

Name S.R. to Various category (B, C, D, D-1, E, E-1 & E-2 Type) quarters and Govt. Bungalows at Shahibaug and of Meghaninagar, Ahmedabad under City (R&B) Division, Ahmedabad. (Repairing and Renovation works of Work : Quarters and bungalows by plaster work, Door - window Work, Toilet repairing work, Colour work, Fabrication Work, Paver Block & other misc. work)

SPECIFICATION SHEET

Sr. No. of Item at Schedule - B	Item Description	Item No. of General Technical Specification Book for Building Work for detail specification
1	Removing and scrapping of old deteriorated plaster of any thickness from masonry / R.C.C member including stacking of serviceable material and disposal of unserviceable from site of work with all lead and lift.	As per separate sheet attached
2	Demolition and disposal of unserviceable materials with all lead and lift.(i) Cement concrete.	20.1
3	Demolition including stacking of serviceable materials and disposal of unserviceable materials with all lead and lift. (i) R.C.C. work	20.3
4	Demolition of Brick work and stone masonry including stacking of serviceable materials and disposal of unserviceable materials with all lead and lift.(ii) In Cement Mortar.	20.11
5	Dismantling of tiled/stone floors laid in mortar incl. stacking of serviceable materials and disposal of unserviceable materials with all lead and lift.	20.23
6	Dismantling of wooden floors including stacking of serviceable materials and disposal of unserviceable materials with all lead and lift.	20.25
7	Dismantling doors, windows, ventilators etc. (wood or steel) shutters including chowkhats, architraves, holdfasts and other attachment etc. complete and stacking them within all lead and lift. (I) Not exceeding 3 sq.m. in area.	20.49
8	Dismantling sanitary fittings like wash-basin W.C. pan Indian and european type, flushing tank etc. incl. stacking the materials with all lead and lift.	As per separate sheet attached
9	Dismantling C.I. pipes G.S.W. pipe and A.C. rain water pipes with fittings and clamps included stacking the materials with all lead and lift. (for any dia. of pipe)	20.56
10	Dismantling of sheet roofing including ridges, Hips, Valleys, Gutters etc. stacking of serviceable materials and disposal of unserviceable materials with all lead and lift.(i) G.I.sheet roofing.	20.27
11	Cleaning grass and removal of the rubbish upto a distance of 50 m outside the periphery of the area cleared.	As per separate sheet attached
12	Dismantling of mangalore of country tile roofing with battens boarding etc. including stacking of serviceable materials and disposal of unserviceable materials with all lead and lift	20.28
13	Dismantling wood work, wrought framed and fixed in frames trusses including stacking the materials with all lead and lift.	20.35
14	Dismantling steel work including distempering and stacking the materials with all lead and lift.	20.43
15	Removing dry or oil bound distemper by a washing and scraping and sand papering the wall surface smooth including necessary repairs to scratches complete.	18.33

16	Providing and laying concrete 1:2:4 (1 cement :2 coarse Sand: 4 Graded Stone Aggregate 20 mm nominal size) in proper gradient on terrace slab as directed by Engineer-in-charge to have proper slope for draining rain water including finishing top with floating coat of neat cement	As per separate sheet attached
17	Providing and laying cement concrete 1:4:8 (1-Cement : 4-coarse sand : 8- hand broken stone aggregates 40 mm nominal size) and curing complete excluding cost of form work in (A) Foundation and Plinth (upto 10 ton)	5.3.3
18	Providing and filling of non structural cracks by exposing the line of crack as per actual requirements at site and removing all the loose material , dirt etc. from the crack by brush. The crack shall be made moist by applying water in the groove by brush. The same groove shall be filled with ready mixed paste " POLYFILL-AR" of Sunanda Speciality Coatings Pvt. Ltd. crack-X of Dr.Fixit or Equivalent and making good the walls as per manufacturer specification and as required by the Engineer-in-charge.	As per separate sheet attached
19	CHIPPING EXIST CONC.FROM RCC MEMBER Surface of member should be checked for sounding using hammer. The damaged/ delaminated portion will sound hollow. The same should be marked to regular geometrical shapes. The edges should be grooved using slim and powerful 850W (230V) corded angle grinder about 25 mm deep. Grinder to have no load speed of 11500 rpm with on / off side switch and for use of cutting disc upto 100 mm. Concrete within the grooved area should be removed using High performance chipper hammer featuring low weight & low vibration having single impact energy of 7.5 J, full hammering frequency of 3180 impacts/minute, maximum chiselling performance of 900 cm ³ /min, weighted emission sound pressure level of 94 dB (A) according to EN 60745, Triaxial vibration for chiseling in concrete 12.1m/s ² according to 60745-2-6 and having weight according to EPTA procedure 01/2003 of 5.6 Kgs.	As per separate sheet attached
20	P/A STEEL PROTECTIVE COATING : Providing and Applying Steel protective coating: The exposed and cleaned reinforcement bars shall be applied with a single component cementitious corrosion inhibiting primer which shall be applied on the surface using suitable brush. Product: Mucis Protozione Ferro Mono of Thermax (Area of Concrete treated with polymer modified mortar shall be measured for payment please)	As per separate sheet attached
21	P/A ANTI CORROSIVE RUST REMOVER ON REINFORCEMENT : Providing and applying anti corrosive rust remover "Rusticide" of M/S Sunanda speciality coating pvt Ltd or equivalent approved including cleaning the reinforcement bars with wire brush or air blowing including removing of all loose particle with applying rust remover thoroughly on reinforcement bars by using cotton waste swab etc. comp. with all the required tools, tackles, labourers as required and as directed by the Engineer in charge. (Area of Concrete treated with poymer modified mortar shall be measured for payment please)	As per separate sheet attached

