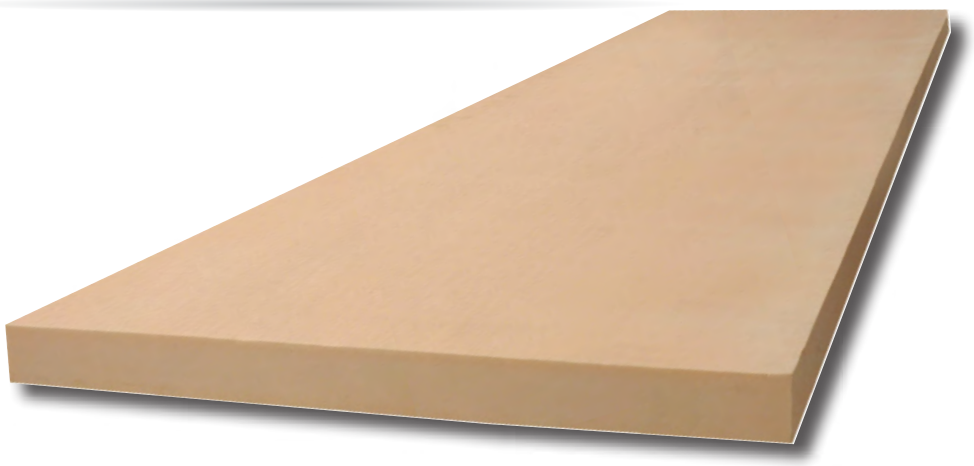
KNAUF INSULATION
it's time to save energy

IMPROVED THERMAL CONDUCTIVITY



August 2015

# ClimaFoam® XPS Board

## For edge beams, green roofs, slabs and cool rooms

**Description**
ClimaFoam XPS Board is a rigid extruded polystyrene (XPS) board. ClimaFoam XPS Board is lightweight with a high compressive strength and are available in ship lap or tongue and groove edges.

**Application**
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

**Thermal**
The thermal conductivity of ClimaFoam XPS Board is 0.028W/mK

## Performance

- Excellent thermal performance
- High compressive strength
- Highly resistant to water absorption
- Lightweight and easy to install
- Tough and durable, not easily damaged
- Dimensionally stable

# ClimaFoam® XPS Board

## 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.

## Standards
ClimaFoam XPS Board is manufactured in accordance with BS EN 13164, EN 16001 Energy Management Systems, OHSAS 18001 Occupational Health and Safety Management Systems, ISO 14001 Environmental Management Systems, and ISO 9001 Quality Management Systems, as certified by Bureau Veritas.

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

ClimaFoam is designed, used and 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 625MNs/g.m when tested in accordance with ASTM E96-2010.

## Moisture absorption
ClimaFoam XPS Board has a 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.

## Specification Guide
The edge beam / green roof / concrete slab / cool room* insulation shall be ClimaFoam® XPS Board R**, **mm thick and 300kPa compressive strength. The product will be manufactured in accordance with BS EN 13164, EN 16001 Energy Management Systems, OHSAS 18001 Occupational Health and Safety Management Systems, ISO 14001 Environmental Management Systems, and ISO 9001 Quality Management Systems, by Knauf Insulation and shall be installed in accordance with the instructions issued by them.

*architect to nominate relevant application.

**architect to insert details of products used.

For more information call 1800 562 834

or visit us online at knaufinsulation.com.au

# ClimaFoam® XPS Board

| Thickness | Thermal conductivity | R-Value | Length | Width | Joint Type | Compressive strength |
|---|---|---|---|---|---|---|
| (mm) | (W/mK) | ($m^2K/W$) | (mm) | (mm) | | (kPa) |
| **ClimaFoam XPS Board - 1200mm wide** | | | | | | |
| 30 | 0.028 | 1.1 | 2200 | 1200 | Shiplap | 300 |
| 40 | 0.028 | 1.4 | 2200 | 1200 | Shiplap | 300 |
| 50 | 0.028 | 1.8 | 2200 | 1200 | Shiplap | 300 |
| 75 | 0.028 | 2.7 | 2200 | 1200 | Shiplap | 300 |
| 100 | 0.028 | 3.5 | 2200 | 1200 | Shiplap | 300 |
| 30 | 0.028 | 1.1 | 2200 | 1200 | T&G | 300 |
| 40 | 0.028 | 1.4 | 2200 | 1200 | T&G | 300 |
| 50 | 0.028 | 1.8 | 2200 | 1200 | T&G | 300 |
| 75 | 0.028 | 2.7 | 2200 | 1200 | T&G | 300 |
| 100 | 0.028 | 3.5 | 2200 | 1200 | T&G | 300 |

