



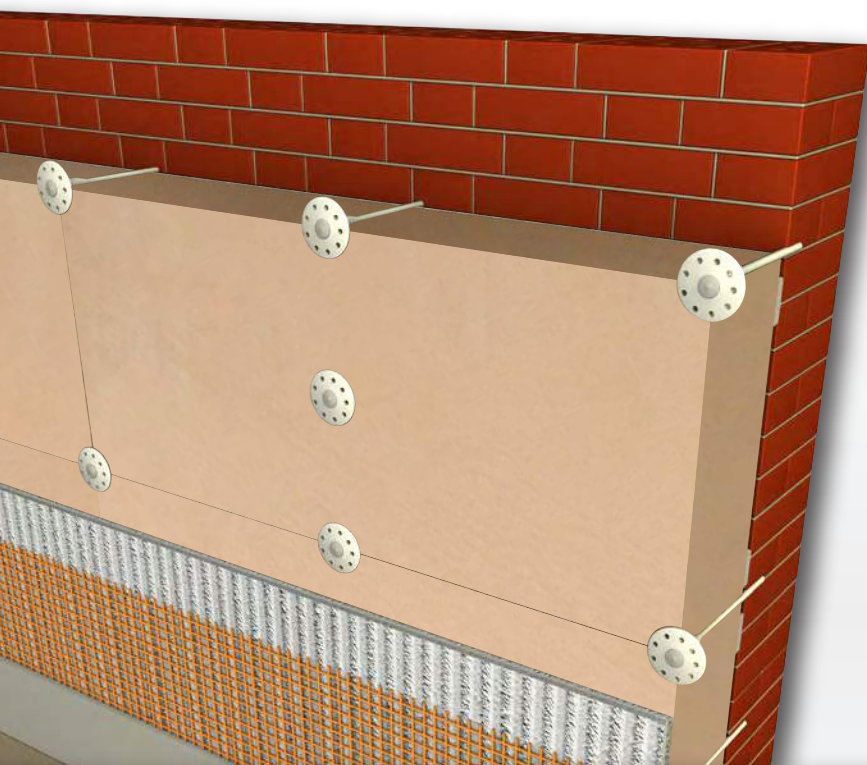
December 2015

ClimaFoam® XPS Board Product Guide

ClimaFoam®

~~EPS~~

Make no mistake,
you need high impact and
water resistance for walls.



Benefits of ClimaFoam XPS Board:

- X High impact resistance
- X High thermal performance
- X Water resistant
- X Long term performance



Strong



Water resistant



Versatile



Lightweight



Thermal



For more information see our website, or scan the QR Code.

knaufinsulation.com.au

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ClimaFoam® XPS Board

Excellent energy efficiency and insulation performance

ClimaFoam XPS Board is one of the strongest and most reliable insulation products that is ideal for tough Australian climatic conditions. Able to resist in wet conditions, high impact loads and extremes of temperature. ClimaFoam XPS Board provides high thermal insulation performance and can be used in areas where other types of insulation are not suitable. ClimaFoam XPS Board has a thermal conductivity rating of 0.028W/mK at 23°C enabling a thinner layer of insulation in thickness constrained application such as cavities and roofs.

High compressive strength

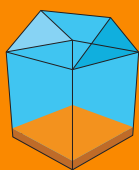
ClimaFoam XPS Board delivers exceptional compressive strength for industrial floors where a designer wants to keep the cold out but retain the high strength for a concrete slab. For buildings such as warehouses and factories, which are being designed to withstand high loads from large vehicles or equipment, ClimaFoam XPS Board has proven long term performance.

Moisture resistance

The moisture resistance of ClimaFoam XPS Boards enables them to be laid exposed to ground water, with negligible impact on thermal performance. They are also ideal for masonry cavities and green roofs where water resistance is important.

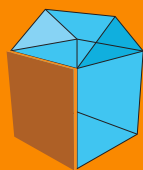


Application Selector



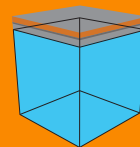
Floors

- Edge beams
- Residential concrete slabs (including heated slabs)
- Cool rooms



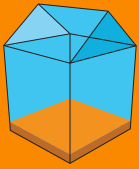
Walls

- Rendered external walls (external insulated facade systems- EIFS)
- Masonry cavity walls



Roofs

- Warm roofs
- Green roofs



Concrete Floors and Edge Beams

Floors can offer excellent thermal performance by incorporating high levels of insulation.

ClimaFoam® XPS Boards are closed cell extruded polystyrene products and therefore are highly resistant to water.

