 2\_50 mm dia (half round SW pipe) | metre | 422 00 |
|  |
|  | 19.33,6 | 300 mm dia (holt round SW pipe) | metre | 552,00 |
| 19.34 | Providing and laying half round RCC pipes class (light duty) with collars jointed with stiff mixture of cement mortar in the propoition of 1:2 (1 cement: 2 sand) including testing of joints etc. complete : Excavation to be paid seperataly | |  |  |
|  | 19.34.1 | 100 mm dia. Half round R.C.C. pipe | metre | 196,00 |
|  | 19342 | 150 mm dia. Half round R\_C.C. pipe | metre | 233.00 |
|  | 19.34.3 | 250 rem dia. Half mind R.C.C. pipe | mane | 315.00 |
|  | 19.344 | 300 rem dia. Half mind R.C.C. pipe | niche | 387.00 |
| 19.35 | Dechict for not provide Cl. manhole cover with frame for item No. 19,9.1,1 & 19.9.12 | | each | 1975.00 |
| 19.36 | Dedua for not provide CI. manhole cover with frame for item No. 19.92.1 & 19.9.22 | | each | 6185.00 |
| 1935 | Deduct for not provide C.I. manhole cover with frame for item No. 19.9.3.1 & 19.9.32 | | each | 10454.00 |
| 19.36 | Providing & Fixing of Precast RCC drain cover of size 600x450 x7Omm (thielmess) with 4 holes, mararfactured by using M-30 grade of concrete rcinfnrced with 8mm dis Tor Steel 40130= c/c both ways, manufactured by vibro compaction process using joint less FRP moulds, so at to achieve &buttering finish cm five faces et, face will have broom finish etc complete, | | each | 350.00 |
| 19.37 | Providing & Fixing of Precast RCC drain cover of sin 750x600 x7Omm (thickness) with 6 holes, manufactured by using M-30 grade of concrete reinforced with 8mm dia Tor Steel WITIOmm c/c both ways, manufactured by vibro compaction process using joint lees FRP [mouldg. so](http://mouldg.so) at to achieve shutting finish on five faces ariP ◼ faa will have broom finish etc complete. | | each | 550,00 |
| 19.38 | Providing & Fixing of Precast RCC drain cover of size 400x450 ircOmm (thialmess) with 8 holes, manufactured by using M-30 grade of concrete reinforced with two layers of 8mm dia Tor Steel 40130mm GIG both ways, manufactured by vibro compaction process using joint less FRP moulds, so at to achieve shuttering finish on fivc faces <Alp thee will have broom finish etc complete, | | each | 900.00 |
| 19.39 | Providing & Fixing of Precast RCC drain cover of rise 1150x400 x100mm (thiclaiess) with 10 holes, manufactured by using M-30 grade *of* concrete reinforced with two layers of 8rom dia Tor Steel 404)0mm GIG bah ways, manufactured by vibro compaction process using joint less FRP moulds, so at to achieve shuttering finish on fivc faces <Alp Ewe will have broom finish etc complete. | | each | 1100.00 |

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| Item No. | Description | | Unit | Rate (in Rs.) |
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| 20.1 | Providing, driving and Stalling driven east-in-situ reinforced cement concrete piles of grade M-35 of specified diameter and length below the pile cap, to carry safe working load not less than specified, occluding the cost of steel reinforcement but including the cost of shoe cement coiaerete 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 | 1366.00 |
|  | 201.2 | 450 mm ciia piles | metre | 1615.00 |
|  | 201.3 | 500 mm ciia piles | metre | 1912.00 |
|  | 201.4 | 550 mm dis piles | metre | 213100 |
|  | 20,1,5 | 750 mm dia piles, | metre | 3695.00 |
|  | 20.1.6 | 1000 mm dia piles. | metre | 6307.00 |
|  | 201.7 | 1200 = dia piks. | metre | 8463.00 |
|  | 2111.8 | 1500 = dia piles. | metre | 12171100 |
| 20.2 | Boring, providing and installing bored crtirt-in-situ reinforced cement concrete piles of grade M-35 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 sohrtion, cement concrete and temporary easing 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 unto bottom of pile cap): | |  |  |
|  | 202.1 | 300 mm ciis piles | metre | 901.00 |
|  | 202.2 | 400 mm ilia piles | metre | 1209.00 |
|  | 202.3 | 450 mm dia piles | metre | 1781.00 |
|  | 20.2,4 | 500 mm dia. piles | metre | 2076.00 |
|  | 20.2,5 | 600 mm dia piles | metre | 2393.00 |
|  | 202.6 | 750 mm di piles. | mette | 3561.00 |
|  | 202.7 | 1000 = dia piles. | metre | 6168.00 |
|  | 202.8 | 1200 = dia piles. | metre | 8466.00 |
|  | 20.2,9 | 1500 mm dia piles. | metre | 12725.00 |
| 20,3 | Boring, Providing and Stalling cast in situ single under reamed piles of specified diameter and length below pile cap in M 35 cement concrete, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the *cod* of boring with bentonite solution, cement ecocide 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) :* | |  |  |

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| Item  No. | Description | | Unit | Rate (in Rs.) |
|  |  | |  |  |
|  | 203.1 | 300 mm dia piles. | metre | 1078.00 |
|  | 20.3.2 | 400 mm die piles | metre | 1489.00 |
|  | 203.3 | 450 nun die piles | metre | 1736.00 |
|  | 203,4 | 550 mm die piles | metre | 2026.00 |
| 20.4 | Extra ***over*** item No. 20.3 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 | 805.00 |
|  | 20.4.2 | 400mm dia piles. | each | 989.00 |
|  | 20.4.3 | 450 mm dia piles. | each | 1100.00 |
|  | 20.4.4 | 550 mm die piles. | each | 1252.00 |
| 203 | Providing, driving and installing driven Pre-east reinforced cement concrete piles of specified diameter and length below the pile cap in M 35 cement concrete to carry safe working load not less than specified. With a central through preformed hole with M.S. black pipe of dia, 40mm for grouting with cement sand grouting of mix 1-2 (1 cement : 2 sand) under sufficient positive pressure to ensure complete filling including cement concrete certring, shuttering, driving and removing the steel casing pipe and lifiing 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 die piles. | metre | 1733.00 |
|  | 203.2 | 450 mm die piles. | metre | 2112.00 |
|  | 20.5,3 | 500 mm dia piles. | metre | 2305.00 |
|  | 20.5,4 | 550 mm dia piles. | metre | 2639.00 |
|  | 20.5,5 | 750 mm dia piles. | metre | 5117.00 |
|  | 20.5.6 | 1000 mm dia piles. | metre | 7066.00 |
| 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 and the direction of Engineer in-charge | |  |  |
|  | 20.6.1 | Single pile upto 50 tonne capacity |  |  |
|  | 20.6.1.1 | Initial test. | per test | 38562.00 |
|  | 20.6.12 | Routine test | pa test | 17423.00 |
|  | 20.6,2 | Single pile above 50 tonne and upto 100 tonne capacity |  |  |
|  | 203,2,1 | Initial ***test*** | pa test | 46808.00  Page No.354 |
| Item  No. | Description | | Unit | Rae (in Rs.) |
|  |  | |  |  |
|  | 20.6.22 | Routine teat, | per test | 267151)0 |
|  | 20.6.3 | Group of two or moan piles upto 50 tonne capacity |  |  |
|  | 20,6,3,1 | Initial test | per test | 56333.00 |
|  | 20.6.3.2 | Routine test | per test | 34264.00 |
| 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 | 17423.00 |
|  | 20:7,12 | Above 50 tonne and upto 100 tonne eaPacitY Pile. | per test | 26715.00 |
|  | 20.7.2 | Group of two piles. |  |  |
|  | 20.7.2.1 | Upto 50 tonne capacity each . | per test | 34264.00 |
| 20.8 | Lateral load testing of single pile in accordance with IS Code of practice IS : 2911 (Part IV) fa: determining safe allowable lateral load on pile : | |  |  |
|  | 20,8,1 | Upto 50 tonne capacity pile. | per test | 17423.00 |
|  | 20,8,2 | Above 50 tonne and upto 100 tonne capacity Pile. | per test | 27411.00 |
| 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 and chipping lean concrete lumps ***etc.*** and use of computerised equipment and high skill -trained personal flea conducting the test and submission of results, all complete as per direction of Engineer-in-charge | | pa test | 897,00 |
| 20.10 | Boring, Providing and installing cast in situ single under reamed piles of specified diameter and length below pile cap in M 20 cement concrete, to tarry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring, cement concrete 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) : | |  |  |
|  | 20,10,1 | 250 mm diameter pile. | metre | 550,00 |
|  | 20,10,2 | 300 mm diameter pile. | metre | 662,00 |
| 20,11 | Extra for providing additional blub for item n0.20,10 | |  |  |
|  | 20,11,1 | 250 mm diameter, | each | 213,00 |
|  | 20.11.2 | 300 mm diameter, | each | 272,00 |

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| Item  No. | Description | | Unit | Rate (in  Rs.) |
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| 21.1 | Providing and fixing aluminium wort( 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 ilia and size, including necessary filling up the gaps at junetions,i c at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, oat 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 Engiueer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) : | |  |  |
|  | 2111 | For fixed portion |  |  |
|  | 2111.1 | Anodised aluminium (anodised transparan or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC15) | a | 353.00 |
|  | 21,1.12 | Powder coated aluminium (minimum thickness of powder coating 50 micron) | Kg | 377.00 |
|  | 21.1.1.3 | Polyester powder coated aluminirmi (minimum thickness of polyester powder coating 50 micron) | Kg | 383.00 |
|  | 21.1.2 | For shutters of deers, windows and vanilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene fad 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 AC15) | Kg | 400,00 |
|  | 21,1.2,2 | Powder coated aluminium (minimum thickness of powder coating 50 micron) | Kg | 425,00 |
|  | 21.1.2.3 | Polyester powder coated aluminirmi (minimum thickness of polyester powder coating 50 micron) | *2* | 431.00 |
| 21.2 | Providing and fixing 12mm thick Pm-laminated particle board flat pressed three layer or graded wood particle board corcEorming to IS: 12823 Grade 1 Type 11, in panelling fixed in aluminium doors, windows shutters and partition frames with C.P. bran / stainless steel screws etc. complete as pa architectural drawings and directions of engineer-in-charge | |  |  |
|  | 21,2.1 | Pre-laminated particle board with decorative lamination on | aim | 1024,00 |
| one side and balancing lamination on other side. |
|  | 21.22 | Pre-laminated particle board with decorative lamination on both sides. | sqm | 1073.00 |