| Thickness | Thermal conductivity | R-Value | Length | Width | Joint Type | Compressive strength |
|---|---|---|---|---|---|---|
| (mm) | (W/mK) | ($m^2K/W$) | (mm) | (mm) | | (kPa) |
| **ClimaFoam XPS Board - 1200mm wide** | | | | | | |
| 30 | 0.028 | 1.1 | 2200 | 1200 | Shiplap | 250 |
| 40 | 0.028 | 1.4 | 2200 | 1200 | Shiplap | 250 |
| 50 | 0.028 | 1.8 | 2200 | 1200 | Shiplap | 250 |
| 75 | 0.028 | 2.7 | 2200 | 1200 | Shiplap | 250 |
| 100 | 0.028 | 3.5 | 2200 | 1200 | Shiplap | 250 |
| 30 | 0.028 | 1.1 | 2200 | 1200 | T&G | 250 |
| 40 | 0.028 | 1.4 | 2200 | 1200 | T&G | 250 |
| 50 | 0.028 | 1.8 | 2200 | 1200 | T&G | 250 |
| 75 | 0.028 | 2.7 | 2200 | 1200 | T&G | 250 |
| 100 | 0.028 | 3.5 | 2200 | 1200 | T&G | 250 |

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| Thickness | Thermal conductivity | R-Value | Length | Width | Joint Type | Compressive strength |
|---|---|---|---|---|---|---|
| (mm) | (W/mK) | ($m^2K/W$) | (mm) | (mm) | | (kPa) |
| **ClimaFoam XPS Board - 600mm wide** | | | | | | |
| 30 | 0.028 | 1.1 | 2200 | 600 | Shiplap | 300 |
| 40 | 0.028 | 1.4 | 2200 | 600 | Shiplap | 300 |
| 50 | 0.028 | 1.8 | 2200 | 600 | Shiplap | 300 |
| 75 | 0.028 | 2.7 | 2200 | 600 | Shiplap | 300 |
| 100 | 0.028 | 3.5 | 2200 | 600 | Shiplap | 300 |
| 30 | 0.028 | 1.1 | 2200 | 600 | T&G | 300 |
| 40 | 0.028 | 1.4 | 2200 | 600 | T&G | 300 |
| 50 | 0.028 | 1.8 | 2200 | 600 | T&G | 300 |
| 75 | 0.028 | 2.7 | 2200 | 600 | T&G | 300 |
| 100 | 0.028 | 3.5 | 2200 | 600 | T&G | 300 |

| Thickness | Thermal conductivity | R-Value | Length | Width | Joint Type | Compressive strength |
|---|---|---|---|---|---|---|
| (mm) | (W/mK) | ($m^2K/W$) | (mm) | (mm) | | (kPa) |
| **ClimaFoam XPS Board - 600mm wide** | | | | | | |
| 30 | 0.028 | 1.1 | 2200 | 600 | Shiplap | 250 |
| 40 | 0.028 | 1.4 | 2200 | 600 | Shiplap | 250 |
| 50 | 0.028 | 1.8 | 2200 | 600 | Shiplap | 250 |
| 75 | 0.028 | 2.7 | 2200 | 600 | Shiplap | 250 |
| 100 | 0.028 | 3.5 | 2200 | 600 | Shiplap | 250 |
| 30 | 0.028 | 1.1 | 2200 | 600 | T&G | 250 |
| 40 | 0.028 | 1.4 | 2200 | 600 | T&G | 250 |
| 50 | 0.028 | 1.8 | 2200 | 600 | T&G | 250 |
| 75 | 0.028 | 2.7 | 2200 | 600 | T&G | 250 |
| 100 | 0.028 | 3.5 | 2200 | 600 | T&G | 250 |

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