22	<p>Bonding Coat:- Providing and applying bond coat on the prepared surface to receive new polymer mortar / polymer modified concrete, with application of bonding coat of slurry made of Polyalk EP of M/S Sunanda Specialty Coating Private Ltd or of equivalent approved brand and manufacture in the weight proportion of 1 :2 (1 cement : 2 Polyalk EP) or / Lanco 751 of Parex Chemicals or Krishna Conchem as per manufactures specification over the cleaned and dried old concrete surface in one full coat. Laying of reinforcement polymer mortar or micro concrete shall be completed within the overlay time of bonding coat. This coat act as bonding agent between old and new concrete and also acts as 'barrier coat' to the migration of chloride ions from host concrete. Item rate is inclusive of the materials all labour, scaffolding, supervision, tools and tackles and transportation etc. complete as per specification and as directed.</p> <p>To ensure proper bonding between old and new concrete application of bonding coat of slurry made of Polyalk EP of M/S Sunanda Specialty Coating Private Ltd or of equivalent approved brand and manufacture in the weight proportion of 1 :2 (1 Cement : 2 Polyalk EP) or Lanco 751 of Parex Chemical as per manufactures specification over the cleaned and dried old concrete surface .</p>	As per separate sheet attached
23	<p>P&A POLYMER MODIFIED CEMENT MORTAR : Applying Corrosion Resistance single Component, polymer modified cement mortar to patch up the damaged concrete section in planks of upto 25mm thickness. Providing and applying Corrosion Resistance Single Component, polymer modified, fiber reinforced cementitious repair mortar having water powder ratio in the range of 0.16 and the mixed density of around 2.05 - 2.20 Gms/cc. The repair mortar shall achieve a minimum compressive strength of 45 MPa @ 28 days when tested as per ASTM C-109 and a flexural strength of 7 MPa when tested as per ASTM C 348. It shall achieve a minimum Adhesion Bond Strength of 2 MPa when tested on Standard Elcometer as per ASTM D 4541 - 85. The modulus of Elasticity shall be a minimum of 28 kN/mm² when tested as per BS 1881. Product: corrosion resistance single Component, polymer modified, fibre reinforced cementitious of M/s. Fosroc (Renderoc SP-40), Parex (Lanko-731).</p>	As per separate sheet attached
24	<p>Extra for additional thickness of Polymer Modified Mortar over and above 25 mm thickness upto 50mm thickness (A) Additional thickness of 15 mm or part there of.</p>	As per separate sheet attached
25	<p>Drilling hole of required diameter and depth as directed for fixing of Rebars using hammer drill.Cleaning the hole using mechanical air blower, water jetting etc.Providing & fixing rebar in the drilled hole using approved make Chemical grout and sealant with necessary scaffolding , staging, labour , tools , and equipments etc. complete and the work shall be carried out by the technical workmens/agency approved by the manufacturer and under technical supervision of Manufacturer of Injection grout.etc. complete as directed by Engineer-in-charge. 8 & 10 mm. dia.bar -Depth 100 mm</p>	As per separate sheet attached
26	<p>Providing TMT Bar FE 500D reinforcement for R.C.C. work including bending, binding and placing in position complete upto floor two level.</p>	5.4.11 Use TMT bar FE 500D

27	Providing and executing injection / pressure grouting in cracks in the parent concrete/brick work or in honeycomb area by fixing-up PVC or metallic grout-nozzles on line of crack in concrete/ masonry at a distance not exceeding 300mm injecting with the help of grout-pump working at a pressure of 3.00 kg/cm ² , Pressure grouting to be done using low viscous 2 component epoxy grack injection material " Lanco 721 " of Parexgroup, "Conbextra EP 10 (M)" of Fosroc, " Coneresive 1315" of BASF or equivalent make shall be done in a sequence starting from lowest grout-hole and proceeding to the next upper one, sealing the grout nozzles temporarily, on the next day repeating the grout sequence once more before cutting and sealing the nozzles permanently. Finally patching up the plaster with cement mortar (1: 3).	As per separate sheet attached
28	Providing and fixing temporary engineered steel tubular standard double scaffolding system on the exterior side for the height upto 15.00 metre and maintaining it in a serviceable condition for the required duration as approved and removing it thereafter. The scaffolding system shall be stiffened with bracings, runners, connection with the building etc with suitable working platform at required locations with essential safety features for the workmen etc, complete as per direction and approval of Engineer-in-charge. For the vertical surface treatment elevational area of the scaffolding shall be measured and for horizontal surface plan area of scaffolding shall be measured for payment purpose .	As per separate sheet attached
29	Providing and fixing chicken wiremesh jali on brick, concrete wall as directed and instructed by Engineer-in charge	As per separate sheet attached
30	Excavation for foundation up to 1.5 m depth including sorting out and stacking of useful materials and disposing off the excavated stuff upto 50 Meter lead.(A) Loose or soft soil	As per separate sheet attached
31	Filling available excavated earth (excluding rock) in trenches. plinth, sides of foundations etc. in layers not exceeding 20cm. In depth consolidating each disposed layer by ramming and watering.	4.12
32	Brick work using common burnt clay building bricks having crushing strength not less than 35 kg./Sq.Cm. in super structure up to floor two level in Cement Mortar 1:5. (1- Cement : 5 -fine sand)(B) Conventional.	6.12+6.19
33	Half brick masonry in common burnt clay building bricks having crushing strength not less than 35 Kg/Sq.Cm. in Cement mortar 1:4 (1- Cement : 4 -coarse sand) in super structure upto floor two level (B) Conventional.	6.3+6.2
34	Providing 10mm thick cement plaster in single coat on brick/concrete walls for interior plastering upto floor two level and finished even and smooth in (i) Cement mortar 1:3 (1-cement:3-sand)	17.58
35	Providing and applying 15 mm thick mala plaster in single coat on fair side on brick / concrete wall for interior plastering in C.M. 1:4 (1 cement : 4 coarse sand) incl. finishing with a floating coat of neat cement slurry.	17.6+17.69
36	20 mm thick sand faced cement plaster on walls upto height 10 Mt. above ground level consisting of 12 mm thick backing coat of C.M. 1:3 (1 Cement : 3 Sand) and 8 mm thick finishing coat of C.M. 1:1 (1 Cement : 1 sand) etc. complete.	17.95

