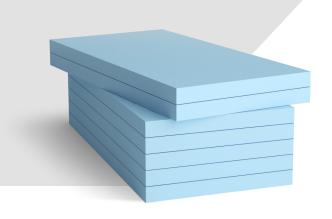


THERMAL INSULATION



Vetotherm XPS

Extruded polystyrene panels for ETICS

Uses

- Extruded polystyrene is 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

- The greatest degree of thermal insulation
- The 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

- ASTM C578
- ASTM E2430

Technical Data

| Vetotherm XPS | Unit | XPS30 | XPS45 |
|---|--|--|--|
| Density DIN 53420 / ASTM D1622 | Kg/m³ | 30 | 14.8 |
| Thermal Conductivity @100C (500F DIN52612 / DIN52616 @23.90C (750F) ASTM C177-97 / ASTM C518-98 | W/m.K But.in/ft2.h.F | 0.029 0.21 | 0.0319 |
| Compression Stength at 10% deflection DIN 53421 / ASTM D1621-95 | kPa psi | 250 36 | 46.49 |
| Water Apsorption by Submersion DIN 53421 / ASTM D2842 | % by Vol. | 0.2 / ≤1 | 143 |
| Water Vapor Diffusion Resistance Factor µ DIN52615 | μ | 100 - 200 | 1800 |
| Water Vapor Permeability ASTM E96-00 | Perm-inch | 0.6 | 1.074 |
| Heat Stability/ Compressive Creep DIN18164 | - 20kPa, 800C Type 2.8psi, 1760F - 40kPa, 700C Type 5.6psi, 1580F | 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 |
| irreversable Dimentional Variation | % | - | <0.2 |
| Fire Classification DIN 4102 | Building Material Class | B2 | B2 |



THERMAL INSULATION

Usage Instructions

Substrate Preparation

The substrate should be sound, clean, free from loose material, grease, laitance, dirt, curing compound, etc. Remove crumbled areas, and fill the holes 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 made by applying a plinth profile with a drip-edge profile. Choose the profile according to the thickness of the thermal insulating material. The profile is leveled utilizing a level and is secured with screw anchors. The profile aims to give a correct horizontal level to the thermal insulation and 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 the bottom sides of Vetotherm XPS boards. Apply the adhesive 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. Stick the boards to the wall while interchanging their adjacent vertical joints 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, interchange the boards. 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 adhesive's complete drying (min. 48 hours), start grinding rough places at the boards' connections with a special tool.

Anchoring

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

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

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

Additional reinforcement of the loaded areas

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

Strengthen the corners around doors and windows by applying adhesive on the base, then place on the adhesive pieces of fiberglass 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 | 60 cm x 125 cm | 5 cm & 10 cm |
| Vetotherm XPS45 | 60 cm x 125 cm | 5 cm & 10 cm |

Health & Safety

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

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

Legal Disclaimer

Saveto endeavors to ensure that any advice, recommendations, information it may give is accurate and correct. It cannot accept any liability either directly or indirectly arising from the use of its products because it has no direct or continuous control over where or how its products are applied, whether or not following any advice, specification, recommendation, or information given by us. Saveto has the right to change any of the technical datasheets specifications upon its discretion without prior notification.

Hard copies of TDSs are printed once or twice a year. Our technical data sheets are continuously updated as per R&D improvements and new 3rd party testing; kindly refer to our website for the latest updated TDSs.

Ref No.: G08-P09-V01-24 SA www.saveto.com