

Orissa Industrial Infrastructure Development Corporation

(A Government of Orissa Undertaking)

Phones: (0674) 2542784, 2540820, Fax: 2542 956

Email: cmd@idco.in



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Bhubaneswar/ Dt.04.03.2010

CORRIGENDUM TO EXPRESSION OF INTEREST NOTICE NO.3547 Dt.23.02.2010

The scope of work for the “**PROPOSED PREENGINEERED WORK SHOP BUILDING (PEB) AT IIT, BHUBANESWAR**” has been revised. All other terms and conditions, last date of submission, opening etc of the earlier Expression of Interest Notice no3547 dt.23.02.2010 will remain unchanged

Sd/-

Chief General Manager (Civil)

PROPOSED PREENGINEERED WORKSHOP BUILDING (PEB) AT IIT , BHUBANESWAR.

Design, Manufacture, Supply, Erection of PEB having roof will be of pre-fabricated, insulated trough Rockwool panel having thickness 50mm of Density 96-100 Kg/M³. The outer walls and partition walls and room above mezzanine floor as shown in the drawing will have light groove pre-fab Rockwool panel having density of 100 Kg/M³ and thickness 50mm respectively. The PEB will have a crane of 3 Ton capacity (Excluding of PEB manufacturer), crane beam and bracket will be in the scope of PEB Manufacturer. Two side walls will have 600mm wide, 93meter long louver. Partial length per bay ridges vent should be provided for proper ventilation purpose. The PEB will have 14 Nos. of Rolling shutters (Excluding PEB Manufacturers) backed by Collapsible gate of size 3Mx3M with 1M canopy of length 3.5M. Open able Aluminum window and door should be provided as shown in the drawing or as per the instruction of site in-charge. The PEB will have PCC mezzanine floor supported by decking sheet made up of steel. The dimension as per the drawing.

The building up-to plinth level will have civil works including foundation for structural columns. Required civil Works of mezzanine floor will also be in the scope of the work. Unless and other wise specified all specification, design will be in conformation of the relevant latest IS Code

Specification of Rockwool Panel.

For Roofing and Cladding, we are proposing 50mm Rockwool panel with the following specification:

Steel Facing and : 0.5mm thick colour coated GI sheet with light groove on both sides for wall with light groove on inner side and troughed sheet on outer side for roof.

Core Material : High density (100 Kg/M³) Rockwool slab converted to lamellar form and bonded to steel structure with industrial grade adhesive.

Panel Thickness : 50mm

Salient features:

- Excellent Thermal Insulation resulting in considerable savings in energy.
- Good acoustic insulation
- Considerable Mechanical strength is achieved due to the sandwich effect.
- Lightness of structure and good stability with time.
- Provides excellent water and air tightness.
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- Ease in erection as well as speed of construction and easier maintenance.
- Eliminates the use of wood, cement and other hard building materials.

Properties of Rockwool Panel:

Thermal Conductivity	0.04 W/m Deg. K
Application Temperature Range	-30 Deg. C to 250 Deg.C
Melting Point of Rockwool	> 1000 Deg.C
Moisture Resistance.	Absorbs less than 0.02 Vol % - ASTM C1104
Water Absorption	Absorbs less than 1%-BS 2972 : 75
Shear strength	75 KPs
Sound Reduction	Transmission losses 28 to 30 dB
Fire Properties:	
a) Fire Resistance	30 minutes to <120 minutes.
b) Euro Fire Class	A1 when tested as per EN 13501-1

The Panel shall be fixed to the purlin (the purlin should have flat surface) with the help of self tapping self drilling screws.

Flashings :

Flashings will be made out of the same material as of roofing / cladding in plain sheets duly fabricated to the required size. All the joints will be sealed with sealants and stitched with stitching screws wherever necessary.

Full Partition Wall : We are proposing Rockwool panel with the following specification:

- Steel Facing : 0.5mm thick colour coated GI sheet with light groove on both sides.
- Core Material : High density (100 Kg/M³) Rockwool slab converted to lamellar form and bonded to steel structure with industrial grade adhesive.
- Panel Thickness : 80mm.

Scope of work:

This structure will be a pre-engineered building as per enclosed sketch. This structure will be constructed on an area of a.1 acre. A portion will be of height 6.0 mtr (52Mx16M) and other portion will be of two storey each of 3 mtr height. In this portion ground floor will house three Civil Engineering Laboratories, and first floor will have class rooms, faculty rooms etc. Foundation will be on the hard moorum soil with an assumed SBC of 12T/SQM.

Requirement.

- 1) In two of the laboratories at 6.0mtr ht portion, each laboratory will have 4 nos of Rolling shutter of size 3.0x2.1m with collapsible gate at back. Each laboratory in this portion will have 8 nos. of Al windows openable outside of size 4.0mtrx1.2m, will have iron grill fitted with window frame.
- 2) Partition between Civil & Mechanical will be of with 50 MM thick Rockwool panel of 2.0mtr height.

- 3) Flooring in lab portion will be of 65mm thick ironite flooring except in environment lab where flooring will be of Acid resistant tiles.
- 4) Flooring in first floor will be of vitrified tiles.
- 5) Gantry crane in Civil Engg Lab will be of 3 tonne capacity.

6) **Details of Doors.**

Sl.No.	Location	Size	Number	Total
1	Class rooms (4 nos)	1.5mtrx2.1mtr	1 nos in each	4
2	Faculty (11 nos)	1 mtrx2.1 mtr	1 nos in each	11
3	HOD	1 mtrx2.1mtr	1	1
4	Conference rooms (1 nos)	1.5mtrx2.1mtr	2 nos in each	2
5	Admn (2 nos)	1 mtrx2.1mtr	1	2
6	Toilets (3 nos)	.8mtrx2.1m	1	3
7	Store	.8mtrx2.1m	1	1
8	Library	1.mtrx2.1mtr	1	2

7) **Details of Windows.**

These windows will be of aluminium openable and having grill fixed with the window frame.

Sl.No.	Location	Size	Number	Total
1	Class rooms (3 nos) Class room CR-1	1.2mtrx2.0mtr 1.2x2.0	2 nos in each 4 nos	6 4
2	Faculty (14 nos)	1.2 x2 mtr	1 nos in each	11
3	HOD	1.2x2.0mtr	2	2
4	Conference rooms (1 nos)	1.2x2mtr	4 nos in each	4
5	Admn (2 nos)	1.2x2mtr	1	2
6	Toilets (3 nos)	.9mtrx.45mtr	1	4
7	Store	1.2x2mtr	1	1

- 8) Staircase will have two number of windows in each flight.
- 9) To have proper lighting corridor will have transparent sheets.
- 10) Expansion joint at the places shown need be provided as per IS
