PROTEUS PRO-THERM
XPS EXTRA

PRODUCT DATASHEET | V1.1 | OCTOBER 2026

PRODUCT DETAILS

Product name **Proteus Pro-Therm XPS Extra**

Product type Insulation

PRODUCT DESCRIPTION

Proteus Pro-Therm XPS Extra is a rigid but lightweight extruded polystyrene (XPS) board with a compressive strength of 300 kPa and is used in conjunction with the Proteus Low-K water flow reducing layer (WFRL) as part of a Proteus inverted roof system. Boards have shiplap (rebated) edges on all four sides with a 15 mm overlap.

APPLICATION

Proteus Pro-Therm XPS Extra is used for the thermal insulation of inverted warm flat roofs, including roofs designed for zero finished falls (0–1:80) where no back falls are present and the waterproofing system is designed for use with zero falls, including:

- Inverted roofs below ballast or paving slabs
- Green roofs

Proteus Pro-Therm XPS Extra is suitable for use with the following waterproofing membranes as part of an inverted/green roof system:

- Cold Melt®
- Pro-BW® Plus
- Pro-BW® LO
- Proteus Hot Melt®

INSTALLATION

- **Proteus Pro-Therm XPS Extra** is to be laid over the already laid waterproofing membrane
- **Proteus Pro-Therm XPS Extra** can be cut to shape with a fine-toothed saw, a sharp knife or a hot-wire cutter. Trim accurately so joints butt closely and insulation remains continuous
- Loose-lay boards in a break-bond (brick-bond) pattern with the rebated edges fully engaged and joints lightly butted. Leave no gaps at abutments, rooflights, upstands or penetrations
- Use a single layer of rebated boards wherever possible (boards are available up to 300 mm). Where two layers are unavoidable, stagger joints in both directions
- Once the boards are laid, install Proteus Low-K with minimum 300 mm laps in the field area and at all upstands, outlets and penetrations (or seal laps where 300 mm cannot be achieved), in accordance with BS 6229:2025 and the Proteus Low-K datasheet. Apply ballast or paving as work proceeds; ballast must resist the combined effects of wind uplift and flotation, with aggregate sized to resist wind scour

TECHNICAL INFORMATION

Characteristic	Value	Unit	Standard
Moisture absorption by volume	0.9	%	EN 12087
Additional water absorption after freeze/thaw	0.0	%	BS EN 12091
Water vapour resistivity	705	MN·s·g^{-1}·m^{-1}	BS EN 12086
Continuous service temperature limit	+70	°C	-
Reaction to fire	F	Class	BS EN 13501-1

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Characteristic	Value	Unit	Standard
Declared thermal conductivity λ_D	0.031	W/mK	-
Design thermal conductivity λ_U thickness <50mm thickness ≥50mm	 0.033 0.032	W/mK	-
Compressive strength CS(10\Y)300	≥300	kPa	BS EN 826
Colour	Yellow	-	-

SIZES

Thickness mm	Thermal Resistance RD m²·K/W	Length mm	Width mm
50	1.60	1250	600
70	2.25		
100	3.20		
125	4.00		
130	4.15		
150	4.80		
160	5.15		
165	5.30		
180	5.80		
190	6.10		
200	6.45		
215	6.90		
220	7.05		
230	7.40		
245	7.90		
250	8.05		
280	9.00		
300	9.65		

STORAGE AND HANDLING

- Do not store close to open flames or other ignition sources
- Do not allow boards to come into contact with solvents, solvent-based primers, adhesives or sealants, coal-tar products, fuels or oils; these will dissolve or damage polystyrene
- Do not leave boards exposed to prolonged sunlight; this will degrade the surface. For extended outdoor storage, cover with opaque/light-coloured sheeting
- Store flat, off the ground, on a clean level surface. Do not crush edges or corners; discard damaged boards

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MATERIAL

Rigid extruded polystyrene (XPS).

PACKAGING

Supplied in polyethylene-wrapped packs, labelled with product and manufacturing data. Boards per pack vary with thickness.

LIMITATIONS OF USE

For professional use only.

GUARANTEES

Defects arising from lack of maintenance or abnormal use may fall outside of the cover of the Proteus Waterproofing guarantee.

MAINTENANCE

Please refer to our Proteus Maintenance Guide.

GUIDELINES AND STANDARDS

It is the responsibility of the Contractor to thoroughly familiarise themselves with all relevant Codes of Practice and Building Regulations to the works or referred in the specification.

Proteus Waterproofing take no responsibility for misinterpretation or lack of knowledge for third parties.

The works shall be carried out in accordance with the requirements of:

- **BS 6229** Flat roofs with continuously supported flexible waterproof coverings - Code of practice
- **BS 8217** Reinforced bitumen membranes for roofing - Code of practice
- **BS 8000-0** Workmanship on construction sites - Introduction and general principles
- **BS 8000-4** Workmanship on building sites - Code of practice for waterproofing
- **LRWA** Design Guide for Specifiers
- **S2T** Safe to Torch
- **GRO** Code of Best Practice

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