



PRODUCT DETAILS

Product name	Proteus Pro-Felt® Dispersion Underlay
Product type	Felt dispersion underlay

PRODUCT DESCRIPTION

Proteus Pro-Felt® Dispersion Underlay is a waterproofing membrane made of distilled bitumen and elastomeric SBS polymers, with a single strand composite polyester reinforcement. When overlaying, there may be trapped moisture in the existing roof construction. **Proteus Pro-Felt® Dispersion Underlay** has been engineered to bond to **50%** of the surface with bituminous stripes, allowing moisture gases to dissipate under the layer via channels and avoid blistering from gases which expand as they warm up.

APPLICATION

Proteus Pro-Felt® Dispersion Underlay is suitable for use within a warm roof system on the following substrates:

- Concrete
- Asphalt
- Felt

INSTALLATION

Substrate preparation

- Repair substrate defects such as holes, voids, tears, and cracks, using suitable materials
- All loose and friable material must be removed by mechanical means where necessary
- Oil, dust, and debris should be removed by brush and vacuum
- Any defective or decayed areas of the substrate or insulation should be cut out, repaired, and reinstated to provide a solid base
- Surfaces should be sound, clean, dry, free from defects, visible dampness, fungal growth, and corrosion
- Adhesion tests may be required to confirm substrate suitability before installation
- Surfaces should be primed with **Pro-Prime® Bitumen** prior to installation. Contact Proteus for specific information on priming

Installation method

- All lap joints must be overlapped and completely sealed as per the following table:

Lap Dimensions <small>mm</small>	
Side Laps	80
End Laps	100
Upstands	100

Overlaps should be heat welded, ensuring a continuous 5mm bitumen bead extruding from all laps

PROTEUS PRO-FELT® DISPERSION UNDERLAY

- Lay all overlaps with the slope
- Position the membrane sheets staggered, and starting from the lowest point, avoiding creating any overlaps against the slope
- Apply by torch, a 250 mm strip of membrane along all vertical up stands
- Cut the corners of the membrane sheet at a **45°** angle (**100mm x 100mm**)
- Apply the vertical membrane making sure that it overlaps the horizontal one by at least **100mm**, heating it with a gas torch and squeezing it with a trowel until a bead of compound appears from underneath
- The height of the verticals must have an upstand of at least **150mm**
- The second layer of membrane will be applied astride and over the first one, always in the same direction, and approximately **1/4** of its length from the previous sheet
- Bond the **Proteus Pro-Felt® Dispersion Underlay** with a propane gas torch to the substrate. It is necessary to heat the entire surface, except for the side & head laps
- All lap joints must be completely sealed, with a continuous **5mm** bitumen bead extruding from all laps
- Use a suitable roller to apply pressure over the surface of the membrane to ensure adequate adhesion
- On vertical surfaces greater than **2m** or on very sloped substrates, apply suitable mechanical fixings to the head laps ensuring they are then sealed

TECHNICAL INFORMATION

Characteristic	Value	Unit	Standard
Mass per unit area	4	kg/m ²	EN 1849-1
Thickness	4	mm	-
Visible defects	none	-	EN 1850-1
Straightness	<20	mm/10m	EN 1848-1
Watertightness	60	kPa	EN 1928
Watertightness after artificial ageing	60	kPa	EN 1296
Cold flexibility	-20	°C	EN 1109
Flow resistance	+100	°C	EN 1110
Joint strength <small>shear resistance</small>	650/400	N/50 mm	EN 12317-1
Maximum tensile strength <small>L/T</small>	750/500	N/50 mm	EN 12311-1
Elongation <small>L/T</small>	40/40	%	EN 12311-1
Resistance to tearing <small>L/T</small>	150/150	N	EN 12310-1
Resistance to static loading	15	kg	EN 12730
Resistance to impact	1000	mm	EN 12691
Dimensional stability	-0.3	%	EN 1107-1
Reaction to fire	F	-	EN 13501-1

PROTEUS PRO-FELT® DISPERSION UNDERLAY

SIZE, FINISH AND COLOUR

Product Code	Length m	Width m	Weight kg	Finish	Colour
FPFULPDI10	10	1	40	Polypropylene mat	Black

SHELF LIFE AND HANDLING

- The rolls should be stored in an upright position, indoors in a dry and ventilated area, away from heat sources
- Avoid stacking rolls and pallets for storage or transport to avoid possible deformations
- It is recommended to store the product at temperatures above **0°C**
- The materials on stock should be rotated following a first in first out rotation
- Always use relevant safe manual handling techniques relevant to a products size and weight.

MATERIAL

Reinforcement	Single strand composite polyester
Compound	Elastomeric polymer bitumen membrane (SBS)
Upper finish	Polypropylene mat
Lower finish	Polypropylene film and sand in stripes

PACKAGING

Felt rolls wrapped with paper seal.

LIMITATIONS OF USE

For professional use only.

CHEMICAL PROPERTIES, SAFETY GUIDANCE AND DISPOSAL

Please refer to **Proteus Pro-Felt® Dispersion Underlay** [Safety Data Sheet](#).

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](#)