

**Format- B (Annexure I)**

**Bill of Quantities ARM works (Civil) Residential**

Sl. No.	Description of Items	Qty.	Unit	Rate in figure	Rate in Words	Amount
1.	Half brick masonry with F.P.S. bricks of class designation 75 in superstructure above plinth level up to floor V level. Cement Mortar 1:4 ( 1 cement : 4 coarse sand)	125	Sqm			
2.	Brick work with F.P.S. bricks of class designation 75 in foundation and plinth in: Cement Mortar 1:4 (1 cement: 4 coarse sand)	20	Cum			
3.	Constructing soak pit 1.20 x 1.20 x 1.20 m filled with brickbats including S.W. drain pipe 100 mm diameter and 1.20 m long complete as per standard design.	5	Each			
4.	Providing and fixing soil waste and vent pipes 100 mm dia. Sand cast iron S & S pipe as per IS: 1729.	50	Mtr			
5.	Providing and filling the joints with spun yarn cement slurry and cement 1:2 ( 1 cement: 2 fine sand( in S.C.I./C.I. Pipes. (100 mm dia pipe)	10	Each			
6.	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.					
	100 mm dia sand cast iron S & S as per IS-1729.	6	Each			
	75 mm dia sand cast iron S & S as per IS-1729.	6	Each			
7.	Providing and fixing M.S. holder-bat clamps of approved design to sand cast iron/ cast iron (spun) pipe embedded in and including cement concrete blocks 10 x 10 x 10 cm of 1:2:4 mix ( 1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size) including cost of cutting holes and making good the walls etc.					

	For 100 mm dia pipe	8	Each			
	For 75 mm dia. pipe	8	Each			
8.	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings. This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge. (External work)					
	15 mm nominal outer dia. Pipes	200	Mt.			
	20 mm nominal outer dia. Pipes	200	Mtr.			
	25 mm nominal outer dia. Pipes	100	Mtr.			
9.	Providing and fixing 1 <sup>st</sup> quality ceramic glazed wall tiles conforming to IS:15622 (thickness to be specified by the manufacture) of approved make in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in Charge in skirting, risers of steps and dados over 12mm thick bed of cement Mortar 1:3 ( 1 cement: 3 coarse sand) and jointing with grey cement slurry @ 3.3 kg per sqm including pointing in white cement mixed with pigment of matching shade complete.	100	Sqm			
10.	Providing and fixing stone slab table rubbed, edges rounded and polished of size 75 x 50 cm deep and 1.8 cm thick fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 ( 1 cement: 2 coarse sand: 4 graded stone aggregate 6 mm nominal size) as per direction of Engineer-in-charge and finished smooth.					
	Granite Stone of approved shade	15	Sqm			

11.	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 10mm gap for thermal expansion. (i) single socketed pipes (110 mm diameter)	120	Mtr.			
12.	Renewing glass panes, with putty and nails wherever necessary. (i) Float glass panes of thickness 4 mm	60	Sqm.			
13.	Renewal of old putty of glass panes (length)	100	Mtr.			
14.	Providing and fixing wash basin with C.I. brackets, 15mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require: White Vitreous China Wash basin size 550 x 400 mm with a pair of 15 mm C.P. brass pillar taps.	6	Each			
15.	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position: (Kiln seasoned and chemically treated Hollock wood)	1	Cum			
16.	Providing and fixing P.V.C. low level flushing cistern with manually controlled device (handle lever) conforming to IS: 7231, with all fittings and fixtures complete. ( 10 litre capacity-White)	5	Each			
17.	Providing and fixing G.I. pipes complete with G.I. fittings and clamps including cutting and making good the walls etc. (Internal work- Expose on walls)					
	15 mm dia. Nominal bore	60	Mtr.			
	20 mm dia. Nominal bore	35	Mtr.			
	25 mm dia. Nominal bore	20	Mtr.			