37	Providing and fixing granite slab of 18mm thickness for stone jamb on wall, framing etc. on the base of cement mortar 1:3 (1-cement : 3-sand) on new surface or fixing on existing location by adhesive material including dismantling of existing location and jointed with color cement slurry including finished with flush pointing & cleaning the surface etc. To be laid or fixed as per the direction of the Engineer-in-Charge	As per separate sheet attached
38	Providing and fixing M.S. grills of required pattern to wooden frames of windows etc. with M.S. flats at required spacings and frame around, square or round bars with round headed bolts and nuts or by screws (A) Plain Grill.	10.1
39	Three Track Window: Providing and fixing Domal Series Three Track aluminium window system, partly fixed and partly sliding type, fabricated from colour anodized aluminium sections comprising outer frame section of size 82.5 × 35 × 1.7 mm, three-track top and bottom section of size 80 × 45 × 1.5 mm and sliding shutter section of size 65 × 27 × 1.5 mm complete with provision of sliding mosquito mesh shutter using powder coated aluminium frame and fibre/glass mesh. The glazing shall consist of ordinary quality 6 mm thick glass fixed with EPDM/rubber gaskets, glazing clips and interlocking clips of approved size. The item includes rollers, bearings, locks, handles, nylon wheels, screws, sealant and all hardware accessories complete with fabrication, installation, alignment, sealing and finishing in true line and level as approved by Engineer-in-Charge.	As per separate sheet attached
40	Providing and fixing 25 mm th. Shutters for windows & cleastory window inc. Indian teak wood frames 12 cm x 7 cm, size incl. anodised alluminium fixtures and fastenings incl. primer coat of approved quality & two coats of painting etc. complete (II) Fully Glazed. (4788.5-439.82)	As per separate sheet attached
41	Providing and fixing 25 mm thick shutters for windows and clear story windows including anodised alluminium butt hinges with necessary screws. (A) Indian Teak Wood (ii) Fully Glazed. (3211.96-439.82)	10.12
42	Providing and fixing PPGL Profile sheet having minimum thickness of 0.45 mm and having traditional naliya type design with fixing base MS Plate having minimum 1 mm thickness as per instruction and fixing on fabricated structure (Generally chajjas) with bolts or screws as per situation with necessary washer in given size and slope incl covering joints and ridge line with overlapping etc complete at any height or level.	As per separate sheet attached
43	Flush Door - Providing and fixing 35 mm thick shutters for Doors with Both side Laminate including Indian teak Wood Frame 100mm X 75mm including black enamelled iron oxidized fixtures and fastenings and necessary hardware such as hinges, door stopper, handle on both side etc, complete.	As per separate sheet attached
44	Flush Door - Providing and fixing 35 mm thick shutters for Doors with Both side Laminate including black enamelled iron oxidized fixtures and fastenings and necessary hardware such as hinges, door stopper, handle on both side etc, complete.	As per separate sheet attached

45	Providing and fixing FRP frame size 100x50 mm and 28mm thick FRP depress panel shutter having extra reinforcement on sides & edges in Gel coat finish. The core of the shutter & frame is to be filled up with injected fire retardant grade polyurethane foam done in situ along with embedded wooden pieces for stiffening & also taking hinges & fixtures. The whole FRP frame & shutter is to be waterproof, weather proof, termite proof & resistance to mild acid / alkali. Rates are to be inclusive of S.S hinges with necessary screws & alluminium fixtures & fastenings & fastener sleeve.	As per separate sheet attached
46	Repairing Existing TW Panelled Doors Shutters by Replacing of Old Rusted / Missing wood members, Hardware making Good, Replacing Frame members if required in position making Tounge /Groove joint & making good & Refixing Shutters in position as Directed by Engineer in Charge.	As per separate sheet attached
47	Repairing Existing TW Fully / Partly glazed windows by Replacing of Old Rusted / Missing wood members, Sheet Glass, Hardware making Good, Replacing Frame members if required in position making Tounge /Groove joint & making good & Refixing Shutters in position as Directed by Engineer in Charge.	As per separate sheet attached
48	Repairing Existing Alluminum extruded Fully / Partly glazed sliding windows by Replacing of Old Rusted rollers, replacing mosquito net, glass, hardware as per requirement & making good & Refixing Shutters in position as Directed by Engineer in Charge.	As per separate sheet attached
49	Providing and fixing 30 mm. thick wire gauge shutters using galvanised M.S. wire of I.S gauge designation 85 G. with wire of 0.56 mm. dia. for doors, windows and clearstory windows including anodised alluminium butt hinges with necessary screws. (A) Indian teakwood.	10.5
50	Providing and fixing fly proof S.S. wire guage of I.S. desination S.S.G. with wire of dia 0.56 mm to windows & clarestorey windows including baten patti.	As per separate sheet attached
51	Steel work welded, in built up sections, framed work incl. cutting, hoisting, fixing in position and applying a priming coat of red lead paint for window, vent and shed work. Using channels angles, tees, flats, pipes, Ez-7 or F4B section etc. complete.as directed by engineer-in-charge.	11.4
52	Providing 2 mm th FRP sheet as per instruction and fixing on fabricated shade with bolts or screws as per situation with necessary washer in given size and slope incl covering joints and ridge line with overlapping etc complete.	As per separate sheet attached
53	Providing corrugated G.I. sheet of class-3 roofing fixed with glavanished iron J or L Hooks, Bolts and nuts 8mm diameter with bitumen and G.I. limpet washer or G.I. limpet washer. filled with white lead complete excluding the cost of purlins, Rafters and Trusses.(1) 0.80 mm thick sheet.	15.1
54	Providing and Laying double charged 600 x 1200 mm size (Thickness to be specified by the manufacturer) vitrified tile flooring over 20 mm (average) base of cement mortar 1:6 (1 cement : 6 coarse sand) on new surface, and jointed with color cement slurry including finised with flush pointing & cleaning the surface etc. complete for light shade.	As per separate sheet attached
55	P & L 24" x 24" vitrified 8 mm thick tile flooring over 20 mm (average) base of cement mortar 1:6 (1 cement: 6 coarse sand) on new surface or fixing on existing flooring by adhesive material including dismantaling of existing flooring and jointed with color cement slurry including finised with flush pointing & cleaning the surface etc. complete for light	As per separate sheet attached

