

PRO-BW[®] PLUS APPLICATION GUIDE

**LIQUID APPLIED WATERPROOFING
MEMBRANE FOR BALCONIES,
WALKWAYS AND FLAT ROOFS**

Design, Develop, Deliver

CONTENTS

Page 3

- 1. Introduction
- 2. System

Page 4

- 3. Preparation

Page 5

Primer Information

Page 6

- 4. Pro-BW® Plus Applications

Page 9

- 5. Limitations

Page 10

Standard Detail Drawings

Page 13

- 6. Safety measures on site
- 7. Legal notes

1. INTRODUCTION

Pro-BW® Plus is a high performance, fast curing, waterproofing system for balconies, walkways and flat roofs. It is designed to provide a durable, monolithic, waterproof protective membrane with slip resistant properties where required. **Pro-BW® Plus** is cold applied and suitable for refurbishment projects; it reduces installation time from days to hours. **Pro-Aggregate EM** provides a slip resistant surface for foot trafficable decks.

For use on:

- Balconies/walkways
- Warm roofs
- Staircases/stairwells/ramps
- Cold roofs
- Inverted roofs

A wet electronic leak test is required when used in all inverted/buried scenarios prior to the waterproofing membrane being covered.

CHARACTERISTICS/BENEFITS

- Temperature application: +3°C to +30°C (can be applied as low as +1°C and rising with added **Pro-BW® Accelerators**)
- Fast application, fast cure
- Same day return to full service may be achieved
- Cold applied
- Seamless finish
- UV stable and colour-fast
- Excellent chemical resistance
- Resilient to crack bridging up to < 0.5mm
- Exceptional wear and waterproofing qualities providing a durable system
- Waterproof, UV stable, seamless and resistant to diluted acids and alkalis, oil, petrol, diesel, vegetable oils and fruit acids
- Can be used for roofs displaying complex detail areas

APPROVALS/STANDARDS

- Waterproofing BBA Certified up to 25 years – 18/5574
- Broof T4 fire tested

REINFORCED ROOF WATERPROOFING

Pro-BW® Plus Base Coat and Top Coat are the same material. The Base Coat is applied in one coat and fully reinforced while wet with **Pro-Force 450**.

After curing, the system is completed with a further coat of **Pro-BW® Plus** Top Coat to achieve the required system Dry Film Thickness.

The anti-slip surface is built up of **Pro-BW® Plus Resin**, **Pro-Aggregate EM** and **Pro-BW® Plus Sealer Coat**. The system working life is up to 25 years.

2. SYSTEM

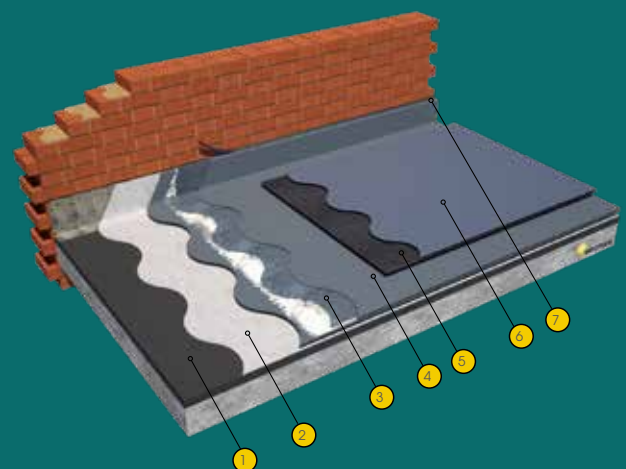
SYSTEM BUILD-UP

All quantities are minimum material use.

Prior to application, all substrates must be clean, dry and free from any oxidation, mould and any other deleterious materials.

Pro-BW® Plus Waterproof System

- | | |
|--|---|
| 1 Substrate | 5 Pro-BW® Plus Resin & Pro-Aggregate EM |
| 2 Pro-Prime® BW | 6 Pro-BW® Plus Sealer |
| 3 Pro-BW® Plus Resin fully reinforced with Pro-Force 450 | 7 Proteus Sealant |
| 4 Pro-BW® Plus Resin Top Coat | |



See table on page 5 to establish if a primer is required. Note, an adhesion test may be required.