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| **Item  No.** | **Description** | | | **Unit** | **Rate (in  Rs.)** |
|  |  | | |  |  |
| **21.3** | **Providing and fixing glazing in ahiminium door, window, ventilator shutters and partitions etc. with EPDM rubber/ neoprene gasket rte. 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** | **849,00** |
|  | **21.3.2** | | **With float *glass panes* of 5,50 mm thickness** | **sqm** | **932,00** |
|  | **21.3.3** | | **With float glass panes of 8 min thickness** | **sqm** | **1292,00** |
| **21,4** | **Add extra for providing and fixing &lasted glass instead of float glass** | | |  |  |
|  | **21.4.1** | **With glass panes of 4,0 mm thickness** | | **sqm** | **259,00** |
|  | **21.4.2** | **With *glass* panes of 5 50 min thickness** | | **sqm** | **262,00** |
|  | **21.4.3** | **With glass panes of 8 min thickness** | | **sqm** | **262,00** |
| **21.5** | **Providing brand and embossed weight upto embedding to the existing single piece the direction** | **and fixing double action hydraulic floor spring of approved** | |  |  |
| **manufitcture conforming to IS : 6315, having brand logo on the body / plate with double spring mechanism and door**  **125 kg., for doors, including cost of cutting floors , m floors as required and making good the same matching**  **floor finishing and cover plates with brass pivot and**  **M.S. sheet outer box with slide plate de. complete *as* per**  **of Engineer-in-charge** | |
|  | **21,5.1** | **With stainless steel covet plate - minimum 1.25 mm thickness** | | **each** | **2012,00** |
|  | **21.52** | **With brass cover plate - minimum 1 25 mm thic1mess** | | **each** | **2186.00** |
| **21.6** | **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 raw/ plugs *f1/50* 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-in­charge (level adjusting bangers, ceiling cleats and expansion hold fasteners to be paid for separately),** | | | **kg** | **458.00** |
| **21.7** | **Providing and fixing 6 mm dia. G.I. level adjusting bangers (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 pa direction of Engineer -in-charge.** | | | **each** | **133,00** |

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| **Item  No.** | **Description** | | **Unit** | **Rate (in  Rs.)** |
|  |  | |  |  |
| **21.8** | **Providing and fixing machine moulded aluminium covering of approved pattern and design, made out of machine cut aluminium sheet and mate 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 &staters of 8 um . din and 75 = long bolt including providing aluminium washers 2 mm thick and 15 mm ilia, 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 dime= ccfEngineer-in-charge :** | |  |  |
|  | **21.81** | **Anodised aluminium sheet 2.5mm thick (anodised**  **transparent or dyed to required shade according to IS: 1868, Minimum anodic coaling of grade AC 15)** | **kg** | **480.00** |
|  | **21.82** | **Powder coated aluminium sheet 2.5mm thick (minimum thickness of powder coaling 50 micron)** | **kg** | **504.00** |
| **21.9** | **Filling the gap in between aluminium frame and adjaceri 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.** | |  |  |
|  | **21,9.1** | **Upto 5mm depth and 5 rem width** | **metre** | **82.00** |
| **21.10** | **Extra for applying additional anodic coating AC 25 instead of AC 15 to aluminium marucled sections.** | |  |  |
|  | **21.10.1** | **For fixed portion** | **kg** | **17.00** |
|  | **21.10.2** | **For shutters of doors, windows and ventilators.** | **kg** | **17.00** |
| **21.11** | **Providing and fixing double glazed hermetically sealed glazing in aluminium windows, ventilators and partition S. with 6 mm thick clear float glass both side having 12 mm air gap including providing EPDM gasket, parfiorated aluminium spacers, desiccants, sealant (Both primary and secondary sealant ) etc. as per specifications, drawings and direction of Engineer-in-charge complete.** | | **sqm** | **3473.00** |
| **21.12** | **Providing and fixing aluminium tubular handle bar 32 mm outer dia, 3.0 mm thick and 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** | **498.00** |
|  | **21,12.2** | **Powder coated minimum thickness 50 micron aluminium tubular handle bar.** | **each** | **536,00** |
|  | **21.12.3** | **Polyester powder coated minimum thickness 50 micron aluminium tubular handle bar** | **each** | **545.00** |

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| **Item  No.** | **Description** | | **Unit** | **Rate (in  Rs.)** |
|  |  | |  |  |
| **21.13** | **Providing and fixing 100mm brass locks (best make of approved quality) for aluminium doors including necessary slitting and making good etc. complete.** | | 1 | **487.00** |
| **21,14** | **Providing and fixing anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868. Minimum anodic coating of grade AC15) sub flame *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** die **and size (Dash fastener to be paid for separately).** | | **Kg** | **332,00** |
| **21.15** | **Providing and fixing alumininna casement windows fastener of required length for aluminium windows with necessary strews etc, complete.** | |  |  |
|  | **21.15.1** | **Anodized (AC15) ahuninium** | **each** | **62.00** |
|  | **21.15.2** | **Powder coated minimum thickness 50 micron aluminium.** | **each** | **65.00** |
|  | **21.15.3** | **Polyester powder coated minimum thicicaess 50 micron aluminium .** | **each** | **71.00** |
| **21.16** | **Providing and fixing aluminium round shape handle of outer die 100mm with SS screws S. Complete as per direction of Engineer-in­chugs** | |  |  |
|  | **21.16.1** | **Anodized (AC15 ) ahaninium** | **each** | **74.00** |
|  | **21.16.2** | **Powder coated minimum thickness 50 micron aluminium** | **each** | **82.00** |
|  | **21.16.3** | **Polyester powder coated minimum thickness 50 micron aluminium .** | **each** | **88.00** |
| **21.17** | **Providing or dyed to coating of standard brass/ stainless cutting the handles around the**  **payment).** | **and fixing anodised aluminium grill (anodised transparent** | **Kg** | **410.00** |
| **Engineer-in-charge.**  **required shade according to IS: 1868 with minimum anodic  grade AC15) of approved design/pattern, with approved  section and fixed to the existing window frame with C.P.  steel screws €;00mm centre to centre, including  grill to proper opening size for fixing and operation of  and fixing approved anodised aluminium standard section  opening, all complete as per requirement and direction of  (Only weight of grill to be measured for** |
| **21.18** | **Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and maim -facture, including providing and fixing top bottom pivot spring type fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as pm direction of Engineer-incharge (Door handle, lock and stopper etc.to be paid separately),** | | **sqm** | **4958,00** |
| **21.19** | **Providing and fixing 50 micron thick reflective one way type heat /light control film to window/door glazing as marketed under the brand name garwara/3M or equivalent as approved** | | I | **448.00** |
| **21.20** |  | |  |  |

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| **Item  No.** | **Description** | | **Unit** | **Rite  (in Rs.)** |
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| **221** | **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 consisting of :**   1. **1st layer of 22mm to 25mm thick approved and specified mush stone slab over a 25mm thick base of cement mortar 1:3 (1 cement : 3 sand) mixed with water proofing compound conforming to 15:2645 in the recommended proportion ova the levelling course (levelling course to be paid separately)- Joints sealed and grouted with cement shiny mixed with water proofing compound .** 2. **2nd layer of 25mm thick canent mortar 1:3 (1 cement : 3 sand) mixed with water proofing compound in recommended proportions.** 3. **Finishing top with stone aggregate of 1 Omrn to 12mm nominal size spreading Ca) 8 cudm/sqm thoroughly embedded in the 2nd layer. (with 5 years service guarantee)** | |  |  |
|  | **22.1.1** | **thing rough Kota done.** | **sqm** | **916.00** |
| **222** | **Providing and laying integral cement based treatment fa water proofing on the vertical surface by fixing specified stone slab 22 mm to 25mm thick with cement slurry mixed with water proofing compound confining to IS:2645 in recommended proportions with a gap of 20mm (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 sand) 20mm thick with neat cement punning mixed with water proofing compound in recommended proportion complete at all levels and as directed by Engineer-in­charge : (with 5 years service guarantee)** | |  |  |
|  | **222,1** | **Using rough Kota stone** | **sqm** | **1013,00** |
| **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 :**   1. **1st course of applying cement slurry C4). 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.** 2. **Mid course of 20mm cement plaster 1:3 (1 cement : 3 sand) mixed with water proofing compound in recommended proportion including rounding off unction of vertical and horizontal surface.** 3. **IIIrd course of applying blown or residual bitumen applied hot at 1.7 Kg. per sqm of arca.** 4. **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 Kgkupn.) (with 5 *years* service guarantee)** | | **sqm** | **440,00** |
| **22.4** | **Providing and Placing in position suitable PVC water stops**  confirming to **IS:12200 for construction/ expansion joints between two RCC members and fixed to the reinforcement with binding wire before pouring concrete etc. complete : (with 5 years service J)** | |  |  |

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| Item  No. | Description | | | Unit | Rite  an Rs.) |
|  |  | | |  |  |
|  | 22.4.1 | Serrated with central bulb ( 22.5mm wide, 8-11= thick). | | more | 551.00 |
|  | 22.42 | Dumb bell with central bulb (180mm wide, 8mm thick). | | metre | 499.00 |
|  | 22.4.3 | Kickers (320rom wide, 5= thick). | | more | 52200 |
| 22\_5 | Providing and Laying water procfmg treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing =matt compound consisting of applying : | | | sgm | 207.00 |
| 1. First layer of slurry of cement (g 0,488 kg/stpn mixed with water proofing cement compound @ 0.253 kg/sqm\_ This layer will be  allowed to air cure for 4 hours, 2. Second layer of shiny of cement Ca). 0.242 kesgm mixed with water proofing =man compomad @ 0.126 kg/sqm. This layer will bc  allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes preparation of surface, treatment and scaling of all joints, canners, junctions of pipes and masom-y with polymer mixed slurry. | | |
| 22.6 | Providing applying cement consisting   1. after surface kg/sqm mixed kffisilm. 2. laying second green. Overlaps 3. third layer 1.289 kg/stpn kg/sqm and 4 hours followed will be taken parapet all | | and laying water proofing treatment cm roofs of slabs by shiny mixed with water proofing cement compound of applying :  preparation, first layer of slurry of cement ® 0.488  with water proofing cement compound (a4 0,253  layer of Fibre glass cloth when the first layer is still of joints of fibre cloth should not be less than 10 an | sqm | 338.00 |
| of 1 5 mm thickness consisting of slurry of cement g  mixed with water proofing cement compound g 0,670  sand @ 1289 kg/sgm. This will bc allowed to air cure for  by water curing for 48 hours, The entire treatment upto 30cm on parapet wall and tucked into groove in  art |
| 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:   1. Applying a shiny 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 mite 300mm height including cleaning the surface before treatment. 2. Laying Mick bats with mortar using broken bricks/brick bats 25 mm to 115mm gin with 50% of cement mortar 1:5 (1 cement : 5 sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 ram thick layer of cement mortar of mix 1:5 (1 cement :5 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. 3. After two days of proper an applying a second coat of cement  shiny using 2.75kg/ sqm of cement admixed with water proofing compound =forming to IS : 2645 and approved by Engineer-in-chnrge. | | |  |  |

