

Description

ShaliXPS® extruded polystyrene rigid board is a high performance insulation material with a proven track record facilitating considerable saving of electricity, thus facilitating green building concept. **ShaliXPS®** can be used widely for various climatic conditions. It has been successfully used for a varied range of temperature and under high humid condition in various part of the country. **ShaliXPS®** has a high compressive strength to enable it to use it for over deck, floor, machine/plant room, etc.

The high thermal resistance property of ShaliXPS® is a result of arresting / millions of tiny closed air cell separated from each other in a unit block.

ShaliXPS® is having a skin formed on top and bottom faces facilitating protection and providing excellent barrier to absorption of water, moisture, dew.

ShaliXPS® keeps its R (Resistivity or Resistance to heat flow) value retained even after its long exposure to high humidity, ground water, freeze thaw cycle and other extreme climatic conditions.

It conforms to ASTM C 578 – Type IV.

Characteristics

Compressive Strength @ 10% deflection, kPa	250	Water Absorption (% by volume), max	≤ 1 %
Thermal Conductivity (k) ¹ , W/mK	0.028	Thermal Resistance (R) (50mm), m ² K/W	1.73
Service Temperature, °C, max	+80	Density, kg / m ³	30 - 36
Water Affinity	Water Resistant	Water Capillarity	None
Fire Classification (building material)	B2	Water Absorption by submersion, % by volume	0.2

Properties shown are representative values for 50 mm thick material and tested at 24 (±) 1 °C mean temperatures **ShaliXPS®** with higher compressive strength (like 300 kPa, 350 kPa, 400 kPa, 450 kPa, 500 kPa) is also available on request for special application other than the uses recommended here.

Application

- Thermal insulation of roof / terrace / exterior walls / underdeck / cold storages / auditorium in commercial / residential buildings and plant room.
- Protection of waterproofing layer for retaining walls / other areas.

Advantages

- Preferred thermal insulation material for Green Buildings.
- Can be used for different kind of areas in the building like roof, walls, floors. It is also used for roofs with different shapes, size, construction materials.
- Completely closed cell structure.
- Resistant to moisture, and water absorption.
- High Thermal Resistance.
- Excellent compressive strength.
- Dimensionally stable.
- Does not age and rot.
- Fire Retardant.
- Reusable and can be recycled.
- Light weight and durable.
- Easy to cut handle and install.
- Resistant to freeze thaw cycle.

Application Methodology

- Clean surface with broom / wire brush to remove all loose dust dirt and any other foreign materials.
- In case of conventional roofing system, **ShaliXPS®** shall be laid on the roof surface by adhering with CPRX Compound.
- Membrane like PVC, TPO and EPDM shall be laid over **ShaliXPS®** as a waterproofing layer.
- In case of trafficable roof, membrane shall be protected with a suitable finish to avoid damage.
- In case of invertible roofing system, Lay **ShaliXPS®** over Polymer Modified Bituminous Membrane and other waterproofing system by adhering the **ShaliXPS®** slabs to be laid only on perimeter. Use CPRX Compound or double side bituminous adhesive tapes.
- Rest of the roof area shall be covered with **ShaliXPS®** slabs by simply laying it free over the membrane/waterproofing system.
- In case the roof is not covered totally on the same day, the last row of **ShaliXPS®** shall be fully adhered with CPRX Compound to ensure no displacement of the **ShaliXPS®** slab.
- A layer of Geo-textile of 150 / 200 gsm shall be loosely laid with an overlap of 50 mm and all overlap joints shall be sealed totally with an adhesive.
- Finally a suitable protection of PCC or tiles either loosely laid or fixed with a cement mortar bed shall be applied.

Health & Safety

- Clean hands with water after application.
- No irritation skin and odourless.

Packaging

Available in several grades in different thicknesses and compressive strength. It is available either in square or shiplap edge finish and also available in thicknesses in , 30, , 50 and 75 mm. The normal size of slab is 2.4 x 0.6 m or 2.4 m x 1.2 m.

The standard packing is:

Thickness (mm)	2400 x 600mm (1.44 m ²)		2400 x 1200mm (2.88 m ²)	
	Per/Pack	Area (m ²)	Per/Pack	Area (m ²)
30	16	23.04	8	23.04
50	10	14.4	5	14.4
75	6	8.64	3	8.64

Storage

Store in a cool dry place, under shed, away from fire and heat.



STP's Businesses
Waterproofing & Insulation
Road Surfacing
Pipeline Coating
Repairs & Rehabilitation
GARA (Grouts & Admixtures)
Other Powder Products
Sealant & Additives
Epoxy Flooring
Protective / Anti-Corrosive Coating
Other Products