56	P & L 24" x 24" vitrified 8 mm thick tile flooring over 20 mm (average) base of cement mortar 1:6 (1 cement: 6 coarse sand) on new surface or fixing on existing flooring by adhesive material including dismantling of existing flooring and jointed with color cement slurry including finished with flush pointing & cleaning the surface etc. complete for	As per separate sheet attached
57	Providing and filling epoxy grout of " Ardex Endura, Dr. Fixit, MAPAI, Kerakoll " or equivalent make in Parking tile flooring of size 800 x 800 mm and having joint width 5 mm and average joint depth 5 mm including providing masking tape 25 mm wide at both side of vitrified tile cleaning the joint upto 5 mm average depth by using wire brush, air blower and finishing the joint etc. complete as per direction of Engineer-in-charge.	As per separate sheet attached
58	Providing and laying Vitrified tiles 8 to 10 mm thick , in skirting risers of steps and dedo on 10mm thick cement plaster 1:3 (1-cement : 3-coarse sand) and jointed with white cement slurry	14.32
59	Providing and laying white/ coloured glazed tiles 6mm thick in flooring treads of steps and landing laid on a bed of 12mm thick cement mortar 1:3 (1-cement : 3- coarse sand) finishing with flush pointing in white cement.	14.29
60	Providing and laying coloured glazed tiles of the size 300 mm x 200 mm x 8 mm / 300 mm x 450 mm x 8 mm in skirting, risers of steps and dedo on 10 mm. thick cement plaster 1:3 (1 cement : 3 coarse sand) & jointed with white cement slurry.	As per separate sheet attached
61	Providing and laying polished Kota stone slab flooring over 20mm (Average) thick base of cement mortar 1:6 (1-cement : 6-coarse sand) or L.M. 1:1.5 (1-Lime putty :1.5 - coarse sand) laid over and jointed with grey cement slurry mixed with pigment to match the shade of slab including rubbing and polishing etc. complete. (A) 25mm thick	14.43
62	Providing and laying polished kota stone slab 25mm thick in risers of steps,skirting Dedo and pillars laid on 10mm thick cement mortar 1:3 (1-Cement : 3 coarse sand) and jointed with gray cement slurry mixed with pigment to match the shade of slab including rubbing and polishing etc. complete.	14.44
63	Providing and laying waterproofing tiles of approved size & 8 to 12mm thick on terrace laid on a bed of 12mm thick cement mortar 1:3 (1-cement : 3- coarse sand) or tile adhesive with providing spacing of required size between tiles as directed & filled with epoxy tile grout of approved quality.	As per separate sheet attached
64	Applying two coats of putty & two coats of primer of approved brand And Wall painting (two coats) with plastic emulsion paint as approved by the Engineer - in - charge over lapi putty and priming coat of approved brand primer on undecorated wall surface to give an even shade incl. thoroughly brushing the surface from mortar dropping & other foreign matter & sand papered smooth.	As per separate sheet attached
65	Finishing wall with weather proof exterior emulsion paint on wall surface (two coats) to give an required shape even shade after thoroughly brushing the surface to remove all dirt, and remains of loose powdered materials etc. complete.	As per separate sheet attached
66	Applying two coats of putty & two coats of primer of approved brand And Wall painting (two coats) with Royal plastic emulsion paint as approved by the Engineer - in - charge over lapi putty and priming coat of approved brand primer on undecorated wall surface to give an even shade incl. thoroughly brushing the surface from mortar dropping & other foreign matter & sand papered smooth.	As per separate sheet attached

67	Distempeing (Two coats) with oil bound washable distemper of approved brand and manufacture and of required shade on wall surfaces to give an even shade, over and including a priming coat with alkali resistance primer of approved brand after thoroughly brushing the surface and other foreign matter and also including preparing the surface even and sand parpered smooth.	18.45
68	Painting two coats on new steel and other metal surface with enamel paint including one coat of priming coat), brushing, interior to give an even shade including cleaning the surface an even shade including cleanien the surface of all dirt, dust and other foreign matter.	19.7+19.2
69	Painting Two coats (excluding priming coat) on previously painted steel and other metal surface with enamel paint, brushing to give an even shade including cleaning the surface of all dirt, dust and other foreign matter.	19.11+19.15
70	Painting two coats (excl. priming coat) on previously painted wood and wood based surface with enamel paint to give an even shade incl. cleaning of oil dirt, dust and other foreign matter.	19.73+19.75
71	Polishing with liquar polish over new wood and wood based surfaces to give even surface including cleaning oil, grease, dirt and sand papered smooth and including a coat of wood filler.	As per separate sheet attached
72	Applying Texture paint on wall surface after scrapping the old paint and preparing the surface and then applying water proof lapi and primer coat and applying two coat of Royal play paint base coat and then applying Asian Royal play texture paint as directed including all materials, tools and labour etc. complete.	As per separate sheet attached
73	Applying Asian paint Stucco marble royal play Texture paint on wall surface after scrapping the old paint and preparing the surface and then applying water proof lapi and primer coat and applying three coat of Royal play stucco marble texture paint using trowel & scrapper in shade as approved by Engineer incharge as directed including all materials, tools and labour etc. complete.	As per separate sheet attached
74	Applying Acrylic exterior Floor paint of Indigo, Berger, Asian or equivalent brand on existing paver block, cement tiles & other suitable flooring surface two coats of paint including priming coat over surface including preparing the surface by throughly cleaning oil, grease dirt and other foreign matter & scoured with sand papers etc. completed with required colour finish as per direction of Engineer-in-charge.	As per separate sheet attached
75	Providing and fixing at all height on all floors , false ceiling of 12.5 mm thick tapered edge gypsum board conforming to IS :2095 including providing and fixing of frame work made of special sections and consisting of angle cleats of size 25mm wide x 1.6mm thick with flanges of 22mm and 37mm at 1200mm centre to centre one flange fixed to the ceiling with dash fastener with 6mm dia bolts to the angle hangers of required length, and other end of angle hanger being fixed with nut and bolts to G.I. channels running at the rate of 1200mm centre to centre to which the ceiling section 0.5mm thick bottom wedge of 80mm with tapered flanges of 26mm each having clips of 10.5mm at 450mm centre to centre shall be fixed in a direction perpendicular to G.I. channel with connecting clips G.I. wire at every junction including fixing the gypsum board with ceiling section and perimeter channels 0.5mm thick As per the site condition size can vary, the entire job is to be carried out as per the instruction and satisfaction of engg in charge complete in all aspects.	As per separate sheet attached