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| Item  No. | Description | | Unit | Rite  (in Rs.) |
|  |  | |  |  |
|  | d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement :4 sand) admixed with water proofing compound =forming 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 sluny and making pattern of 300x300 mm square 3= deep.  a) 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 \*pacified by the Engineer-in-Charge - (with 5 years service guarantee) | |  |  |
|  | 22.7.1 | With average thickness of 120mm and minimum thiclmess at khurra as 65 mm. | sqm | 885.00 |
| 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 coarse of roofing felt type 3 grade-I (hessian based self finished bitumen felt) and fourth and final course of stone grit 6mm and down size or pea-sized gravel spread at 6 cubic decimeter per square metre including preparation of surface but excluding grading complete with : (with five years service woke). | |  |  |
|  | 22,8,1 | Bitumen felt (hessian base) type 3 grade I conforming to IS : 1322. | sqm | 371,00 |
| 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 ha g 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. (with five years service gurantee). | | sqm | 597.00 |
| 22.10 | Providing and laying six courses water proofing treatment with bitumen felt over reefs consisting of first, third and fifth courses of blown or / and residual bitumen applied hot ***at*** 1,45, 1,20 and 1.70 kg pa square **mare** 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 6mm and dawn size or pea sized gravel spread at 6cu,dm per sqm including preparation of surface, excluding grading, compete. (with five years service gurantee). | | sqm | 585.00 |
| 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, 120 and 1 70 kg pa square **mare** 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 6mm and down size or pea sized gravel spread at 6 cubic dm per sqm including preparation of ***surface*** but excluding grading, complete. (with five years service gurantee). | | sqm | 586.00  Page No.373 |
| Item  No. | Description | | Unit | Rite  **(II** Rs.) |
|  |  | |  |  |
| 22.12 | Supplying and applying bituminous solution primer on roof and or wall surface at 0.24 litre per sqm. | | sqm | 23.00 |
| 22.13 | Deduct for omitting in water proofing treatment final course of spreading stone grit 6mm down *size* or pea sized gravel : | |  |  |
|  | 22.13,1 | At 6 cuchn per sqm. | sqm | 10.00 |
| 22.14 | Guiding roof for water proofing treatment with | |  |  |
|  | 2214.1 | Cement concrete 1:2:4 (1 cement : 2 sand : 4 graded stone aggregate 20 mm nominal size) | cum | 4569.00 |
|  | 22.142 | Cement mortar 1:3 (1 cement : 3 sand) | cum | 7308,00 |
|  | 22.14,3 | Cement mortar 1:4 (lcernent : 4 sand) | cum | 6437,00 |
| 2215 | Providing and laying in situ six course water proofing trcatmaa with APP (Atactic poly-propylene) modified Polymeric memb crane over roof consisting of first coat of bitumen primer @ 0.40Kg par sqm, 2nd, 4th and 6th courses of bonding material @ 1.20 Kg/srim, which shall consist of blown type bitumen of grade 85125 conforming to IS : 702, 3td and 5th layers of roofing membrane APP modified Polymeric membrane 1.5mm thick of 2.25 Kg/scpn weight consisting of five layers prefabricated with centre core as 20micron HMHDPE film sandwiched **on** both sides with polymeric mix and the polymeric mix is protected on both side with 20micron HMHDPE film\_ (with 5 years service guarantee) | | sqm | 5000 |
| 22.16 | Providing and laying in situ four course water proofing treatment with APP (Atactic Polypropylene) modified Polymeric memb crane over roof consisting of first coat of bitumen primer I@ 0.40Kg per sqm, 2nd and 4th courses of bonding material @ 1.20 ICesqm, which shall consist of blown type bitumen of grade 85125 conforming to IS : 702, 3rd layer of roofing membrane APP modified Polymeric membrane 2.0mm thick of 3.00 Kghigm weight consisting of five layers prefabricated with centre core as 100micron HMHDPE film sandwiched **on** both sides with polymeric mix and the polymeric mix is protected on both side with 20micron HMHDPE film\_ (with 5 years service guarantee) | | sqm | 368,00 |
| 22.17 | Providing and laying in situ six course water proofing treatment with APP (Atactic Polypropylene) modified Polymeric memborane over roof consisting of first coat of bitumen primer @ 0.40Kg per sqm, 2nd, 4th and 6th courses of bonding material g 120 Kg/sqm, which shall consist of Mown type bitumen of grade 85125 conforming to IS : 702, 3rd and 5th layers of roofing membrane APP modified Polymeric membrane 2.0mm thick of 3.00 Kg/sqm weight consisting of five layers prefabricated with centre core as 100micron HMHDPE film simdwiched on both sides with polymeric mix and the polymeric mix is protected on both side with 20microtr HMIIDPE film, (with five years service gurantee). | | sqm | 606,00 |

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| Item  No. | Description | | Unit | Rite  (in Rs.) |
|  |  | |  |  |
| 2218 | Providing and fixing APP (Atactic Polypropylene Polymer) modified prefabricated five lay& 2nun thick water proofing membrance, black finished reinforced with glass fibre matt consisting of a coat of bitumen primer for bitumen membrane @ 0,4.0 ltr/sq. mix, by the same membrane manufacture of density at 25°C, 0.87 - 0.89 kg/ It and viscocity 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/ 5cm, 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. (with five years service gurantee). | |  |  |
|  | 2218.1 | 2mm (for corrugated roof sheets) | sqm | 389.00 |
| 2219 | Providing prefabricated finished reinforced bitumen primer membrane viscocity 70 shall be laid preparing parameters longitudinal strength in point of membrane 2°C when membrane mamifactura | and laying APP (Medic Polypropylene Polymer) modified  five layer, 3mm thick water proofing membrane, black  with glass fibre matt consisting of a coat of  for bitumen membrane @ 0,40 Itr/sgm. by the same  manufactured of density at 25°C, 0.87 - 0.89 kg/Itr and  - 160 cps. Over the primer cod the layer of membrane  using butane torch and sealing all joints etc., and  the surface complete. The vital physical and chemical  of the membrane shall be as under Joint strength in  and transverse direction at 23°C as 3501300 W5cm Tear | sqm | 440.00 |
| longitudinal and transverse direction as 60/80N. Softening  not less than 150°C. Cold flexibility shall be upto -tested in accordance with ASTM, D - 5147. The laying of shall be got done through the authorised applicator of the  of membrane : (with 5 years service guarantee) |
| 2220 | Providing and laying APP (Magic Polypropylene Polymer) modified prefabricated five layer 3mm thick water proofing membrane, black finished reinforced with mm-woven polyester malt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 ltr/sqm. by the same membrane manufacture of density at 25°C, 0.87-0.89 kg/ttr 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 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 mamifactuna of membrane : (with 5 years service guarantee) | | sqm | 510.00 |

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| **Item  No.** | **Description** | **Unit** | **Rite  (hn Rs.)** |
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| **2221** | **Extra fur covering top of membrane with Geri:dile, 120gsm non woven, 100% polyester of thickness 1 to 1\_25mm bonded to the membrane with intermit/mat touch by heating the membrane by Butane Torch as per mamifiectures recommendation. [for item No. 22.18 to 2220]** | **sqm** | **59.00** |
| **2222** | **Water proofing treatment ova Roof, Wall, Chajjas, Balcony with  Diamond Shield and Sealer coat or equivalent at leakage/ seepage area** | **sqm** | **46190** |
| **consisting of (i) Surface preparation roughening of surface, opening of cracks in V groove m size of 5mmsl0mm (Wit) filling of cracks with putty of Diamond shield with laying fiber *glass* mesh, Cleaning of surface by scrubbing with steel wire/ Nylon brut Removing all dust particles and washing with adequate water to clean completely. (ii) Providing and applying 1st coat of diamond shield or equivalent (minimum thicknes 70-80 micron) (a two component flexible waterproof and *protective* modified mortar, dry powder 80% Chemical 20% acrylic resin having 30% solid contents) with mix proportion of Part 1 and 2 with proper mixing with laying of fiber glass mesh (of weaving size of 10x10 yanifmch duly coated with alkaline resistant polymer). Allow the coating to air cure for minimum 2 Hrs. (Diamond Shield or equivalent After two hours minimum of Id coat applying 2nd coat (minimum thickness 100 micron) of diamond shield or equivalent with mix proportion of part 1 and part 2 with proper raising Allow the coaling to air cure fir minimum 2 Hrs. Consumption of the diamond child or equivalent should be ®17.90 kg for 10sqm area. (After two cods of diamond shield, surface is to be cured properly minimum for 4 his hefore application of third coat). (iii) Providing and applying 1st coat of sealer coat 50-60 micron (single component High build elastomeric, flexible, pure acrylic waterproofing membrans having solid content of 65%) and allow it to air care fat 4 Hrs mininnum After two hours minimum of 1st coat** |
| **applying 2nd and final coat 120-140 micron of sealer coat and allow it to air arm for 4 Hrs minimum. Consumption of Sealer soar should be** g **5.40 kg per 10 sqm. area. (IV) The treated aarea should be cure with water for 48 hrs. by flooding the surface. (V) The final appearance of the coating will be milky white. All above operations to be done in order.** |

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| Item  No. | Description | | Unit | Rate (in Rs.) |
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| 23.1 | Trenching in ordinary soil up to a depth of 60cm including removal *and* stacking of serviceable materials and then disposing of surplus soil, by spreading and neatly leveling within a lead of 50m 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). | | cure | 207,00 |
| 23.2 | Supplying and stacking of good earth at site including royalty if any and carriage (earth measured in stacks will be reduced by 20% for payment). | | cum | 568.00 |
| 23.3 | Supplying and stacking sludge at site including royalty and carriage (sludge measured in stacks will be reduced by 8% fig payment). | | cum | 715.00 |
| 23.4 | Supplying and stacking at site dump manure from approved source, including carriage (manure measured in stacks will be reduced by 8% for payment) : | | cum | 816.00 |
| 23.5 | Rough dressing the trenched ground including breaking clods. | | 100 sqm | 495.00 |
| 23,6 | Uprooting weeds from the trenched area after 10 to 15 days of its flooding with ***water*** including disposal of uprooted vegetation. | | 100 sqm | 168,00 |
| 23.7 | Fme dressing the ground | | 100 sqm | 126.00 |
| 23.8 | Spreading of sludge, dump mars= and / or good earth in required thiclmess as pa direction of Officer-in-charge (Cost of sludge, dump manure and / or good earth to be paid separately). | | 0 | 18.00 |
| 23.9 | ?Axing earth and sludge or manure in the required proportion specified or directed by the Offices'-in-charge. | | cum | 12.00 |
| 23.10 | Grassing with selected type of 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): | |  |  |
|  | 23.10A | In rows 15 cm apart in either direction. | 109 sqm | 1293.00 |
|  | 23.102 | In rows 7.5 can apart in either direction | 100 sqm | 2672.00 |
|  | 23.103 | In rows 5 cm apart in both directions. | 100 sqm | 4002.00 |
|  | 23.10.4 | With grass Turf, | 100 sqm | 3174,00 |
| 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). | | 100 sqm | 1202.00 |

