

CLIMAFOAM® XPS BOARD

May 2018



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:	0.028W/mK.
BENEFITS	
 Excellent thermal performance 	✓ Lightweight and easy to install
 High compressive strength 	✓ Tough and durable, not easily damaged
 Highly resistant to water absorption 	✓ Dimensionally stable.





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ADDITIONAL INFORMATION

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.



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SPECIFICATIONS

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

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

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

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