18.	Providing and placing on terrace ( at all floor levels) polyethylene water storage tank ISI: 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	5x500	Ltr.			
19.	Providing and fixing PTMT bib cock of approved quality and colour. 15mm nominal bore, 122 mm long. Weighing not less than 99 gms.	30	Each			
20.	Providing and fixing PTMT stop cock of approved quality and colour.					
	15 mm nominal bore, 86 mm long. Weighing not less than 88 gms.	10	Each			
	20 mm nominal bore, 89 mm long. Weighing not less than 88 gms.	10	Each			
21.	Providing and fixing G.I. Union in existing G.I. pipe line, cutting and threading the pipe and making long screws including excavation, refilling the earth or cutting of wall and making good the same complete wherever required: (15 mm nominal bore)	10	Each			
22.	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drain (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. ( All kinds of soil)	4.50	Cum			
23.	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering- All work up to plinth level:					
	1:4:8 (1 cement: 4 coarse sand: 8 graded stone aggregate 40 mm nominal size)	2	Cum			

	1:3:6 ( 1 cement: 3 coarse sand: 6 graded stone aggregate 40 mm nominal size)	2	Cum			
	1:2:4 ( 1 cement : 2 coarse sand: 4 graded stone aggregate 40 mm nominal size)	2	Cum			
24.	Repairs to plaster of thickness 12mm to 20 mm in patches of area 2.5 sq. meters and under including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete including disposal of rubbish to the dumping ground within 50 meters lead: (with cement mortar 1:4 ( 1 cement: 4 fine sand)	100	Sqm.			
25.	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100mm sand cast iron P or S trap, 10 litre low level white P.V.C. flushing cistern 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: (a) White Vitreous china pattern W.C. pan of size 580 x 440 mm with integral type foot rests.	3	Each			
26.	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete. (40 mm dia)	20	Each			
27.	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. (450 mm long towel rail with total length of 495mm, 78mm wide and effective height of 88mm, weighting not less than 170 gms.	20	Each			
28.	Providing and fixing 600 x 450 mm beveled edge mirror of superior glass (of approved quality) complete with 6mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	5	Each			

29.	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required: (Kitchen sink with drain board)	3	Each			
30.	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade. New work ( two or more coats) over and including priming coat with cement primer.	50	Sqm.			
31.	Applying priming coat with ready mixed pink or grey primer of approved brand and manufacture on wood work (hard and soft wood)	10	Sqm.			
32.	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade ( Two or more coats on new work)	10	Sqm.			
33.	Applying one coat of cement primer of approved brand and manufacture on wall surface. ( cement primer)	300	Sqm.			
34.	Finishing walls with water proofing cement paint of required shade. New work ( Two or more coats applied @ 3.84 kg/10 sqm)	250	Sqm.			
35.	Fixing chowkhats existing opening including embedding chowkhats in floors or walls cutting masonry for holdfasts embedding hold fasts in cement concrete blocks with cement concrete 1:3:6 ( 1 cement: 3 coarse sand: 6 graded stone aggregate 20 mm nominal (size) painting two coats of approved wood preservative to sides of chowkhats and making good the damages to walls and floors as required complete including disposal of rubbish to the dumping ground within 50 meters lead:					
	Door chowkhats	10	Each			
	Window chowkhats	8	Each			
	Clerestory window chowkhats	6	Each			

36.	Taking out doors, windows and clerestory window shutters (steel or wood) including stacking within 50 meter lead: ( Of area 3 sq. meters and below.	10	Each			
37.	Dismantling C.I. or asbestos rain water pipe with fittings and clamps including stacking the material within 50 meters lead: (100 mm dia pipe)	30	Mtr.			
38.	Providing and fixing aluminium sliding door bolts ISI marked anodized ( anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with nuts and screws etc. complete. (300 x 16 mm)	20	Each			
39.	Providing and fixing aluminium tower bolts ISI marked anodized (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:					
	200 x 10 mm	20	Each			
	150 x 10 mm	20	Each			
40.	Providing and fixing ISI marked M.S. pressed butt hinges bright finished with necessary screws etc. complete: ( 100 x 58 x 1.90 mm)	30	Each			
41.	Providing and fixing bright finished brass handles with screws etc. complete: ( 125 mm)	15	Each			
42.	Providing and fixing paneling or paneling and glazing in paneled or paneled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside proves or rebates to be measured). Panelling for paneled or paneled and glazed shutters 25 mm to 40 mm thick: (Kiln seasoned and chemically treated Hollock wood)	20	Sqm.			
43.	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	50	Sqm.			

