

PREMTOOL

Premtool XPS Tile Backer Boards are made of high-performance waterproof extruded polystyrene sheet (XPS) as its core, reinforced on both sides with alkali fiberglass mesh embedded into a thin layer of modified polymer mortar, it is rigid, waterproof, insulating, lightweight and easy to install.

| Performance Of XPS Foam Component | | |
|--|---------------|---------------------------------------|
| Item | Standard | Result |
| Density | DIN 53420 | 35+1 kg/m ³ |
| Thermal Conductivity | EN 12667:2001 | 0.033Watt/m.k |
| Compressive Strength (10% Deflection) | DIN 53421 | Minimum of 0.35N/mm ² |
| Flexural Strength | ASTM C203 | 0.30 ± 0.02 MPa |
| Water Absorption (Capillary) | DIN 53428 | Zero |
| Coefficient Of Linear Expansion | N/A | 70 x 10 ⁻⁶ K ⁻¹ |
| Water Vapour Diffusion Resistivity (μ) | DIN 52615 | 110 - 225 μ |
| Water Vapour Permeability | ASTM E-96 | 0.028 ng/Pa.m.s |
| EU Controlled Substances Content | N/A | None |

| Performance Of Tile Backer Board | | |
|---------------------------------------|---------------|---------------------------------------|
| Item | Standard | Result |
| Thermal Conductivity | EN 12667:2001 | 0.033 Watt/m.k |
| Compressive Strength (10% Deflection) | EN 826:1996 | Minimum of 0.35N/mm ² |
| Bond Strength | BS EN 1384 | 0.4N/mm ² |
| Maximum Tile Loading Weight | CERAM121107 | 62kg/m ² |
| Flexural Strength | ASTM C203 | 2.05 ± 0.02 MPa |
| Long Term Water Absorption | EN12087 | 0.11kg/m ² |
| Water Vapour Permeability (Sd) | DIN EN 12086 | 3.2m |
| Resistance To Body Impact | ETAG 003 | 3 x 120N/m |
| Bending Stiffness, E (12mm) | EN 12089 | 480 KNmm ² |
| Coefficient Of Linear Expansion | N/A | 30 x 10 ⁻⁶ K ⁻¹ |
| Flammability | EN13501-1 | Class E |
| Impact Sound Reduction | BS-ISO140-8 | dLw = 21 |
| Shear Bond Strength | EN 1448 | 3.32kg/cm ² |
| EU Controlled Substances Content | N/A | None |

Working temperature range: -50 to +80°C

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| | 600 x 1200mm | 600 x 2400mm |
|-----------|------------------------|------------------------|
| Thickness | Average Weight (Kg/pc) | Average Weight (Kg/pc) |
| 6mm | 2.3 | 4.6 |
| 10mm | 2.45 | 4.9 |
| 12mm | 2.5 | 5.0 |
| 20mm | 2.7 | 5.4 |
| 30mm | 2.95 | 5.9 |
| 50mm | 3.45 | 3.9 |

Dimensional tolerances for standard boards: Thickness +1mm, Width +/- 1mm, Length +/- 1mm
 The boards should be stored dry and flat. Slight bowing caused by incorrect storage or transport, for example, is not permanent and does not represent a technical defect. Slight curving can be rectified through storing the boards flat.

| Board Thickness In mm | R-Value (m ² .K)/W | U-Value W/m ² x K | Ad Rated Value |
|-----------------------|-------------------------------|------------------------------|-------------------|
| 6 | 0.11 | 3.63 | 0.0378 |
| 10 | 0.21 | 2.62 | 0.0378 |
| 12 | 0.28 | 2.23 | 0.0378 |
| 20 | 0.49 | 1.55 | 0.0378 |
| 30 | 0.74 | 1.10 | 0.0378 |
| 50 | 1.27 | 0.69 | 0.0378 |