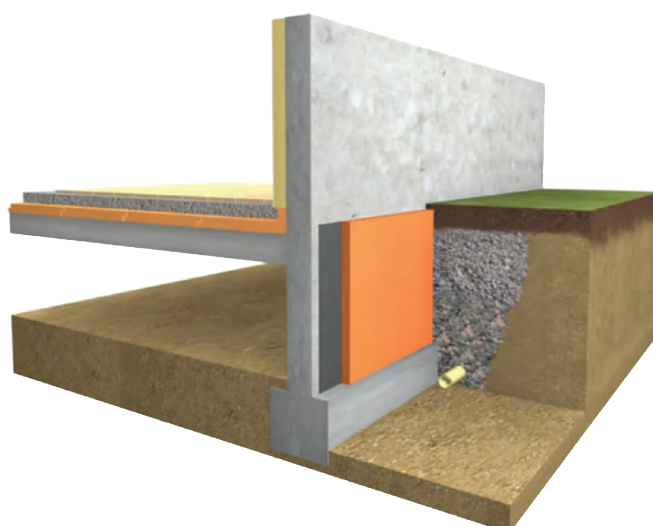


Edge beams

Concrete floors such as slab on ground can be designed using a number of footing types and can offer excellent thermal performance when they incorporate insulation.

Heat loss in winter through the edges of a slab on ground floor can be very high and edge beam insulation can dramatically increase thermal resistance. Applied before the concrete is poured the edge beam insulation should be installed to form a continuous barrier around the slab edge. Earth can be backfilled directly against the insulation.

	Thickness (mm)	Thermal Conductivity (23°C)	R-Value (m ² K/W)	Compressive Strength kPa	Edge	Skin (on/off)	Width (mm)	Length (mm)
1200mm Wide	30	0.028	1.1	300	Shiplap	On	1200	2200
	40	0.028	1.4	300	Shiplap	On	1200	2200
	50	0.028	1.8	300	Shiplap	On	1200	2200
	30	0.028	1.1	250	Shiplap	On	1200	2200
	40	0.028	1.4	250	Shiplap	On	1200	2200
	50	0.028	1.8	250	Shiplap	On	1200	2200

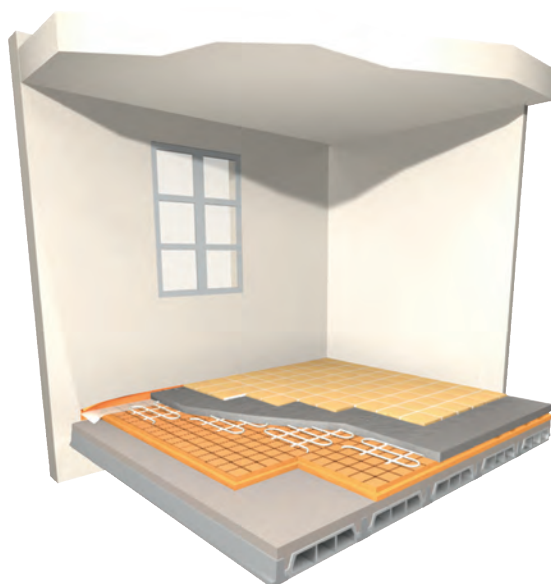


Residential concrete slabs (including heated slabs)

Underfloor heating (hydronic heating) for a concrete floor is a popular build consideration and in order to ensure optimum performance of the heating system, ClimaFoam® XPS Board is an ideal solution as it will help to minimise heat loss and reduce energy costs.

ClimaFoam XPS Board should be applied underneath the concrete slab.

	Thickness (mm)	Thermal Conductivity (23°C)	R-Value (m²K/W)	Compressive Strength kPa	Edge	Skin (on/off)	Width (mm)	Length (mm)
1200mm Wide	50	0.028	1.8	300	Shiplap	On	1200	2200
	75	0.028	2.7	300	Shiplap	On	1200	2200
	75	0.028	2.7	300	Smooth Edge	Off	1200	2200
	50	0.028	1.8	250	Shiplap	On	1200	2200
	75	0.028	2.7	250	Shiplap	On	1200	2200
	75	0.028	2.7	250	Smooth Edge	Off	1200	2200
600mm Wide	50	0.028	1.8	300	Shiplap	On	600	2200
	50	0.028	1.8	250	Shiplap	On	600	2200

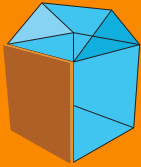


Cool rooms

Cold storage is a long-term and high-return investment, and insulation materials play an extremely important role in cold storage operations. ClimaFoam® XPS Board is a quality insulation material with a closed-cell structure. Its outstanding insulation performance, moisture/freeze-thaw resistance, and excellent compressive strength make it the best choice as a cold storage insulation material.