	slurry, but excluding the cost of nosing of steps etc. complete. (40 mm thick with 20 mm nominal size stone aggregate.					
44.	Cutting holes up to 15 x 15 cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 ( 1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) including finishing complete so as to make it leak proof.	20	Each			
45.	Demolishing cement concrete manually by mechanical means including disposal of material within 50 metres lead as per direction of Engineer-in-Charge. (1:3:6 or richer mix)	0.50	Cum			
46.	Demolishing brick work manually by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 meters lead as per direction of Engineer-in-charge. (In cement mortar)	1.00	Cum			
47.	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 mm to 40 mm nominal bore)	50	Mtr.			
48.	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	100	Sqm.			
49.	Dismantling of flushing cistern of any size including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead.	5	Each			

50.	Removing mortar from bricks and cleaning bricks including stacking within a lead of 50 m (stacks of cleaned bricks shall be measured) from brick work in cement mortar.	2000	1000 Nos.			
51.	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	100	Sqm.			
52.	Providing & fixing to existing door frames 24 mm thick factory made PVC door shutters made of styles and rails of a PVC hollow section of size 59 x 24 mm and wall thickness 2 mm $\pm$ 0.2 mm with inbuilt edging on both sides. The styles and rails mitred and joined at the corners by means of M.S. galvanized/plastic brackets of size 75 x 220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanized M.S. tube of size 20 x 20 mm and 1 mm $\pm$ 0.1 mm wall thickness. The lock rail made up of 'H' section, a UPVC hollow section of size 100 x 24 mm and 2mm $\pm$ 0.2 mm wall thickness fixed to the shutter styles by means of plastic/galvanized M.S. 'U' cleats. The shutter frame filled with a UPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm $\pm$ 0.1 mm wall thickness. The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanized M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge. (For W.C. and bathroom door shutter).	2	Sqm.			
53.	Providing and fixing PTMT pillar cock of approved quality and colour. 15mm nominal bore, 107 mm long, weighing not less than 110 gms.	10	Each			

54.	Providing and fixing PTMT swiveling shower, 15mm nominal bore. Weighing not less than 40 gms.	10	Each			
55.	Providing and fixing soap Dish Holder having length of 138mm, breadth 102mm, height of 75 mm with concealed fitting arrangements. Weighing not less than 106 gms.	10	Each			
56.	Providing and fixing PTMT Bottle Trap for Wash basin and sink. 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 25 mm minimum water seal, weighing not less than 260 gms.	10	Each			
57.	Providing and fixing PTMT Waste Coupling for wash basin and sink, of approved quality and colour. Waste coupling 31mm of 79mm length and 62mm breadth weighing not less than 45 gms.	10	Each			
58.	Providing and fixing 25 mm thick shutters for cup board etc.: Second class teak wood including ISI marked anodized aluminium butt hinges with necessary screws.	10	Sqm.			
59.	Providing and fixing aluminium handles ISI marked anodized (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: (125 mm)	20	Each			
60.	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work)					
	15 mm nominal bore	25	Each			
	25 mm nominal bore	20	Each			
	25 mm nominal bore	15	Each			

61.	Providing and fixing gun metal non-return valve of approved quality (screwed end):				
	25 mm nominal bore (Horizontal)	5	Each		
	25 mm nominal bore (Vertical)	5	Each		
62.	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. (External work)				
	15 mm dia nominal bore	50	Mtr.		
	20 mm dia nominal bore	30	Mtr.		
	25 mm dia nominal bore	20	Mtr.		
63.	Making chases up to 7.5 x 7.5 cm in walls including making good and finishing with matching surface after housing G.I. pipe etc.	25	Mtr.		
64.	Centering and shuttering including strutting, propping etc. and removal of form for:				
	Foundations, footings, bases of columns etc. for mass concrete.	10	Sqm.		
	Lintels, beams, plinth beams, girders, bressumers and cantilevers.	10	Sqm		
	Columns, Pillars, Piers, Abutments, Post and Struts.	10	Sqm.		
65.	Providing and fixing ISI marked flush door shutters conforming to IS:2202 (Part I) non-decorative type, core of block board construction with frame of 1 <sup>st</sup> class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters: 35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	10	Sqm.		
<b>Total</b>					

Rupees.....only.