

Ref: BHE/PW/PUR/X014/Corrigendum- 02

Date 23/08/2010

To

ALL BIDDERS

Sub: Corrigendum-02 for Issue of Clarification and Extension of Last Date of offer submission.

JOB: SUPPLY OF PORTA CABINS OF VARIOUS TYPES WITH ALL FITTINGS INCLUDING PAINTING FOR VARIOUS SITES

T.S. No. BHE/PW/PUR/X014

Bidders to kindly take note of the following:

AA) Clarification:-

Bidders may kindly note the following:

1. The Technical specifications for the various types of Porta Cabins have been revised and mentioned in Annexure-I. Earlier technical specifications should be treated null & void.
2. The Godrej make chairs, sofa & centre table as mentioned on Page 4 of 6 has been deleted from Supplier's Scope.
3. Bidders who have already submitted their offer are requested to submit the revised bid, in case of any change due to the above amendment.

BB) Extension of Last Date of Submission:-

The last date for submission of Tender has been re-scheduled to 01/09/2010, 15.00 hrs. Technical Bid shall be opened on 01/09/2010 at 16.00 hrs

All other Terms and conditions of the Tender Specification shall remain unaltered unless expressly amended by BHEL in writing.

Bidders are requested to submit as a part of Technical Bid, a copy of this corrigendum duly countersigned by the authorized signatory and stamped with the Official seal as a token of Bidder's unqualified acceptance of this corrigendum.

Thanking you,

Yours faithfully,

DGM (Purchase)

ANNEXURE – I**REVISED TECHNICAL SPECIFICATION****Scope of work:**

Design, Engineering, Supply, Transportation and Installation over the foundation/platform (provided by BHEL) in all respects including fittings, fixtures, accessories, electrification, sanitary, plumbing etc. at various construction sites (in the state of Maharashtra, M.P., Gujarat, Chhattisgarh (C.G.), U.P., Rajasthan, Bihar, Goa etc.)

Recommended Revised Technical Specifications against old Technical Specifications for Work Station (Bunk House) of required size for different category of cabins as per our enquiry.

New revised technical specifications shall only be followed for this tender and Amendments whatsoever issued till date for this tender shall not be pertinent to this tender. Bidders are advised to read all revised technical specifications and relevant documents consciously.

Sr. No.	Component	Description (old)	Description (Revised)	Remarks
Main Load Bearing members				
1	Base Frame (Outer frame)	150mm especially Pressed formed profile of appropriate geometry made of MS sheet (IS 10748 or equivalent) 2.5mm Thick.	No change	Ref. drawings
2	Stiffeners for base frame	75mm x 40mm Pressed formed rectangular hollow Section made of MS sheet (IS 10748) 2.5mm Thick (Min. 3 rows in longitudinal side & 4 rows transverse side)	No change	Ref. drawings
3	Roof top frame (Main outer frame)	150mm especially Pressed formed profile of appropriate geometry made of MS sheet (IS 10748 or equivalent) 2.5mm Thick.	No change	Ref. drawings
4	Stiffeners (for Top frame)	50 x 25 x 2.5mm (transverse direction min. 4 rows) & 32 x 32 x 2mm (longitudinal direction min. 3 rows) Pressed formed hollow section made of MS sheet (IS 10748)	No change	Ref. drawings
5	Corner Posts	Pressed formed square hollow section of 3.15mm thick M.S sheet of section 91 X 91 X 31.5 mm.	No change	Ref. drawings
6	Side/vertical intermediate Post & horizontal stiffeners	Especially Pressed formed profile of appropriate geometry made of 2.0 mm thick M.S sheet for holding wall paneling (compressed sandwich panel), all fitting & fixtures including AC and Over Head cabinets etc.	No change	
7	Lifting Hooks & Base Plates	Necessary lifting hooks for loading, unloading shall be provided. All the corner post shall have min. 16mm thick base plate of size 250mmx250mm on both top and bottom.	No change	
8	Painting	The All Exposed Structure shall be painted with one coat primer and two coat enamel paint	The All Exposed Structural frame shall be painted with one coat primer and two coat enamel paint. With dark blue color. Primer coat shall be red oxide 35 micron DFT and synthetic enamel paint shall be 50 micron DFT of two coats of Asian/ Burger make. Total dry film thickness (DFT) of finished paint should not be less than 135 micron including primer.	