3. PREPARATION

3.1 SURFACE PREPARATION AND APPLICATION

General

Prepare and repair the existing surfaces to ensure a sound substrate.

All areas of the roof should be clean, dry, free from dirt, dust, grease and any other friable material. All roof surfaces should be power washed clean at a minimum of 2,000 psi. **Pro-BW® Plus** should not be applied in wet conditions or when rain is imminent. The surface must be free of any visible moisture.

To confirm adequate surface preparation, carry out adhesion tests prior to the application of Proteus Waterproofing products – Substrates must be prepared as stated below:

Exposed Asphalt

- Clean thoroughly all areas to be treated; remove dirt, debris, surface lying water, mould growth and moss, etc. Inspect all surfaces and assess the soundness of existing substrates, including any existing coatings, repairs and any test areas: this verifies compatibility for the proposed coating system and confirms the type of primer.
- All large cracks and voids should be cleaned, v-cut and made good using a suitable fast curing compound (**Proteus Fastfill**), prior to application of local reinforcement.
- Treat any areas of fungal growth or moss with **Biodex Wash** to ensure spores are destroyed. Powerwash to remove residues.
- Any blow holes in the asphalt are to be smoothed out or removed and levelled off using a suitable repair compound, (**Proteus Fastfill**). Allow repairs to cure prior to priming. **Do not repair with new asphalt.**
- Apply catalysed **Pro-Prime® BW** prior to application of **Pro-BW® Plus** system.

Note: Ensure that the surface is clean and dry. Contaminants such as dust, dirt, water or grease may cause the coating system to fail. Adhesion tests may be required prior to **Pro-BW® Plus** applications.

Coated Asphalt

- Clean thoroughly all areas to be treated; remove dirt, debris, surface lying water, mould growth and moss, etc. Inspect all surfaces and assess the soundness of existing substrates, including any existing coatings, repairs and any test areas. This verifies compatibility for the proposed coating system and confirms the type of primer.
- All large cracks and voids should be cleaned, v-cut and made good using a suitable fast curing compound (**Proteus Fastfill**), prior to application of local reinforcement.
- Treat any areas of fungal growth or moss with **Biodex Wash** to ensure spores are destroyed. Powerwash to remove residues.
- Any blow holes in the asphalt are to be smoothed out or removed and levelled off using a suitable repair compound, (**Proteus Fastfill**). Allow repairs to cure prior to priming. Do not repair with new asphalt.
- Apply catalysed **Pro-Prime® BW** prior to application of **Pro-BW® Plus** system.

Note: Ensure that the surface is clean and dry. Contaminants such as dust, dirt, water or grease may cause the coating system to fail. Adhesion tests may be required prior to **Pro-BW® Plus** applications.

Concrete – Aged

The following assumes that the existing concrete is free from structural defects.

- Clean thoroughly all areas to be treated; dirt and debris, surface lying water, mould growth, moss, etc. Inspect all surfaces and assess the soundness of existing substrates, including any existing coatings, repairs and any test areas. This verifies compatibility for the proposed primer required (see priming table).
- All large cracks and voids should be cleaned, v-cut and made good using a suitable fast curing compound (**Proteus Fastfill**), prior to application of local reinforcement.
- Treat any areas of fungal growth or moss with **Biodex Wash**. Wash to ensure spores are destroyed. Powerwash to remove residues.
- Any spalled, loose, unsound concrete or brickwork should be broken out and repaired using a suitable repair mortar.
- All smooth concrete surfaces to be treated should be abraded lightly with suitable equipment (e.g. vacu-blast, diamond disc grind etc) to remove laitance and other impervious matter until a clean, dry and open surface is attained.
- All large non-structural cracks and voids should be cleaned and made good using a suitable repair compound (**Proteus Fastfill**).

- Ensure all surfaces are dry before any products are applied.
- Apply catalysed **Pro-Prime® BW** or **Cold Melt® DPM Primer** prior to application of **Pro-BW® Plus** system.

Note: Ensure that the surface is clean and dry. Contaminants such as dust, dirt, water or grease may cause the coating system to fail.

