



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

**SCHEDULE- A**

Tender Notice No:

HY/FCD/OT-01/2013-14, Dt: 03.05.2013

**PRICE BID**

Item no.: 5

**Name of work: Misc. Carpentry works in Factory area & Admn. Building.**

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
1	Fixing the given commercial ply / teak ply royal teak sheets to the wooden frame (Only required sheets will be supplied free of cost by BHEL at their stores). The rate shall include removal of existing sheets, cost of nails, screws in position jolly insulex board / masonite board, thermocole sheets for false ceiling / wall panelleing including removing existing damaged boards etc. complete. <b>Only false ceiling boards required for the work will be issued free of cost by BHEL at BHEL stores.</b>	220.00	One Sq. m	24.00	5,280.00
2	Fixing of flush or panelled shutters (single/double leaf) to the wooden frame wherever required, including cutting, planing, fixing hinges, aldrops, mortice lock, tower bolts, etc. complete, all as directed by Engineer-in-charge. All required materials will be supplied free of cost by BHEL at BHEL stores. <b>(Only labour charges)</b>	44.00	One Sq. m	93.24	4,102.56
3	Supplying and fixing of commercial type double leaf flush shutters solid core non-decorative type conforming to I.S 2202 Part-I. 30 mm thick (commercial ply on both sides) of approved quality and brand including 6 nos M.S hinges 10 cm, and 2 Nos. aluminium tower bolts 20 cm long and 1 No. aluminium aldrip 300 mm long, including cost of materials and labour etc., complete as directed by Engineer-in-charge.	16.50	One Sq. m	569.00	9,388.50
4	Providing wood work in frames of doors, window, celerestory windows and other frames, wrought framed and put in position including cost of MS hold fasts, painting with two coats of coal tar, cost of labour etc. complete as directed by Engineer-in-charge. (Running length and size of teak wood scantling used for making frames will be measured for payment)	0.275	One Cu.m	52,090.00	14,324.75
5	Providing and fixing false ceiling frame made out of 25 x 25 x 1.3 mm aluminium 'T' and wall angles in a grid pattern of 0.60 x 0.60 M suspended with 6 mm dia MS rounds with adjustable bolts etc., including cost of all materials, labour etc., complete as directed by Engineer-in-charge. a) 4 mm thick flexo board (A. C)	5.50	One Sq. m	428.40	2,356.20
5 b)	12 mm thick Nova teak / Kit Ply – plain or semi perforated particle board	49.50	One Sq. m	614.14	30,399.93
5 c)	19 mm thick thermocole	110.00	One Sq. m	363.00	39,930.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
6	Providing and fixing false ceiling boards / tiles of size 0.60 x 0.60 M, including removing the damaged ceiling tiles with the following boards etc., complete as directed by Engineer-in-charge. a) 12 mm thick (Nova teak or Kitply) plain / semi perforated particle board.	66.00	One Sq. m	349.20	23,047.20
6 b)	12 mm thick jolley insulex board.	44.00	One Sq. m	328.20	14,440.80
6 c)	4 mm thick flexo boards (A.C)	33.00	One Sq. m	175.80	5,801.40
6 d)	4 mm thick hard board.	33.00	One Sq. m	167.52	5,528.16
6 e)	19 mm thick thermocole boards	11.00	One Sq. m	59.00	649.00
7	Dismantling the existing wooden / aluminium partitions into small units including removing doors, glass panes, etc., transporting, planing, cutting, and <b>re-assembling of partitions</b> , doors, glass panes etc., complete. Rate quoted shall include the cost of all materials required for reassembling such as nails, screws, fevicol etc. all as directed by the Engineer-in-charge.	66.00	One Sq. m	222.80	14,704.80
8	Dismantling the existing wooden / aluminium partitions into small units including removing doors, glass panes, etc., transporting and stacking carefully for reuse, in the departmental stores etc., complete, all as directed by the Engineer-in-charge.	110.00	One Sq. m	117.70	12,947.00
9	Erecting dismantled wooden partitions /aluminium partitions in new locations including transporting from BHEL stores, making necessary modifications by planing, cutting etc., to suit new place, fixing of doors, glass panes etc., complete (Dismantled wooden / aluminium partitions will be made available at BHEL stores on free of cost). Rate shall include cost of all hardware materials like nails, screws, Fevicol etc., complete as directed by Engineer-in-charge.	110.00	One Sq. m	53.52	5,887.20
10	Repairs to the existing wooden / aluminium partitions and doors, removing the bends, repairing the spoiled/damaged joints of frames and re-fixing them in position including cutting, planning etc., complete. The work includes the removal of glass panes and doors if any and re-fixing them in position. The rate quoted shall include cost of all materials required for the work such as nails, screws, Fevicol etc. complete as directed by Engineer-in-charge.	110.00	One Sq. m	58.20	6,402.00
