

PRODUCT DETAILS



Product name **Proteus Pro-Felt® Endura SA Underlay**

Product type Self-adhesive underlay

PRODUCT DESCRIPTION

Proteus Pro-Felt® Endura SA Underlay is a cold-applied, self-adhesive bituminous underlay which is saturated and coated with high quality SBS (Styrene-Butadiene-Styrene) modified bitumen.

APPLICATION

Proteus Pro-Felt® Endura SA Underlay is suitable for use on the following substrates:

- Timber
- Concrete
- Asphalt
- New roofs
- Overlays

Note: Some surfaces may require priming or sacrificial layers.

INSTALLATION

Preparation

- To install the **Proteus Pro-Felt® Endura SA Underlay** membrane correctly, ensure that the surface is dry, free of oil, dust, and other impurities.
- Ambient and surface temperatures during the application should be at least **5°C**
- All substrates, including thermal insulation and detailing areas, should be primed with **Pro-Prime® SA**
- We recommend that self-adhesive membranes such as **Proteus Pro-Felt® Endura SA Underlay** are rolled into position and allowed to settle prior to their application
- If used with **Proteus Pro-Felt® Endura Capsheet**, over suitable insulation, **Pro-Prime® SA** may be omitted in lieu of heat transfer activation, on horizontal work only
- The membrane should always be installed with a minimum **80 mm** joint overlap

Installing the membrane

- Apply by pulling off the bottom separating film whilst simultaneously rolling out the sheet
- Any overlapping membrane at a t-joint connection must have a diagonal cut over the width of the overlapping. The diagonal sheet edge must be cut off with a knife at approximately **45°**
- During the application of **Proteus Pro-Felt® Endura SA Underlay** we recommend using a weighted roll bar or tube to help provide a uniform, strong bond
- After application, the installed membrane should be rolled again to remove any entrapped air and further strengthen the bond with the substrate
- Following the application of **Proteus Pro-Felt® Endura SA Underlay** within a multi layered roofing system, a suitable torch-on cap sheet (e.g. **Proteus Pro-Felt® Endura Capsheet**) must be installed immediately
- When using the membrane as part of a temporary or provisional roof construction the joint overlap must be thermally activated (e.g. with hot air)



Safe-seal lap methodology

- The product's **80 mm** wide side selvedge consists of two key elements:
 - The first **40 mm** of selvedge (inner element) features a self-adhesive release film which, once removed, enables the adjacent membrane to be securely bonded without the need for heat – only a pressure roller is required
 - The outer **40 mm** of the selvedge is then bonded in a traditional manner using either hot air or naked flame, depending on the type of system being installed
- Any overlaps on the mineral chippings must be sealed with a gun or torch (>3000 W).
- All joint overlaps should be unrolled with a draw roll
- During installation it is important to ensure that a visible bead of bitumen exudes from all side and end laps

CERTIFICATION

| Type | Name | Reference |
|------|--------------------------|-----------|
| BBA | Proteus Pro-Felt® Endura | 22/6033 |

TECHNICAL INFORMATION

| Characteristic | Value | Unit | Standard |
|---|---------------|-------------------|------------|
| Length | ≥ 10.00 | m | EN 1848-1 |
| Width | ≥ 1.0 | m | EN 1848-1 |
| Thickness | 3.0 (± 0.1) | mm | EN 1849-1 |
| Mass per unit area | 3.7 | kg/m ² | - |
| Tensile properties: maximum tensile force | ≥ 1000 / 1000 | N/50mm | EN 12311-1 |
| Tensile properties: elongation | ≥ 2 / 2 | % | EN 12311-1 |
| Watertightness | Passed | - | EN 1928-B |
| Flexibility at low temperatures | ≤ -20 | °C | EN 1109 |
| Resistance to thermal distortion | ≥ +90 | °C | EN 1110 |
| Reaction to fire | E | N/A | EN 13501-1 |

SIZE, FINISH AND COLOUR

| Product Code | Length (m) | Width (m) | Weight (kg) | Colour | Finish |
|--------------|---------------|--------------|----------------|------------|--------|
| FTEULSSA10 | 10 | 1 | 41 | Anthracite | Sanded |



SHELF LIFE AND HANDLING

The performance of self-adhesive membranes can be compromised if they are stored incorrectly. Self-adhesive membranes should be stored upright in a cool, dry place and protected from direct sunlight. It is recommended to store the product at temperatures above 0°C.

Avoid the stacking of rolls and pallets for storage or transport as this may cause possible deformations which may compromise a perfect installation.

The product should also be installed within three months of delivery, otherwise the surface must be primed with a suitable primer (please contact Proteus for further details).

MATERIAL

- Reinforcement Glass fibre (**200 g/m²**)
- Compound Self-adhesive elastomeric modified bitumen
- Upper Finish Sand
- Lower Finish Release film

PACKAGING

Proteus Waterproofing felt label tape.

LIMITATIONS OF USE

For professional use only. Care must also be taken when using hot air guns near combustible materials, decorative coatings and heat sensitive materials.

CHEMICAL PROPERTIES, SAFETY GUIDANCE AND DISPOSAL

Please refer to **Proteus Pro-Felt® Endura SA Underlay** [Material Safety Datasheet](#).

Proteus Pro-Felt® Endura SA Underlay is water-resistant and is resistant to watery solutions of salt, diluted non-oxidising acids and bases. Aliphatic and aromatic hydrocarbons, as well as chlorine hydrocarbons, oils and greases may loosen the product and should therefore be avoided.

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](#)