

PRODUCT DETAILS

Product name	Proteus Pro-BW® LO
Product type	Liquid applied waterproofing membrane

PRODUCT DESCRIPTION

Proteus Pro-BW® LO is a low odour, cold applied, fast curing waterproofing system designed to provide a durable, monolithic waterproof protective membrane with slip resistant properties.

The high performance and longevity of **Proteus Pro-BW® LO** system is provided by the combination of the **Proteus Pro-Force** reinforcement and its polyester characteristics.

APPLICATION

Proteus Pro-BW® LO is appropriate for the following substrates:

- Buried decks
- Concrete
- Screeds
- Timber
- Asphalt
- Bituminous felt
- Single ply

Proteus Pro-BW® LO is suitable for use on the following areas:

- Walkways and balconies
- Protected built-up roof
- Inverted built-up roof
- Warm built-up roof
- Warm deck
- Cold deck

Note: Some surfaces may require priming or sacrificial layers.

Electronic leak test is required for all inverted/buried systems prior to the liquid applied membrane being covered.

INSTALLATION

Substrate 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

Substrate quality

- There should not be any deflections in the substrate to avoid the risk of ponding water
- There should be no bond breaking contamination or deformation and no smooth shiny surface patina
- The minimum finished fall must be at least **1:80** in accordance with **BS 6229**, this is to guarantee a proper rainwater runoff

Treatment of cracks and joints

- Cracks and splits greater than **0.5 mm** should be neatly cut out and repaid using an appropriate repair material
- Re-enforce repairs with **Proteus Pro-BW® LO Resin** at **1.25 L/m²** and embed **Proteus Pro-Force 450**
- Whilst wet, add a further **0.25 L/m²** of **Proteus Pro-BW® LO Resin** and allow to cure
- **Proteus Pro-Force 450** should be taken a minimum of **50 mm** either side of the repair and finished with a feathered edge

Priming

Prepare substrates, including verticals and details, with the appropriate primer as detailed below:

Primer	Substrate
Proteus Cold Melt® DPM Primer	Virgin concrete and screeds
Proteus Pro-Epoxy Primer	New asphalt (aged 28 days) and metal surfaces
Proteus Pro-Metal Primer	Metal surface spot priming
Proteus Pro-Sealer WB	Friable and porous surfaces
Proteus Pro-Prime® SA	Use with Proteus Pro-Vapour Control/Carrier Membrane SA
Proteus Pro-Reactivation Primer	Proteus Pro-BW® LO reactivation

Allow primer to cure before proceeding with the application of **Proteus Pro-BW® LO**
Please refer to the individual datasheets for all priming products for coverage rates

Preparation of product

- **Proteus Pro-BW® LO** system consists of individual products that require mixing on site
- **Proteus Pro-BW® LO Accelerator** must be used in colder conditions. It will shorten the pot and curing times, at the same time helping with viscosity and matting embedment.
- When required, thoroughly mix 1 tin of **Proteus Pro-BW® LO Accelerator** into a 10L tin of **Proteus Pro-BW® LO Resin** **before** **Proteus Pro-BW® LO Catalyst** is added

Proteus Pro-BW® LO Accelerator			
Temperature	Requirement	Additive	Per 10L tin of Pro-BW® LO Resin
2°C to 7°C	Must be used	Proteus Pro-BW® LO Accelerator	0.5 L (1 tin)
8°C to 17°C	Optional	Proteus Pro-BW® LO Accelerator	0.5 L (1 tin)
18°C to 30°C	Must not be used	-	-

Proteus Pro-BW® LO Accelerator is not a substitute to **Proteus Pro-BW® LO Catalyst**
Proteus Pro-BW® LO Catalyst will have to be added before product can be used

Proteus Pro-BW[®] LO Catalyst dosage is dependent on the temperature:

Temperature	Additive	Proteus Pro-BW [®] LO Resin			
		10L	7.5L	5L	2.5L
2°C to 7°C	Proteus Pro-BW [®] LO Catalyst	16 pumps	12 pumps	8 pumps	4 pumps
8°C to 17°C	Proteus Pro-BW [®] LO Catalyst	12 pumps	9 pumps	6 pumps	3 pumps
18°C to 30°C	Proteus Pro-BW [®] LO Catalyst	8 pumps	6 pumps	4 pumps	2 pumps

Shake the catalyst before opening, decant using the pump dispenser into the thoroughly mixed resin

Installation methods/tools

- Apply **Proteus Pro-BW[®] LO** immediately after mixing using a medium pile roller or brush
- Details should be locally reinforced with **Proteus Pro-BW[®] LO Resin** and reinforced with **Proteus Pro-Force 450** prior to application of main system, and prepared in the same way as the main substrate using the appropriate primer
- Curing time per coat is approximately **45 minutes to 1 hour**

Embedment Coat coverage rate *	
Smooth Surfaces	1.3 – 1.5 L/m ²
Rough Surfaces	1.5 – 2.0 L/m ²

- Whilst still wet, reinforce with **Proteus Pro-Force 450**, overlapping by a minimum of **75 mm** and allow to cure

Top Coat coverage rate *	
Rough and Smooth Surfaces	0.5 L/m ²

- Upon completion, an optional anti-slip finish can be applied with a maximum overcoating time of **7 days**, after this, cleaning with acetone will be required allowing another **7 days** overcoating period

Skid-inhibiting finish

- Only applicable to main deck, not on ungritted surfaces like verticals
- For maintenance walkways, use masking tape to provide a neat termination of the skid-inhibiting finish. Upon completion, remove masking tape whilst surface is still wet
- Apply an additional coat of **Proteus Pro-BW[®] LO Resin** and whilst wet distribute **Proteus Pro-Quartz Sand**
- Once cured, sweep and remove excess sand, which can be salvaged for future use
- Apply **Proteus Pro-BW[®] LO Sealer** and allow to cure

Skid-inhibiting finish coverage rate *	
Proteus Pro-BW [®] LO Resin	0.5 L/m ²
Proteus Pro-Quartz Sand	2.6 kg/m ²
Proteus Pro-BW [®] LO Sealer	0.2 L/m ²

* Coverage rates can vary depending on the substrate and the environment, this should be assessed on an individual basis by the contractor

Cleaning of Tools:

- Tools and equipment must be cleaned immediately after use with **Proteus Tool Cleaner**

SIZE, FINISH AND COLOUR

Product Code	Product Type	Colour	Diameter (cm)	Height (cm)	Volume (L)
BWLC02	Catalyst	White	11	21	2
BWLC02D	Catalyst dispenser	White	-	-	-
BWLDG10	Resin	Dark Grey	30	25	10
BWLLG10	Resin	Light Grey	30	25	10
BWLS02CL	Sealer	Clear	11	21	2
BWLS02GG	Sealer	Goosewing Grey	11	21	2
BWLS02	Sealer	Graphite Grey	11	21	2
BWLO10A	Accelerator	-	9	10	0.5

SHELF LIFE AND HANDLING

- Shelf life is **12 months** after point of manufacture. Check container for use by date
- Storage area temperature should be between **5°C** and **30°C**, stored off the ground in a covered dry store, and out of direct sunlight. Protect from frost

MATERIAL

Polyester methacrylate.

PACKAGING

Proteus Pro-BW[®] LO is supplied in sealed, labelled tins.

LIMITATIONS OF USE

- For professional use only
- The substrate and ambient temperature should be between **2°C** and **30°C**
- Proteus Pro-BW[®] LO Accelerator** is essential for applications between **2°C** and **7°C**

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 and/or walkway, 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 area 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 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](#)