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| Item No. | | Description | | | | Unit | | Rate (in Rs.) | |
|  | |  | | | |  | |  | |
| 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 Sr planting new grass, including disposal of all rubbish with all leads mid fifth. | | | | 100 sqm | | 2068,00 | |
| 23.13 | | Preparatica of beds for hedging and shrubbery by excavating further 30cm deep of already prepared trench, 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 afka raked= by 8%), flooding with water, filling with earth if necessary, watering and finally fine dressing, levelling etc, including socking and disposal of materials declared unserviceable and surplus earth by spreading and levelling as directed, within a lead of 50m lift upto 1.5 m complete (cost of sludge, manure or extra earth to be paid Sr separately). | | | | cum | | 75.00 | |
| 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 mamire afbn 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 bp be paid for separately) : | | | |  | |  | |
|  | | 23.14.1 | | Holes 1.2 m dia and 1.2 m deep. | | each | | 157,00 | |
|  | | 23.142 | | Holes 60 cm dia, and 60 cm deep. | | each | | 68.00 | |
|  | | 23.143 | | Holes 45 cm dia, aial 45 cm deep. | | each | | 21.00 | |
|  | | 23.14A | | Holes 30 cm ilia, and 30 cm deep. | | each | | 10.00 | |
| 23.15 | | Providing and planting different variety of plants of approved quality and sizes as mentioned including making pits of required size at rite, refilled with B.C. Soil mixture manmuing and pesticide etc. complete (to be paid separately) including *watering* and 90 days maintenance from the date of final bill as per direction of engineer in charge complete in all respect (Bt. ?torture paid separately). | | | |  | |  | |
|  | | 23.15.1 | | Any of one from Plameriya alba, fycus Benjametna, Malatya champs., Begncona plamaric pudoca Plants (lJetsam to 2.10mtrs height | | each | | 645.00 | |
|  | | 23.15.2 | | Any of Cdie from Lantana VAR Red, Lantan.a Blue White, Hemelia Mini, Lantana varicated, Ticoma Redicens, Spi Oala Golden Dunanta.(hriglir 0.3 m to 0.45 m) | | I | | 33.00 | |
|  | | 23.15.3 | | Any of one from Hibiscus Vice Rai, *Crul* Plainia, Bamboo Varicated, Chandani Vera:abed, Manila  Pattem, Bouganvellia, Canna Red/Yellow, Taqwammasia, (bright 03 m to *OAS* m) | | each | | 54.00  Page No.379 | |
| **Item  No.** | | **Description** | | | | **Unit** | | **Rate (in Rs.)** | |
|  | |  | | | |  | |  | |
|  | | **23.15.4** | | **Any of one from Spathodia, Silver Oak, Thuja, Golden Bottle Brush, Exora Red. (height 0.45 m to 0.60 m)** | | **each** | | **319.00** | |
|  | | **23.115** | | **Any of one from Glerodendron, Allamamala New, Allamanda Bail, Thins Bouganvellia.** | | **each** | | **96.00** | |
|  | | **23,15.6** | | **Any of one from Climetics, Venentora. (height 0.3 m to 0.45 m)** | | **each** | | **73.00** | |
|  | | **23.117** | | **Fos:tail Palm (1 80m1rs to 2.10mtrs height)** | | **each** | | **1784.00** | |
|  | | **23.118** | | **Cycus (1.80natrs to 2.10mtrs height)** | | **each** | | **3067.00** | |
|  | | **23.119** | | **Ficus Varic.stod (1.80mths to 2.10nitrs height.)** | | **each** | | **994.00** | |
|  | | **23.1110** | | **Casia Iliflora (0.45mtrs to 0.60 mtrs height)** | | **each** | | **129.00** | |
| **23.16** | | **Half brick circular tree guard in bricks, internal diameter 1.25 metre and height 12 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 sand) and the intermediate counts being in dry honey comb masonry as per design complete:** | | | | **each** | | **1549.00** | |
| **23.17** | | **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:** | | | |  | |  | |
|  | | **23.17.1** | | **Common burnt clay modular bricks** | | **metre** | | **35.00** | |
| **23.18** | | **Filling mixture of earth and sludge or manure in the desired proportion in trenches, flooding with water and levelling (cost of supplying earth and sludge or manure and mixing excluded),** | | | | **cum** | | **18.00** | |
| **23.19** | | **Excavation in dumped stones or malba including stadcing of serviceable and unserviceable material separately and disposal of unserviceable material lead upto 50 m and lift upto 1.5 m disposed material to be neatly dressed.** | | | | 0 | | **172.00** | |
| **23.20** | | **Flooding the ground with water including making kiaries and dismantling the same.** | | | | **100 sqm** | | **113.00** | |
| **23.21** | | **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).** | | | | 0 | | **797.00** | |
| **23.22** | | **Providing and fixing M. S. tree guard 45 cm square in plan, height 120 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 mambas 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 = thick M.S. sheet of size 250x100 mm shall be welded to the tree guard near the middle height and lettered 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** | | | | **each** | | **1585,00** | |

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| **Item  No.** | **Description** | | **Unit** | **Rate (in Rs.)** |
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|  | **the earth, compaction etc. complete. The tee guard shall be painted with two or more coats of synthetic enamel paint of approved brand and manufacture ova a coat of prima, complete in all respect.** | |  |  |
| **23.23** | **Providing 1.40 metre level. The of Sin 25x25x5 of size 25x5 4 nos. 25x6 member of size 250x100 height and shall be fixed embedding earth, compaction with two coats coat of printer,** | **and fixing M. S. tree guard 50 cm square in plan, height  above ground level and 0.50 metre below ground  vertical members shall consist of four nos. of angle iron  mm 1.9 long, one at each comer and 8 nos. flat iron  mm 1.4 hag. The vertical members shall be welded to  mm M, S, flats placed horizontally around the vertical  the cage. One name plate of 1 mm thick M.S. sheet of  mm shall be welded to the tree guard near the middle  lettered PWD/ any other approved name The tree guard** | **each** | **2494,00** |
| **to the ground by making suitable holes and by four comers leg in the ground , including refilling the**  **etc,. complete. The tree guard shall be painted**  **of paint of approved brand and manufacture over a**  **corm lac in all respect.** |
| **23.24** | **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 Offirc-in­carge,** | | **cum** | **153.00** |
| **23.25** | **Providing Circular Cement Concrete pots of specified size, *cast* with cement concrete of nominal mix 1'2.4 (1 cement: 2 sand: 4 graded stone aggregate 6 mm nominal size), reinforced with 7 Nos. (3 nos. horizontal and 4 nos. vertical "U" shape) M.S, wires of 3,5 mm dia as pet design, including required form work, finishing with cement punning on exposed surface, curing for specified period and stacking in required rows and height, all complete as per direction of Officer-in-charge.** | |  |  |
|  | **23251** | **Top inside dia. 35 cm, outer bottom dia 25 an, total height 35 an with wall thickness of 25.4 mm** | **each** | **152.00** |
|  | **23.252** | **Top inside dia 30 cm, outer bottom dia 20 an, total height 30 an with wall thickness of 2.5 4 mm\_** | **each** | **111.00** |
| **23.26** | **Providing with cement graded stone (3 nos. horizontal mm dia as cement punning stacking in of Of** | **Square Cement Concrete pots of specified size *cast* concrete of nominal mix 1'2.4 (1 cement: 2 sand: 4  aggregate 6 mm nominal size), reinforced with 7 Nos.  and 4 nos vertical "V' shape) MS. wires of 3.5** |  |  |
| **per design , including required form work, finishing with  on =posed steam, curing for specified period and  required ion and height, an complete as per direction** |
|  | **2326.1** | **Top inner width 35 cm, outer bottom width 25 cm, total height 35 an and wall thickness 25.4 mm.** | **each** | **183.00** |

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| **Item  No.** | **Description** | **Unit** | **Rite (m  Rs.)** |
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| **24.1** | **Design, Supply and fixing of factory finished custom designed cold form Light Gauge Steel Framed super structure comprising of steel wall panel, trusses purling etc. manufactured out of minimum 0.75 thick (load bearing members shall not be less than 1.2mm thick) Pre-treated factory finished Bare Galvalame/hot dipped GI hi-tensile steel sheet (AZ150gsm. Aluminium Zinc alloy coated steel having yield strength 300-550 Mpa) conforming to AISI specifications and IBC 2009 for cold formed steel finning and construction and shall also be as per IS:875-1987, IS: 800-1984 and IS : 801-1975. The wind load (For all wind speed) shall be as per provirions ccfIS:875 (part-DI) The framing section shall be cold form C-typc having minimum depth of (89mm depthx39mm flangied.1 mm lip) in required length as per structural design requirements, duly punched with dimple/slot at required locations as per approved drawings the slots will be** | **kg** | **192.00** |
| **along centre line of the webs and shall be spaced minimum 250 mm away  floe both ends of the member. The frame can be supplied in Pamaelized or  knock down condition in specified dimensions and fastened with designed** |
| **screws (minimum 4 mm Dia. galvanized wafer head steel screws with  minimum length extending through the steel beyond by minimum of three  exposed threads All self-drilling tapping screws for joinning the members** |
| **shall have a Type Il coating in accordance with ASTM B633(13) or equivalent corrosion protection.**  **The main frame shall be fixed to RCC slab or Plinth Tie beam, over Nuprene rubber using self =parking carbon steel anchor bolt of dia. as per design subject to minimum 12 ram diameter and minimum 121 mm length, confirming to AISI 304 and 316 at 500 = c/c with minimum embeddment of 100 mm in RCC(RCC to be paid separately) and located not more than 300 mm from comas or termination of bottom tracks complete in all respects. Welding shall not be permitted to the member of structure having thickness lass than 1.09 mm. Load-bearing steel framing members shall have a legible label, stamp, stencil or embossment, spaced at a minimum of 1200 mm on center along the length of the member, with the following minimum infamatior Mamifactarer's Name; irimimum uncoated steel thickness in mm, Minimum coating designation and, Minimum yield straigth in MPa. Rate are inclusive of designing charges ccaatractea- shall submit structural stability report from NIT/ITT.** |
| **24.2** | **Structural steel work riveted, bolted or welded in built up sections, in framed work, including cutting hoisting, fixing in position and applying a priming coat of approved steel primer all complete.** | **kg** | **68.70** |
| **243** | **Providing and fixing Trim for window and door 1mm thick with zinc coating not less than 275gmhe galvanized sheet material Girth up to 400mrn.** |  | **592.00** |
| **24.4** | **Providing and Fixing ramrene rubber in between wall frame and foundation.** | **sqm** | **292.00** |
| **24.5** | **Supply and installation of moisture/fire resistant cement fiber board (High Press= Steam Cured) category ID type A conforming to IS 14862:2000 in wall panels on external faces of galvanized cold formed light gauge steel frame structure to form wall/ partition wall cm external f 3CCS of the frame, fixed with self drilling/tapping screwslfasteners of approved make. The hollow wall space between two cement fiber board will be provided with 50mm thick Resin bonded *glass* wool insulation conforming to IS 8183 and of density not less than 48 kg/cum (glass wool insulation shall be paid separetly). All exterior faces of the wall/frame shall essentially be provided** |  |  |

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| **Item  No.** | **Description** | | **Unit** | **Rite (m  Rs.)** |
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|  | **with breathable vapour barrier uademeada the commit fiber board\_ The installation of the vapour barrier should conform to the provisions of international Building Code 2009 and *as* pa design\_ The joints of the cement boards must be scaled with pulymermodified thin set mortar conforming to ANSI A 118 4 satndanis and self adhesive alkalai resistant dry wall fiber mesh tape of minimum 100 mm width. All exterior wall comers of cement fiber board wall panels must be reinforced with galvanized metal angles of 100 = x 100mm xl.Cr9 mm thickness and fixed on both adjoining walls with self drillingttapping fastners of approved make as per design including providing silicon gel caulking complete in all respects.** | |  |  |
|  | **24.11** | **12mm thick cement fibs; board category 3 type A** | **sqm** | **1262.00** |
|  | **24.5.2** | **lOmm thick canent fibs board category 3 type A** | **sqm** | **1141.00** |
| **24.6** | **Supply and installation of moist:me/fare resistant cement fiber board (High** | |  |  |
|  | **Steam Cured) category 3 type B conforming to IS 14862:2000 in**  **on both faces of galvanized cold formed light gauge steel frame to form wall/ partition wall on internal faces of the frame, fixed drilling/tapping screws/fasteners of approved make. The hollow**  **between two cement fiber board will be provided with 50=**  **bonded glass wool insulation conforming to IS 8183 and of not less than 48 kg/cum (glass wool insulation shall be paid**  **The joints of the cement boards must be sealed with**  **thin set mortar conformin,g to ANSI A 118 4 sgdndards and**  **alkalai resistant dry wall fiber mesh tape of minimum 100 mm**  **interior cement board corners of installed wall panels must be**  **with a galvanized angular metal strips of 25 mmx2.5ronnE0.50**  **on both adjoining walls with self drilling fastness aid provided mm wide non alkalal fiber mesh tape covering.** |
| **Pressure wall panels structure with self wall space thick Resin density separetly). polymetmodified self adhesive width. All reinforced mm screwed with 100** |
|  | **24.6.1** | **12mm thick cement fiber board category 3 type B** | **sqm** | **892.00** |
|  | **24.6.2** | **10mm thick cement fiber board category 3 type B** | **sqm** | **740.00** |
| **24.7** | **Providing and fixing thermal insulation with Resin Bonded glass wool conforming to IS: 8183, having density 48 kg/in'. 50 mm thick.wraPPed in 200 0 Virgin Polythene Bags fixed to wall with screw, rawl plug and washers and held and in position by criss coming GI wire etc. complete *as* per directions of Engineer-in-Charge.** | | **sqm** | **448.00** |
| **24.8** | **Supply and installation of moisture/fire resistant lap siding 8 mm thick and width as per standard sizes made of cement fibre board with embossed decorative finish to give pleasing exterior finish fixed horizontally with staggered joints including minimum overlap of 32 mm on external cement fibre hoard conforming to IS 14862:2000 fixed with self drilling/tapping screws/fasteners of approved make.** | | **sqm** | **702.00** |
| **24.9** | **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 gsm 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 while transportation and should be supplied in single length uptri 12 metre or as desired by Engineer-in-charge The sheet shall be fixed using self drilling /self tapping screws of size (5.5x** | | **sqm** | **652.00** |

