CLIMAFOAM® XPS BOARD

APPLICATIONS

DESCRIPTION

ClimaFoam® XPS board is ideal for applications in the construction industry as it is equipped for ‘site survival’ and can be cut to shape making it extremely fit for use. It also means that ClimaFoam® XPS board is ideal for a vast range of fabrication applications where the strength of the material as an infill in panels etc. is widely recognised and valued. In short, ClimaFoam® XPS board is two solutions in one - both a thermal and structural insulation solution.

ClimaFoam® XPS Board can be used for the thermal insulation of:

Flat Roofs:
• in an inverted roof below ballast or paving slabs
• in a green/garden roof
• in a flat roof with a single ply membrane

Concrete Slabs:
• around trenches
• in between pods
• edge beams

Cool Rooms:
• refrigeration
• trucks

PERFORMANCE

Thermal
Thermal conductivity: 0.028 W/mK.

BENEFITS

✓ Excellent thermal performance
✓ High compressive strength
✓ Highly resistant to water absorption
✓ Lightweight and easy to install
✓ Tough and durable, not easily damaged
✓ Dimensionally stable.
Specification Compliance
AS/NZS 4859.1: 2002 Materials used in the Thermal Insulation of Buildings and comply with the Building Code of Australia (BCA) requirements.

Specification Guide
The edge beam / green roof / concrete slab / cool room* insulation shall be ClimaFoam® XPS board R**, **mm thick and 300kPa compressive strength.

*architect to nominate relevant application.
**architect to insert details of products used.

Durability
The continuous service temperature limit of ClimaFoam® XPS board is up to +70°C.

ClimaFoam® XPS board is used, installed and maintained in accordance with Knauf Insulation’s instructions. It will meet or contribute to satisfying the NZBC Clause B2 Durability.

Performance B2.3.1:
• not less than 50 years, B2.3.1
• not less than 15 years and B2.3.1
• not less than 5 years

Compressive strength
ClimaFoam® XPS board is highly resistant to compression and withstands both occasional and long term static loads. The high compressive strength and rigidity of the boards allows a range of ballast materials including gravel, soil and concrete slabs to be used as part of the construction. Load bearing construction elements should be designed to adequately support the combination of imposed and dead loads without creating excessive deflection.

Vapour resistivity
The water vapour resistivity of ClimaFoam® XPS board is estimated to be 625MNs/g.m when tested in accordance with ASTM E96-2010.

Moisture absorption
ClimaFoam® XPS board has an estimated moisture absorption 0.6% by volume when tested in accordance with ASTM C 272 and can be laid in standing water or up against wet concrete with negligible impact on the performance of the product.

Handling and storage
ClimaFoam® XPS board is easy to handle and install. Ensure the board product is not stored close to open flames or other ignition sources and avoid volatile organic compounds and chemicals such as solvents. ClimaFoam® XPS board should not be left exposed to prolonged sunlight as this will result in surface degradation.
## CLIMAFOAM® XPS BOARD

### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Product Code</th>
<th>R-Value (m²K/W)</th>
<th>Thermal conductivity (W/mK)</th>
<th>Thickness (mm)</th>
<th>Width (mm)</th>
<th>Length (mm)</th>
<th>Joint type</th>
<th>Compressive strength (kPa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>450521</td>
<td>1.1</td>
<td>0.028</td>
<td>30</td>
<td>600</td>
<td>1200</td>
<td>Straight</td>
<td>300</td>
</tr>
<tr>
<td>435612</td>
<td>1.4</td>
<td>0.028</td>
<td>40</td>
<td>600</td>
<td>1200</td>
<td>Straight</td>
<td>300</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product Code</th>
<th>R-Value (m²K/W)</th>
<th>Thermal conductivity (W/mK)</th>
<th>Thickness (mm)</th>
<th>Width (mm)</th>
<th>Length (mm)</th>
<th>Joint type</th>
<th>Compressive strength (kPa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>435607</td>
<td>1.1</td>
<td>0.028</td>
<td>30</td>
<td>600</td>
<td>2200</td>
<td>Shiplap</td>
<td>300</td>
</tr>
<tr>
<td>435612</td>
<td>1.8</td>
<td>0.028</td>
<td>50</td>
<td>600</td>
<td>2200</td>
<td>Shiplap</td>
<td>300</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product Code</th>
<th>R-Value (m²K/W)</th>
<th>Thermal conductivity (W/mK)</th>
<th>Thickness (mm)</th>
<th>Width (mm)</th>
<th>Length (mm)</th>
<th>Joint type</th>
<th>Compressive strength (kPa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>434707</td>
<td>1.1</td>
<td>0.028</td>
<td>30</td>
<td>1200</td>
<td>2200</td>
<td>Shiplap</td>
<td>300</td>
</tr>
<tr>
<td>455554</td>
<td>1.4</td>
<td>0.028</td>
<td>40</td>
<td>1200</td>
<td>2200</td>
<td>Shiplap</td>
<td>300</td>
</tr>
<tr>
<td>434706</td>
<td>1.8</td>
<td>0.028</td>
<td>50</td>
<td>1200</td>
<td>2200</td>
<td>Shiplap</td>
<td>300</td>
</tr>
<tr>
<td>463076</td>
<td>2.7</td>
<td>0.028</td>
<td>75</td>
<td>1200</td>
<td>2200</td>
<td>Shiplap</td>
<td>300</td>
</tr>
</tbody>
</table>