



PRODUCT DETAILS

Product name **Proteus Pro-Therm PIR Torch-On**
Proteus Pro-Therm PIR Foil
Proteus Pro-Therm PIR Tissue

Product type Insulation

PRODUCT DESCRIPTION

Proteus Pro-Therm PIR insulation is manufactured using a high-performance rigid thermoset polyisocyanurate (PIR) and is available for three different application types:

- | | | |
|----------------------|-----------------------|---|
| • Torch on | → with bitumen facing | → Proteus Pro-Therm PIR Torch-On |
| • Mechanically fixed | → with foil facing | → Proteus Pro-Therm PIR Foil |
| • Fully bonded | → with tissue facing | → Proteus Pro-Therm PIR Tissue |

APPLICATION

Proteus Pro-Therm PIR Torch-On provides insulation for flat roofs with partially bonded torch applied multi-layer bituminous waterproofing membranes.

Proteus Pro-Therm PIR Foil provides insulation for flat roofs waterproofed with mechanically fixed single ply waterproofing membranes.

Proteus Pro-Therm PIR Tissue provides insulation for flat roofs with fully adhered single-ply, partially bonded built-up felt, mastic asphalt and cold liquid applied waterproofing membranes.

Each version of **Proteus Pro-Therm PIR** can be applied to the following substrates:

- Concrete
- Timber
- Metal
- Existing waterproofing membranes

INSTALLATION

All substrates should be primed with the appropriate Proteus surface primer prior to installation.

Depending on the system being used, **Pro-Vapour Control/Carrier Membrane SA** or a suitable **Proteus Pro-Felt®** AVCL layer, should be laid over the primed substrate, the side and end laps of which should be sealed and turned up at the roof edges.

Lay the boards over the vapour control layer with the edges butted together, arranging them in a staggered, break-bonded pattern that runs either perpendicular to the roof's edges or diagonally across the roof.

Do not drop boards and use a sharp knife or fine-tooth saw to cut the boards. Always wear eye protection whilst cutting and handling. Damaged boards should not be used.

- Proteus Pro-Therm PIR Tissue**
Should be fully bonded to the **Pro-Vapour Control/Carrier Membrane SA** using **Pro-Bond Foaming**.
- Proteus Pro-Therm PIR Foil**
Should be mechanically fixed to the substrate using suitable fixings. A 50mm countersunk washer should be used with each fixing and the washer must restrain one board only. The suitability of the substrate to accept and retain mechanical fixings must be checked prior to the work commencing.
- Proteus Pro-Therm PIR Torch-On**
Whenever work is interrupted, a night joint must be made to prevent water penetration.

TECHNICAL INFORMATION

Characteristic	Value	Unit
Compressive strength @10%	150	kPa
Reaction to fire	F	-
Density ±15%	37.5	kg/m ³

SIZE, FINISH AND COLOUR

Product Description	Thickness Range mm	Length mm	Width mm	Thermal Conductivity W/m.K		
Pro-Therm PIR Tissue	25	1200	600	0.027 for thickness < 80mm 0.025 for thickness 80 - 120mm 0.024 for thickness > 120mm		
Pro-Therm PIR Tissue	50 - 160	1200	1200			
Pro-Therm PIR Tissue	60 - 160	1200	600			
Pro-Therm PIR Foil	25 - 160	2400	1200			
Pro-Therm PIR Torch On	30 - 160	1200	600			
Each project is designed individually to suit specific needs by our in-house design team Tapered schemes are also available						

SHELF LIFE AND HANDLING

- Store boards in a flat, dry area off the ground away from mechanical damage and sources of ignition
- Boards should be completely covered with weatherproof sheeting
- If boards get wet, they must be replaced or allowed to fully dry naturally before application of the waterproof layer
- The boards must be protected from prolonged exposure to sunlight and should be stored either under cover or covered with opaque polyethylene sheets

MATERIAL

Polyisocyanurate (PIR).

PACKAGING

Packs are stretch wrapped in recyclable polythene.

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.

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](#)