1200mm Wide	Thickness (mm)	Thermal Conductivity (23°C)	R-Value (m²K/W)	Compressive Strength kPa	Edge	Skin (on/off)	Width (mm)	Length (mm)
	75	0.028	2.7	300	Shiplap	On	1200	2200
	75	0.028	2.7	300	Smooth Edge	Off	1200	2200
	75	0.028	2.7	250	Shiplap	On	1200	2200
	75	0.028	2.7	250	Smooth Edge	Off	1200	2200





Walls

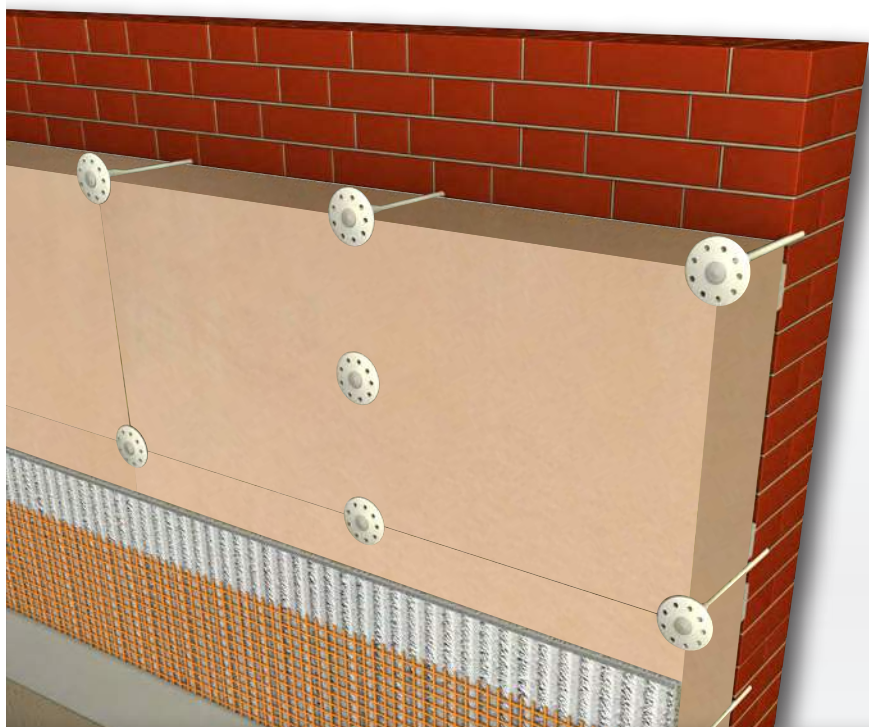
ClimaFoam® XPS Board can be used for external and cavity walls in order to improve the thermal performance of the building.

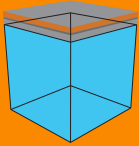


Rendered external walls (external insulated facade systems - EIFS)

ClimaFoam® XPS Board is a very effective solution for the thermal upgrade of external walls due to its lightweight nature and it being easy to handle and quick to install. It can be easily applied with mesh and render and has extra high impact resistance. It is ideal for buildings which require reliable long term thermal performance and high impact resistance to reduce the risk of visible damage to the facade.