New Concrete

- All smooth concrete surfaces to be treated should be abraded lightly with suitable equipment (e.g. vacu-blast, diamond disc grind etc.) where necessary to remove laitance and other impervious matter until a clean, dry and open surface is attained.
- For newly laid concrete/screed, follow general guidelines allowing a curing time of at least 28 days. **Cold Melt® DPM Primer** can be applied to new concrete after 3 days as long as it is below 98%.
- Apply catalysed **Pro-Prime® BW** after 28 days or to **Cold Melt® DPM Primer** after 3 days prior to application of **Pro-BW® Plus** system.

Note: Ensure that the surface is clean and dry. Contaminants such as dust, dirt, water or grease may cause the coating system to fail.

Brickwork/Concrete Blocks (Porous/Dry Surfaces)

- Treat any areas of fungal growth or moss with **Biodex Wash** to ensure spores are destroyed. Powerwash to remove residues.
- Any spalled, loose, unsound brickwork should be broken out and repaired using a suitable repair mortar.
- All cracks and voids on the brickwork should be cleaned and made good using a suitable repair compound (**Proteus Fastfill**).
- Wet or saturated substrates should be allowed to thoroughly dry before any products are applied.
- Apply catalysed **Pro-Prime® BW** prior to application of **Pro-BW® Plus** system.

Note: Ensure that the surface is clean and dry. Contaminants such as dust, dirt, water or grease may cause the coating system to fail.

Metal Example (Balustrades, Outlets)

- Abrade metal surfaces free from rust/corrosion.
- Degrease all metal surfaces by wiping **Pro-Tool Surface Cleaner**. Allow to dry.
- Apply **Pro-Metal Primer** to all prepared metal surfaces.

Note: Ensure that the surface is clean and dry. Contaminants such as dust, dirt, water or grease may cause the coating system to fail. All metals require cleaning and degreasing.

Chases

Cut out all new chases ensuring that the new chase is W15mm x D25mm deep. All chases must be cut out before jet washing.

Please refer to the Priming Table below for more information.

PRIMER INFORMATION

| Deck | Adhesion Test | Primer | Unit Size | Single Pack or Two Pack Primer | Minimum Coverage per Unit | Minimum Coverage Rate | Application Temperature |
|---|---------------|-----------------------|-----------------|-------------------------------------|--|-----------------------|-------------------------|
| Exposed Aged Asphalt | NO | Pro-Prime® BW | 5ltr Unit | Single Pack (catalyst) | 25m ² | 0.2ltr m ² | 3° C & Rising |
| Coated Asphalt | YES | Pro-Prime® BW | 5ltr Unit | Single Pack (catalyst) | 25m ² | 0.2ltr m ² | 3° C & Rising |
| Concrete Aged | NO | Pro-Prime® BW | 5ltr Unit | Single Pack (catalyst) | 25m ² | 0.2ltr m ² | 3° C & Rising |
| Green Concrete/Concrete laid within 28 days | YES | Cold Melt® DPM Primer | 2.5/5/10kg Unit | Two Pack Primer | 2.5kg: 6.25m ² 5kg: 12.5m ² 10kg: 25m ² | 0.4kg m ² | 5° C & Rising |
| New Concrete Cured | YES | Pro-Prime® BW | 5ltr Unit | Single Pack (catalyst) | 25m ² | 0.2ltr m ² | 3° C & Rising |
| Porous/Dry Surfaces | YES | Pro-Prime® BW | 5ltr Unit | Single Pack (catalyst) | 25m ² | 0.2ltr m ² | 3° C & Rising |
| Metal | NO | Pro-Metal Primer | 250ml unit | Single Pack - Shake well before use | 0.2ltr m ² | 1.25 m ² | 5° C & Rising |

*Pro-BW® Accelerators can be added to the Pro-Prime® BW to allow temperature application at +1°C

4. PRO-BW® PLUS APPLICATIONS

4.1 APPLICATION TEMPERATURES

The system can be applied within an ambient temperature range between +3°C and +35°C rising. Please refer to the table below for exact details.

The surface temperature must be at least +3°C above dew point during application and curing. (metal surfaces will be more prone to temperature fluctuations occurring and wind chill effects).

Surface Temp +3°C min. above dew point (metal surfaces will be more prone to temperature fluctuations occurring and wind chill effects).

