



BHARAT HEAVY ELECTRICALS LIMITED
RAMACHANDRAPURAM::HYDERABAD::32
FACTORY CIVIL ENGINEERING DEPARTMENT

SCHEDULE- A

Tender Notice No:

HY/FCD/OT-15/2012-13, Dt: 14.08.2012

PRICE BID

Item no.: 1

Name of work: Floor repairs and gangway paints in production blocks.

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
1	Dismantling reinforced cement concrete / plain cement concrete including loading, unloading and spreading as directed by Engineer-in-charge etc., complete.	920.00	Cu.m	582.68	5,36,065.60
2	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering including consolidation by vibrations for all works up to plinth level with 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate of 20 mm nominal size) etc. complete as directed by Engineer-in-charge.**	302.00	Cu.M	1560.50	471271.00
3	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement, including consolidation by vibrations for all works up to plinth level with 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate of 20 mm nominal size) etc. complete as directed by Engineer-in-charge.**	610.00	Cu.m	1,641.30	10,01,193.00
4	Granolithic topping of 25 mm thick using 1 cement 1 granite chips of 10mm down graded laid over base concrete when it is green conditions and ironite finishing 12mm thick using a mix of 50Kg of ironite, 200 Kg of cement and 0.30 Cu.m of granite metal 6mm down graded including cost of form work, curing etc. complete as directed by Engineer-in-charge.	3,054.00	Sq.M	244.50	7,46,703.00
5	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding grills with binding wire all complete by cold twisted bars etc. complete as directed by Engineer-in-charge.	4.50	MT	4,003.00	18,013.50
6	Fabrication and fixing inserts in concrete wall with lugs of required dia welded to the insert plates.(Structural Steel, electrodes and gas required for work will be issued on free of cost by BHEL at their stores) etc. complete as directed by Engineer-in-charge.	2.20	MT	3500.00	7700.00
7	Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as per manufactures specifications including appropriate priming coat, preparation of surface, cost of all materials etc. complete on concrete work etc. complete as directed by Engineer-in-charge.	20500.00	Sq.M	77.75	1593875.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
9	<p>Supply and applying 3000 microns thick medium duty flooring of epoxy polyurethane(EPU based product) floor coat on concrete floor of approved shade and brand. The scope of work include surface preparation and application as directed by the manufacturer with a warranty of one year from the date of completion of work. The work should be carried through authorised application of Cipy products EPU coating should be carried after 2 month of completion of granolithic finish to ensure moisture free surface etc. complete as directed by Engineer-in-charge.</p> <p>The detail specification for application of EPU flooring is as stated below :</p> <p>Testing is done as directed by the manufacturer and the test like Clean, dry and sound test should be conducted. Moisture test should be conducted by moisture meter or plastic sheet method. The residual moisture in the concrete should not be more than 4-5%. The concrete must be clean, dry and sound before EPU coating is applied to it.</p> <ul style="list-style-type: none"> • Clean means that there is no foreign matter such as dust, dirt, grease or oil on the concrete • Dry means no free water is present. • Sound means there is no laitance or weak surface skin on the top of the concrete. <p>a) Surface preparation The surface should be free from oil grease and foreign particles, which will be achieved by mechanical power tool/manual cleaning and solvent cleaning and scarifier attached with vacuum cleaner up to the depth of 100 to 200 microns loose laitance will be removed.</p> <p>b) Primer application: Providing and applying EPU primer, cipoxy 14 in the ratio 1:1on the scarified surface by brush or roller or trowel and allow for 6 hours curing.</p> <p>c) Screed application: Providing and applying 3 component cipoxy 14 and FQ 150 sand 100% solids in the ratio 1:1 and mixed with one part of FQ 150 sand in power mixture to achieve homogeneous mix and applied and leveled by troweling to form a monolithically layer for a thickness 2000 microns and allow curing for 4 to5 hours</p> <p>d) Grinding: The entire surface would be grounded mechanically to remove any undue protrusions after grinding the entire dust particles would be removed by the vacuum cleaner.</p> <p>e) Sealer application: A layer of Epoxy polyurethane sealer putty will be applied to seal all the micro porosities and allow to dry for 1 to 2 hours.</p> <p>f) Self leveling EPU top coat: Cipothane SL is a self leveling, two component EPU based pigmented top coat recommended for epoxy floor coatings. It has excellent flexibility & adhesion. Ensure that the sealer coat is dried. Grind the surface with grinder. Cipothane SL resin is pigmented. Stir it well before mixing with hardener. Mix Cipothane SL (100% solids and solvents) resin and Cipothane SL Hardener in 2:1 ratio by volume. Agitate the mixture for 10 minutes. Apply by leveler at the thickness of 800 microns. Then deaerate by using spike roller. Allow to cure for overnight etc. complete as directed by Engineer-in-charge.</p>	2,017.00	Sq.M	1,625.00	32,77,625.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
10a	Providing and applying 2.5 mm thick road marking strips (retro-reflective) of specified shade/ colour using hot thermoplastic material by fully/ semi automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour, T & P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and accordance with applicable specification etc. complete as directed by Engineer-in-charge.	4,075.00	Sq.M	497.30	20,26,497.50
b	-----do -----on Road Surface	750.00	sq.m	497.30	3,72,975.00
11	Casting and placing in position of R.C.C cable trench covers of 75 mm thick in mix of 1:1.5:3 using 20 mm down graded metal including cutting, welding of Angle iron frame, cost of MS reinforcement as specified including cutting bending, binding wire, spreading of Ironite powder at 2 Kg / Sq.m, neat finishing, cost of labour, etc. complete as directed. (MS angles, electrodes only will be issued on free of cost by BHEL at their stores) etc. complete as directed by Engineer-in-charge.**	80.00	Sq.m	184.00	14,720.00
	Total			₹	1,00,66,638.60
	Add increase in Vat 1% over the material cost (70% of contractor scope)			₹	70,466.47
	Total value of work			₹	1,01,37,105.07
Total : ₹ One crore one lakh thirty seven thousand one hundred five and seven paise only					

Note: **Cement, structural steel, MS reinforcement steel will be issue by BHEL on free of cost at BHEL stores.

1	A penalty of 0.5% of the gross value of work or part thereof will be levied for every week's delay of work subject to a maximum penalty of 10% of the gross value of work.
2	The rates are inclusive of all taxes and duties except Service tax, which is extra as per service tax norms will be paid by BHEL to the agency after submission of necessary documents

Note : The bidders are required to quote the tender value on percentage (%) basis at excess or less or on par with estimate value in figures and words.

Tender %	In figure	In words
Excess		
Less		
Estimated value		

Name of the Contractor :

Signature of the Contractor