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| Item  No. | Description | | Unit | Rite (in  Rs.) |
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|  | 55mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces excluding the cost of purling, rafters and trusses and including cutting to size and shape wherever required\_ | |  |  |
| 24.10 | Providing and fixing precoated galvanised steel sheet roofing accessories 0.50 mm + 0.05 % natal coated thickness, Zinc coating 120gsm 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 topping screws complete : | |  |  |
|  | 24.10,1 | Ridges plain (500 - 600mm). | meter | 722.00 |
|  | 24.10,2 | Flushing?' Aprons.( Upto 600 mm) | meter | 706.00 |
|  | 24303 | North light carves. | meter | 777.00 |
|  | 2430,4 | Barge board (Upto 300 mm). | meter | 669.00 |
|  | 24.10,5 | Crimp curve | sqm | 738.00 |
|  | 24.10.6 | Clatter 4600 mm ***over*** all girth). | meter | 848.00 |
| 24.11 | Providing and fixing thermal insulation of ceiling (under deck insulation) with Resin Bonded Fibre glass wool conforming to IS : 8183 density 24kg/n2, 50mm Oar+, wrapped in aluminirmi foil laminated placed over motel mesh between the gape of purlin and sheet with wire mesh of 12.5mm x24 gange wire mesh, using self drilling/ self taping screws of size (5\_5x55mm), EPDM seal. | | sqm | 484.00 |
| 24.12 | Providing and fixing PUF insulated continuous sandwich panels far roofs of total thickness not less than 30 mm made out from continue line method paned shall have pre coated GI sheet on both side of Polyurethane foam with extant face being corrugated in shape for GI and PU foam both magnet The crest height of the panel shall be of 35 mm minimum wiht 250mm c/c pitch. The Precasted shed shall be of minimum 240mpa steel grade confirming to IS 14245:1995 and shall have zinc coating of 120 gem as per IS:277, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 micron. The PPM Sheet shall have protective guard film of minimum 25 microns to avoid scratches wihile traspartation\_ The roof panels are laid over a fame work of trusses, columns and purling fixed using 90 mm self drilling bolt with rubber washer including all types of (lashings. PU Foam must be self extinguishing. Fire retardant type having minimum density of 40 Kg/ Cum\_(+-2 Kgs) including 0.25 mm craft paper edging, self tapping screws of required length and nos. etc complete as per structural design and direction of Engineer-in-charge. | |  |  |
|  | 24.12.1 | PPGI sheet 0.5mm thick skin on both sides. | sqm | 2555.00 |
|  | 24.12.2 | PPGI sheet 035= thick skin on both sides. | sqm | 2276.00 |
| 24.13 | Providing and fixing PUF insulated contitmetne sandwich panels for wall of total thickness not less than 50 mm and width 1.0m made out from continue line method on automatic plant Panel shall have pre coated GI shed on both side of Polyurethane foam confirming to IS 12436:1988. The precasted sheet shall be of minimum 240 mpa steel grade confirming to IS 14246:1945 and shall have zinc coating of minimum 120 gem as per IS:277, 5-7 microns epoxy primer on both side of the sheet and polyester top coat | |  |  |

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| Item  No. | Description | | Unit | Rite (in  Rs.) |
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|  | 15-18 micron. The PPGI Sheet shall have plastic protective guard film of minimum 25 microns to avoid scratches during trasportation. The panels shall be vertically joined together by tongue and groove joints. The PU foam shall be self extinguishing, fire retardant type having minimum density of 40 kg/Cum. (12 Kgs} including 0 25 mm thick craft paper edging on both *edges.* The panels shall be fixed to the steel frame structure with minimum 5mm thick craft paper edging on both edges. The panels shall be fixed to the steel frame structure with minimums 5mm thick self tapping Gi screws of required length and nos. with minimum spacing of 300 **mm** c/c. | |  |  |
|  | 24.13,1 | PPG! sheet 0.5mm thick skin on both sides, | sqm | 2566.00 |
|  | 24.13,2 | PPG! sheet 0.35mm thick skin on both sides. | sqm | 2289.00 |
| 24.14 | Pm viding and fixing PUF insulated contimecius sandwich panels for wall of total thickness not less *than* 40 mm and width 1 Om mark out from continue line method on automatic plant panel shall have 035 mm thick pro coated GI sheet on both side of Polyurethane foam confirming to IS 12436:1488. The precasted sheet shall be of minimum 240 mpa steel grade confirming to **IS 14246:1995 and shall have** the coating of minimum 120 gsm as per **IS:277:1992 . 5-7 microns epoxy** primer on both side of the sheet and polyester top coat 15-18 micron\_ The **PPGI** Sheet shall have plastic protective guard film of minimum 25 microns to avoid scratches during trasportation. The panels shall be vertically joined together by tongue and groove joints. The FU foam shall be self odinguishing, fire retardant type having minimum density of 40 kg/Cum. ( +2 Kgs) including 0.25 mm thick craft paper edging on both edges. The panels shall he fixed to the steel frame structure with minimum 5mm thick self tapping Gi screws of required length and nos. with minimum spacing of 300 mm c/c. | |  |  |
|  | 24.14.1 | PPGI sheet 0,5mm thick skin on both sides. | sqm | 2496.00 |
|  |
|  | 24.14.2 | PPGI sheet 0,35mm thick skin on both sides. | Kim | 2218.00 |
| 24.15 | Supply and installation of moisture/fire resistant solid wall 75ram thick non asbestos fibre reinforced aerated cement sandwich panel made out of light weight fibre reinforced mated cement/ concrete core composed of Portiand cement, flyash, binders etc. and 4mm thick in asbestos fiber cement conforming to IS 14862:2000 and ISO : 8336:1993 (E) on either side of the core, having a tongue and groove on longitudinal side of the panels and fixed to steel structure frame by pre-coated water head self drillingkappin,g fastness of minimxma 100 mm length and 4 mm die of approval make as per design\_ Rate include for supply and fixing of 15mm high density non asbestos fiber cement board conforming to IS 14862:2000 and ISO 8336:1993 (E) on exterior side of the steel structure frame with tinnier fastening arangment. The joints of the cement boards mast be sealed with polymer fortified thin set mortar and self adhesive Arabi resistant dry wall fiber mesh tape of minimum 100 mm width complete in all respects. | | sqm | 2544.00 |
| 24.16 | Providing **and** fixing of Bottom and top U track for closing of end joints for cut **PUF** panels. The U track shall be made **out** of 1 mm thick we coated GI sheet The Precasted sheet shall be of minimum 240 mpa steel grade confirming to IS 14246:1995 and shall have zinc coating of minimum 120 *gsm as* per IS277: 1992 , 5-7 microns epoxy primer **on** both side of the sheet and polyester top coat 15-18 micron. The PPGI Shea shall have | |  |  |

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| Item  No. | Description | | Unit | Rite (m  Rs.) |
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|  | plastic protective guard film of minimum 25 microns to avoid scratches during trasportalion. The U track shall be fixed with suitable POP rivet with wall roof panels and plinth with Expandable fsstnens with minimum spacing of 450 mm c/c. The Utrack shall be fixed to RCC Plinth or Tie Beams by suitable anchor bolts. | |  |  |
|  | 24.16.1 | For panel of size of 52mmx30mm with 5mm lipping on both edges, | RM | 338.00 |
|  | 24.16.2 | For panel of size of 42mmx30mm with 5mm lipping on both edges, | RM | 323.00 |
| 24.17 | Supplying and installation of magnesia block 66 mm thick drywall partition including Framework includes floor/ Head GI channels having thickness 0.5mm, length 3600mm, equal flanges of 32mm and web of 50mm fixed to floor and ceiling with suitable fasteners at 300mm centers staggered. Noise and fire rated silicon bead sealant to be caulked along the perimeter of the partition frame before fixing channels That Stud channel having thickness 0.45mm, length 3600mm, unequal flanges of 34/36mm and web of 48mm should be placed into the floor/head channel positioned vertically at 600mm *centers.* Extra reinforcement to be provided at openings (doors, windows, ctc.,)1he first layer of magencsia oxide block 8mm thick should be fixed on one side of the Stud framework in a staggered pattern by using suitable metal **fasteners** at 300mm centers. Second layer of magencsia oxide block 8mm thick should be fixed other side of the frame work similar fashion as the first layer. 3mm gap should be maintained between boards.3 mm gap shall be filled with jointing compound. Magnesia oxide block shall have following physical characteristics.   * Core - Magnesia. Fire Rating — upto 150mins • Acoustics — Sit upto 44- 5 a. Climate (OC RH) — 50, 99 * Moisture Absorption - 6.8% after 2hrs and 11.3% after 24hrs soaking * Wet Expansion - < 0,02% from ambient to saturation * Dry Contraction - S 0.02% from evaporation * Moisture Movement - 0.02%. Light reflectance — 80 Ye Green (RC %) —30• Strength - Arrtisag * Impact - 4kg hammer 175mm | | Rim | 1578.00 |
| 24.18 | Add extra far providing and fixing Thermal insulaticm by providing 50mm thick synth PF having density 1000 GSM within the cavity held in position by using chicken wire mesh/ cross bracing/ pasting to the wall. | | sqm | 768.00 |
| 24.19 | Supply and installation of moisbareffire resistant solid wall 75mm thick non asbestos fibre reinforced with expanded polysteryreue sandwich panel made out of light weight fibre =nest facing board composed of Portiand cement flyash, binders expanded potysteryrene beads etc and 4mm thick non asbestos fiber cement board (category 3 type B) conforming to IS 14862:2000 and ISO : 8336:1993 (E) on either side of the core, having a tongue and groove on longitudinal side of the panels and fixed to steel structure frame by pre-coated water head self drilling/tapping fastness of minimum 100 mm length and 4 ram dia of approved make as per design\_ Rate include for supply and Fixing of 15mm high density non asbestos fiber cement board conforming to IS 14862:2000 and ISO 8336:1993 (E) on exterior side of the steel structure frame with similes\* fastening arangment The joints of the cement boards must be sealed with polymer fortified thin set mortar and self adhesive alkalal resistant dry wall fiber mesh tape of minimum 100 rim width complete in all respects. | | sqm, | 1862.00  Page No.388 |