Pro-BW® Accelerators can be added to the **Pro-BW® Plus Resin** and **Pro-Prime® BW** to allow temperature application at +1°C.

Pro-BW® Accelerators are used in the **Pro-Prime® BW** and **Pro-BW® Plus Resin** but not in the **Pro-BW® Plus Sealer**.

Moisture

Relative humidity must be less than 85%. The surface must be protected from moisture until the coating has hardened. Typically, the system will be shower proof within 30 minutes.

The surface temperature will affect how quickly the materials will cure. Cure times may be extended at low temperatures and low humidity.

EQUIPMENT/TOOLS

- Drill & Mixing Paddle
- Retractable Safety Knife
- Extension Pole
- 9" or 12" Roller Cage and Medium Pile Roller Sleeve
- 4" Mini Roller Frame and 4" Roller Sleeve
- 4" or 2" Brushes

PRO-PRIME® BW

Pro-Prime® BW is supplied in 5 litre units and must be mixed with **Pro-BW® Catalyst**. This is used on new or existing substrates before **Pro-BW® Plus Resin** embedment application.

Pro-Prime® BW requires **Pro-BW® Catalyst**. The contents of the kit should be mechanically mixed for 2 to 3 minutes until fully mixed.

The below table is for the catalyst measurements for **Pro-Prime® BW** and **Pro-BW® Plus Resin** required for priming, base coat and top coat applications

| Temperature (°C) | Catalyst Addition (Scoops per Litre) |
|------------------|---|
| * 1 – 10+ | 4 |
| 11 – 20+ | 3 |
| 21 – 30 | 2 |

*Accelerators should be used in temperature range +1°C to +3°C

BASE COAT – Reinforcement

Materials: **Pro-BW® Plus Resin - Mid Grey** – 10.3 Litre Unit & **Pro-Force 450 (450g GFM)** – 20 metre roll

Details

1. Prepare the required sizes/lengths of **Pro-Force 450** for each detail. Tear the reinforcement to give a feathered edge. Set the prepared **Pro-Force 450** aside until this is required.
2. Apply **Pro-BW® Plus Resin** by brush or mini roller at a minimum of 1.5 Ltr/m² onto the desired detail.
3. Place the pre-cut **Pro-Force 450** into the wet **Pro-BW® Plus Resin**. Saturate the **Pro-Force 450** by brush or a mini roller into the wet **Pro-BW® Plus Resin**. Ensure a minimum overlap of 75mm to end and side laps of the **Pro-Force 450** during embedment application.
4. Leave for 5-10 minutes to allow the matting to break down. Once the matting has broken down, form the **Pro-Force 450** into the desired detail until completely encapsulated with the **Pro-BW® Plus Resin**.
5. The embedded details must be left to cure for a minimum of 1 hour before Top Coat can be applied.

Flat Areas (Base Coat):

1. Roll off full lengths of **Pro-Force 450** for the flat areas of the roof – these can be pre-measured. Set the **Pro-Force 450** aside until this is required.
2. Apply **Pro-BW® Plus Resin** with a 9 or 12 inch medium pile roller at a minimum of 1.5 Ltr/m² onto the desired flat roof area.
3. Place the pre-rolled **Pro-Force 450** into the wet **Pro-BW® Plus Resin**, saturate the **Pro-Force 450** with the medium pile roller into the wet **Pro-BW® Plus Resin**. Ensure a minimum overlap of 75mm to end and side laps of the **Pro-Force 450** during embedment application.
4. Leave for 5-10 minutes to allow the matting to break down. Once the matting has broken down, embed the **Pro-Force 450** until completely encapsulated with the **Pro-BW® Plus Resin**.
5. The embedded flat area must be left to cure for a minimum of 1 hour before Top Coat can be applied.

