

# PROTEUS PRO-FELT® 3MM PLAIN UNDERLAY



## PRODUCT DETAILS

Product name	<b>Proteus Pro-Felt® 3mm Plain Underlay</b>
Product type	Prefabricated waterproofing membrane

## PRODUCT DESCRIPTION

**Proteus Pro-Felt® 3mm Plain Underlay** is a torch on, elastomeric polymer bitumen membrane. It is composed of distilled bitumen and elastomeric polymers (SBS type) with non-woven spunbonded polyester fabric to provide reinforcement.

## APPLICATION

**Proteus Pro-Felt® 3mm Plain Underlay** is appropriate for use on the following substrates:

- Concrete
- Asphalt
- Felt

**Proteus Pro-Felt® 3mm Plain Underlay** is appropriate for the following uses:

- A Vapour Control Layer
- Refurbishment & New build projects
- **Proteus Pro-Felt®** built-up roof systems
- Upstands and details

## INSTALLATION

### Surface 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
- All details should be primed 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 (mm)	
Side Laps	80
End Laps	100
Upstands	100

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

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- 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 **250mm** 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® 3mm Plain 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
Visible Defects	No	-	EN 1850-1
Thickness	3 ±5%	mm	EN 1849-1
Mass per unit area	3 ±5%	kg/m <sup>2</sup>	-
Straightness	< 20	mm/10m	EN 1848-1
Watertightness	60	kPa	EN 1928
Watertightness after artificial ageing	60	kPa	EN 1296
Maximum tensile strength (L/T)	600/400 ±20%	N/50mm	EN 12311-1
Elongation (L/T)	35/35 ±15%	%	EN 12311-1
Resistance to tearing (L/T)	150/150 ±30%	N	EN 12310-1
Dimensional stability	-0.3	%	EN 1107-1
Cold Flexibility	-15	°C	EN 1109
Flow resistance	100	°C	EN 1110
Joint strength (shear resistance)	500/300 ±20%	N/50mm	EN 12317-1
Resistance to impact	1000	mm	EN 12691
Resistance to static loading	15	kg	EN 12730
Reaction to fire	F	-	EN 13501-1

# PROTEUS PRO-FELT® 3MM PLAIN UNDERLAY



PRODUCT DATASHEET

v1.0 | AUGUST 2024

## SIZE, FINISH AND COLOUR

Product Code	Length (m)	Width (m)	Thickness (mm)	Weight (kg)	Colour
PPFULP0310	10	1	3	30	Black

## SHELF LIFE AND HANDLING

- The rolls are to be stored in an upright position, indoors in a dry, warm, and ventilated area, away from heat sources
- Should the workability of the material deteriorate or become stiff and difficult to install during application, these should be returned to the heated storage area and substituted with new rolls
- Avoid the stacking of rolls and pallets for storage or transport to avoid possible deformations
- It is recommended to store the product at temperatures above **0°C**
- The rolls that are temporarily stored on the roof before application, should be kept elevated by being left on their own pallets and shall be covered and protected from the weather

## MATERIAL

Compound: Elastomeric polymer bitumen membrane  
Reinforcement: Spunbond polyester

## PACKAGING

Felt rolls wrapped with paper seal.

## LIMITATIONS OF USE

For professional use only. The Installation must be done at temperatures  $\geq 5^{\circ}\text{C}$  and stopped in adverse weather conditions.

## CHEMICAL PROPERTIES, SAFETY GUIDANCE AND DISPOSAL

Please refer to **Proteus Pro-Felt® 3mm Plain Underlay** [Material Safety Datasheet](#).

## GUARANTEES

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

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### 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](#)