76	<p>Providing and fixing eco-friendly light weight calcium silicate false ceiling tiles having Tegular edge & 15 mm Thick Densified edges on the Tile Periphery for Extra Strength The Light weight calcium silicate ceiling tiles shall have , light reflection 85% non-combustible as per B.S. 476 part IV, 100% humidity resistance and also having thermal conductivity 0.043° w/m KC. for the best thermal Insulation . The Light weight calcium Silicate tile shall be of approved texture Fine fissured/ Spintone/Cosmos having NRC value of 0.5 & Globe having NRC value of 0.75 NRC or equivalent of size 595 X 595 mm to be laid on true horizontal level suspended inter locking metal grid of hot dipped galvanized steel sections (galvanizing @120 grams per sqm including both side) consisting of main 'T' runner suitably spaced at joints to get required length and size of 24X38mm made from 0.30 mm thick (minimum) sheet, 1200mm centre to centre, and cross 'T' of size 24X28mm made out of 0.33mm (Minimum) sheet spaced 1200mm along spaced between main 'T' at 600mm centre to centre to form a grid of 1200X600mm and</p> <p>secondary cross 'T' of length 600mm and size 24x28mm made of 0.30 mm thick (Minimum) sheet to be interlocked at middle of the 1200X600mm panel to form grid of size 600X600mm resting on</p>	As per separate sheet attached
77	<p>Providing, removing & refixing 60 mm thick high density homogeneous inter locking or non interlocking grey or colour base paver block including providing new one as per requirement of paver block of homogeneous grey or colour smooth finish having grade minimum M 200 or higher of approved shape with good finishing and 75mm (avg) thick sand layer including consolidation of the same etc. complete in pattern and design or sample approved by Engineer in charge etc complete.</p>	As per separate sheet attached
78	<p>Providing and fixing pre-cast Rubber Dye / steel Dye inter locking concrete block 60mm thick with grade of concrete M300 pneumatic compressed / vibrated mechanically and as per approved design Confirming to IS 15658 : 2006 including 35 mm Sand layer for levelling and filling the joint with sand in proper line and level as per guidelines of IRC : SP 63-2018 etc. Complete.</p>	As per separate sheet attached
79	<p>Providing and fixing pre-cast concrete kerb stone of gray cement based concrete block 30cm length, 30cm height and 15cm thick of M250 grade concrete as per approved design and including excavation for fixing in proper line and level, filling the joint with C:M 1:3 (1 cement:3 fine sand) etc complete.</p>	As per separate sheet attached
80	<p>Providing and fixing chain link jali using 1.50 mm (10 GGI) wire as per drawing using MS Angle post of size 40mm x 40mm x 5mm fixed at 2 meter Center /Center on existing compound wall including cutting , welding as directed and one coat of primer and two coat of oil paint etc complete.</p>	As per separate sheet attached
81	<p>Providing and fixing 1.20 Metre high fencing with 2.0 Metre long M.S. Angle posts 40mm x 40 mm x 6 mm and oil painting 3 coats fixed at 2.5 Mt, C/c. with five Horizontal lines and two diagonals of galvanised steel barbed wire weighting 9.38 Kg. per 100 Metre, strained and fixed to posts with G.I. staples including fixing the posts in ground with 0.5 M x 0.5 M x 0.5 M. block in C.C 1:5:10 etc complete.</p>	22.2
82	<p>Providing and Fixing 6 mm thick Lexan Polycarbonate multi wall roofing sheet fixed with hilti screw and rubber silicon sealer and aluminium strip of size 50 x 3 mm etc complete as directed by Engineer in charge.</p>	As per separate sheet attached

83	Carring out plinth treatment to post construction / existing structure by spraying chemical solution for termite control treatment including labour and material consistment with I.S.I specification. Using Chlordene and Chiorpurfiles 20 EC. As Per 6131_paret-II Consentration Weight one percent is recommended i.e one litre 20 EC chemical emulsion with 19 liter give 1 % concentration inclusive of one litre chemical emulsion appication at the rate of 5 Litre chemical / Sqm of surface is recommended as per I.S.	As per separate sheet attached
84	Providing and fixing in position Storage unit of any height and depth (450/600 mm), fabricated from 18/19 mm BWR grade calibrated plywood of approved make, with shutters made from 12 mm plywood or 6 mm thick glass shutters (as specified), complete with openable arrangement. All external and internal surfaces shall be finished with 1 mm laminate, with batten patti on exposed edges finished in PU polish and 2 mm PVC edge banding. The unit shall include soft-close concealed hinges, soft-close drawer channels (35 kg capacity), locks, and all necessary hardware, complete as per approved drawings and instructions of Engineer-in-Charge/Architect.	As per separate sheet attached
85	Providing and fixing 8mm thick AC4 wooden laminated flooring of size 1285mm x 186mm x 8mm thick moisture, heat, wear resistant specially formulated particle board/HDF board of approved pattern with core density more than 850 gsm/ sq.mt. This flooring shall be comprising of surface guard coating for extra durable layer and a solid armour. The boards shall consist moisture resistant,high density core composed of different layers, comprssed under extremely high pressure and temperature to a homogeneous composite. Joint mechanism between the boards shall be geometrically shaped tounge and groove construction. Floor boards shall be laid on polymer sheet and joints shall be fixed including providing final finishing.	As per separate sheet attached
86	Providing and fixing sandwich platform counter comprising bottom layer of 25mm thick Kota stone and top layer of 18mm thick mirror polished granite of approved shade and pattern, fixed with 25mm thick cement mortar bed/approved adhesive complete with cutting, moulded 3" fascia, nosing, chamfered edges, sink/wash basin cutouts, joint filling with matching pigment, polishing, finishing, debris disposal and all accessories complete as per approved drawings, samples and instructions of Architect/EIC.	As per separate sheet attached
87	S.S Kitchen Sink: Providing and fixing Kitchen sink with C.I. or M.S. brackets, painted white including cutting holes in walls and making good the same but excluding fittings. (C)Vitreous China Sink. (i) 600mm x 450mm x 150mm size	23.13
88	Providing and laying broken chine mosaic flooring for terrace using 12 mm to 20 mm broken pieces of glazed tiles to be laid over cement mortar 1:3 to plain or slope and to be tempered to bring mortar creme out upto surface using white cement including rounding off junctions and extending them upto 15 cm along the wall,clearing with water and oxalic acid etc. as directed.	As per separate sheet attached

