



BRG

ECOFOAM XPS

BRG ECOFOAM Extruded Polystyrene - XPS - are strong and durable, making it an ideal product for use across a range of construction and building applications and waterproofing Thermal Insulation for building construction – both residential and commercial. With ever increasing realisation of the importance of energy conservation, these properties make XPS a cost-effective building resource where a thermally controlled environment is a design requirement. A resilient and robust construction material boasting a high compressive strength and a superior thermal performance, BRG ECOFOAM XPS is the number one choice for home builders, specifiers, architects and engineers.

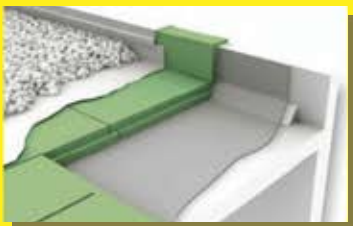
Extruded Polystyrene (XPS) is a high performance rigid extruded polystyrene board used for thermal insulation. It is manufactured using a continuous extrusion method for creating a consistent rigid board free of CFC gases. Unlike other polystyrene products, it has no voids between the cells, so it does not have a 'bead' structure appearance. The process permits accurate control of thermal and mechanical properties, producing very consistent quality material.

This creates a rigid board with no bead structure that can then be sanded and moulded for specific requirements. XPS has higher thermal properties than EPS which makes it the preferred product for thermal insulation in commercial and residential building projects.





Product Uses:



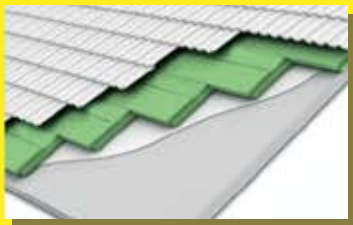
Floor Insulation:

The high compressive strength of BRG ECOFOAM XPS makes it ideal for insulating a wide range of floor constructions, especially those subjected to heavy loads such as warehousing, production areas, and car parks. BRG ECOFOAM XPS can absorb local peak loads as well as adjust to uneven surfaces under pressure. Dimensionally stable, it will also not attract vermin and is resistant to most ground contaminants.



Perimeter Insulation:

BRG ECOFOAM XPS is ideal for perimeter insulation – surrounding the shell of a building without forming any thermal bridges. Perimeter insulation helps a slab retain warmth, further reducing the amount of heat lost through the building's foundations. Suitable for use in pervious, semi-pervious and impervious soils, BRG ECOFOAM XPS extruded polystyrene sheets deliver excellent thermal insulation. Its R-values will also help increase your Energy Efficiency Rating (EER) for a relatively low expenditure.



Inverted Roofs:

As an insulation layer fitted over the waterproofing seal to help protect the membrane from fluctuations in weather conditions, BRG ECOFOAM XPS extruded polystyrene sheets are durable, do not rot or decompose. Its high compressive strength makes it an ideal insulation material for roofs subjected to heavy loads or constant foot traffic.

Features and Benefits:

- High compressive strength to weight ratio
- Low thermal conductivity (high R rating)
- Very low water absorption (<1%)
- Resistance to bacteria and micro-organism growth
- Treated with fire retardant additive
- Eco-friendly – energy savings greatly outweigh the cost
- CFC and HCFC Free Free, and Zero Ozone Depletion
- Easy to shape on site, or for model making with blade or hot wire
- Dust free



Our XPS Boards Come In Various Sizes, With Straight Or Tapered Edges. Density Ranges From 32kg/m³ to 35kg/m³.

Thicknesses available are 25mm, 30mm, 50mm, 75mm and 100mm. Thicknesses up to 50mm have a smooth surface whereas the thicker boards have a rough face to make them more suitable for gluing other substrates to them. Our XPS boards in stock have straight edges on them. Tongue and groove and shiplap edges are available on boards 50mm or thicker by request.



R-value

Nominal R-values (m²K/W) – excluding surface resistance

Sheet thickness	R Value
25mm	0.87
30mm	1.04
50mm	1.74
75mm	2.60
100mm	3.47

Thermal conductivity

for BRG ECOFOAM grades are shown in the reference below	
25mm	k = 0.028 W/mk
30mm	k = 0.028 W/mk
50mm	k = 0.028 W/mk
75mm	k = 0.028 W/mk
100mm	k = 0.028 W/mk

Technical Information

Product name	Thermal conductivity (W/m.°K) 10°C	Compressive strength 10% (Kpa)	Reaction to fire	Water absorption (%)	Thickness tolerance (mm)	Surface
XPS SL	0,034 (30-60 mm) 0,036 (> 60 mm)	300	E	≤ 0,7	+2/-2 (< 50 mm) +3/-2 (≥ 50 mm)	Skin
XPS CR	0,034 (30-60 mm) 0,036 (> 60 mm)	300	E	≤ 0,7	+2/-2 (< 50 mm) +3/-2 (≥ 50 mm)	Skin grooved
XPS TR	0,034 (30-60 mm) 0,036 (> 60 mm)	300	E	≤ 0,7	+2/-2 (< 50 mm) +3/-2 (≥ 50 mm)	Skin
XPS 500	0,034 (30-60 mm) 0,036 (> 60 mm)	500	E	≤ 0,7	+2/-2 (< 50 mm) +3/-2 (≥ 50 mm)	Skin
XPS CW	0,034 (30-60 mm) 0,036 (> 60 mm)	250	E	≤ 0,7	+2/-2 (< 50 mm) +3/-2 (≥ 50 mm)	Skin
XPS PM	0,034 (30-60 mm) 0,036 (> 60 mm)	250	E	≤ 0,7	+2/-2 (< 50 mm) +3/-2 (≥ 50 mm)	Skin
XPS CB (ETICS)	0,034 (30-60 mm) 0,036 (> 60 mm)	300	E	≤ 0,7	+2/-2 (< 50 mm) +3/-2 (≥ 50 mm)	Planed

Applications Table

Product name	Roof insulation	Insulation for walls	Floor insulation
XPS SL	X		X
XPS CR	X		
XPS TR	X		
XPS 500			X
XPS CW		X	
XPS PM		X	
XPS CB (ETICS)		X	



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BRGTM
for better Insulation