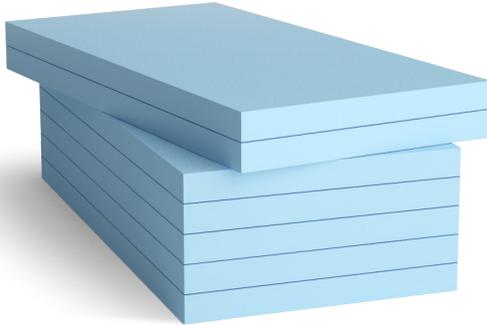


Vetotherm XPS

Extruded Polystyrene Panels for ETICS



Uses

- Extruded polystyrene used as thermal insulation in EIFS / ETICS systems of residential and industrial concrete buildings.
- Save energy consumption related to heating and cooling.
- Ideal for use in footing areas of buildings.

Product Description

Vetotherm XPS are Extruded polystyrene panels for use in thermal insulation and ETICS system. With a properties of greatest degree of thermal insulation, compressive strength and water non-absorption. These properties make it ideal for use in footing areas of buildings. It is also used for thermal insulation of whole facades. Vetotherm EPS is supplied in blue sheets with different sizes and thicknesses.

Advantages

- Factory controlled pre-blend ensures consistent high quality.
- Greatest degree of thermal insulation
- Greatest degree of water non-absorption
- High compressive strength
- Ready to receive adhesives and a wide range of adhesives & decorative finishes.
- Easy to transport.

Standards Compliance

- DIN 53420, DIN 52612, DIN 52616, DIN 53421, DIN 52615, DIN 52328
- DIN 18164
- DIN 4102
- ASTM D1622, ASTM D2842
- ASTM C177-97, ASTM C515-98
- ASTM D1621-95
- ASTM E96-00

Technical Data

Vetotherm XPS	Unit	XPS30	XPS45
Density DIN 53420 / ASTM D1622	Kg/m ³	30	45
Thermal Conductivity @10°C (50°F) DIN52612 / DIN52616 @23.9°C (75°F) ASTM C177-97 / ASTM C518-98	W/m.K But.in/ft ² .h.F	0.029 0.21	0.026 0.18
Compression Strength at 10% deflection DIN 53421 / ASTM D1621-95	kPa psi	250 36	700 100
Water Absorption by Submersion DIN 53421 / ASTM D2842	% by Vol.	0.2 / ≤1	0.2 / <1
Water Vapor Diffusion Resistance Factor μ DIN52615	μ	100 - 200	150 - 220
Water Vapor Permeability ASTM E96-00	Perm-inch	0.6	0.4
Heat Stability/ Compressive Creep DIN18164	- 20kPa, 80°C Type 2.8psi, 176°F - 40kPa, 70°C Type 5.6psi, 158°F	WD WS	WD WS
Linear Coefficient of Thermal Expansion and Contraction DIN 52328	°C °F	70 X 10 ⁻⁶ 39 X 10 ⁻⁶	70 X 10 ⁻⁶ 39 X 10 ⁻⁶
irreversible Dimensional Variation	%	-	<0.2
Fire Classification DIN 4102	Building Material Class	B2	B2

Usage Instructions

Substrate Preparation

The substrate should be sound, clean, free from loose material, grease, laitance, dirt, curing compound, etc. Crumbling areas should be removed and the holes must be filled up until reaching a stable base. Uneven base - if deviations are greater than 1-2 cm, the facade should be evened.

Initial Arrangement of EPS BOARDS

The initial arrangement of the facade is done through applying of a plinth profile with a drip-edge profile. Choose the profile according to the thickness of the thermal insulating material. The profile is levelled by means of a level and is secured with screw anchors. The purpose of the profile is not only to give a correct horizontal level to the thermal insulation but also to fix and connect the plinth thermal insulation and the thermal insulation system.

Application

Striking the Thermal Insulation Boards

Use Saveto Vetotherm Flex as an adhesive applied over bottom sides of Vetotherm XPS boards. The adhesive is applied as a continuous framework along the edge of the insulation board and in the form of three or four balls in the middle of the board. The boards are stuck to the wall as their adjacent vertical joints should be interchanged like brickwork. Do not leave joints between the boards, and if you get greater gaps, fill them with the insulation material or construction foam, but not with adhesive.

At external edges, the boards should be interchanged. Around the corners of windows and doors you must put whole thermal insulation boards, cut on site along the contour of the hole - so called "gun". After the complete drying of the adhesive (min. 48 hours), start to grind rough places at the connections between the boards with a special tool.

Anchoring

Start anchoring Vetotherm XPS boards minimum 48 hours after sticking the boards in order to allow the adhesive to dry completely. The dowels should be mounted according to a diagram depending on the height of the building, the region and the strength of the wind.

If Vetotherm XPS have a thickness exceeding 8 cm, you need to make previously a hole of 2 cm depth with a cutter and then, in this hole, to drill an opening for the screw anchor. After the mounting of the dowels, the hole should be filled with a polystyrene cap.

After the completion of the anchoring, cover the heads of the dowels with Saveto Vetotherm Flex to flush with the level of the boards.

Additional reinforcement of the loaded areas

Apply ready to use angle profiles Vetotherm ACP to reinforce external angles. Apply Saveto Vetotherm Flex along the edge, place the profile and press it tightly.

Corners around doors and windows should be strengthened by applying adhesive on the base, then place on the adhesive pieces of fibreglass mesh with minimum dimensions of 20x50 cm. Apply more adhesive to cover the mesh completely.

Before continuing to reinforce the entire surface, wait 24 hours to allow these areas to dry.

Sheets Sizes & Thickness

Product	Board Size	Thickness
Vetotherm XPS30	60cm x 125 cm	5cm & 10 cm
Vetotherm XPS45	60cm x 125 cm	5cm & 10 cm

Health & Safety

Vetotherm XPS is a non toxic material. it is free from Freon gas and it is non-flammable as it contains non retardant material.

For further information, please refer to material safety data sheet.

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