89	Providing & Laying Synroof Hi Build 2 mm thick eelectrometric, premium quality acrylic coating as a water proofing membrane finished which consists a coat of Bitumen primer & 80 CSM membrane on terrace with ultra violet resistance and working upto any height arresting water leakages including removing and scrapping terrace surface having water proofing treatment, if any etc. and thoroughly brushing the surface to remove all dirt, and remains of loose powdered materials. etc complete as per detail specification & as directed by Engineer-in-charge.	As per separate sheet attached
90	Providing and applying two coats of high performance and Ultra flexible polymer modified elastomeric water proofing membrane, having two components, Brushbond UltraFlex of Fosroc or approved equivalent for water proofing of RCC water tanks. Cleaning the RCC/Plaster surface of tank throughly, complete all as per direction of Engineer in charge.	As per separate sheet attached
91	Cement Vata : Providing cement vata (10cm. x 10 cm. size) quarter round in cement mortar 1:1 including neat cement finishing, watering etc. complete at all floors / all levels / all heights	As per separate sheet attached
92	Providing and fixing in position Storage unit shutter of any height fabricated from 18/19 mm BWR grade calibrated plywood of approved make, (as specified), All external and internal surfaces shall be finished with 1 mm laminate, with batten patti on exposed edges finished in PU polish and 2 mm PVC edge banding. The unit shall include soft- close concealed hinges, locks, and all necessary hardware, complete as per approved drawings and instructions of Engineer-in-Charge/Architect.	As per separate sheet attached
93	Providing & Applying two coat of Dr. Fixit / Sika / Fosroc Waterproofing treatment including throughly brushing the surface free from mortar dropping and other foreign matter & masonry surface fully cured & dried before application.	As per separate sheet attached
94	Providing and fixing FRP (1.80 mm Thick) weather shed with 1" X 1" square M.S. Pipe (Wt 1.219kg/m). Applying red lead priming coat and two coat enamel paint and fixing on GF+F.F+S.F. window incl. the cost of all materials labour and scaffolding etc. complete.	As per separate sheet attached
95	Providing and fixing 25 mm thick polished kotah stone shelf in existing brick colla using cement mortar 1:3 (1 cement : 3 coarse sand) including rubbing polishing and making the edges round and making the wall finished including all labour and materials etc.	As per separate sheet attached
96	Providing and fixing 10 to 12mm thick clear toughened glass partition including SS fittings, silicone sealant, cutting, fixing and finishing complete as directed by Engineer-in-Charge.	As per separate sheet attached
97	Providing and fixing modular kitchen cup board below plate form and on kitchen wall using 18 mm thick plywood with both side laminated including S.S. basket jali ,drawers, cutlery box,cup saucer drawer, thali plate drawer, fixed with Telescopik channel and neseccery S.S. fixtures and fastening as directed by engineer-in-charge etc. complete.	As per separate sheet attached
98	Providing and fixing concealed center point to wall ceiling & floor CPVC (SDR 13.5) PIPE having National Sanitation Foundation (NSF) seal for potable water of following dia. nominal bore tube fittings and clamps including making good the wall, ceiling and floor etc. complete.[C] 15 mm dia.	23.2 Use of 15mm dia CPVC pipe instead of G.I. Pipe.

