

MAHARASHTRA INDUSTRIAL DEVELOPMENT CORPORATION

Item Specification

Work Name: Nardana Industrial Area... M & R to WSS... Providing S.S Railing & other Rehabilitation work to filter house and CLF at Nardana Industrial Area.

Sub Estimate:Sub Estimate

1 Removing the existing cement plaster of any thickness without causing dust nuisance and stacking the debris upto a distance of 50 metres or spreading in the compound and cleaning the site etc. complete.

Specification:

BDL & As directed by Engineer in charge.

Mode of Measurement : Quantity shall be measured on square meter basis and paid accordingly

2 Providing and applying RP-100 polymer modified repair plasters a high quality polymer modified cement based ready mixed plaster mortar, which has a very high strength and is crack resistant and has good adhesion to all concrete, including all costs of labor and material as per directions of engineers in charge etc. complete.

Specification:

Production Description

Chemistik Repair Plaster RP-100 Polymer Modified Repair Plaster is a high quality polymer modified cement based ready mixed plaster mortar. It is a factory made mortar having a superior standard formulation based on Portland cement, graded filters and additives which overcome the fluctuations and human errors of on site mixing. It can be used in spray application as well as manual. Ideal for quick repairing as well as leveling of undulations on the surface to attain a smooth leveled surface at all times.

Applications: This ready to use repair plaster has a variety of uses for repair as well as new work. It can be sprayed or used manually for plastering of brick walls or over precast slabs and blocks. Damaged concrete repairs or honey combs, Defect in concrete or masonry walls in thin coat for leveling and finishing, also can be used where light weight is required in air entrained structures like insulations, domes, steeples, foam concrete etc.

Preparation: Remove all loose flecking materials expose the surface completely and free laitance, grease, oils, mold release agents curing membranes, paints, coatings etc. It is recommended to wet the area to be repaired prior to use complete all plumbing or other works in the area. Fill all voids, corners etc. or any other defect in the surface prior to starting the work

Method of Application: To mix thoroughly one 40 kg bag of Chemistik repair plaster RP-100 with 7-8 liters of clean water either by hand or with aid of electrical mixer for 3-5 minutes until a homogenous mix without any lump formation is achieved. It is now travelable consistency commence application and use within one hour. The application should be in layers each layer

should not exceed more than 15mm in thickness. Allow first coat to initially set and commence application of second coat, additional layers if required to be applied as above. Then allow the final coat to achieve initial set then trim, level, finish the surface with steel trowel to achieve desired finish and smoothness. For external sand finish plasters sponge the partially set mortar in circular movements until desired sand finished surface is attained.

Mode of Measurements: The Quantity shall be measured on Square Meter basis and paid accordingly.

3 Providing and applying flexible coating of CW 100 to provide flexible water proof barrier on the cementitious surface to provide anti carbonation and to withstand high hydrostatic pressure including all costs of labor, materials as per the direction of Engineer-In-Charge etc. Complete

Specification:

Product Description:

Chemistik CW-100 is a two-component polymer modified flexible coating. This product may be trowel brush or spray applied to provide a flexible, waterproof barrier. Chemistik CW—100 may be used where there is a requirement to exclude water from a building or retain it within a structure. The material is particularly effective where there is a requirement for a crack bridging capability, and on cementitious surfaces

Applications:

1. Tanks in Fisheries.
2. Portable water containers, tanks, reservoirs and spray ponds.
3. Swimming pools and silos, sumps.
4. Waterproofing planter boxes.
5. Waterproofing of slabs in new and existing buildings.
6. Reinstatement of tie-barholes.
7. Foundation protection against brackish water.
8. Coating seawater channels.
9. Car Parking Ramps, Podiums etc.
10. Protection to concrete sewage pipes

Preparations:

The substrate must be clean and firm and completely free from contaminants including grease, oils etc. Any repairs should be carried out using Chemistik cementitious repair mortar. The product cannot be mixed by hand. The liquid should be poured into a 25 ltr. plastic or metal drum. The powder is added slowly whilst mixing with a spiral paddle attachment on a slow speed electric drill. Mixing should continue until the product is lump free and for a minimum of 5 minutes.

Method of Applications: The prepared substrate should be dampened using a fine water spray. Care should be taken with porous substrates as more extensive pre-soaking will be required. Any free water on the surface should be removed immediately prior to applying Chemistik CW-100. While the substrate is damp but free from standing water, apply the mixed product by medium hard short bristle brush, towel or roller checking that the first coat is at a minimum wet film thickness of no more than 5 mm and no less than 0.5 mm. The product should always be finished in one

direction. The second coat should be applied as soon as the first coat is set hard, normally after a minimum of 3 hours @ 30oC and longer at lower temperatures. This second coat should again be finished in one direction (normally at 90o C to the first coat). The total thickness should be 1-2 mm on wall and 1-3 mm on floors depending on the anticipated water pressure. As a general rule the coating thickness should be 1.5 mm on walls and 2 mm on floors up-to 3 meter hydrostatic head. For deeper structures the wall coating thickness should be increased to 2 mm and for floors to 3 mm.

