

GUJARAT STATE POLICE HOUSING CORPORATION LTD. JUNAGADH

Name of Work:- Special Repair to Cat B-48 (G+3) (Block No. 7, 8 & 9), C-03 (G+2), D-02 (G+1) & E-03 Units, City Police Station & Dy. Sp. Office in Veraval City, B-32 (G+3), C-02 & D-01 Units in Prabhas Patan Police Line & B-32 (G+3) Units at Sutrapada, Dist. Gir Somnath. [Including Electrification Work]

Specification of Platicizer.

Specification : Conforms to ASTM C – 494 TYPE A: IS 9103:1999

Usage : At Location with congested reinforcement, thin slender section or any other location, where improves workability is required.

For Pumped concrete as it improves the lubricating properties.

Roof slabs for both residential as well as industrial buildings.

Medium to low grade concrete to improve the cohesively.

Water retaining structure.

Method of application :

Add requires quality of plasticizer / water reducing agent either directly to the wet concrete mix in the concrete mixer under operation or along with gauging water.

Dosage : - 350 ml per 50 kg of cement, for best result conduct site trial.

Providing and Laying acrylic modified cementation composite coating system in two coats. 1st coat shall be acrylic polymer and cement and 2nd coat shall be of acrylic polymer, cement and silica sand. The application of both the coats shall be as per manufacturer's manual on terrace.

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Usage:

It is usage with cement to form polymer modified cementations composite (PMCC). In addition, if used with varying of silica / quartz sand produces PMC brush topping. PMC filler and PMC mortar. All the above material are extensively used for waterproofing and strengthening of external surface to prevent ingress of water.

Method of Application:

To produce a PMC mix whether slurry, brush topping or mortar, requires quantity of Tape create P151 is to be mixed with proper amount of other material. The recommended ratio is 100 parts of OPC 50 parts Tape create P151. The PMC material is placed on the surface to be treated after wetting the surface to saturation but without any free water. The curing of PMC material is only nominal and required for maximum of 4 days starting one day after the application.

Dosage.

Covering capacity (Mix proportion) for tape create P151 coating / slurry: 100 Kg. Cement: 52 Kg Tape create Polymer.

Mode of Measurement:

The Rate includes labor charges for cleaning slab any other surface to applying coat. The rate shall be paid per 01 sqmt. for the work done.

Item No. 8

Credit Value for PVC/ U-pvc Pipe of any dia...etc complete.

Material & Workmanship :-

Dismantled old pipe of any diameter carefully and no damage to existing structure or old connection. This old pipe remove from site before completion of work.

Mode of Measurement :-

Mode of Payment on Rmt basis of any diameter of pipe and this Amount will be deducted from 1st R.A. Bill.

Item No. 9

Credit value for C-pvc pipes Rate are inclusive of dismantalling of C-pvc Pipes

Material & Workmanship :-

Dismantled old pipe of any diameter carefully and no damage to existing structure or old connection. This old pipe remove from site before completion of work.

Mode of Measurement :-

Mode of Payment on Rmt basis of any diameter of pipe and this Amount will be deducted from 1st R.A. Bill

Item No. 10**Cleaning the Sludge of Old Septic Tank****Workmanship:-**

1, The cleaning of sludge of old Septic tank shall be worked out very carefully, connected inlet and outlet pipes in septic tank without damaging them .

2, And extra care shall be taken to see that labors are wearing masks so as to prevent inhaling of harmful gases.

3, After cleaning the sludge all the surfaces of S.T. are to washed with fresh water and after this dirty water shall be taken out of the septic tank in a look like manner of new unused septic tank .

Mode Of Measurement and Payment :-

The rate shall be for a unit of one number

Item No. 12

Providing & applying bonding agent for grip between old & new concrete by sikadur 32 or its equivalent.

1] Material :-

Bonding chemical for perfect bond for old & new concrete shall be of Sika company (Sikadur-32) or its equivalent from Perma, Forsrock, Basf, roff etc. company or as approved by Engineer in charge..

2] Surface preparation :-

All surfaces must be clean, free from standing water and all adhering particles. Cement laitance must be removed and the surface to be treated must be roughened. For preparation work, sand-blasting or other mechanical methods may be adopted

3] Mixing :-

Mix both components together with a slow-speed electric drill with properly designed impeller until a smooth consistecny is achieved. Mix only that quantity which can be applied within its pot life.

