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| **SPECIFICATIONS**  **1.0 Earthwork Excavation**  **1.1 Excavation** in foundations, trenches, in all soils including hard soils but excluding soft rock and hard rock, up to a depth **not as per structural details,** including backfilling and consolidating etc., complete. | | | | |
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| * 1. **Bringing selected good earth from outside the premises** wherever available and depositing in places shown by the Architect/Engineer, in foundations, plinth and in layers of 15 cm, breaking clods, watering and consolidating each layer with mechanical rammer, wooden rammers/rollers. The rate quoted should include excavation of earth and conveyance for all distances. The Contractor’s representative and the Architect/Engineer should jointly record Block levels at the place of depositing of earth before depositing the earth. Such levels shall be used for calculating the quantity of earth deposited. The measurement will be at the place of deposit and not at the place of excavation. | | | | |
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| * 1. **Earth filling with available excavated good earth** for plinth only. The excavation back filling is part of the excavation items above | | | | |
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| * 1. **Removal of surplus earth,** including removing excavated material from foundations and general excavation and conveying outside the premises and disposing at a place as acceptable to the concerned government authorities in accordance with their rules and regulations. Measurement will be on the net quantities after deducting for voids.(Truck/trailer measurement less 25% voids). | | | | |
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| **2.0 Plain Cement Concrete Works** | | | | |
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| 2.1 Providing and laying **plain cement concrete 1:4:8** for **foundation of walls, below footings and rafts**, in foundations, using coarse graded aggregates of 40 mm and down size, laid in layers and compacted by wooden or cast iron rammers including necessary shuttering. | | | | |
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| 2.2 Providing and laying **plain cement concrete 1:4:8, below floors, pavements, steps**, etc;, using coarse graded aggregates of 40 mm and down size, laid in layers and compacted by wooden or cast iron rammers including necessary shuttering. | | | | |
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| 2.3 Providing and laying **plain cement concrete 1:3:6 in cills and copings, 50 mm thick** and above using coarse graded aggregates 20 mm and down size, compacted by wooden or cast iron rammers, including necessary shuttering. | | | | |
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| 2.4 Providing and laying **plain cement concrete 1:3:6 for damp proof course 75 mm thick** and above using coarse graded aggregates 20 mm and down size and admixture of approved water proofing compound 2% by weight of cement and compacted by wooden or cast iron rammers, including necessary shuttering. | | | | |
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| 2.5 Providing and laying **flagging course around building** **and parking area** or wherever required with **plain cement concrete 1:3:6, 75 mm thick** using coarse graded aggregate 20 mm and down size, compacted by wooden or cast iron rammers. The work will include earth work excavation, backfilling earth with consolidation where required and plastering with C.M 1:4 (1 part of cement and four parts of sand by volume) 12 mm thick for exposed faces including shuttering where necessary. | | | | |
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| **3.0 Reinforced Cement Concrete Works** | | | | |
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| 3.1 Providing and laying **reinforced cement concrete M 20** for **footings** of all shapes and sizes, using 20 mm and downsize graded aggregates, at all depths, complete as per specification, including the necessary shuttering. | | | | |
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| 3.2 Providing and laying **reinforced cement concrete M 20** for **column pedestals, columns, brackets**, of all shapes and sizes, using 20 mm and downsize graded aggregates, at all levels and heights, complete as per specification, including the necessary shuttering. | | | | |
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| 3.3 Providing and laying **reinforced cement concrete M 20**  for **plinth beams,** of all shapes and sizes, using 20 mm and downsize graded aggregates, at all depths, complete as per specification, including the necessary shuttering. | | | | |