99	Providing and fixing concealed center point to wall ceiling & floor CPVC (SDR 13.5) PIPE having National Sanitation Foundation (NSF) seal for potable water of following dia. nominal bore tube fittings and clamps including making good the wall, ceiling and floor etc. complete.[C] 25 mm dia.	23.2 Use of 25mm dia UPVC pipe instead of G.I. Pipe.
100	Providing laying and jointing in true line and level 15mm dia. U.P.V.C. Pipe (SCH- 40) for cold water including fittings as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.	23.2 Use of 15mm dia UPVC pipe (SCH- 40) instead of G.I. Pipe.
101	Providing laying and jointing in true line and level 25mm dia. U.P.V.C. Pipe (SCH- 40) for cold water including fittings as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.	23.2 Use of 25mm dia UPVC pipe (SCH- 40) instead of G.I. Pipe.
102	Providing laying and jointing in true line and level 40mm dia. U.P.V.C. Pipe (SCH- 40) for cold water including fittings as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials	23.2 Use of 40mm dia UPVC pipe (SCH- 40) instead of G.I. Pipe.
103	Providing laying and jointing in true line and level 50mm dia. U.P.V.C. Pipe (SCH- 40) for cold water including fittings as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials	23.2 Use of 40mm dia UPVC pipe (SCH- 40) instead of G.I. Pipe.
104	Providing, laying and jointing in true line and level 160 diameter U.P.V.C (Type B) conforming to IS 13592-1992 with one end plain and other end socketed with rubber ring, & fittings conforming to ISI 14735-1999 of approved make for drainage system pipe line, pipe shall be jointed with each other with rubber lubricant, pipe shall be fixed on wall using of PVC clamp of the size 160 mm diameter x 210 mm length x 196 mm height at every 2000 mm center to center or shall be concealed in walls as directed including necessary fittings such as bends, shoes etc. including testing of pipes and joints and jointed with adhesive solvent cement including cost of all materials.	23.2. Use of 160 mm dia UPVC pipe (SCH- 40) instead of G.I. Pipe.
105	Providing and fixing to wall ceiling and floor 6.0 Kg. F/Cm2 working pressure polythene pipes of the following outside Dia. Low density, complete with special flange compression type fittings, wall clipsetc. including making good the wall ceiling and floor.(A) 50 mm	23.8 . The use of 50 mm dia pipe
106	Providing and fixing to wall ceiling and floor 6.0 Kg. F/Cm2 working pressure polythene pipes of the following outside Dia. Low density, complete with special flange compression type fittings, wall clipsetc. including making good the wall ceiling and floor.(A) 75 mm	23.8 . The use of 75 mm dia pipe
107	Providing and fixing to wall ceiling and floor 6.0 Kg. F/Cm2 working pressure polythene pipes of the following outside Dia. Low density, complete with special flange compression type fittings, wall clipsetc. including making good the wall ceiling and floor.(A) 110 mm	23.8 . The use of 110 mm dia pipe

108	Providing and fixing wall hung/Floor mounted or as equivalent as approved by engineer incharge European WC P or S trap of make cera, Jaquar, Parryware or Equivalent , chair Bracket complete set with required all internal fitting for flushing system etc. complete.	As per separate sheet attached
109	Providing and fixing Hand shower (Health Faucet) 1 meter PVC Tube with wall hook of Jaquar , Plumber or equivalent brand including necessary hardware and other consumable and labor etc complete. as approved by engg. in charge .	As per separate sheet attached
110	Providing and fixing Angular stop cock with wall flange of Jaquar , Plumber or equivalent brand including necessary hardware and other consumable and labor etc complete. as approved by engg. in charge .	As per separate sheet attached
111	Providing and fixing water closet Orissa Pan of size 580 mm x 440 mm (Earthwork, bed concrete, foot rest and trap to be measured and paid for separately) including providing and fixing white vitreous china P Trap(A) Vitreous China.(I) Long pattern White colour.	23.111 Use Orissa Pan
112	Providing and fixing Tabale top type basin of Cera , Jaquar, Parryware or Equivalent with cunter CI / MS / SS clamps or fastener including of fitting and brackets cutting and making good the walls wherever required including S.S. bracket.	As per separate sheet attached
113	Providing and fixing Bib cock with wall flange of Jaquar , Plumber or equivalent brand including necessary hardware and other consumable and labor etc complete. as approved by engg. in charge .	As per separate sheet attached
114	Providing and fixing Single Lever Basin Mixer foam flow with wall flange of Jaquar, Plumber or equivalent brand including necessary hardware and other consumable and labor etc complete. as approved by engg. in charge.	As per separate sheet attached
115	Providing and fixing 600mm x 450mm bevelled edge mirror of superior glass mounted on 6mm thick A.C. sheet or plywood sheet and fixing to wooden plug with C.P. brass screws and washers.	23.143
116	Providing and fixing Single Lever Shower Mixer with 3-way diverter foam flow with wall flange including spout with provision Hand shower of Jaquar , Plumber or equivalent brand including necessary hardware and other consumable and labor etc complete. as approved by engg. in charge .	As per separate sheet attached
117	Providing and fixing Overhead shower 240 mm dia. Or more of Jaquar , Plumber or equivalent brand including necessary hardware and other consumable and labor etc complete. as approved by engg. in charge .	As per separate sheet attached
118	Providing and fixing Soap Dish of Jaquar, Plumber or equivalent brand including necessary hardware and other consumable and labor etc complete. as approved by engg. in charge.	As per separate sheet attached
119	Providing and fixing Toilet Paper Holder of Jaquar , Plumber or equivalent brand including necessary hardware and other consumable and labor etc complete. as approved by engg. in charge .	As per separate sheet attached
120	Providing and fixing Corner Glass Shelf of Jaquar, Plumber or equivalent brand including necessary hardware and other consumable and labor etc complete. as approved by engg. in charge.	As per separate sheet attached
121	Providing and fixing cast iron (spun) nahni trap of the following nominal diameter of self cleaning design with C.I. scribed down or hinged grating incl. cost of cutting & making good the walls and floors 100 mm inlet and 50 mm outlet.	23.857
122	Providing and fixing Towel Rack 24" of Jaquar , Plumber or equivalent brand including necessary hardware and other consumable and labor etc complete. as approved by engg. in charge .	As per separate sheet attached