| | Base Coat 10 Year | Base Coat 15 Year | Base Coat 20 Year | Square Meter Per 10.3 Litre Unit |
|--------------------------------|-----------------------|-----------------------|-----------------------|-------------------------------------|
| Exposed Asphalt | 1.5ltr m ² | 1.5ltr m ² | 1.5ltr m ² | 6.86m ² |
| Coated Asphalt | 1.5ltr m ² | 1.5ltr m ² | 1.5ltr m ² | 6.86m ² |
| Felt & Stable Bitumen | 1.5ltr m ² | 1.5ltr m ² | 1.5ltr m ² | 6.86m ² |
| Solar Reflective Paint | 1.5ltr m ² | 1.5ltr m ² | 1.5ltr m ² | 6.86m ² |
| Mineral Felt | 2.0ltr m ² | 2.0ltr m ² | 2.0ltr m ² | 5.15m ² |
| Brittle Bitumen | 1.5ltr m ² | 1.5ltr m ² | 1.5ltr m ² | 6.86m ² |
| Concrete Aged | 1.5ltr m ² | 1.5ltr m ² | 1.5ltr m ² | 6.86m ² |
| Concrete New/Damp | 1.5ltr m ² | 1.5ltr m ² | 1.5ltr m ² | 6.86m ² |
| Dry Brickwork | 1.5ltr m ² | 1.5ltr m ² | 1.5ltr m ² | 6.86m ² |
| Brickwork Porous/Damp | 1.5ltr m ² | 1.5ltr m ² | 1.5ltr m ² | 6.86m ² |
| Metal | 1.5ltr m ² | 1.5ltr m ² | 1.5ltr m ² | 6.86m ² |
| Lead | 1.5ltr m ² | 1.5ltr m ² | 1.5ltr m ² | 6.86m ² |
| Aluminium | 1.5ltr m ² | 1.5ltr m ² | 1.5ltr m ² | 6.86m ² |
| Stainless Steel | 1.5ltr m ² | 1.5ltr m ² | 1.5ltr m ² | 6.86m ² |
| Galvanised | 1.5ltr m ² | 1.5ltr m ² | 1.5ltr m ² | 6.86m ² |
| Pro-Carrier Membrane SA | 1.5ltr m ² | 1.5ltr m ² | 1.5ltr m ² | 6.86m ² |
| PVC Membranes | 1.5ltr m ² | 1.5ltr m ² | 1.5ltr m ² | 6.86m ² |
| EPDM Membrane | 1.5ltr m ² | 1.5ltr m ² | 1.5ltr m ² | 6.86m ² |
| Other Single-ply Membranes | 1.5ltr m ² | 1.5ltr m ² | 1.5ltr m ² | 6.86m ² |
| GRP | 1.5ltr m ² | 1.5ltr m ² | 1.5ltr m ² | 6.86m ² |
| Asbestos Cement | 1.5ltr m ² | 1.5ltr m ² | 1.5ltr m ² | 6.86m ² |
| Existing Proteus Roof Coatings | 1.5ltr m ² | 1.5ltr m ² | 1.5ltr m ² | 6.86m ² |

All coverage rates in the above table are minimum coverage rates and do not allow for wastage.

Embedment Snagging

Before applying the top coat, please check and rectify the below:

- **Pinholes** – Fill with **Proteus Sealant** and allow sealant to cure before over coating with **Pro-BW® Plus Top Coat**
- **Wicking Fibres** – Sand/Cut down before applying **Pro-BW® Plus Resin**
- **Tenting/Voids** – Cut out and re-apply Base Coat (**Pro-BW® Plus** and **Pro-Force**), allow to fully cure before applying the **Pro-BW® Plus Top Coat**.
- **Lack of Pro-BW® Plus (Base Coat)** – Ensure all areas of embedment below the coverage rate are applied with additional **Pro-BW® Plus** to achieve the required thickness.

TOP COAT

Materials: **Pro-BW® Plus - Mid Grey** – 10.3 Litre Unit

Upstands & Flat Areas (Top Coat)

Pro-BW® Plus Top Coat is applied directly to the **Pro-BW® Plus Base Coat**. All embedded details (upstands, pipe penetrations etc.) and flat areas are applied with **Pro-BW® Plus Top Coat** – Apply top coat at the consumption rates, depending upon the system required. See table on following page.

Note: Top Coat is to be applied in straight lines, leaving no runs or raised/puddling areas. Top Coat is to be laid off in one direction, which creates a good finish to the system. Gridding out areas to the required coverage rate/area per tin is advised. Be aware that heavy rain or rain showers can physically mark or damage the Top Coat when in a liquid state.

