PROTEUS PRO-FELT®
ENDURA AVCL

PRODUCT DATASHEET | V2.1 | NOVEMBER 2024

PRODUCT DETAILS

Product name	**Proteus Pro-Felt® Endura AVCL**
Product type	Air vapour control layer

PRODUCT DESCRIPTION

Proteus Pro-Felt® Endura AVCL is a torch-applied, bituminous vapour control layer which is saturated and coated with high quality SBS (Styrene-Butadiene-Styrene) modified bitumen. It has a **60 g/m²** aluminium and glass fleece reinforcement, a thermofusible polyethylene film on the underside and is finished on the top surface with quartz sand.

The product features an aluminium reinforcement which is resistant to alkali and corrosion.

APPLICATION

Proteus Pro-Felt® Endura AVCL is designed for use as a premium vapour barrier membrane and is ideal for use as part of a high-performance torch-on roofing system.

It can be applied to a wide range of non-combustible substrates, including **metal** and **concrete** decks, subject to use of a suitable primer as required.

INSTALLATION

- Ensure that the surface is dry, free of oil, dust, and other impurities
- When setting out the field area, rolls should always be laid in the same direction
- The **Proteus Pro-Felt® Endura AVCL** membrane must be fully bonded to the prepared substrate by using the torch-on application method
- Ensure that a constant flow of bitumen is maintained across the whole width of the roll and that a continuous bead of bitumen (**5-15 mm**) is exuded from all side and end laps to demonstrate that a good seal has been achieved
- The lower surface has a thermofusible film which rapidly melts during the torching operation
- When addressing an angle where the membrane will change from a horizontal to a vertical configuration, press the product firmly into place and ensure that a full bond is achieved throughout the detail

Lap type	Distance *(mm)*
Side	80
End	100
Upstand/Detail	100
All laps are to be heat welded with a suitable hot air gun or flame torch (dependant on Safe2Torch)	

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TECHNICAL INFORMATION

Characteristic	Value	Unit	Standard
Visible defects	No visible defects	-	DIN EN 1850-1
Length	≥ 7.50	m	DIN EN 1848-1
Width	≥ 1.0	m	DIN EN 1848-1
Straightness	≤ 20	mm/10m	DIN EN 1848-1
Mass per unit area	5.0 (+ 5%)	kg/m²	DIN EN 1849-1
Thickness	3.50 (+ 5%)	mm	DIN EN 1849-1
Watertightness	100	kPa	DIN EN 1928-B
Maximum tensile force	≥ 400/400	N	DIN EN 12311-1
Tensile properties: elongation	≥ 2/2	%	DIN EN 12311-1
Heat resistance	< - 20	° C	DIN EN 1110
Cold bending behaviour	< - 20	° C	DIN EN 1109
Diffusion-equivalent air layer thickness	sd ÿ 1.500	m	DIN EN 1931
Reaction to fire	E	N/A	EN 13501-1

SIZE, FINISH AND COLOUR

Product Code	Length *(m)*	Width *(m)*	Colour	Finish	Weight *(kg)*
FTEVCSTO07	7.5	1	Anthracite	Sanded	37.5

SHELF LIFE AND HANDLING

- The rolls are to be stored in an upright position, indoors in a dry and ventilated area, away from heat sources
- 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

MATERIAL

- Reinforcement — Glass fleece/aluminium composite (**60 g/m²**)
- Compound — Elastomeric modified bitumen
- Upper Finish — Sanded
- Lower Finish — Thermofusible polyethylene

PACKAGING

Wrapped with Proteus Waterproofing felt label tape.

LIMITATIONS OF USE

For professional use only.

Care must be taken when using torches and hot air guns near combustible materials, decorative coatings and heat sensitive materials.

CHEMICAL PROPERTIES, SAFETY GUIDANCE AND DISPOSAL

Please refer to **Section 13** of the **Proteus Pro-Felt® Endura AVCL** Material Safety Datasheet.

GUARANTEES

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

MAINTENANCE

A flat roof should be inspected at least twice yearly; in autumn to ensure it is clear of leaves, dirt and debris, outlets are not blocked and the roof is free draining; in spring to discover and rectify any damage due to weather. Green, blue, and other specialist roofs should be inspected in accordance with the designer's original inspection plan.

Inspections should include the following elements:

- Examination of ceilings for signs of water penetration or condensation followed by examination of external walls, eaves and soffits for signs of movement
- The roof should then be inspected for any signs of damage or displacement of the individual layers of construction including, as appropriate, the waterproofing layer, the thermal insulation, the WFRL, the surface protection and flashings
- The location and extent of any build-up of leaves, moss, plants or debris should be recorded
- The mountings of roof top installations such as safety barriers, fall arrest posts, harness bolts and satellite dishes should be examined to ensure their attachment remains waterproof

Maintenance of a flat roof should involve:

- Removal of all accumulated leaves, dirt and debris
- Clearance of rainwater outlets, downpipes and gutters
- Replacement of any surface protection which has been dislodged or removed and cleaning of vents to the underside of a cold roof.

Repair / Renewal

Should inspection discover the need for repair or replacement of any part of the roof, the work should be undertaken as soon as possible but only after appraisal of the original roof design and assessment of the need for modification or improvement. Repairs should be undertaken using materials and techniques compatible with the original work and, if still under an original guarantee, by the original installer. If it is decided to renew part or all of a flat roof, a full assessment of the design should first be undertaken in accordance with Clauses 4 to 6 of BS 6229. All works of inspection, repair and renewal should be recorded in the owner's building information manual.

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