4] Application :-

After mixing, apply directly to the prepared substrate by brush, roller or spray. On damp surfaces ensure that its well brushed in. Pour new concrete within specified time so that material still remains tacky.

5] Mode of Payment :-

On sq.m basic of covered area.

Item No. 13

Providing and applying Micro concrete in existing RCC members. micro concrete shall be of Perma recrete - 306 or its equivalent from ROFF etc...

1] Material : -

[i] Micro concrete shall be of Perma recrete-306 or its equivalent from Roff, Forsrock, Basf or Sikka or as approved by Engineer in charge. It shall be of 60 MPA at 28 days.

[ii] Rust remover shall be Sika Rustoff 100 or its equivalent.

2] Surface Preparation :-

All concrete surfaces should be clean, sound and free from loose particles, Oil, Grease etc. Metal surfaces should be scale, rust, oil and grease.

3] Application :-

Fix form work & scaffolding. Mix water as per recommend. Make free flow pouring material. Pour material in water tight form work, hack the surface immediately after removal of shutters.

4] Mode of Payment :-

Payment shall be made on cu.m basic.

Item No. 18

Providing and fixing Polyvinylchloride (PVC) Door frame of size 50 x 47mm with a wall thickness of 5mm thick made out of extruded 5mm rigid PVC foam sheet, mitre cut at two corners and jointed with 2 Nos. of 150mm long brackets of 15 x 15mm M.S. square tube. The two vertical door profiles are to be reinforced with 19 x 19mm M.S. square tube of 19 gauge, EPDM rubber gasket weather seal to be provided throughout the frame. The door frame shall be fixed to the wall using 65/100mm long M.S. screws through the frame by using PVC fasteners. A minimum of 4 Nos. of screws to be provided for horizontal member. Providing and fixing 30mm thick Solid Panel PVC Door Shutter consisting of frame made out of M.S. tubes of 19 gauge (16mm) thickness and size of 19mm x 19mm for stiles, & 15mm x 15mm for top & bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacturer. M.S. frame shall be covered with 5mm thick heat moulded.

PVC 'C' channels of size 30 x 50mm forming stiles. and 5mm thick, 75mm wide PVC sheets for top rail, lock rail & bottom rail on either side, and 10mm (5mm x 2) thick, 20mm wide cross PVC sheet as gap insert for top rail & bottom rail. Panelling of 5mm thick PVC sheet to be fitted in the M.S. frame welded /sealed to the stiles & rails with 30mm wide x 5mm thick PVC Sheets beading on either side, and jointed together with solvent cement adhesive etc. An additional 5mm thick PVC strip of 20mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent adhesive and stainless steel (grade 316) fixtures & fastening 4 nos. of hinges (100mm x 58mm x 1.9mm) Two Nos. of Aldrop of 200 mm x 16 mm, Stopper 150 mm x 10 mm & Handle 125 mm long as per detail drawing etc. complete as

direction of Engineer-in-Charge.

SPECIFICATION

1. PVC Door:- 30mm thick solid panel PVC door shutter(conforming to criteria of testing as per IS 4020 with up to date amendments) consisting of frame made out of M.S tubes of 19 gauge thickness and size of 19mm x 19mm for stiles and 15mm x 15mm for top and bottom rail. M.S. frame shall have a coat of steel primers of approved make and manufacturer. M.S. frame shall be covered with 5mm thick heat molded PVC ' C' channel of size 30 x 50mm forming stiles, and 5mm thick 75mm wide PVC sheets for top rail, lock rail and bottom rail on either side, and 10mm (5mm x 2mm) thick, 20mm wide cross PVC sheet as gap insert for top rail and bottom rail, panelling of 5mm thick PVC sheet to be fitted in the M.S. frame welded/ sealed to the stiles and rail with 30mm wide and 5mm thick PVC sheet (PVC sheet shall be manufactured from free foam process containing uniform density) beading on either side and jointed together with solvent cement adhesive etc. An additional 5mm thick PVC strip of 20mm width is to be stuck on the interior side of the 'C' channel using PVC solvent adhesive.