ANNEXURE – I

Paneling				
1	Main Wall paneling	The interior shall be aesthetically finished to give custom built appearance with good workmanship. Wall Paneling shall be of COMPRESSED SANDWITCHED PANEL (CSP) with PUF (Polyurethane Foam) insulation of overall thickness 60mm with 0.5mm thick permanent colour coated galvalume sheet of approved colour (preferably light blue color) on both sides.	The interior shall be aesthetically finished to give custom built appearance with good workmanship. Main Wall Paneling shall be of CONTINUOUS SANDWITCHED PANEL (CSP) with PUF (Polyurethane Foam) insulation of density 40 ± 2 Kg/M ³ and overall thickness 60mm with 0.5mm thick PPGI (pre painted galvanized iron) sheet of approved color (preferably light gray color) on both sides. An additional off-white colored wall paneling of 8mm thick hollow extruded polymeric section (syntax or Equivalent) with tongue and groove arrangement on inner surface of CSF panel to be fixed with suitable anti-corrosive frame grid arrangements. All electrical wiring shall be concealed with PVC conduit between CSF and Inner polymeric panel.	PPGI sheet make shall be ISPAT INDIA LIMITED/ JSW or Approved Equivalent.
2	Roof	Roofing shall be of 50mm thick PUF insulation with 0.5mm thick permanent colour coated galvalume sheet on both sides.	Roofing shall be of 50mm thick PUF insulation of density 40 ± 2 Kg/M ³ with 0.5mm thick PPGI (pre painted galvanized iron) sheet of approved color (preferably light gray color) on both sides.	PPGI sheet make shall be ISPAT INDIA LIMITED/ JSW or Approved Equivalent.
3	False ceiling	The false ceiling shall be made out of anti corrosive painted 19mm square hollow section design to fix to the roof frame with suitable hangers. The clear height of ceiling shall be 8 ft. from the finished floor level. Cut out should be made properly wherever necessary for fixing electrical fitting. False ceiling shall be done with polymeric section of minimum thickness 6 mm. These panels are to be joined together by tongue and groove using self tapping screws. The colour of PVC Ceiling should match with wall panels.	The false ceiling shall be made out of anti corrosive painted 19mm square hollow section design to fix to the roof frame with suitable hangers. The clear height of ceiling shall be 8 ft. from the finished floor level. Cut out should be made properly wherever necessary for fixing electrical fitting. False ceiling shall be done with 8mm thick hollow extruded polymeric section (syntax or Equivalent) with tongue and groove arrangement. The color of Ceiling should match with inner wall panels.	
4	Partition	Partition frame to be made out of anticorrosive painted 25 mm hollow square section of 16 SWG thicknesses as per IS-4923 and double side paneling with polymeric section of minimum thickness 6 mm. These panels are to be joined together by tongue and groove using self tapping screws. The color of PVC partition should match with wall panels. Doors for partition of height 6 feet (wherever required) should be polymeric fully open able air tight doors with proper accessories, and locking arrangement etc. Bunk house Cabin Type –A shall have full partition with PVC doors and vision panels.	No change	Ref. drawings