Mode of measurement: The Quantity shall be measured on Square Meter basis and paid accordingly

4 Providing and applying two coats of EP Plus 800 (HIGH BUILT EPOXY COATING) it can be applied to most of the surfaces to provide a water proof, dust proof and hard wearing surface with excellent chemical resistance. Mixing ratio of resin and hardener is 88:12 the finish surface should be smooth and semi glossy. Film thickness 125 to 150 microns per coat. Packaging of material is of 5 and 25 Kg etc. complete.

Specification:

EP Plus 800 (HIGH BUILT EPOXY COATING) (Heavy Duty Anti-Skid Coating) Chemistik EP Plus 800 (HIGH BUILT EPOXY COATING) is an instant waterproof coating which when applied stops leakage, dampness, rising dampness, seepage of water from internal or external masonry walls, R.C.C. Slabs., tanks etc. Also ideal as an anti-skid coating. Applications Can be applied on Terraces, RCC Slabs, External & Internal walls, basements, Lift-pits, Water Tanks, Swimming Pools etc. Can be applied in Bathroom, WC, Sunken Slabs for permanent water proofing of the area. Can be applied in MS tanks, PVC tanks, effluent tanks, pickling tanks, spray ponds, cooling towers etc. Can be used for damp proofing course at preconstruction stage, for underground structures in Box type construction of walls, swimming pools, basements, magazines etc. Bedding of acid proof tiles in Chemical Plants and Fertilizers Plants. Can be applied on factory floors of dairies, abattoirs, aqueducts, runways, hangars where heavy traffic occurs, to minimize deterioration of concrete flooring and to reduce maintenance cost and increase the life of floors

Preparation The surface preparation before application plays an important part in obtaining longer and durable performance from the coating. Clean the surface of loose particles and dust with the help of wire brush. Clean the surface of oil, grease by using florklin solvent and wash the areas with detergent thereafter. Wash the areas with water thoroughly to remove the contaminants. Allow to dry. Chemical cleaning, if necessary, can be done by using Hydrochloric Acid Commercial Grade by diluting with water in ratio of 1:2 by volume. However, after treating surface it is required to rinse wash with water containing dilute ammonia solution (1part ammonia diluted with 7 parts water.) The surface where it is not possible to clean, in view of extensive area, it is essential to prime the area with Chemistik EP-SEAL 100 coat before application as a tie coat. Freshly laid concrete can be coated only after 30 days curing. Fill the cracks less than 10 mm with Chemistik Crack-seal Compound. Allow to dry for 24 hours. Fill the crack above 10 mm with Epoxy Mortar SL-1 ITC-2 after assessment of the structural requirements. Allow to cure for 3-4 hours. For potholes fill the area with Chemistik Floor Re-surfacer. Allow to cure over night.

Method of Application :Rough Surface primed with Chemistik Epoxy Tack Coat will give additional

mileage i.e. it will increase coverage at the same time and improve the bond of the coating. However, care should be taken to apply EP Plus 800 (HIGH BUILT EPOXY COATING) while the ETC is still tacky. As the Epoxy Slurry Mortar is three components consisting of (a) Mortar Resin, (b) Hardener, (c) Thickened Water, mix as under: Open the lid of Chemistik EP Plus 800 (HIGH BUILT EPOXY COATING) tin and loosen it. Pour the hardener into Chemistik EP Plus 800 (HIGH BUILT EPOXY COATING). Immediately, add into container the third component i.e. thickened water. Stir the contents vigorously for 5 minutes with iron rod or wooden stick. The contents will now turn into a brush able homogenous mix. Start applying by brush on the prepared surface immediately. Use the material as fast as possible but within 1 hour as it will start curing and become hard in consistency. Allow to cure for 6 to 8 hours. If subsequent coat is required for longer durability, apply as above. Coverage area shall be 40 to 45 Sq.ft. per Kg per Sqm.

Mode of measurement: The Quantity shall be measured on Square Meter basis and paid accordingly.

5 Providing and fixing stainless steel railing of approved design and make all including all labour and material etc. complete.

Specification:

The scope of item includes providing and fixing 40 mm diameter and 1.5 mm thick stainless steel hand railing in SS 304 grade including fabricating, fixtures, erecting , necessary welding, grinding, finishing buffing to stainless steel pipe etc complete.

The item is for providing and erecting SS pipe railing wherever required. The vertical pipes to be welded at bottom to 5mm thick base plate of size 50 mm x 50 mm duly grouted or welded to base slab reinforcement. Alternatively the pipe also can be fixed in the concrete pedestal. The clear height of vertical pipe shall be 1.0 m above the floor /pedestal level. The vertical pipes shall be fixed in the true plumb,line and level at 2.0 m C/C. Three horizontal pipes shall be fixed one at top and two at intermediate level. All horizontal pipes shall be fixed in true line level, curves as directed. The joints shall be tight and should not be easily removable. The sharp corner edges shall be filed smooth.

Item to include : The item includes providing all the material, ss pipes, accessories, threaded joints, 5 mm thick plate, welding, anchor bolts, paints, etc and all labour tools and equipments for construction, transportation of railing or material fixing etc complete.

Test reports: Agency will provide test reports of pipe

Mode of Measurement : The Quantity shall be measured on per running Meter basis and paid

6 Credit for Dismantled Material

6.1 H.G. / M.S. / G.I. Materials / Poles etc.

Specification:

6.1 Specification

The scope of item includes Rebate of existing MS railing etc.

Mode of measurement: The Quantity shall be paid on per kilogram basis