2. Door Frame :- PVC door frame (Choukhat) of size 50 x 47mm in made out of 5mm thick sheet properly joined with solvent cement adhesive as per the sectional view. A mild steel square tube of size 19mm of 19mm gauge is inserted inside to give extra structural strength. The door frame can be made with / without rubber gasket as required then one strip of 5mm thickness can be eliminated and final size of choukhat will be 50mm x 42mm. PVC door frame section are cut in 45 degree and joined to each other perfectly at 90 degree L shape brackets made out of M.S. square tube are inserted inside the choukhat corners. These brackets are finally fixed using the steel screws from both the sides.

3. Workmanship :- Shutter shall be fixed in true line, level and Proper manor having 2.0 to 3.0mm play i.e. airspace for smooth and easy working three S.S. hinges shall be fixed properly with necessary screws.

4. Fixtures and Fastening :- All other fixture like aluminum drop, tidi or baby- latch, stopper, handle shall be fixed with shutter in usual manner.

5. Tolerance :- + 1.5 mm tolerance will be allowed in thickness of shutter.

6. Mode of Measurement payment:- Rate of shutter includes the cost of aluminum fixture and fastening with necessary screws for fixing in position and payment shall be made on a unit of Sqm. Basis.

Item No. 19

Providing and fixing standard extruded of alluminium section of size 63.50 mm x 38.10mm x 1.01mm (Jindal section :20033,@ Wt.0.593kg/Mt) with colour anodized alluminium frame for ventilation with 5 mm thick frosted glass as fetails etc complete for ventilation.

Materials

Alluminium section for the all around frame is to be used of jindal make 20033 of size 63 x 3810 x 1.01(0.593 Kg/Mt)

Additional vertical members are to be of heavy aluminium anodized with in built system of making louvers up & down with the proper holding knob from movement.

5mm thick glass shall be clear or Dudhiya or Acid wash or colour as instructed by Engineer In-Charge.

Materials shall be of approved quality and shall generally confirm to latest IS specifications and size of the sections are as specified in the item description. All units shall conform to AA – Aluminum Standards and data, latest edition. The contractor shall order all the materials required for the execution of work as early as necessary and ensure that such materials are on site well ahead of requirement for use in the work. The work involved calls for high standard of workmanship combined with speed and to the entire satisfaction of the Consultant.

Workmanship

The contractor shall furnish all labour, materials, equipments & appliances required for the complete execution of the work as shown on drawings and as specified herein. The contractor shall make his own arrangement for necessary scaffolding/staging, etc. for erection.

Contractor shall submit Samples prior to work. Samples shall include colour & finish samples for each finish type required.

The aluminum sections shall confirm to the following parameters also

- a) The minimum tensile strength shall be 19kgf/m.
- b) The maximum allowable deviation in length from a straight line shall be 0.5mm/metre.
- c) The maximum allowable deviation from straight line shall be one degree.
- d) The maximum permissible twist shall be 0.5 mm/meter.

The contractor shall execute the works as per working drawings provided of louver units and accessories including plans, elevations, sections & Detials showing profiles, angles, spacing of louvers, unit dimensions related to openings & constructions, free areas for each size indicated.

All aluminum section shall be anodized with matt finish colour & shade anodizing shall be 6 microns thick prior to anodizing to all aluminum members shall be rendered uniform in appearance free from scratches, stains or other blemishes.

Mode of measurement and payment

Measurement shall be taken in length and width of completed dimension. The rate includes for execution of whole item and shall be paid for a unit of one sq. meter as per actual work done.

Item No. 41

Providing and laying Damp Proof Suprema white on Terrace Surfaces (Two Coats) over and above Applying one coat of primer to give in Required Cleaning of Terrace and open old Vatta of China mosaic after thoroughly brushing the surface to remove all dirt and remains of loose powdered materials etc. complete. Primer and Damp proof shall be used as per approved materials list of GSPHCL or Instruction as Engineer Incharge. The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing for final taste. Rate are including Ten Years performance of guarantee bond to be given on Stamp Paper.

Material:

Damp Proof : Use Asian paint Industries made Damp proof material

Water : Water conform to M-1.