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| Item  No. | Description | | Unit | Rate (in  Rs.) |
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|  | For items no. 25.1 to 25.63 all fitures of Jaguar, Kohler or ttpultivent make shall be used. | |  |  |
| 25.1 | Providing and fixing Anti germ Fluoro-Polymer Coated Water closet squatting pan (indian type W. C. 260x440x580 pan) with 100 mm sand cast Iron P and S- nap, and 7 2 litre Low level, dual flush, PP (Poly Propeline) made open slim wall hung cistern capcity 3 lit r'6 litre flushing, with all fittings and fruires complete including cutting and making good the wall and floors wherever required : | |  |  |
|  | 25.1.1 | white Vitreous china Anti germ Mamie-Polymer Coated Orissa Pattern W. C. Pan of Size 260 X 440 X 580 mm With integral foot rests. | each | 5510.00 |
| 25.2 | Providing and fixing white vitreous china pedestal type Anti germ Fluoro-Polymer Coated Water Closet (European type W. C. pan the 390 X 365 X 540 MM) with soft closing scat cover, and 72 litre Low level slim dual flushing, PP (Poly Propeline) made SO ram thick cons cakd flushing cistern, flushing capcity 3 litre/6 litre, with all fittings and foams complete including cutting and making good the wall and floors wherever required : | |  |  |
|  | 25.2.1 | Anti germ Fluoro-Polymer Coated (neno coating)  European W. C. Size 390 X 365 X 540mm with solid poly propelyne made soft closing seat cover | each | 11956.00 |
| 25.3 | Providing and fining white vitreous china extended Wall Mounted Anti germ Mum-Polymer Coated water closet Size 350 X 360 X 545mm of approved shape (Wall Hung W C pan size 350 X 360 X 545mm) with soft closing seat cover, and 72 litre Low level slim dual flushing, PP (Poly Propeline) made 80 mm thick congealed flushing cistern, flushing cap city 3 litre/6 litre, with all fittings and Beres complete including cutting and making good the waft and floors wherever required : | |  |  |
|  | 25.11 | Anti germ Fluoro-Polymer Coated (no coating) Wall  tamg water closet Size 350 X 360 X 545mm with solid poly propelyne made soil closing scat cover | I | 21040.00 |
| 25.4 | Providing and fixing white vitreous china Anti germ Fluoro-Polymer Coated couple water closet flushing capacity 3 and 6 litre Size 760 X 360 X 635mm of approved shape (couple closet W. C. pan size 760 X 360 X 635mm) with 15mm quarter tam angular stop cock and PVC ccamection pipe, and all fittings and &cures complete including cutting and making good the wall and floors wherever required : | |  |  |
|  | 25.4A | Anti germ Fluoro-Polymer Coated couple water closet Size 760 X 360 X 635mm with solid poly propelyne made soft closing seat cover. | each | 18369.00 |
| 25.5 | Providing and fixing white vitreous china Anti germ Fluoro-Polymer Coated Single Piece W C dui: aching capacity 3 and 6 litre Size 770 X 375 X 695mm of approved shape (Single Piece W. C. pan size 770 X 375 X 695mm) with 15mm quarter turn angular stop cock and PVC connection pipe, and all fittings and fixures complete including outing and making good the wall and floors wherever required : | |  |  |

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| Item  No. | Description | | Unit | Rae (in  Rs.) |
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|  | 25.11 | Anti germ Fluoro-Polymer Coated Single Piece W.C. Pan Size 770 X 375 X 695mm with solid poly propelyne made soft closing seat cover. | each | 34049.00 |
| 25.6 | Providing type couple cistern flushing hung couple turn angular fix ores | and firing white vitreous china made extemied wall hung  closet size 760X360X635mm along with dale flushing  capacity 3 & 6 litre approved shape (extended wall  cosec pan size 760X360X635mm) with 15mm quarter  stop cock and PVC connection pipe, and all fittings and complete including cutting and making good the wall and  required : |  |  |
| floors wherever |
|  | 25.6A | Anti gam Fluoro-Polymer Coated extended wall hung type couple closet size 760X360X635mm with solid poly propelyne made soft closing seat cover | each | 18369.00 |
| 25.7 | Providing and fixing white vitreous china type Anti germ Mum-Polymer Coated Wash Basin size 160x580x450mm with C.L Brakes, 15 mm C. P. wall mounted pressmatic pillar cock auto closing system (decal technology), 15mm quarter turn angular stop cock, 32 mm C.P. brass made waste coupling length 130mm and 32 mm CP. Bran Made Bottle Trap size 200x300mm fittings and fixates complete including Painting of fittings and cutting and making good the wall and floors wherever required | |  |  |
|  | 25.7A | Whitt Vetrious China Anti gam Fluoro-Polymer Coated Wash Basin Size 160x580x450 mm with basin mounted pressmatic pillar cock auto closing system (decol technology), | I | 13520.00 |
| 25.8 | Providing Polymer 15 mm C.  130mm fittings cutting and | (decol technology),  and fixing white vitreous china type Anti germ Ftnoro-  Coated Wash Basin size 190z600a435mm with C.I. Bluets,  P. wall mounted pressmatic pillar cock auto closing system  32 mm C.P, brass made waste coupling length  and 32 mm C P Brass Made Bottle Trap size 200x300mm  and fix ores complete including Painting of fittings and |  |  |
| making good the wall and floors wherever required : |
|  | 25.8.1 | White Vetrious China Anti germ Moore-Polymer Coated Wash Basin Size 190z600a435mm with wall mounted pressmatic pillar cock auto closing system (decol technology). | each | 17314.00 |
| 25.9 | Providing and fixing white vitreous china type At germ Moore-Polymer Coated Wash Basin size 190x600x435mm with C. L Bralmts, 15 mm C. P. wall mounted single lever °ensiled basin mixure, (cartage size 32 mm) 32 mm C P brass made waste coupling length 130mm and 32 mm C P. Brass Made Bottle Trap size 200x300mm fittings and filmes complete including Painting of fittings and cutting and making good the wall and floors wherever required : | |  |  |
|  | 25.9.1 | White Vetrious China Anti germ Fluoro-Polymer Coated Wash Basin Size 190x600x435mm with wall mounted single lever consiled basin mixure (cortrage size 32mm,) | I | 16414.00 |

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| Item  No. | Description | | Unit | Rae (in  Rs.) |
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| 25.10 | Providing and fixing white vitreous china type Arti germ Fluoro­Polymer Coated Wash Basin size 190x600x435mm with C. L &Arts, 15 mm Table mounted single lever Tall boy basin mecum, (cartrage size 32 mm) 15mm quarter tum angular stop cock, 32 mm C. P. brass made waste coupling length 130mm and 32 mm C. P. Brass Made Bottle Trap the 200x300mm fittings and frxures complete including Painting of fittings and cutting and making good the wall and floors wherever required : | |  |  |
|  | 25,10,1 | White Vetrious China Anti germ Fluoro-Polymer Coated Wash Basin Size 190x600x435mm with Table mounted single lever Tall boy basin minim, (cartage size 32mm.) | 1 | 19114,00 |
| 25.11 | Providing and fixing white vitreous china Flat Back Art germ Fluoro-Polymer Coated urinal (Inbuilt spreaders, Inbuilt Bottle trope and inbuilt ceramic Waste coupling) Size 670 X 330 X325 mm with 15mm Brass made presmatic auto closing consealcd urinal flush *valve* with wall flange (Decal technology, 400000 operation warranted) complete including painting of fittings and brake's, crating and making good the wall and floors wherever required : | |  |  |
|  | 25.11.1 | White Vetrious China Anti *gam* Fluoro-Polymer Coated Urinal Size 670 X 330 X325 mm with 15mm Brass made presmatic auto closing consealed urinal flush valve with wall flange (Decal technology, 400000 operation warranted) | each | 13335.00 |
| 25.12 | Providing and fixing white vitreous china Flat Back Anti germ Fluoro-Polymer Coated urinal (Inbuilt spreaders, Inbuilt Bottle lime and inbuilt ceramic Waste coupling) Size 670 X 330 X325 mm with sensatronic concealed type flushing *valve* for urinal complete set with installation box with control cock complete including painting of fittings and brakets, cutting and making good the wall and floors wherever required : | |  |  |
|  | 25.12.1 | White Vetrious China Anti germ Fluoro-Polymer Coated Urinal Size 670 X 330 X325 mm with sensotronic concealed type flushing valve for urinal complete set with installation box with ccetrol cock | each | 21059.00 |
| 25.13 | Providing and fixing white vitreous china Flat Back Anti germ Fluoro-Polymer Coated Urinal (Inbuilt spreaders, Inbuilt Bottle lime and inbuilt ceramic Waste coupling) Size 730 X 480 X310 mm with 15mm Brass made prismatic (Decal technology, 400000 operation warranted) congealed fhishing Stop cock complete including painting of fittings and brakets, cutting and making good the wall and floors wherever required : | |  |  |
|  | 25.13.1 | White Vetrious China Anti germ Fluoro-Polymer Coated Urinal Size 730 X 480 X310 mm with 15mm Brass made presmatic auto closing congealed urinal fhadi valve with wall flange (Depot technology, 400000 operation warranted). | each | 12290.00 |

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| Item  No. | Description | | Unit | Rae (in  Rs.) |
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| 25.14 | Providing and fixing white vitreous china Flat Back Arti germ Fluoro-Polymer Coated Urinal (Inbuilt spreaders, Inbuilt Bottle italic and inbuilt ceramic Waste coupling) Size 710 X 480 X300 mm with sensor canpkte including painting of fittings and brakets, cutting and making good the wall and floors wherever required : | |  |  |
|  | 25.14.1 | White Various China made Flat Back Anti germ Fluoro- Polymer Coated Urinal (Inbuilt spreaders. Inbuilt Bottle tripe and inbuilt ceramic Waste coupling) Size 710 X 480 X300 mm with sensor | I | 20014.00 |
| 25.15 | Providing & Fixing 8mm thick Boasted Urinal glass partition size 900s450mm brass made bracket with mine plating. | | each | 6900.00 |
| 25.16 | Providing & Fixing 8mm thick /roasted Urinal glass partition size bight 900 mm top width 450mm and bottom width 300mm brass made bracket with crone plating. | | I | 8400.00 |
| 25.17 | Providing & Fixing plain bath tub of size 180x80cm body made of PMMA (Poly Methyle metha acrylate) with 20mm wooden reinforcement | | I | 35000.00 |
| 25.18 | Providing ceramic 0.10 micron | and fixing in position best indian (banal size 24mm, disc size 19mm and min body thielmess 2mm, nickel plating | I | 1740.00 |
| and chrome plating 0.3 micron, quarter tum) Pillar cock |
| 25.19 | Providing ceramic 0.10 micron | and fixing in position best indian (bonus size 24mm, disc size 19mm and min body thickness 2mm, nickel plating | each | 1680.00 |
| and chrome plating 0.3 micron, quarter turn)Bili cock. |
| 25.20 | Providing and fixing in position best indian ( bonut size 24mm, ceramic disc size 19mm and min. body thickness 2mm, nickel plating. 10 micron and chrome plating 0.3 micron, quarter tum)Angular stop cock | | each | 1200.00 |
| 2521 | Providing ceramic 0.10 micron stop cock. | and fixing in position best indian ( bonut size 24mm, disc size 19mm and min body thickness 2mm, nickel plating | 1 | 1620.00 |
| and chrome plating 0.3 micron, quarter tarn)Consealed |
|  | Providing and fixing in position best indian (bent, size 24mm, ceramic disc size 19mm and min. nickel plating 0.10 micron and chrome plating 0.3 micron, quarter tarn)Wall Mixer with 115mm bend. | | I | 5280.00 |
|  | Providing and fixing in position best indian ( bonut size 24mm,  ceramic disc size 19mm, nickel plating 0.10 micron and chrome plating 0.3 micron, quarter turn) 3-inl Wall Mixer . | | I | 5880.00 |
| 2524 | Providing and fixing in position best Indian C. P. bran made quarter turn *(Ceramic disc* Size 25mm) Flush Cock for Indian W. C. (orissa Pan). | | I | 2220 00 |

