PROTEUS PRO-FELT® ENDURA AVCL

TECHNICAL DATASHEET

Reference Date:
Version 1.1, May 2023

PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Proteus Pro-Felt® Endura AVCL
PRODUCT TYPE: Felt
PRODUCT/SKU CODE: FTEVCSTO07
PRODUCT DATASHEET REFERENCE: TDS_FTEVCSTO07_Proteus Pro-Felt Endura AVCL_V1.1_110523
COMPANY: Proteus Waterproofing Ltd, 21a Sirdar Road, Brook Road Industrial Estate, Rayleigh, Essex SS6 7XF, United Kingdom
CONTACT NUMBER/EMAIL ADDRESS: +44 (0)1268 777871/ enquiries@proteuswaterproofing.co.uk

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 60g/m2 aluminium and glass fleece reinforcement, a thermofusible polyethylene film on the underside and is finished on the top surface with quartz sand.

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

APPLICATION & USE

Proteus Pro-Felt® Endura AVCL should be installed in accordance with manufacturer recommendations and all relevant national standards and codes of practice, including BS 8217:2005 – the code of practice for reinforced bitumen membranes for roofing.

Roofing contractors should also be fully conversant with the guidelines set out in the National Federation of Roofing Contractors (NFRC) 'Safe2Torch' campaign. All operatives using torch guns or hot air guns during installation should be competent, conversant and capable of using such items in a safe and responsible manner. Care must also be taken when using torches and hot air guns in close proximity to combustible materials, decorative coatings and heat sensitive materials.

In order to install the Proteus Pro-Felt® Endura AVCL membrane correctly, ensure that the surface is dry, free of oil, fat and dust and other impurities. When setting out the field area, rolls should always be laid in the same direction. The width of the side laps should be at least 8 cm with end laps of at least 10 cm. A minimum 5 cm link with the waterproofing layers at all detailing and upstand abutments must also be achieved, with the completed detailing entirely encapsulating the insulation.

The Proteus Pro-Felt® Endura AVCL membrane must be fully bonded to the prepared substrate by using the torch-on application method, ensuring 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.

Proteus Waterproofing Limited
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Brook Road Industrial Estate
Rayleigh
Essex SS6 7XF

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Email: office@proteuswaterproofing.co.uk
www.proteuswaterproofing.co.uk

Registered Office: Charter House, 105 Leigh Road, Leigh-On-Sea, Essex, SS9 1JL I Registered company number: 08458402

PROTEUS PRO-FELT® ENDURA AVCL

MATERIAL

Reinforcement:	Glass fleece/aluminium composite (60g/m²)
Compound:	Elastomeric modified bitumen
Upper Finish:	Sand
Lower Finish:	Thermofusible polyethylene
Intended Use:	Air/vapour control layer
Application Method:	Torch-on

WEIGHT

35kg roll

FINISH & COLOUR

Upper Finish: Sanded

Colour: N/A

PACKAGING

Proteus Waterproofng felt label tape

PACK SIZE/UNIT OF MEASURE

• Rolls sold individually.

• Please refer to the table below in the 'Size & Dimensions' section for more information.

CHEMICAL PROPERTIES

Proteus Pro-Felt® Endura AVCL 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.

For product specific chemical information, please refer to the material safety safety datasheet.

SIZE & DIMENSIONS

Product Name	Product Code	Roll Dimensions (m)	Weight (kg/m²)
Proteus Pro-Felt® Endura AVCL	FTEVCSTO07	7.5 x 1.0	5.0

SHELF LIFE

Not applicable.

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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.

• For information on handling, please refer to the material safety datasheet.

TECHNICAL INFORMATION

Properties	Test Metho		Declared Performance
Length	DIN EN 1848-1	m	≥ 7.50
Width	DIN EN 1848-1	m	≥ 1.0
Straightness	DIN EN 1848-1	mm/10 m	≤ 20
Mass per unit area	DIN EN 1849-1	kg/m²	5.0 (+ 5%)
Thickness	DIN EN 1849-1	mm	3.50 (+ 5%)
Watertightness	DIN EN 1928 Method B	-	passed at 100 kPa
Tensile properties: maximum tensile force	DIN EN 12311-1	N	≥ 400/400
Tensile properties: elongation	DIN EN 12311-1	%	≥ 2/2
Flow resistance at elevated temperatures	DIN EN 12311-1	° C	+ 0
Flexibility at low temperatures	DIN EN 1109	° C	≤ - 20
Water vapour transmission properties	DIN EN 1931	m	sd > 1.500
Reaction to fire	DIN EN 11925-2	-	Class E according to DIN EN 13501-1

ADDITIONAL INFORMATION

KEY FEATURES

• Torch-on application
• Low temperature flexibility at -18°C
• Aluminium reinforced
• SBS modified bitumen
• Rapid, simple installation
• Complies with EN13707:2004

QUALITY ASSURANCE

Proteus Pro-Felt® Endura AVCL is manufactured following ISO 9001: 2008 Quality Management System and Environmental Management System approved to ISO 14001: 2004.

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CODES OF PRACTICE & STANDARDS

1. 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.

2. The works shall be carried out in accordance with the requirements of;

- BS 6229:2018 - Flat roofs with continuously supported flexible waterproof coverings -Code of practice.
- BS 8217:2005 - Reinforced bitumen membranes for roofing Code of practice.
- BS 8000-0:2014 - Workmanship on construction sites - Introduction and general principles.
- BS8000-4:1989 - Workmanship on building sites - Code of practice for waterproofing.
- GRO Green Roof Code of Best Practice - Latest Edition.
- LRWA Design Guide for Specifiers - Latest Issue.
- LRWA Hot Melt Code of Practice - Latest Edition.

- Please refer to Proteus Waterproofing's Technical department for project specifications.

OPERATION

- For professional use only.

SAFETY GUIDANCE

- Use as per Proteus Waterproofing installation instructions/guidance.

- For safety information, please refer to the material safety datasheet.

LIMITATIONS OF USE

- Not applicable.

MAINITENANCE FOR WATERPROOFING

1. 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.
2. Inspections should include the following elements:
   2.1. Examination of ceilings for signs of water penetration or condensation followed by examination of external walls, eaves and soffits for signs of movement;
   2.2. The roof should then be inspected for any signs of damage to, or displacement of, the individual layers of construction including, as appropriate, the waterproofing layer, the thermal insulation, the WFRL, the surface protection and flashings;
   2.3. The location and extent of any build-up of leaves, moss, plants or debris should be recorded; and
   2.4. 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.

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3. Maintenance of a flat roof should involve:
   3.1. Removal of all accumulated leaves, dirt and debris;
   3.2. Clearance of rainwater outlets, downpipes and gutters;
   3.3. Replacement of any surface protection which has been dislodged or removed; and
   3.4. Cleaning of vents to the underside of a cold roof.
4. 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 **BS6229:2018**. All works of inspection, repair and renewal should be recorded in the owner's building information manual.

ADDITIONAL MAINTENANCE REQUIREMENTS

• No additional requirements. See information above.

GUARANTEES

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

DISPOSAL

For information on disposal and environmental hazards, please refer to section 13 of the material safety datasheet.

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