PROTEUS HOT MELT®
CAPSHEET

PRODUCT DATASHEET v1.2 | NOVEMBER 2024

PRODUCT DETAILS

Product name	**Proteus Hot Melt® Capsheet**
Product type	Waterproofing membrane

PRODUCT DESCRIPTION

Proteus Hot Melt® Capsheet is a highly durable polyester reinforced SBS – modified bitumen membrane.

APPLICATION

Proteus Hot Melt® Capsheet is a component of the **Proteus Hot Melt®** system and suitable for the following roof types:

- Inverted flat roofs
- Zero-fall inverted flat roofs
- Warm roofs
- Green roofs
- Blue roofs
- Terraces
- Podiums
- Balconies
- Roof gardens

Proteus Hot Melt® system can be applied to the following substrates:

- Concrete
- Timber

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
- Substrates should be primed with **Pro-Prime® Bitumen** at a nominal **0.2 L/m²** coverage rate (dependent on the substrate porosity) and allowed to dry for between **1 – 3 hours** until completely dry, prior to the installation of the waterproofing membrane
- For substrates with high levels of residual moisture, **Cold Melt® DPM Primer** can be used. Please refer to the **Cold Melt® DPM Primer** Product Datasheet for additional details
- Adhesion tests **is required** to confirm substrate suitability before installation

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Installation

- **Proteus Hot Melt® Compound** blocks are heated in an air jacketed boiler (or a thermostatically controlled bitumen boiler) to a temperature of between **170°C - 180°C**. Overheating and prolonged heating should be avoided
- **Proteus Hot Melt® Force** is unrolled over the primed substrate, with minimum overlaps of **75 mm**
- The heated **Proteus Hot Melt® Compound** is then poured through **Proteus Hot Melt® Force** at an application rate of **3 kg/m²**, to a minimum depth of **3 mm**
- Whilst still hot, roll the **Proteus Hot Melt® Capsheet** or **Proteus Hot Melt® Anti-Root Capsheet** onto the **Proteus Hot Melt® Compound** to complete the waterproofing system
- Excess compound should extrude from the edges of the capsheet by a minimum of **50 mm**
- Capsheet side overlaps minimum **100 mm**
- Capsheet end overlaps minimum **150 mm** and offset by a minimum of **300 mm**
- Capsheet must be fully bonded to the hot melt compound
- This pour and roll method is detailed in **BS 8217**

CERTIFICATION

Type	Name	Reference
BBA	Proteus Hot Melt®	22/6186

TECHNICAL INFORMATION

Characteristic	Value	Unit	Standard
Weight	4.5	kg/m²	-
Thickness	4	mm	-
Dimensional Stability	-0,3	%	EN 1107-1
Cold Flexibility	-20	°C	EN 1109
Flow Resistance	+100	°C	EN 1110
Resistance to Tearing L/T	150/150	N	EN 12310-1
Maximum Tensile Force L/T	600/400	N/50mm	EN 12311-1
Elongation L/T	35/35	%	EN 12311-1
Watertightness	60	kPa	EN 1928
Watertightness After Artificial Ageing	60	kPa	EN 1296
Joint Strength Shear resistance	500/300	N/50mm	EN 12317-1
Resistance to Impact	1000	mm	EN 12691
Resistance to Static Loading	15	kg	EN 12730
Straightness	<20	mm/10m	EN 1848-1
Reaction to Fire	F	-	EN 13501-1
Visible Defects	No	-	EN 1850-1

SIZE, FINISH AND COLOUR

Product Code	Length (m)	Width (m)	Thickness (mm)	Weight (kg)	Colour	Finish
FHMCSS0410	10	1	4	45	Black	Sanded

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
- Always use relevant safe manual handling techniques for product of this size and weight

MATERIAL

Distilled bitumen and elastomeric polymers (SBS) with non-woven spunbonded polyester fabric reinforcement.

PACKAGING

Felt rolls wrapped with paper seal.

LIMITATIONS OF USE

For professional use only.

CHEMICAL PROPERTIES, SAFETY GUIDANCE AND DISPOSAL

Please refer to **Proteus Hot Melt® Capsheet** 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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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