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5	Bottom flooring	The floor Panel shall be made with 0.5mm thick. Pre coated Sheet as outer Skin & 18mm thick marine plywood as a inner Skin of both side of PUF. The plywood shall be covered with 1mm thick Vinyl sheet. Total thickness of panel shall be 50mm.	The floor shall consists of min. 0.80mm thick PPGI (pre painted galvanized iron) sheet as outer most Skin followed by 25mm thick marine plywood conforming to IS: 710. The plywood shall be finally covered with 1mm thick Vinyl sheet of approved Texture and color.	PPGI sheet make shall be ISPAT INDIA LIMITED/JSW or Approved Equivalent.
6	Rain water gutter	Especially Pressed formed profile of appropriate geometry made of 2.0 mm thick M.S sheet for Rain water gutter with having min 65mm dia GI rain water down comer connected with L bow.	No change	Ref. drawings
External Doors and Windows				
1	Windows	Glazed sliding type windows of required dimension as per drawing shall be made out of PVC extruded sections with horizontal two track sliding. Windows shall be fitted with 4mm thick Tinted Glass with proper locking arrangement. Safety aluminum Grills/ guard bars of suitable sections shall be provided in all windows. Window sill shall be decided as per the height of work station. All Windows shall be fitted with Rain-shed (canopy) made from 1.0 mm thick color coated sheet. Canopy shall be folding type with proper holding and locking arrangement and shall be used as a protective cover to the glazed window at the time of transportation.	No change	
2	M.S Doors	M.S. frame shall be made from pressed steel using CR Steel of 1.5mm thick. Door shutter shall be made of suitable M.S. Frame covered with 0.5mm thick pre coated sheet both side with PUF insulation so as to match with wall panel. High Quality Mortice Lock, Aldrop, Stopper, Handle & other accessories shall be Provided.	M.S. frame shall be made from pressed steel using CR (corrosion resistant) Steel of 1.5mm thick. Door shutter shall be made of suitable M.S. Frame covered with 0.5mm thick PPGI sheet both side with PUF insulation (density 40±2 Kg/M ³) so as to match with wall panel. High Quality Mortice Lock, Aldrop, Stopper, Handle & other accessories shall be Provided.	Location of the door shall be as per the drawings.
Electrical Installation, Telephone and Data cabling :				
1	A) Main electric supply (Normal 3 Ph 4 wire supply)	Main electrical inlet shall be through Cutler, Hammer make IP-55 certified 5 Pin welding socket (63Amp). All wiring shall be done with Finolex / Anchor Make FRLS multi-strand copper wire and cable of open type with using proper channel (PVC - C section channel) closer for wiring. The wiring of Air Conditioner (AC) should be 6 Sqmm and for lighting/Fans should be 4Sqmm. One main incomer distribution board (3Ph-4 wire) should be provided in each cabin with 1 No. ELCB along with 63Amps 3 pole MCB and individual MCBs for light, fans and AC. All MCBs shall be housed in metal enclosure. UPS power supply	Main electrical inlet shall be through Cutler, Hammer make IP-55 certified 5 Pin welding socket (63Amp). All wiring shall be done with Finolex / Anchor Make FRLS multi-strand copper wire and cable of concealed type (refer wall paneling details) for wiring. The wiring of Air Conditioner (AC) should be 6 Sqmm and for lighting/Fans should be 4Sqmm. One main incomer distribution board (3Ph-4 wire) should be provided in each cabin with 1 No. ELCB along with 63Amps 3 pole MCB and individual MCBs for light, fans and AC. All MCBs shall be housed in metal enclosure. UPS power supply. Main wire	Quantities of various Electrical items shall be read from Annexure-A

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			entry should be from the opposite side of the Entrance/Door.	
2	B) UPS power supply	UPS inlets supply shall be through Cutler, Hammer make IP-55 certified 5 Pin welding socket (63Amp). These sockets should be mounted on outside wall of the cabin and further connected to Main distribution board inside the cabin having provision of incoming MCB 32Amps, 2 Pole and MCB at each sitting arrangement including internal wiring from Main Board up to the switch socket for further distribution. All wiring shall be done with Finolex/Anchor Make FRLS multi-strand copper wire 2.5mm square cable of open type with using proper channel (PVC - C section channel) closer for wiring.	No change	Quantities of various Electrical items shall be read from Annexure-A
3	C) Telephone and Network cabling	One (1) No. Junction Box with Lock and Key should be mounted outside the Cabin for connecting to external telephone lines and network data cables. The junction Box should have provision for connecting at least four telephone lines and for connecting external network cabling type CAT-6. The cable should be terminated on Krone connectors and should be wired to the Telephone, outlets inside the cable. One (1) No. 8 port D-Link switch should be mounted inside the cabin and further internal cabling shall be done with CAT-6 cables. Cabling from D-Link switch to users nodes is within the scope of work.	No change	Quantities of various Electrical items shall be read from Annexure-A
4	Electrical fittings	Tubes – 3Nos., Doors Lights – 1No., Ceiling mounted Fans swing type (12") – 2 Nos., Switches, Sockets (5/15A), Telephone outlets type RJ-11 socket and Air-conditioner points with Earth Leakage Circuit Breaker as per requirement of Electricity norms. All fittings shall be Anchor/ Havel make, Split AC (Voltas, Videocon, LG, Samsung, Godrej make)- 1.5T with arrangement of condenser unit at one corner inside cabin but open able from out side with locking arrangement, Fridge (LG/Kelvinator/Godrej/Samsung make 220 Ltr)	Same as old description shall be followed, only fridge and their fitting and fixtures are deleted from Bidder's scope.	Quantities of various Electrical items shall be read from Annexure-A
Furniture for work station				
1	(A) Tables	Layout and dimensions shall be as per drawings. Materials shall be extruded polymeric panel (PVC) as per IS 10151/1982 of 25mm thick with proper supporting legs and clamping arrangement with wall frame	No change	
	(B) Chairs, Sofa, Centre Table	1) Regency Model ECH 7001 D-2 Nos 2) Serena Model 9002 A-51 Nos 3) Regency Model PCH 7003D-57 Nos 4) Petal Series F3 XX- 1 No.	DELETED FROM SUPPLIER'S SCOPE.	
2	Overhead cabinets	As per Drg. Materials shall be extruded polymeric panel (PVC) as per IS 10151/1982 of 25mm thick with proper locking and fixing arrangement with wall frame. It should be strong enough to take load of files.	No change	
3	Fridge	Fridge having capacity of 220 Ltr , made of LG/Kelvinator/Godrej/Samsung make - 1 No	Not in Bidder's scope.	

