# Technical Specifications

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<th>Test Method</th>
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</tr>
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<td>ASTM D 1621</td>
<td>kPa N/mm²</td>
<td>≥ 300 0.300</td>
</tr>
<tr>
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<td>IS 3346</td>
<td>W/m-K</td>
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<td>ASTM D 2842</td>
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<td>%</td>
<td>≤ 2</td>
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<td>Flammability</td>
<td>DIN 4102, Part-1</td>
<td>82</td>
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</tbody>
</table>

*INsulboard® is compliant with ISO 4898: 2008 as well as ASTM C 578-08b - Type VI requirements.*

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**PACKING DETAILS**

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<thead>
<tr>
<th>Thickness (mm)</th>
<th>Boards/Bag</th>
<th>m²/Bag</th>
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<th>F²/Bag</th>
<th>Edge Profile</th>
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<tr>
<td>25</td>
<td>18</td>
<td>13.5</td>
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<td>Shiplap</td>
</tr>
<tr>
<td>100</td>
<td>5</td>
<td>3.75</td>
<td>0.375</td>
<td>13.24</td>
<td>Shiplap</td>
</tr>
</tbody>
</table>

*Standard Size: 1250 x 600 mm*

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**Regional Office**

- **West/Central**
  - Mumbai: 91-22-67099180/81

- **North**
  - Delhi: 91-11-25730405

- **East**
  - Kolkata: 91-33-24417069

- **South**
  - Chennai: 91-44-39811160/22313633

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**INsulboard®**

Extruded Polystyrene Thermal Insulation Boards

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MINISUPPLY SOLUTIONS LTD

Corporate Office

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**SUPREME PETROCHEM LTD**

Supreme Petrochem Ltd (SPL) has set up India's first ultra-modern manufacturing facility to produce eco-friendly XPS (Extruded Polystyrene) Thermal Insulation Boards with an annual production capacity of 1.50,000 m², backward integrated with a 27,200 TPA Polystyrene plant at Nagophane, Maharashtra.

**Extruded Polystyrene (XPS) Thermal Insulation Board** is a rigid foam board extruded from polystyrene, having a closed cell structure. It is globally acknowledged to be one of the best value-for-money thermal insulation options.

**Product Benefits:**

**SAVINGS IN ENERGY COSTS**

XPS Thermal Insulation helps save energy costs in building as air-conditioning loads are lower & cooling effect is retained longer in an insulated building.

**LIVING COMFORT INSIDE THE BUILDING**

XPS Thermal Insulation helps provide comfortable living inside the building by providing a thermal barrier against heat conduction, suppressing air movements to minimize heat convection & limiting heat radiation effects.

**ENHANCED LIFE OF THE BUILDING STRUCTURE**

XPS insulation enhances the life of the building structure by providing protective insulation and thereby preventing the formation of cracks due to thermal expansion-contraction stresses which occur when a building structure is exposed to sunlight. XPS also helps in extending the life of terrace waterproofing.

**INTERNAL WALL INSULATION**

- Surface preparation of the wall (leveling with cement plaster & surface bonding) should be done before application of XPS boards.
- Fix XPS boards in a staggered manner with a suitable adhesive or mechanical fasteners (plaster nails).
- Fix the GI framework of the insulated wall with the help of mechanical fasteners recommended by Gypsum board supplier.
- Install Gypsum boards with the help of suitable fasteners as per guidelines of the Gypsum board manufacturer.
- Any internal finish depending upon the aesthetic preference of the customer can be applied directly on Gypsum boards.

**OVER DECK ROOF INSULATION**

- Suitable slope to be provided to the roof surface towards a drain to prevent rain water accumulation.
- Surface preparation (level & clean surface) of the roof to be done.
- Waterproofing to be done to the roof prior to application of thermal insulation.
- XPS boards (0.500mm thickness) are placed loosely on the roof connecting the laps, ensuring that the joints between the rows are staggered.
- A vapour barrier in the form of a 100–120 gm plastic film is laid over the boards. A 75 mm overlap is given at the edges.
- A 140 gm glass fabric/polyester non-woven cloth is placed on top of the vapour barrier as a separation layer to prevent against differential expansion among the various layers. A 75 mm overlap is given at the edges.
- A PVC/Glass Fiber wire mesh is provided as reinforcement above the polyester non-woven separation layer.
- Fibre-reinforced plaster/cedar cement screed generally with a composition of 1:2.4 of Cement:Sand:Stone Aggregate is applied on the PVC wire mesh to cover the surface with the required thickness.
- Cement screed sloping should be done in a 1 in 8:1 1/2 panel form with appropriate control joints given to protect against any subsequent thermal expansion-related cracking.
- Tires can be laid on top of this cement screed surface. This roof is a fully accessible roof.