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| 3.4 Providing and laying **reinforced cement concrete M 20** for **lintels(over the openings only) and beams,** of all shapes and sizes, including haunches, using 20 mm and down size graded aggregates, at all levels and heights, complete as per specification, including the necessary shuttering. | | | | |
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| 3.5 Providing and laying **reinforced cement concrete M 20** for **floors, roofs, canopies, balconies, staircase landing** **slab**, of all types and shapes, using 20 mm and downsize graded aggregates, at all levels and heights, complete as per specification, including the necessary centring and shuttering. | | | | |
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| 3.6 Providing and laying **reinforced cement concrete M 20** for **chajjas, platforms, shelves, lofts, cill slabs, coping, etc**; using 20 mm and downsize graded aggregates, at all levels and heights, complete as per specification, including the necessary centering and shuttering. | | | | |
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| **4.0 Reinforcement Works** | | | | |
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| Reinforcement steel (Basic rate @ 45,000/- per MT) | | | | |
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| **5.0 Masonry Works** | | | | |
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| 5.1 Providing and constructing **size stone masonry** in foundations, plinths, trenches and retaining walls in C.M 1:6, in courses not less than 150 mm high complete as per specifications. | | | | |
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| 5.2 Providing & constructing **150 mm thick walls with solid cement concrete blocks** conforming to IS 2185 with a minimum crushing strength of 35 Kgs/sq cm in CM 1:6, in superstructure at all levels & heights complete as per specifications. | | | | |
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| 5.3 Providing & constructing **100 mm thick walls with solid cement concrete blocks** conforming to IS 2185 with a minimum crushing strength of 35 Kgs/sq cm in C.M 1:4, in super-structure at all levels & heights complete as per specifications. | | | | |
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| **6.0 FLOORING WORKS** | | | | |
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| 6.1 Providing **Rubble packing (Soling)** below floor where ever necessary with approved quality rubble of Granite, Basalt or Trap of approved quality 100 to 150 mm size laid in layers, well packed and correct to level, interstices filled with stone chips, sand or Murom and consolidated well with a roller. Consolidated thickness shall be 150 mm unless otherwise specified. | | | | |
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| 6.2 Providing & laying **vitrified/ceramic flooring** with approved sizes & colour set over a bed of cement mortar 1:4, 20 mm thick including pointing with matching coloured cement to match the color of tiles, including acid washing complete. Tiles of approved size to be laid to the pattern given by the Architects, complete as per specifications.**(Basic landed cost of the material shall be Rs. 45/- per Sft)**  6.3 P/F **skirting for item**  over a bed mortar 20mm in CM 1:4 including pointing the joints with coloured cement etc., complete. **(Basic landed cost of the material shall be Rs. 45/- per Sft)** | | | | |
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| 6.4 Providing & fixing **dadoing with first quality ceramic tiles** of approved sizes set in CM 1:3,12 mm thick, matching colour cement to match the colour of tile including acid washing, complete as per specifications and as per the sizes and pattern given by the architects. **(Basic landed cost of the material shall be Rs. 45/- per Sft)** | | | | |
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| 6.5 Providing & laying **20mm Sadaralli for flooring** in common passage and stairs with approved pattern set over a bed of cement mortar 1:4, 20 mm thick etc. complete as per specifications.**(Basic landed cost of the material shall be Rs. 50/- per Sft)** | | | | |
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| 6.6 Providing & laying **20mm Sadaralli for skirting** with approved pattern set over a bed of cement mortar 1:4, 20 mm thick etc. complete as per specifications.**(Basic landed cost of the material shall be Rs. 50/- per Sft)** | | | | |
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| **7.0 PLASTERING WORKS** | | | | |
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| 7.1 **Plastering surfaces of walls, beam's columns, chajjas**, etc; with C.M. 1:4, 15 mm thick, finished smooth with a thin coat of lime rendering at all heights and levels including scaffolding curing etc, complete as per specifications. | | | | |