123	Providing and fixing Towel Ring of Jaquare , Plumber or equivalent brand including necessary hardware and other consumable and labor etc complete. as approved by engg. in charge .	As per separate sheet attached
124	Providing erecting and fixing double coated ISI water tank of required capacity each with all necessary fittings and connection etc. complete on terrace.	As per separate sheet attached
125	Providing and fixing Hand Shower 105mm Round Shape Single Flow of Jaquare , Plumber or equivalent brand including necessary hardware and other consumable and labor etc complete. as approved by engg. in charge	As per separate sheet attached
126	Providing and fixing Wall Mixer 3-in-1 System with Provision for both Hand Shower and Overhead Shower Complete with 115mm Long Bend Pipe, Connecting Legs & Wall Flange of Jaquare , Plumber or equivalent brand including necessary hardware and other consumable and labor etc complete. as approved by engg. in charge	As per separate sheet attached
127	Two Way Bib Cock: Providing ,fixing ,testing commissioning and keeping in good condition until project completion of 15mm dia two way bib cock of Plumber, Cera, Jaqure or Equivalent brand including with all fittings complete as per specification/drawings and details.	As per separate sheet attached
128	Providing and fixing Metropole of Jaquare , Plumber or equivalent brand including necessary hardware and other consumable and labor etc complete. as approved by engg. in charge	As per separate sheet attached
129	Providing and fixing Brass ball Handle Valve of standard compny like Zoloto or equivalent and as per directed by engineer incharge. (A) 25mm dia.	As per separate sheet attached
130	Providing and fixing Brass ball Handle Valve of standard compny like Zoloto or equivalent and as per directed by engineer incharge. (A) 50mm dia.	As per separate sheet attached
131	Providing and fixing screw down bib taps of following size.(A) Brass screws down Bib Tap polished bright. (i) 15mm dia.	23.192
132	Providing and fixing wash basin with single hole for pillar tap with C.I. or M.S. brackets painted white incl. cutting holes and making good the same (A) vitreous china (ii) Flat back wash basin 550 mm x 400 mm size (i) in white colour with C.P. brass waste for wash basin 32 mm dia.	23.127+23.135
133	Providing and fixing pillar tap, capstan head, screw down high pressure with screws, shanks and back nuts. (i) 15mm dia.	23.95
134	Providing and fixing C.P. Angle stop cock of 15mm dia of approved quality including fixing in pipe line etc. as per Engineer in charge.	As per separate sheet attached
135	Providing and fixing Brass ball valve of 25mm dia of approved quality including fixing in pipe line etc. as per Engineer in charge.	As per separate sheet attached
136	Providing and fixing Brass ball valve of 40mm dia of approved quality including fixing in pipe line etc. as per Engineer in charge.	As per separate sheet attached
137	Providing and fixing C.P. brass shower rose with 15mm or 20mm inlet.(A) 100mm dia. Each	23.141
138	Providing and fixing C.P brass towel rail complete with c.p. brass bracket fixed to wooden plug with c.p. brass screw (B) 600mmx20mm size or as directed by EIC	23.144
139	Providing and fixing PVC SWR Nahni trap IS 14735 for drain -75 mm diameter with jali of the following nominal diameter of self cleansing design with C.I screed down or hinged grating including the cost of cutting and making good the walls.	As per separate sheet attached

140	Providing and fixing wsh down water closet (European type, W.C. Pan) with integral P or S trap including jointing the trap with soil pipe in Cement Mortar 1:1 (1-Cement : 1-fine sand)(A) vitreous China Pattern : (i) in white colour and plastic seat cover for wash down water closet with C.P. Brass hinge incl. Buffers.	23.112+23.121
141	Providing and fixing chromium plated brass half trun flush cock of approved quality including fixing in pipe line etc. complete. (ii) 25mm dia.	23.00
142	Providing and fixing Hand shower (Health Faucet) 1 meter PVC Tube with including necessary hardware and other consumable and labor etc complete. as approved by engg. in charge .	As per separate sheet attached
143	Providing and fixing 12.5 Litres high level C.I. flushing cistern with A pair of C.I. or Mild steel brackets, wocomplete with fittings such as syplionic arrangement, 15mm nominal size brass ball valve with polythene float, lever G.I. China (60 cm.) and pull union and couplings for connections with inlet, outlet and overflow pipes etc. including cutting holes in walls and making good the same	23.116
144	Providing and fixing Lead connection pipe for washbasin and gyser with including necessary hardware and other consumable and labor etc complete. as approved by engg. in charge .	As per separate sheet attached
145	Providing and fixing standared extruded of alluminium section of size 63mm x 38.10mm x 1.2mm @ Wt. 0.643 Kg/mt with colour anodized alluminium frame for ventilation with 5 mm thick frosted glass as details etc complete for Ventilation	As per separate sheet attached
146	Providing water based epoxy membrane/ barrier coating to existing wall surface to prevent rising damp, efflorescene and to withholds hydrostatic pressure by using two component water based epoxy of Ardex Endura make "WPM 300 " or equivalent make on cleaned wall surface as per manufacturer specificatio etc. all complete as per direction of Engineer-in-charge.	As per separate sheet attached
147	Providing and fixing of R.C.C. Cover of size 34" x 34" for drainage chamber as approved by engineer in charge.	As per separate sheet attached
148	Providing and Fixing 12 mm thick moisture & fire resistant heavy duty Cement Fibre Board (High pressure steam cured) Confirming to ISO 4862-2000 in wall panels of one face of cold formed galvanised light gauge steel frame structure to form wall / partition as & Where directed by Engineer-in-Charge	As per separate sheet attached
149	Providing and fixing wooden planks ceiling with tounge and grooved jointing and wood screws (frame work and cover fillings to be measured and laid for separately) (A) Indian Teak wood (iii) 25mm thick	16.3
150	PLY WALL PANELING FINISH WITH VENEER FINISH : Providing & fixing 12mm thick IS 710 MR Grade ply fixed on frame work. The framework shall be fixed as per drawing vertically as per requirement. The framework shall be covered with approved make plywood (IS 710-12 mm ply), adhesive ,tape, headless nails etc ,finished with Veneer (veneer base 4 mm thick ply) with semiglossy PU polish & in pattern as shown in the drawing. Rate shall be inclusiveg grooves etc complete as per drawing or as directed by Employer's representative/ Employer.	As per separate sheet attached
151	Credit of Dismantled Material	
	(1) Brass fitting like Bib cock, stop cock, pillar cock, shower etc. (Actual Quantity as per work will be accounted during billing)	As per separate sheet attached
	(2) Old Damaged FRP Doors including frame, attachment etc comp	As per separate sheet attached

	(3) Old Damaged Doors including frame, attachment etc comp.	As per separate sheet attached
	(4) Old Damaged Windows including frame, attachment etc comp.	As per separate sheet attached
	(5) Old Steel, grills, Pipes etc.	As per separate sheet attached

Deputy Executive Engineer
Shahibaug (R&B) Sub Division
Ahmedabad

Executive Engineer
Ahmedabad City (R&B) Division
Ahmedabad