11	Fixing G.I, sheets / decolam sheets to door shutters as directed by Engineer-in-charge. (Materials required will be supplied free of cost by BHEL at BHEL stores). The rate shall include removal of existing sheets, the cost of nails, screws Fevicol etc., required for the work etc. complete as directed by Engineer-in-charge.	55.00	One Sq. m	82.80	4,554.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
12	Supply and fixing M.S. clamps of size 150 x 50 x 3 mm to wooden partition frames and R.C.C. columns beams slabs, masonry walls etc., to fix the partitions rigidly using screws and nails etc. complete as directed by Engineer-in-charge.	55.00	Each	46.00	2,530.00
13	Polishing two or more coats on new wood work with French spirit polish including a coat of wood filler including cost of all materials etc complete as directed by Engineer-in-charge.	275.00	One Sq. m	75.60	20,790.00
14	Polishing one or more coats with French spirit polish to old wood work including cost of all materials etc. complete as directed by Engineer-in-charge.	330.00	One Sq. m	38.40	12,672.00
15 (a)	Supply and fixing of 3 mm thick glass of plain / opaque / pin headed etc., with MS glazing clips and putty at all floors of buildings. The rate quoted shall include removal of broken glasses, cleaning old putty etc., complete from the old windows / partitions at all heights of the buildings, etc., complete as directed by Engineer-in-charge.	22.00	One Sq. m	341.00	7,502.00
(b)	Fixing of 3 mm glass of plain/ opaque/ pin headed etc. with MS glazing clips and putty at all floors of the buildings. The rate quoted shall include removal of broken glasses, cleaning old putty etc. complete from the old windows / partitions at all heights of the buildings, as directed by Engineer in charge. <b>(Only glasses will be supplied by BHEL on free of cost).</b>	82.50	One Sq.M	284.20	23,446.50
16 (a)	Fixing of 4 mm glass of plain/ opaque/ pin headed etc. with MS glazing clips and putty at all floors of the buildings. The rate quoted shall include removal of broken glasses, cleaning old putty etc. complete from the old windows / partitions at all heights of the buildings, as directed by Engineer in charge. <b>(Only glasses will be supplied by BHEL on free of cost).</b>	55.00	One Sq.M	524.45	28,844.75
16 (b)	Supply and fixing of 4 mm thick glass of plain / opaque / pin headed etc., with MS glazing clips and putty at all floors of buildings. The rate quoted shall include removal of broken glasses, cleaning old putty etc., complete from the old windows / partitions at all heights of the buildings, etc., complete as directed by Engineer-in-charge.	22.00	One Sq. m	427.60	9,407.20
17	Supply and fixing 5.0 mm thick (Modi Float /Saint gobin glass) plain glass to the aluminium frame with rubber beading, screw less snap on clips etc. complete as directed by Engineer-in-charge.	55.00	One Sq. m	557.35	30,654.25
18	Manufacturing of door frame/air conditioner frames with the given wooden scantlings issued free of cost at BHEL stores. The rate shall include cost of all hardware materials like nails, screws, fevicol, hole fasts etc. complete as directed by Engineer-in-charge.	5.50	One Sq. m	159.00	874.50
19	Supply and fixing 9 mm thick particle board of (Novapan or Kit ply) exterior grade laminated on both sides fixed to frame with rubber beading screw less snap on clips etc. complete as directed by Engineer-in-charge.	66.00	One Sq. m	534.00	35,244.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
20	Repairs to the existing Armstrong false ceiling including dismantling and removal of damaged 'T' angles, wall angles, intermediate channels, and refixing the false ceiling with new wall/Tee/intermediate angles and channels in place of damaged sections including dismantling of existing false ceiling and providing the false ceiling in new locations. It also includes anchoring the ceiling grid with GI wire to the ceiling with rawl plugs, hooks, levelling and fixing of boards etc. complete as directed by Engineer-in-charge.	55.00	One Sq. m	250.00	13,750.00
21	Supply and fixing of Armstrong mineral fibre false ceiling boards of following models etc., complete as directed by Engineer-in-charge. a) Prima Dune Plus Tegular edge 600 x 600 mm	22.00	One Sq. m	778.00	17,116.00
	b) Microlook Tegular edge / Plain 600 x 600 mm	22.00	One Sq. m	778.00	17,116.00
22	Repair to the sliding doors of built in cup boards, repairs include removal of MS tees / channels, casters etc. converting the sliding shutters hinged type shutters with required modification to the shutters and using the following fixtures to a pair of shutters.a) 1" continuous hinges-2nos, B0 Knobs-2nos, c) 3" aluminum tower bolts-2nos. The rate shall include cost of modification to shutters, cost of all materials and polishing with one coat of polish etc., complete as directed by Engineer-in-charge. (The payment will be made for the surface area of shutters.)	27.50	One Sq.M	305.64	8,405.10