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| 7.2 **Plastering surfaces of walls, beam's columns, chajjas, etc**; with C.M. 1:4, 15 mm thick, finished smooth with a thin coat of lime rendering at all heights and levels with **waterproof compound** including scaffolding curing etc, complete as per specifications. | | | | |
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| 7.3 **Plastering external surfaces of walls** with C.M 1:6, 18 mm thick finishing with sponge finish/rough finish at all levels and heights including scaffolding curing etc complete as per specifications. | | | | |
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| 7.4 **Plastering surfaces of ceilings, soffits of staircase waist slab, chajjas,** etc with cement mortar 1:3, 12mm thk finished smooth with a thin coat of lime rendering, at all levels, heights including scaffolding curing etc, complete as per specifications.. | | | | |
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| 7.5 Providing **waterproof plaster for concrete walls, slabs, sloping roofs, sunken slabs, gutters, chajjas,** etc; done by a specialized agency like "India water proofing" or approved equivalent complete as per their specifications.(10 years Guarantee to be given by the specialist agency.)Chemical coating charges extra. | | | | |
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| **8.0 PAINTING WORKS** | | | | |
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| 8.1 Providing & **painting to plastered internal walls & ceilings**, two coats of Emulsion paint of Asian make of approved colour over & with one coat of approved primer & putty to give a uniform shade complete as per specifications. | | | | |
| 8.2 Providing & **painting to external plastered walls & ceilings**, two coats of Ace paint of Asian make of approved colour over & with one coat of approved primer to give a uniform shade complete as per specifications. | | | | |
| 8.3 Providing & **painting to selected parts of external plastered walls with branded texture paint** of approved make & colour over & with one coat of approved primer to give a uniform shade complete as per specifications including curing, scaffolding etc., complete. | | | | |
| **9.0 WOOD WORKS** | | | | |
| 9.1 Providing & fixing doors **Teak wood frames** of 75 x 125 mm fixed in masonry with40mm x 5mm flat iron hold fasts 40cms long embedded in CC (1:3:6) with granite metal of size 20mm and down 30mm thk skin panelled moulded doors as per design including fixing the SS fixtures . | | | | |
| 9.2 Providing and fixing **door with Sal wood frame 62 x 125 mm with 30 mm thick** moulded shutter with with necessary powder coated fittings including 2 coats of enamel paint over one coat of primer. etc. complete. | | | | |
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| 9.3  **Aluminium windows and ventilators**  Providing and fixing anodized **aluminum glazed windows** and **ventilators** as per chief Architect's drawing with sliding shutters using Three track68.85mm.x 31.75mm.x 1.50mm. For frame section around and 40mm.x 18mm.1.25mm. For shutter section and 40mm.x26.70mm. X1.10mm.inter lock section for shutter. The shutter should be mounted on nylon roller with approved quality fixtures such as aluminium handle. Tower bolt etc. providing 5.50mm thick, plain or pin headed glass for shutter fitted with rubber beading. All the aluminium sections should be anodized/powder coated 12 to 15 microns and fabricated by cutting to the required length joints mitred sub- dividing the frame tenanted and riveted in the assembled frame to be stiffened with end clips, corner angles etc. fixed to the wall, lintel, floor-beam as the case may be with necessary steel screws, rawl plugs and teakwood guttas etc. including cutting masonry, concrete and making good to the original surface using cement mortar. All the aluminum sections should be pretreated for removed of any rust and prevention of further rust and coated with greasy materials for non-adhesive of mortar and any other sickly materials. This coating should be Cleaned after installation with all lead and lift. Including MS grills as per design, Work should be carried out as per the directions of engineer In-charge of the work. Etc., complete to a degree of Perfection. | | | | |
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| **10.0 MISCELLANEOUS WORKS** | | | | |
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| Providing **MS handrail** as shown in the drawing fabricated out of MS Rolled sections and MS Extruded sections and fixed to staircase steps, balconies, floors, etc; including cost of painting with two coats of synthetic enamel over a coat of primer. (900 mm high) | | | | |
