

S. No.	Specifications
1	Laying of machine batched concrete in position and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete work including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing & Reinforcement including admixtures in recommended proportions as per IS-9103 to accelerate, retard setting of concrete, improve workability with M-10 grade in raft base.
2	Laying of RMC of M-25 grade in Isolated foundation, Raft foundation, Slab, plinth beams, Chajja, Lintels, Stair Case, Lift or any other Structure etc. upto floor V level excluding the cost of Shuttering, complete with all tools, plants, curing as per drawing, CPWD specification and the direction of Engineer-in-charge
3	Reinforcement & Embedment:
3.1	Stacking, straightening, cutting, bending, cranking, hooking placing in position and binding with approved annealed binding wire of 1.63mm dia (16SWG) to reinforcement for RCC work at all depths below plinth level and in superstructure up to all heights and levels including placing of cover blocks, spacers and all materials and labour, tools & plants, machines etc. complete in all respects as per CPWD specifications and the direction of Engineer. It also includes preparation of bar bending schedule and supplying three copies of the schedule. The cost of binding wire shall be included in the rate and will not be paid extra as cold twisted /TMT bars.
4	Laying of RCC of M-30 grade in Columns, walls etc. excluding the cost of centring, shuttering upto all floor level.
5	Making and Fixing centering and shuttering including propping, bracing etc. with 12mm thick water proof ply of approved quality and steel plates and removal of form work upto floor all level in all shapes, size, heights including all labour, tools & plants etc. complete in all respects as per specification and direction of engineer in charge:-
6	Laying of Half brick work with bricks of class designation 75 in cement mortar 1:4 (1Cement: 4 Coarse sand) including placing in position 1 no. 6 mm dia M.S. bar at every fourth course of half brick masonry including all labour, tools & plants etc. complete in all respects as per drawing, specifications and direction of engineer in charge, upto floor VIII level (rate shall include the labour and exclude cost of reinforcement steel including drilling & fixing in RCC column/wall wherever available)
7	Plaster & Finishing:
7.1	6 mm cement plaster of mix 1:3 (1 cement : 3 fine sand) on R.C.C. surfaces of slabs, beams and columns for all levels and heights.
7.2	Laying 12 to 15mm thick or desired thickness cement plaster (internal) in Cement mortar 1:6 (1 Cement : 6 Course Sand) neatly finished on concrete brick masonry surfaces including jambs, patts grooves etc. in all positions including necessary scaffolding with all lifts and depths, hacking and fixing of chicken mesh (Excluding cost) including curing, all necessary labour, tools & plants etc. complete in all respects as per drawing, CPWD specifications and the direction of Engineer in charge.
7.3	Cement Plaster with Neat Finishing on dado work
7.4	Laying 20 to 25 mm thick or desired thickness cement plaster (External) in 1:4 cement mortar (1 cement: 4 coarse sand) on all external surfaces such as all vertical and horizontal surfaces including all necessary grooves wherever required as per drawings, internal sides of parapet walls, shafts etc. at all levels and heights including necessary scaffolding with all lifts and depths, hacking and fixing of chicken mesh (excluding cost) including curing, all necessary labour, tools & plants etc. complete in all respects as per drawing, CPWD specifications and the direction of Engineer in charge. With Steel Scaffolding

8	Water Proofing:
	Laying of integral cement based water proofing treatment including preparation of surface as required for treatment of sunken areas, roofs, balconies, terraces etc. consisting of following operations for all levels. Applying & grouting two slurry coats with 12 mm thick protection plaster by mixing of Dr. Fixit Pidicrete URP and cement in 1:2 proportions (1 liter Dr. Fixit Pidicrete URP: 2 Kg. Cement) for 20 Sqft . Apply 1st coat when the surface is in touch to dry condition and allow it to dry for 4 to 5 hours. Apply 2nd coat and allow it to air cure for at least 72 hours including cleaning the surface before treatment
9	Wood Work
	Fixing ISI marked 30mm thick flush door shutters conforming to IS:2202 (Part I) non decorative type, care of block board construction with framed of 1st class hard wood & well matched commercial 3 ply veneering with vertical pairs or cross bands & take commercial ply on both faces of shutters including the following fittings.
	30 mm thick with necessary screws and coat of wood primer
	Fixing M.S. sliding door bolt with nuts & screws etc. complete
(a)	300 X 16 mm
	Fixing M.S. Tower Bolts with necessary nuts and bolts all complete.
(b)	200 X 10mm
	Fixing M.S. handles with necessary screws etc. complete
(c)	125 mm
10	Fixing of MS chowkhat, windows and ventilators frames including welding fixing with hold fast embeded in cement concrete block 1:2:4 all complete as per drawing & instructions of engineer in charge.
11	<u>Flooring</u>
(a)	40 mm thick Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand: 4 graded stone aggregate) finished with a floating coat of neat cement including cement slurry, but excluding the cost of nosing of steps etc. complete.
(b)	18 mm thick cement plaster in cement mortar 1:3 skirting (1 cement : 3 coarse sand)
(c)	Fixing 35mm X 4mm glass strik in flooring with cement mortar 1:4 (1 cement :4 coarse sand)
12	Sanitary & Plumbing Works: :
	Sanitary and Plumbing work for Bathroom, Toilet, Kitchen, Balconies, shafts, overhead tanks and Rain Water pipe etc. by fixing of PVC, CPVC, UPVC and GI pipe of required size including Orissa Pan W.C. set with plastic cistern, bibcock, angle valve etc. (Prayag make) and all necessary fittings etc. complete in all respects as per plumbing drawing and the direction of Engineer at all levels & heights. (On covered area basis) (a) Soil, waste and vent pipes terminating into manholes through gulley traps as per Drawing. (b) Measurement to be taken as per covered area as per CPWD norms excluding area of Terrace.
13	Electrical work [slab & wall conducting, fish wire laying, sheet switch, DB, wiring, Lift, Shaft, common area connection upto rising main].(a) Measurement to be taken as per covered area as per CPWD norms excluding area of Terrace.
14	Finishing
14.1	White washing with lime to three or more coats to give an even shade on new work.
14.2	Finishing walls with water proofing cement paint two or more coats on new work.
14.3	Painting with synthetic enamel paint two or more coats on new work

15	Steel Work
15.1	Fixing of factory made ISI marked steel glazed door, window and ventilators side/top/ centre hung with beading and all members such as K11 B and K12 B etc. complete of standard rolled steel sections, joints mitred and flash butt welded and sash bars tenoned and riveted with 15*3mm lugs, 10cm long, embedded in cement concrete blocks 15*10*10cm of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required, including providing and fixing of hinges, pivots, float glass panes with glazing clips and special metal sash putty of approved make and a priming coat of approved steel primer excluding the cost of metal beading and other fittings except necessary hinges or pivots complete as per approved design including 4 mm thick glass.
15.2	Fixing of chowkhat M.S. door frames including welding fixing with hold fast embedded in cement concrete block 1:2:4 all complete as per drawing & instructions of engineer in charge.
a)	in M.S. angles, flats & hinges etc.
16	Roofing
(a)	Laying of 100mm thick mud phaska of damped brick earth on roofs laid to slope consolidated and plastered with mortar mixed with bhsa of earth and gobri leaping with mix and covered with flat tile bricks, grouted with cement mortar 1:3 (1 cement : 3 fine sand)