23	Supplying and fixing <b>aluminumm partitions</b> with new anodised aluminun box section of size 101.60x 44.45x 2.00mm for verticals, and with 63.50x 38.10x 2.00mm for horizontals spacing suitable to the site requirements and as approved by. Wherever doors are coming wooden runners are to be provided in the box section. The rate shall include grouting of frame to the floor properly fixed at ends to walls, cost of aluminum sections, labour etc., complete as directed by Engineer-in-charge. (The door opening shall be deducted for payment)	55.00	One Sq.M	1,316.40	72,402.00
24	Supplying and fixing aluminumm door shutters made out of new anodised aluminun box section of size 44.50x 47.50x 2.00mm for verticals, top and middle rails and 101.60x44.50x2.00mm for bottom rail inclusive of supply and fixing of all aluminum fixtures and fittings such as handles 2 nos, 1 No of tower bolt 12mm dia 200mm long, 1 No of hydraulic door closure of IS specification, 3 nos. of 4" long (100mm) but hinges, stopper 1 No and suitable locking arrangement etc. complete all as directed by Engineer in charge etc. complete.	16.50	One Sq.M	2,918.40	48,153.60
25	Supplying and fixing 2 mm thick vinyl flooring tiles ("Tusker" make) in required colour and of size 300 x 300 mm on the existing floor after thorough cleaning including necessary adhesives, labour, cost of all materials, shifting of furniture from the cabins to outside and re-arranging the same after completion of work as directed by the Engineer-in-charge. The tile material confirm to IS:3462.	110.00	One Sq.m	325.00	35,750.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
26	Supplying and fixing 2 mm thick vinyl flooring ("Tusker" make) (roll) in required colour and size on the existing floor including necessary adhesives, labour, cost of all materials shifting of furniture from the cabins to outside and re-arranging the same after completion of work as directed by the Engineer-in-charge. The tile material confirm to IS:3462.	220.00	One Sq.m	300.00	66,000.00
27	Providing and fixing 6 mm thick mirror of approved quality ("Modi float/Belgium" make) with 6 mm thick hard board back and best teak wood design beading alround the mirror including necessary clamps, screws, polishing to beading, cost of all materials and labour etc. complete.	55.00	One Sq.m	1,445.00	79,475.00
28	Providing wooden curbing ducting for the thyrestor test pit of the rotors etc. for carrying out testing of equipment using 8 mm thick comml.ply sheets of approved quality and wooden scantlings (Non teak) of size 50 x 76 mm of length 1.8 M to 2.4 M of approved quality. The ducting ply sheet panels of required shape are prepared with necessary wooden runners allround ply sheets and cross members at required intervals based on required shape of ducting to suit the equipment to be tested, as directed by the engineer incharge.The manufactured ply sheet panels are to be assembled after equipment is put on the test bed as directed by the Engineer-In-charge, using MS nails, screws etc. The contractor shall engage necessary skilled and unskilled labour during the testing period to rectify/modify the ducting already provided to meet the testing requirements during test run. Ducting is to be dismantled after testing is conducted. The rate quoted shall include cost of supply of all materials, labour, tools & tackles, PPEs and conveyance etc. complete as directed by Engineer-in-charge.	660.00	One Sq.m	184.00	1,21,440.00
29	Supply and fixing of aluminum window grills of size 1.50 Mx1.80M approx. and 1.20 mx1.80M approx. . along with aluminium frame consisting aluminium 'F' (solid) 0.80kg/12' supply and fixing of design of 4" aperture aluminium grill to the above frame work with necessary fixtures. It includes fixing of total frame to the existing brick work, finishing etc. complete as directed by Engineer in-charge. (The material shall be aluminium alloy :6063, thick 7 mm, ultimate tensile strength more than 19 kgs/sq.mm)	12.10	Sq.m	1,540.00	18,634.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
30	Providing and Fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/appropriate Z sections and other sections of approved make conforming to IS:733 and IS :1285, Fixed with rawl plugs and screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required EPDM rubber/ neoprene gasket, etc.; Aluminium sections shall be smooth, rust free. straight, mitred and jointed mechanically wherever required including cleat angle, aluminium snap beading for glazing/panelling, CP bar /stainless steel screws all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing and Panelling to be paid for separately). - Anodised aluminium (Anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15) - <b>For Sliding Windows of required size.</b>	55.00	Kg	290.45	15,974.75