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| 10.1 Providing & injecting **chemical emulsion (Chloropyriphos - 20 EC)** or approved equivalent) for pre-constructional Anti-Termite treatment with 1% concentration or at dilution ratio of 1:19 (i.e. 1 litre of chemical to be mixed with 19 litres of water) to create a chemical barrier under & all round the building complete as per specifications & carried out by an approved agency. (Guarantee for 10 years to be given by the agency doing the treatment). Plinth area of the building at ground floor shall be measured. | | | | |
| 10.2 Providing **underground Sump** of 25,000 Ltrs capacity with 150mm thk rubble packing, RCC M 30 rafts, walls & cover slabs with approved waterproof admixture, including necessary scaffolding, shuttering on a bed of 100 mm thick CC 1:4:8. The inside & outside portion will be plastered over 20mm thick in CM 1:4 proportion with approved water proofing admixture. The top should covered with RCC slab of suitable thickness with RCC M20 with reinforcements, with 6 nos. 600X600mm opening for manhole including supply and fixing CI man - hole with frame weighing not more than 60 kgs. The work includes necessary earth work excavations in all soils including hard soils & soft rock up to a maximum depth of 4.00 mtrs & back filling in the over sides upon completing, carting away the excess earth outside the premises, external plaster & consolidating & also providing, fixing puddle flanges, rungs as detailed in the drawing. The capacity will be the net capacity leaving a free board of 150mm. The quoted rate to include the cost of providing & fixing reinforcement steel & cement for entire sump work. | | | | |
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| 10.3 Providing Over head water tank of 20,000 Ltrs capacity with SINTEX Tanks over 7’ height Base slab, walls and cover slabs with approved waterproof admixture. | | | | |
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| **11.0 WEATHER PROOFING WORKS** | | | | |
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| 11.1 Providing patented "Surface" method specialist **water proofing treatment like "India water proofing"** or approved equivalent to terraces & sunken slabs (with guarantee for 10 years) consisting of providing 75 mm average thickness with CC 1:2:4 to achieve the required gradient for free flow of water using reputed brand water proof component over the terrace, & 'Cetroof' jointless waterproof plaster finished smooth with trowel & treatment carried along the vertical surface of parapets & other adjoining walls to a height of 300 mm with a round vata at the junction & finishing at the rain water pipe outlets etc; complete as per the specialist's specification | | | | |
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| 11.2 Providing and fixing **150 mm dia PVC class 2 pipes** (4Kgs / sqm) for rain water down take pipes of approved make with necessary bends, shoes, all accessories and jointed according to the Manufactures specifications. | | | | |
| **12.0 STEEL WORKS** | | | | |
| 12.1 Providing & fixing **MS grills** to windows & ventilators using 10mm square rods at 100mm centre to centre and including one coat of metal primer etc., complete. | | | | |
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| 12.2 Providing & fixing **MS box section of 125 x 62 x 5 mm** for balcony pergola as per architectural design including one coat of metal primer etc., complete. | | | | |
| **13.0 Kitchen**  13.1 Polished granite (black/ Hassan green) slab of 2’ width for counter and 2’ height ceramic tile dado with one Stainless steel sink provision for exhaust fan/water purifier, washing machine and dish washer.  **14.0 Toilet fittings and accessories.**  14.1 C.P fittings basic series of Jaquar/Ess Ess make or Equivalent.  14.2 sanitary fixtures of Hinware/parryware or equivalent make.  14.3 7’ height ceramic tile wall dadoing.  14.4 Provision for exhaust fan and geyser,  **15.0 Electrical works**  15.1 Modular switches and sockets of Anchor/Lisha/ABB or equivalent.  15.2 TV and Telephone points in living and master bed rooms.  15.3 Provision for AC in master bed room.  15.4 One Earth Leakage Circuit Breaker (ELCB) for each apartment.  **16.0 Generator backup**  16.1 100 KVA power back up provided for all apartments and common services.  **17.0 Lift.**  17.1 One passenger lift of 6 persons capacity (OTIS/CONE or equivalent) | | | | |
| **18.0 Compound Wall Work** | | | | |
| 18.1 Providing & constructing **150mm thick compound wall** for 4’6”’ ft. height including gates (plain without cladding) | | | | |
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