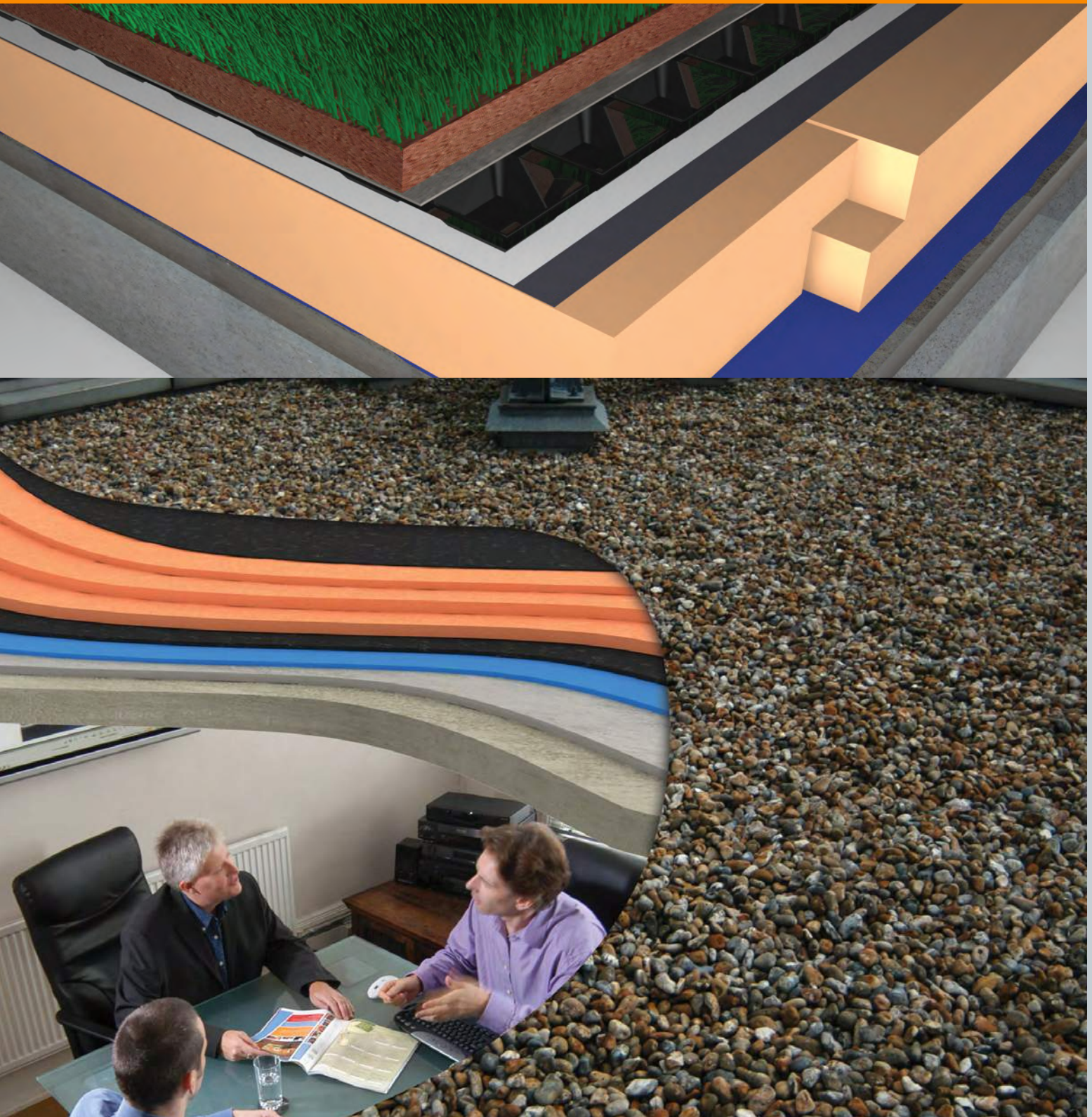
1200mm Wide	Thickness (mm)	Thermal Conductivity (23°C)	R-Value (m²K/W)	Compressive Strength kPa	Edge	Skin (on/off)	Width (mm)	Length (mm)
	75	0.028	2.7	300	Shiplap	On	1200	2200
	75	0.028	2.7	300	Smooth Edge	Off	1200	2200
	75	0.028	2.7	250	Shiplap	On	1200	2200
	75	0.028	2.7	250	Smooth Edge	Off	1200	2200





Roofs

Usually the most exposed surface of the building, the roof must not only be weather-tight and waterproof, but adequately insulated to ensure the specified level of heat loss is achieved. ClimaFoam® XPS Board is the ideal solution across a range of applications and sectors.



Warm roofs

Warm roofs not only provide amenity space for building users and should be designed with materials that have high compression and resistance to water. ClimaFoam® XPS Board is a highly cost effective solution for use in a warm roof system.

	Thickness (mm)	Thermal Conductivity (23°C)	R-Value (m²K/W)	Compressive Strength kPa	Edge	Skin (on/off)	Width (mm)	Length (mm)
1200mm Wide	50	0.028	1.8	300	Shiplap	On	1200	2200
	75	0.028	2.7	300	Shiplap	On	1200	2200
	75	0.028	2.7	300	Smooth Edge	Off	1200	2200
	50	0.028	1.8	250	Shiplap	On	1200	2200
	75	0.028	2.7	250	Shiplap	On	1200	2200
	75	0.028	2.7	250	Smooth Edge	Off	1200	2200
600mm Wide	50	0.028	1.8	300	Shiplap	On	600	2200
	50	0.028	1.8	250	Shiplap	On	600	2200

Green roofs

Green roofs not only provide amenity space for building users and should be designed with materials that have high compression and resistance to water. ClimaFoam® XPS Board is a highly cost effective solution for use in a green or garden roof system. Many green roofs in Europe are incorporating XPS with the Knauf Insulation Urbanscape green roof system, visit www.green-urbanscape.com

	Thickness (mm)	Thermal Conductivity (23°C)	R-Value (m²K/W)	Compressive Strength kPa	Edge	Skin (on/off)	Width (mm)	Length (mm)
1200mm Wide	50	0.028	1.8	300	Shiplap	On	1200	2200
	75	0.028	2.7	300	Shiplap	On	1200	2200
	75	0.028	2.7	300	Smooth Edge	Off	1200	2200
	50	0.028	1.8	250	Shiplap	On	1200	2200
	75	0.028	2.7	250	Shiplap	On	1200	2200
	75	0.028	2.7	250	Smooth Edge	Off	1200	2200
600mm Wide	50	0.028	1.8	300	Shiplap	On	600	2200
	50	0.028	1.8	250	Shiplap	On	600	2200



KNAUF INSULATION

it's time to save energy



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