31	Providing and Fixing Glazing in aluminium door, window, ventilator shutters and partitions etc.; with EPDM rubber/neoprene gasket etc.; complete as per the architectural drawings and the directions of engineer-in-charge. (Cost of Aluminium snap beading shall be paid in basic item) - With Float glass panes of 4.00 mm thickness.	11.00	Sq.m	554.95	6,104.45
32	Providing and fixing shutters along with frames for toilets that are 30 mm thick factory made PVC rigid foam paneled, door and shutters manufactured by M/s. Rajashri made from M.S. tube, 19 gauge thick, size 19x19mm for styles and 15x15mm for top and bottom rails, covered with heat moulded PVC "C" channel of 5mm thick sheet and 30x50mm wide for styles and 5mm thick and 75mm wide PVC sheets for top rail and bottom rail either side and 5 mm thick, 20mm wide cross PVC sheet as gap insert for top rail and bottom rail, paneling of 5mm thick PVC sheet fitted with M.S. frame welded / sealed to the styles and rails with 5x30mm PVC sheet beading on either side and joined together with solvent cement adhesive etc. complete in all respects as per direction of engineer in-charge fixed to frames. This includes providing brass hinges, brass aldrops, brass tower bolts, brass handles and brass door stoppers (For W.C. and bathroom doors)	3.30	Sq.m	1,830.00	6,039.00
33	Supply and fixing of Rollar blinds including channels, fabric etc. complete and the basic cost of the blinds shall be in the range of Rs. 125/- per S Ft. The colour and design of the blinds will be selected by department within the above specified cost etc. complete as directed by Engineer-in-charge.	3.30	Sq.m	1,500.00	4,950.00
34	Supply and fixing of vertical blinds 100 mm in required colour along with channels, fabric bottom weights etc complete. The basic cost of the blinds shall be in the range of Rs. 70/- per S Ft. The colour and design of the blinds will be selected by department within the specified cost. The agency shall procure the same etc. complete as directed by Engineer-in-charge.	5.50	Sq.m	800.00	4,400.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
35	Providing and Fixing Factory made PVC door frame of size 50X47mm with a wall thickness of 5mm, made out of extruded 5mm rigid PVC foam sheet mitred at corners and joined with 2 no.s of 150 mm long brackets of 15X15mm MS square tube, the vertical door profiles to be reinforced with 19x19 mm MS square tube of 19 guage, EPDM rubber gasket weather seal to be provided through out the frame. The door frame to be fixed to the wall using MS screws of 65/100 mm size complete as per manufacturers specification and direction of engineer-in-charge.	26.40	RM	353.10	9,321.84
36	Providing and fixing Factory made panel PVC door shutter consisting of frame made out of MS tubes of 19 guage thickness and size of 19 mmX 19 mm for styles and 15X15mm for top & bottom rails, MS frame covered with 5mm thick heat moulded PVC "C" channel of size 30mm thickness, 70 mm width out of which 50mm shall be flat and 20 mm shall be tapered in 45 degree angle on either side forming style; and 5 mm thick, 95 mm wide PVC sheet out of which 75 mm shall be flat and 20 mm shall be tapered in 45 degree on inner side to form top and bottom rail and 115 mm wide PVC sheet out of which 75mm shall be flat and 20 mm shall be tapered on both sides to form lock rail. Top, bottom and lock rails shall be provided on either side of the panel. 10mm (5mm X 2 ) thick, 20 mm wide cross PVC sheet be provided as gap inserts for top and bottom rail. Panelling of 5mm thick both side PVC sheet to be fitted in the MS frame welded / Sealed to the styles and rails with 7mm (5mm +2mm) thick x 15mm wide PVC sheet beading on inner side, and joined together with solvent cement adhesive.and additional 5mm thick PVC strip of 20 mm width is to be stuck on interior side of the "C" channel using PVC solvent adhesive etc.; complete as per direction of Engineer-in-charge. Manufacturer's specification and drawing (for WC and bathroom door shutter).	8.80	Sq.m	2,109.95	18,567.56
	<b>Total value of work</b>			₹	<b>9,35,308.00</b>
<b>Total : ₹ Nine lakhs thirty five thousand three hundred and eight only</b>					

**Note:**

1	A penalty of 0.5% of the gross value of work will be levied for every week's delay of work or part there of subject to a maximum penalty of 10% of the gross value of work executed after the period of completion.
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		