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| Item  No. | Description | Unit | Rate (in  Rs.) |
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|  | Providing and fixing in position best **Indian** single Lever Auto Mixing Wall Mixer (Cartradge Size 40manickel plating 0.10 micron and chrome plating 0.3 micron) for Shower area use only . | each | 5880.00 |
| 25.26 | Providing and fixing in position best Indian single Lever Auto mixing  Basin Mixer (Cartridge Sizc 32mmnickel plating 0 10 micron and | each | 4560.00 |
| chrome plating 0.3 micron) For Wash Basin area use only . |
| 2527 | Providing and fixing in position best indian single Lever Auto Mixing Divertor (Cartradge Size 47mm,nickel plating 0.10 micron and chrome plating 0.3 micron) for Shown area use only . | I | 5760.00 |
| 252S | Providing and fixing in position best indian C. P. brass made Spout (nickel plating 0,10 micron and chrome plating 0,3 micron) . | each | 1200.00 |
| 2529 | Providing and fixing in position best indian C. P. brass made  Shower Arm Length 300mm (nickel plating 0,10 micron and chrome plating 0.3 micron) . | I | 1080.00 |
| 25.30 | Providing and fixing in position best indian C. P. brass made  Shower Arm Length 450mm (nickel plating 0,10 micron and chrome plating 0.3 micron) . | each | 1320.00 |
| 25.31 | Providing and fixing in position best indian C. P. brass made  Shower Arm Length 600mm (nickel plating 0,10 micron and chrome plating 0.3 micron) . | I | 1560.00 |
| 25.32 | Providing and fixing in positicai best indian shower rose 300mm die body and flue chrome plated, brass made body, Silicon based Rnbit cleaning nozzels. | I | 11700.00 |
| 25.33 | Providing and fixing in position best Milian shower rose 150mm die, body and thee chrome plated, brass made body, Silicon based Rnbit cleaning nozzels. | each | 4200.00 |
| 25.34 | Providing and fixing in position best indian shower rose 200mm die body and thee chrome plated, brass made body, Silicon based Rnbit cleaning nozzels . | each | 5400.00 |
| 25,35 | Providing and fixing in position best indian shower rose 250mm  body and face chrome plated, brass made body, Silicon based Rnbit cleaning nozzels. | I | 7800.00 |
| 25.36 | Providing and fixing in position best indian ( bonut size 24mm,  ceramic disc size 19mm and min body thickness 2mm, nickel plating | each | 2040.00 |
| 0.10 micron and chrome plating 0.3 micron, quarter turn) 2-way Bib Cock . |
| 25.37 | Providing and fixing in position best indian Health Faucet with 8mm dai 1 meter long Flasolle Tube and wall brat with N. It V. (non-return wall). | each | 1920.00 |

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| Item  No. | Description | Unit | Rate (in  Rs.) |
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| 25.38 | Providing and fixing in position best Milian Auto Closing Pillar Cock (with DECOL cartreedge) for wash basin use | each | 2280.00 |
|  |
| 25.39 | Providing and fixing in position best Indian Auto Closing Bib Cock (with DECOL cartreedge) for comon arca *use.* | each | 2400.00 |
| 25,40 | Providing and fixing in position best indian Auto Closing Urinal  valve opal type (with DECOL cartredgc) for urinal use only. | each | 24.00,00 |
| 25,41 | Providing and fixing in position best indian Auto Closing Urinal  *valve consealed* type (with DECOL cash-edge) for urinal use only. | each | 2520,00 |
| 25,42 | Providing and fixing in position best indian Auto Closing wall  mounted Pillar Cock (with DECOL castredge) for wash basin **use** only. | each | 3720,00 |
| 25.43 | Providing and fixing in position best indian Auto Closing 40mm  Flush valve (for W. C. European and Wall Hung Type) consealed type (with DECOL tcclumlogy/eartrcclgc). | I | 3600.00 |
| 25,44 | Providing and fixing in position best indian Auto Closing 40mm  Dual Flow (3.016.0 lir) *Flush valve* (for W. C. European and Wall Hung Type) ceesealcd type (with DECOL technology/ cashodgc). | I | 3840.00 |
| 25,45 | Providing and fixing in position best Milian Auto Closing 32mm, Flush valve (for W. C. European and Wall thing Type) consealed type (with DECOL technology/cartredge). | I | 3360.00 |
| 25,46 | Providing and fixing in position best Milian Auto Closing 32mm,  Dual Flow (3.016.0 11r) Flush valve (fur W. C. European and Wall Hung Type) congealed type (with DECOL technology/cartredge). | I | 3600.00 |
| *25,47* | Providing and fixing in position best Milian Sensotronic Sensor  Faucet For Wash Basin usc only. | each | 10800.00 |
| 25A8 | Providing and fixing in position best Milian Sensotronic Sensor  Faucet For Urinal use only. | each | 10500.00 |
| 25.49 | Providing and fixing in position best indian Sensahonic Sensor  congealed type Faucet For Wall Mounted Water Closet use only. | each | 15000.00 |
| 25.50 | Providing and fusing in position best indian C. P. Brass made (0.3 micron Chrom and 10 micron Nickel plated) Single Towel Rail 300 mm long . | each | 1920.00 |
| 25.51 | Providing and fusing in position best Indian C. P. Brass made (03 micron Chrom and 10 micron Nickel plated) Single Towel Rail 600 mm long. | each | 2520.00 |

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| Item  No. | Description | Unit | Rate (in  Rs.) |
|  |  |  |  |
| 25.52 | Providing and fixing in position best Indian C. P. Brass made (0.3 micron Chrom and 10 micron Nickel plated) Swivel Towel holder Twin Type. | each | 1800.00 |
| 25.53 | Providing and fixing in position best Indian C. P. Brass made (0.3 micron Chrom and 10 micron Nickel plated) Single Towel Ring Square. | each | 1920.00 |
| 25,54 | Providing and fixing in position best Winn C. P. Brass made (03 micron Chrom and 10 micron Nickel plated) Soap Dish Holder . | each | 1050,00 |
| 25.55 | Providing and fixing in position best indian C. P. Brass made (03 micron Chrom and 10 micron Nickel plated) Soap Disposer with Metallic Bade . | I | 2940.00 |
| 25.56 | Providing and fixing in position best indian C. P. Brass made (0.3 micron Chrom and 10 micron Nickel plated) Tumbler Holder . | each | 690.00 |
| 25.57 | Providing and fixing in position best Indian C. P. Brass made (0.3 micron Chrom and 10 micron Nickel plated) Toilet papa holder with Flap . | each | 1620.00 |
| 25.58 | Providing and fixing in position best indian C. P. Brass made (03 micron Chrom and 10 micron Nickel plated) Toilet Roll Holder . | each | 1140.00 |
| 25.59 | Providing and fixing in position best incur C. P. Brass made (0.3 miaon Chrom and 10 micron Nickel plated) Glass Self size 600= with toughened glass | each | 1320.00 |
| 25.60 | Providing and fixing in position best indian C. P. Brass made (03 micron Chrom and 10 micron Nickel plated) Double coat Hook . | each | 720.00 |
| 25,61 | Providing and fixing in position best Milian C. P. Brass made (03 micron Chrom and 10 micron Nickel plated) Towel Rake 600 ram . | each | 3000.00 |
| 25.62 | Providing and fixing in position best indian C. P. Brass made (03 micron Chrom and 10 micron Nickel plated) W. C. Brush Holder . | each | 2100.00 |
| 25.63 | providing and Fixing Frosted safety 8mm Glass made Urinal Partition Size 900mm Height and 450mm width. | each | 8400.00 |
| Note | 1) All the items included in this chapter can only be executed with prior approval of Chief Engineer of respective Zone and in case of Pill item shall be executed after prior permission from the Additional Proixt Director.  For All the item contractor shall extend warranty for 10 years.  Contractor shall be required to produce test certificates from the manufacture for individual item. | | |

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| Item No. | Description | | Unit | Rae (in Rs.) |
|  |  | |  |  |
| 26.1 | Providing laying, testing and commissioning of 'C' class heavy duty MS pipe confirming to IS 1239/3589 i/c fittings hie elbows, tees, flanges, tapers, mrts bolts, gariccts etc. in ground including mu:awake and providing cement concrete blocks as supports, a | |  |  |
|  | 26.1.1 | 200mm dia | metre | 28171)0 |
|  | 26.1.2 | 150mm dia | metre | 19271)0 |
|  | 26.1.3 | 80mm dia. | metre | 93100 |
| 262 | Providing laying, testing and commissioning of cast iron pipe double flanged class 'A' ccoxfirming to IS 1556 or IS 1537 including fittings, elbows, nuts bolts, gasket etc. on surface and providing tamest concrete block as supports, refilling the trench etc. o | |  |  |
|  | 26.2.1 | 200mm dia | metre | 3813.00 |
|  | 26.2.2 | 150mm din | metre | 1962.00 |
| 26.3 | Providing laying, testing and commissioning of class 'C' heavy duty MS pipe confirming to IS 3589/1239 including fittings like elbows, tees, flanges, tapers, nuts bolts, gasket etc. fixing the pipe on the wall/ceiling with suitable clamps and painting with | |  |  |
|  | 26.3.1 | 200mm din | metre | 2806.00 |
|  | 26.3.2 | 150mm din | metre | 1916.00 |
|  | 26.3.5 | 100mm din | metre | 1328.00 |
|  | 26.34 | 80mm dia | metre | 921,00 |
|  | 26.3.5 | 65mm dia. | metre | 743.00 |
|  | 26.5.6 | 50mm dist | metre | 588.00 |
|  | 26,33 | 40mm dia | mare | 443,00 |
|  | 26,3,8 | 32mm dia | metre | 391,00 |
|  | 26.3.9 | 25mm dia. | metre | 310.00 |
| 26,4 | Supplying and fixing single headed internal hydrant valve with instaneous Gun metal couplings of 63mm din with cast iron wheel 1ST marked conforming to IS 5290 (Type -A) with blank gunmetal cap and chain as required | | each | 8445,00 |
| 26.5 | Supplying and fixing single headed external yard hydrant valve with 1 no. 65mm din instaneous FM Gun metal coupling and cast Mt wheel, IR marked confirming to IS 5290 (Type -A) with blank gunmetal cap and chain as required. | | each | 8445.00 |
| 26.6 | Supplying, fixing, testing and commissioning of butterfly valve PN 1.6, with IlmnzeiGunmetal seat duly IR marked complete with Nuts, Bolts, washers, gaskets, confirming to IS 13095, of following sizes as required\_ | |  |  |
|  | 26.6.1 | 200 mm dia | each | 9043.00 |
|  | 26.6.2 | 150 mm dia | each | 4516.00 |
|  | 26.6.3 | 80 mm dia. | each | 2511.00 |