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Safety appliances				
1		1 No. fire portable Fire Extinguisher shall be in each cabin at appropriate location.	1 No. Portable Fire Extinguisher shall be in each cabin at appropriate location with all fitting and fixtures. The pressure capacity of Fire Extinguisher shall be 2.5 Kgf.	

A tentative BOQ for various electrical items against different types of bunk houses as follows. It is the responsibility of the bidder to enumerate the required quantity as per their electrical design.

Annexure-A

Sl.no	Item Name	Unit	Type of Bunk House						
			A	B/E	C	D	F	G	L
1	Air conditioner -1.5T capacity	Nos	2	1	1	2	1	1	0
2	Tube light CFL type	Nos	3	3	3	6	3	3	1
3	Fan	Nos	2	2	2	4	2	2	1
4	Main power distribution board.	Nos	1	1	1	1	1	1	1
5	UPS power distribution board.	Nos	1	1	1	1	1	1	1
6	Main power inlet 5 pin socket.	Nos	2	2	2	2	2	2	2
7	Telephone and network crone box	Nos	1	1	1	1	1	1	1
8	Bulk head fitting CFL type.	Nos	1	1	1	1	1	1	1
9	24 port D-Link switch for networking.	Nos	1	1	1	1	1	1	1
10	Computer, UPS, telephone and networking point	Nos	2	6	8	8	8	1	1

Shop Inspection:

Periodical inspection of process at least at three stages – 1st during welding process of main frame for inspection of materials & welding quality & 2nd at internal & external paneling & insulation and 3rd at Furnishing, electrocutions & finish paint. Minor modifications, if any, required to be carried out which will be specified during the stage of inspection/manufacturing process. Rates quoted should consider this aspect also.

Testing of CSP Panel

Successful bidder (after award of tender) shall submit the test certificates like Fire test & Impact test for CSP panels from recognized Govt institution / CBRI (Central Building Research Institute, Roorkee). The mentioned tests are indicative only. Any additional tests relevant to this product shall be submitted. The certificates shall be submitted during manufacturing of CSP panels.

Marking:

Each Unit shall be marked externally with:

Name & address of Manufacturer

Type and Serial No.

Max. Permissible distributed floor loads

Max. External size

Max. Weight of unit for lifting

Position of lifting & anchoring points

Suitability of stacking

BHEL Logo: The Main Door should carry a logo of BHEL made of stainless embossed.

ANNEXURE – I**Warranty:**

1 year for workmanship & defective materials

3 years for painting as per European scale of rusting RE3 (10% of total surface). However normal wear & tear and damage by external impact etc. are not covered.

First installation at site and after sale service:

During the first installation(for each cabin) at site, manufacturers shall depute their technician to check placement of cabins over the pedestal, all fittings, fixtures and electrical installation ,AC etc. and to ensure successful operation of Bunk House at site. Minor wear and tear occurred during transit which involves denting and painting shall be done by Manufacture free of cost.

Warranty/Guarantee for electrical installation/Equipments like Air conditioner (AC), Fans, Lighting shall either be extended in the name of BHEL from original supplier of Equipment or to be taken care by the supplier of the Bunk House as a part of Warranty.

Different categories of Bunk Houses & expected requirement:

Type	Purpose	Remark
Type – A	For Construction Manager - 20' x 10'	Dimensions are out to out.
Type – C	For Field staff - 20 x 10'	Dimensions are out to out.
Type – D	For Conference hall - 40'x10'	Dimensions are out to out.
Type – E	For Sr. Executive / Executive - 20' x10'	Dimensions are out to out. Type B and E are same.
Type – F	System & Computers - 20'x10'.	Dimensions are out to out.
Type – G	Documentation- 20'x10'	Dimensions are out to out.
Type – L	Security -5'x6'	Dimensions are out to out.

Note:

The specifications provided herein are only indicative and, manufacturer shall be overall responsible for detail Design, Engineering, drawings, finishing, internal furnishing, electrification & fixtures and proper functioning of the Bunk houses.