**EXTERNAL WALL INSULATION**

- Surface preparation of the wall (leveling with cement plaster & surface bonding) should be done before application of the XPS boards.
- Special XPS Adhesive Cement is applied to the XPS board & the board is then fixed to the brick-concrete wall.
- Holes are drilled through the XPS board to insert the plastic expansion-fastener system.
- The surface around the hole is prepared to ensure that the plastic fastener face is flush with the XPS board surface.
- The Plastic fasteners are inserted into the holes & the screw is driven into the fastener to lock them in.
- Special XPS Cement Plaster is applied to XPS surface as a first layer. This surface is coarsened with the scored tool and a fiber mesh is applied as reinforcement.
- An additional layer of XPS Cement Plaster is applied over the fiber mesh to cover it completely.
- Any exterior finish depending on the budget & aesthetic preference of the customer can be applied over the cement screed.
- The Building Exterior looks no different from that of an unmodified structure.

**www.insuboard.com**
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### LIVING COMFORT INSIDE THE BUILDING

XPS Thermal Insulation helps provide comfortable living inside the building by providing a thermal barrier against heat conduction, suppressing air movements to limit heat convection & limiting heat radiation effects.

### ENHANCED LIFE OF THE BUILDING STRUCTURE

XPS insulation enhances the life of the building structure by providing protective insulation and thereby preventing the formation of cracks due to thermal expansion-contraction stresses which occur when a building structure is exposed to sunlight. XPS also helps in extending the life of terrace waterproofing.

### INTERNAL WALL INSULATION

- Surface preparation of the wall (leaving with cement plaster & surface shooting) should be done before application of XPS boards.
- Fix XPS boards in a staggered manner with a suitable adhesive or mechanical fasteners/plastics nails.
- Fix the G.I. framework of the insulated wall with the help of mechanical fasteners recommended by Gypsum board supplier.
- Install Gypsum boards with the help of suitable fasteners as per guidelines of the Gypsum board manufacturer.
- Any internal finish depending upon the aesthetic preference of the customer can be applied directly on Gypsum boards.

**XPS Thermal Insulation Boards**

- Brick Wall
- GI Sheet
- Gypsum Board
- Screw
- Paper

**www.insuboard.com**

### OVER DECK ROOF INSULATION

- Suitable slope to be provided to the roof surface towards a drain to prevent rain water accumulation.
- Surface preparation (level & clean surface) of the roof to be done.
- Waterproofing to be done to the roof prior to application of thermal insulation.
- XPS boards (0.50mm Thick) are placed loosely on the roof connecting the laps together, ensuring that the joints between the rows are staggered.
- A vapour barrier in the form of a 100–120 gsm plastic film is laid over the boards. A 75 mm overlap is given at the edges.
- A 140 gsm geotextile/polyester non-woven cloth is placed over the vapour barrier as a separation layer to prevent against differential expansion among the various layers. A 75 mm overlap is given at the edges.
- A PVC/Glass Fiber wire mesh is provided as reinforcement above the polyester non-woven separation layer.
- Fiber-reinforced plasterized cement screed generally with a composition of 1:2.4 of Cement:Sand:Stone Aggregate is applied on the PVC wire mesh to cover the surface with the required thickness.
- Cement screed casting should be done in a 1:4 cement:water mix with appropriate control joints given to protect against any subsequent thermal expansion-related cracking.
- Tiles can be laid on top of this cement screed surface. The roof is now ready to accept the roofing system.

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- The surface around the hole is prepared to ensure that the plastic fastener face is flush with the XPS board surface.
- The Plastic fasteners are inserted into the holes & the nails are driven into the concrete to hold them.
- Special XPS Cement Plaster is applied to XPS surface as a first layer. This surface is coated with the assorted tool and the screw mesh is applied as reinforcement.
- An additional layer of XPS Cement Plaster is applied over the first layer to cover it completely.
- Any exterior finish depending upon the budget & aesthetic preference of the customer can be applied to the cement screed.
- The Building Exterior looks no different from that of an uninsulated structure.

**www.insuboard.com**
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**XPS THERMAL INSULATION FOR BUILDINGS**

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