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| Item  No. | Description | | Unit | Rae  (in Rs.) |
|  |  | |  |  |
| 26,7 | Supplying and fixing orifice plate made of 6mm thick stainless steel with orifice of required size in between flanged and landing valve of external and internal hydrant to reduce pressure to working pressure of 15 kg/cm complete as per specification as r | | each | 1196,00 |
| 26S | Providing, installation, testing and caninissicoring of dual ***plate*** non-return valve of following sizes confirming to IS 5312 complete with rubber gasket, el bolts, nuts, washers etc. as required | |  |  |
|  | 26,8,1 | 200 mm dia | each | 18239,00 |
|  | 26.8.2 | 100 mm dia | each | 7000.00 |
|  | 26.8.3 | 80 mm dia | each | 5286.00 |
| 26,9 | Providing, installation, testing and commissioning stainless steel strainer fabricated out of 1.6 mm thick stainless steel shed with 3 mm dia holes with stainless steel flange. | |  |  |
|  | 26.9.1 | 80 mm dia | each | 4573.00 |
|  | 26,9,2 | 100 mm dia | each | 6631,00 |
| 26.10 | Providing, installation, testing and commissioning of gun metal valves of following sizes as required. | |  |  |
|  | 26.10.1 | 50 mm dia | each | 2534.00 |
|  | 26.102 | 25 mm dia | each | 1041.00 |
| 26,11 | Supplying and fixing 63mm dia, 15 mtr long RRL hose pipe with  63mm du male and female gun metal couplings duly binded with GI wire, rivets etc. confirming to IS 636 (type-A)as required. | | each | 7077,00 |
| 26.12 | Supplying and fixing first -Aid hose reel with MS construction spray painted in post office red, confirming to IS 884 with upto date amendments, complete with the following as required. a) 20/30/40m long 20mm (nominal internal) dia water hose thermoplastic (tectile rciafirced ) type -2 as per IS 12585b) 20mm (nominal internal) dia gun metal globe valve and nozzle.c) Dnim and bluets for fixing the equipments on wall.d) Connections from riser with 40 mm dia stop valve (gun metal ) and M,S, pipe | | each | 6064.00 |
| 26.13 | Supplying and fixing hose cabinet of size 900mmx6006ramx500mm made of 2 mm thick MS died with 6 mm thick glazed glass doors We necessary locking anangement suitable to accommodate weal hydrant with butterfly valve 2 nos, 15intr, Long hose pipe, 1 no | | I | 1617100 |
| 26,14 | Supplying and fixing 63mm gun metal branch pipe with 20 mm  (nominal internal diameter) size pm metal nozzle conforming to IS 903, suitable for instaneous connection to interconnect hose pipe coupling as required. | | each | 2509,00 |
| 26.15 | Supplying and fixing 4 way fire brigade connection of cast iron body with 4 nos. gun metal male instantaneous inlet couplings complete with cap and chain as required. For 150mm dia MS pipe connection, confirming to IS 904 as required, | | I | 14169.00 |

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| Item  No. | Description | | Unit | Rae  (in Rs.) |
|  |  | |  |  |
| 26.16 | Supplying and fixing 2 way FBC of CI body with 2 nos. gun metal male instantaneous inlet couplings complete with cap and chain as required For 150mm dia. MS pipe comiection, confirming to IS 904 as required | | each | 9485.00 |
| 26.17 | Supplying and fixing air vessel made of 250 mm dia, 8mm thick MS sheet, 1200 mm. in height with air release valve cm top and flanged connection to riser, drain arrangement with 25mm dia gum metal wheel valve, with required accessories, pressure gauge a | | I | 11744.67 |
| 26.18 | Providing fixing testing and commissioning of 15 mm size quattzoid bulb type sprinkles, of rating 68 degree C. pendent with required accessories. | | each | 515.00 |
| 26.19 | Providing and fixing Pressure switch in the MS pipe Line including connection etc. as required | | each | 1487,00 |
| 26.20 | Providing and fixing flow switches in 100/150mm dia MS pipe. | | each | 3526.00 |
| 26.21 | Providing and fixing pressure transducer m MS pipe line (pressure  range 0-10 kg/cm) suitable for 12 volts /24 DC. Including connection etc. as required. | | I | 1510.00 |
| 26.22 | Providing and fixing angle iron (40mmx4Omm x5mm) door frame and MS sheet (2mm thick) cum glass shirtier of size 2.1 mtr. X 1.2mtr. (N.S.) with 25mmx25mmx3mm angle frame all around and stiffened in between i/c hinges, handle, locking arrangement, painting wit | | each | 7045.00 |
| 26.23 | Providing and fixing of carbon-di-oxide type fire extinguishers  consisting of welded M.S. cylindrical body, squeeze lava discharge valve fitted with pressure indicating guage internal discharge tube 30 ems long high pressure discharge hose, discharge no | |  |  |
|  | 26.23.1 | Capacity 4.5 Kg. | each | 11351.00 |
| 2624 | Providing and fixing of ABC Powder type fire extinguishers consisting of welded M.S. cylinderical body, squeeze lever discharge valve fitted with pressure indicating guage internal discharge tube 30 ems long high pressure discharge hose, discharge nozzle | |  |  |
|  | 2624,1 | Capacity 5,0 Kg. | each | 7301,00 |

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| **Item No.** | **Description** | | **Unit** | **Rite (in Rs.)** |
|  |  | |  |  |
| **27.1** | **Preparation showing nallne electric** | **of site plan and location plan with total station surveying all individual structures and feeuures late trees, roads, culverts,**  **poles, telephone poles, *sewer* lines, chambers, water**  **hand pumps, well etc. complete alongwith showing of reads proposed in master plan. i/c Contours of entire area at**  **using auto level, preparing of site plan in soft copy**  **in suitable scale as desired by engineer-in-charge duly north direction- Rate includes providing 1 digital copy and six**  **one print on tracing film, khasra map duly showing the land**  **plan (index plan) and google image of the land. Rates are of transportation charges. (Work shall be got done through**  **duly empanelled with chief Architect MP P.W.B.)** |  |  |
| **supply lines, location 0.5 m. intervals (using ennead) indicating hard copies, and location inclusive consultants** |
|  | **27,1,1,1** | **upto 1 Hectare** | **Each** | **10000.00** |
|  | **27.1.11** | **1 Hectare to 2 Hectare** | **Each** | **12000.00** |
|  | **27.1.11** | **2 Hectare to 4 Hectare** | **Each** | **15000.00** |
|  | **27,1,1,4** | **add extra for each additional one Hectare or part there off** | **Each** | **2500,00** |
|  | **27.11.1** | **Excavation of trial pit of size 120 m X 1.20 m at bottom of pit and depth up to hard strata or upto 3.5m depth Trial pit shall be taken at suitable location/ locations as directed by Engineer in charge and shall be indicated on the site plan glowing details of soil grata.** | **Each** | **2000.00** |
| **27.2** | **Preparation of double line plan after measaranent of internal as well as external dimensions of existing buildings/structures and plotting the same in suitable scale as directed by engineer-in-charge. (Work shall be got done through consultants duly empanelled with chief Architect MP P.WD.)** | | **Per sqm** | **20,00** |
| **27.3** | **Preparing of double line plan for planning of addition and alteration work after measurement of internal *as* well as external dimensions and details of existing buildings/structures and plotting the same separately showing sectional elevations minimum two numbers. and all elevations alongwith all relevant details hie doors, windows stairs etc in suitable scale as directed by engineer-in-charge. The consultant shall also submit detail condition survey report. (Work shall be got done through consultants duly empanelled with chief Architect MP P.W.D.)** | | **Per sqm** | **50,00** |
| **27.4** | **Performing Plate Load Test for Determining soil bearing capacity (SBC) at site including submission of Geotechnical Report on recommaided bearing capacity in accordance to IS-1888-1982 (Without Conveyance).** | | **Per Pit** | **15225.00** |
| **275** | **Performing Standard Penetration Test for determining soil bearing capacity (SBC) in accordance to IS-2131-1981 and submission of Geotechnical Report on bearing capacity based on SPT in accordance to IS-6403-1981 (Without Conveyance)** | |  | **18330.00** |
| **27.6** | **Transportaion charges for transportation of Geotechnical testing**  **equipments for plate load test or cone penetration test upto a distance of 100km\_ one way or 200km. both way. Rates are inclusive of Loading and unloading of testing equipments and other incidental charges.** | | 111 | **3500.00** |
|  |
| **28.7** | **Add extra for distance beyond 100km and upto 1501** | | **Per km** | **50.00** |
|  |
| **28.8** | **Add extra for every additional km beyond 150km** | | **Per km** | **40.00** |
|  |
| **27.9** | **Providing and carrying out video shooting of buildings, including hiring  of vehicle equipments for video shooting, titling, lightening, mixing,** | |  |  |

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| Item No. | Description | | Unit | Rite (in Rs.) |
|  |  | |  |  |
|  | lettering, editing, including cost of two colour CDs of approved makes and quality etc. complete. | |  |  |
|  | 27.9.1 | Within 50 ICms. | Per day | 2500.00 |
|  | 27.92 | Beyond 50 kms. | Per day | 2700.00 |
|  | 27,9.3 | Work upto 5 hours per day only, | Per day | 1500.00 |
| 27.10 | Shooting of still photographs outdoor and indoor of construction and other works of building, bridgcs, roads etc. at any distances. | |  |  |
|  | 27,10.1 | Pod Card size | 3 Nos. | 60.00 |
|  | 27.10.2 | 411x6t size | 3 Nos. | 85,00 |
|  | 27.10.3 | 5"z7v size | 3 Nos. | 135.00 |
|  | 2710.4 | 8'3E12" Size (A-4 Size) | 3 Nos. | 250.00 |
|  | 27.10.5 | 20'00" zize (Banner Size) | 1 No. | 600.00 |
|  | Mtn Copies: | |  |  |
|  |  | Post Card size | 1 No. | 8.00 |
|  |  | 4"x6" size | 1 No, | 1200, |
|  |  | 5"x7' size | 1 No, | 15,00 |
|  |  | 8"x12" Size (A4 Size) | 1 No. | 50.00 |
|  |  | 20'7.30' size (Banner Size) | 1 No. | 450.00 |
| 27.11 | Providing including fixing at as pa direction | and fixing Stainless steel plate 304grade of 1.50mm thick, writing with Embossing of letters of required size including | I | 13652.00 |
| required placed with studs, screws and rawl plugs etc. compete of engineer-in-charge. |
| 27.12 | Providing and fixing of name plate for offices name of Stainless steel plate 304 grade of 1.50mm thick, including writing with computerized vinayk sheet letters of required size including fixing at required placed with studs, screws and rawl plugs etc. compete as per direction of enigintecr incharge. | | I | 11926.00 |
| 27.13 | Providing and fixing Aluminum composite panels Silver colour with matte finish, 3mm thick, (025mm 2.5mm and 0.25mm) shed for name plate including writing with computerized vimayle sheet letters of required size including fixing at required placed with 1.25m Chromium plated Steel Pipe 15mm dia, compete as per direction of engineer-in­charge. | | Sqm | 7287.00 |
| 27.14 | Providing and fixing Aluminum composite panels Silver colour with matte finish, 3mm thick, (025ram 2.5mm and 0.25mm) sheet for name plate including writing with computerized vimayle sheet letters of required size including fixing at required plated with studs, screws and rawl plugs de, compete as per direction of engineer-in-charge, | | I | 6180.00 |
| 27.15 | Providing and fixing stainless steel English (Capital) and Hindi letters in standard pattern bellow type made with 120 mm thick stainless steel (ASI Grade-304) Tindal or equivalent Depth of letter shall not be less than 30mm and rate includes welding/soldering of joints polishing, buffing and fixing on the wall beam surface at any height with necessary nut and bohrdfasterner wherever is required complete as per direction of Engineer-in-charge. | | Per letter per cm hight | 75.00 |
| 27.16 | Preparation of detailed estimate on the basis of the working drawing supplied by the department, including computation of bill of gnaw:ides of material and supplying the same in six hard copies and one soft copy to the en,gineer-in-eharge and if required revision of the same without any additional charges. (Work shall be got done through consultants duly empanelled with chief Architect MI' P.W.D.) | | Per estimate | 0.1% ofthe total estimated amount |

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