Application: Clean the surface thoroughly. Remove dirt, dust, efflorescence, mold, salt, grease, oil, asphalt, curing compound, paint, coating and other foreign material. Repair and cure visible cracks having more than 0.5 mm width by using Primer & after surface Clean One coat of Primer, Then apply two coat of Damp Proof Suprema which shall be with mixing proportion as per manufacturer. In case of rains, allow the structure to dry for at least for 24 hours prior to apply the Damp proof Suprema coat. Horizontal strokes shall be given first and vertical strokes shall be applied immediately afterwards which together shall constitute one coat. Apply first coat of the solution with help of painting brush. Allow the surface to dry completely and then apply second coat of solution after 24 hours. After 24 hours of second coat, fill the surface with water for 24 hours and check the dampness, if any.

Mode of measurements & payment :

[1] All the work shall be measured to the nearest 0.01 M.

[2] Deductions for openings exceeding 0.5 sq. mt. but not exceeding 3 sq.mt. each shall be made.

[3] No deductions shall be made for attachment such as casing, conducts, pipe and the like.

[4] The rate shall include the cost of all materials, labour, scaffolding, protective measures etc. Involved in all the operations described above.

[5] The rate shall be for a unit of one sq. meter.

Item no. 55

Providing and fixing PVC Water tank cover including necessary screw for Fixing and applying two coats of oil painting outside the tank Cover etc. complete.

1.0 Material :

1.1 Water tank Cover shall be installed on perfectly plained and smooth surface.

1.2 Diameter of Water Tank Cover shall be bigger than manhole of Tank.

1.3 For fixing Cover in water tank required Screw and Hinges or Chapla shall be used.

1.4 Two coats of oil paint on external surface of tank Cover shall be applied.

All damage during lifting, placing, operating will be borne by contractor.

2.0 Mode of measurement and payment :

The rate include for all labour, for Fixing PVC water tank Cover in position, two coats of oil paints, and P&F all necessary fittings if required etc. completed. This shall be measured in and rates are of per Number basis.

Item no. 71

Repairing of Inspection Chamber Brick work and plaster if required after the cleaning Chamber, inside Dimension of 610mm x 455mm and 450mm deep etc. Complete.

Workmanship : -

Before Repairing of Inspection Chamber, Cleaning Sludge in Inspection Chamber, Remove Loose Plaster and damage masonry work. After as per Require Brick work and Plaster work. Bottom of Inspection Chamber in Proper Chanel.

After Repairing of Inspection Chamber clean plaster lums.

Mode of measurements & payment

The rate includes cost of all labour and materials required for satisfactory completion of this item.

The rate shall be for a unit of one number.

Item No. 72

Providing & Fixing Precast R.C.C Frame with cover MD 10 Ton (Rubber Mould Finish) inner size 600 x 450mm with all necessary fittings.

Materials

Precast RCC cover size of 0.60 x 0.45 m. with Frame. Frame size 0.60m x 0.80m (out to out), and Mixing proportion M200 (1: Cement; 1.5: Coarse Sand and 3: 20mm Nominal size Agregate of best quality.

Workmanship

Precast RCC frame fixing on IC with Cement mortar 1:4, If necessary outer side plaster finish with plaster in 1:4 finish smooth. cover shall be fixed on Precast RCC frame.

Mode of measurements & payment

The rate includes cost of all labour and materials required for satisfactory completion of this item.

The rate shall be for a unit of one number.

Item No. 83

Providing & fixing 3mm acrylic sheet with Vinyl letter colour-2073 - Dark Grey for back ground and colour - 2199- white letter with Required screw.... etc. as per required sizes complete etc. as per specification & Instruction of Engineer In Charge.

Letter / Matter of required size shall be prepared out of PVC Radium material.

Font pattern shall be as directed by Engineer – In – Charge.

Letter / Matter Shall be of 10cm wide.

letters / Matter shall be prepared in English and or Gujarati as required by Engineer – In – harge.

Letters / Matter shall be glued properly on acrylic sheet of 60cm wide x 15 cm height and 3mm thickness.

In Gujarati Rates are inclusive of Punctuation marks.

Rates are inclusive of all materials labour for fixing & Finishing etc complete.

Payment shall be made per No of complete acrylic sheet with letter / matter.

**Exe Engineer
G. S. P. H. C. Ltd.
Junagadh**