*Material will dry at the surface in around 30 minutes depending on temperature. Always maintain a wet edge and finish surface as work proceeds – Application to partially dried **Pro-BW® Plus** may disrupt the surface finishes.

APPLICATION TECHNIQUE

Top Coat is to be applied in straight lines, leaving no runs or raised/puddling areas. Top Coat is to be laid off in one direction, which creates a good finish to the system. Gridding out areas to the required coverage rate/area per tin is advised. Be aware that heavy rain or rain showers can physically mark or damage the Top Coat when in a liquid state.

*Material will dry at the surface in around 30 minutes depending on temperature. Always maintain a wet edge and finish surface as work proceeds – Application to partially dried Pro-BW® Plus may disrupt the surface finishes

TOP COAT

INVERTED ROOFS / WARM ROOFS / COLD ROOFS

Top Coat – To all cured Pro-BW® Plus Base Coat apply Pro-BW® Plus Resin at a minimum of 0.5 l/m² to all surfaces.

ANTI-SLIP SURFACE APPLICATION

BALCONIES / WALKWAYS / STEPS / MAINTENANCE ROUTES / FIRE ROUTES etc.

Slip Resistant Coat – Apply Pro-BW® Plus Resin at a minimum of 0.5 l/m² to all surfaces to be trafficked. While wet, fully broadcast Pro-Aggregate EM (0.5mm – 1.0 mm) at a minimum of 2-3 kg/m² and allow to cure. Once cured, remove all excess and loose Pro-Aggregate EM. All areas to have the slip resistant coat should be masked off with tape prior to application. Remove the tape while the coating is still wet.

Anti-Slip Sealer Coat – Apply Pro-BW® Plus Sealer over the Pro-Aggregate EM areas at a minimum of 0.5 l/m². All areas to have the Pro-BW® Plus Sealer coat should be masked off with tape prior to application. Remove the tape while the coating is still wet.

MIXING

- Pro-BW® Plus Resin is supplied in 10.3 litre units and must be mixed with Pro-BW® Catalyst. The Pro-BW® Plus Resin is used for the embedment and top coat applications. Pro-BW® Plus Resin is also used for the anti-slip application to bond the Pro-Aggregate EM.
- Pro-BW® Plus Sealer is supplied in 9.6 litre units and must be mixed with Pro-BW® Catalyst. This is used to encapsulate the Pro-Aggregate EM and provides the anti-slip finish.
- For both Pro-BW® Plus Resin and Pro-BW® Plus Sealer, add Pro-BW® Catalyst. The contents of the kit should be mechanically mixed for 2 to 3 minutes until fully mixed.
- Pro-BW® Catalyst – The required quantity of Pro-BW® Plus Resin and Pro-BW® Plus Sealer should be poured into a calibrated unit. Pro-BW® Catalyst can then be added to the Pro-BW® Plus Resin and Pro-BW® Plus Sealer. NB. The minimum level of catalyst is 2% (2 measuring scoops) per litre of Pro-BW® Plus Resin and Pro-BW® Plus Sealer – Temperature depending.
- Pro-BW® Primer also requires Pro-BW® Catalyst.

The below table is for the catalyst measurements for Pro-BW® Plus Resin and Pro-BW® Plus Sealer required for the anti-slip surface applications:

| Temperature (°C) | Catalyst Addition (Scoops per Litre) |
|------------------|---|
| * 1 – 10+ | 4 |
| 11 – 20+ | 3 |
| 21 – 30 | 2 |

*Accelerators should be used in temperature range +1°C to +3°C

**Pro-BW® Accelerators cannot be added or used In Pro-BW® Plus Sealer

5. LIMITATIONS

- Do not apply **Pro-BW® Plus** on substrates with rising moisture.
- On substrates likely to exhibit out-gassing, apply during falling ambient and substrate temperature. If applied during rising temperatures 'pin holing' may occur from rising air.
- Do not dilute **Pro-BW® Plus** with any solvent.
- Do not use **Pro-BW® Plus** for indoor applications.
- Do not apply close to the air intake vent of a running air conditioning unit.
- Do not apply **Pro-BW® Plus** directly on Insulation boards. Instead use **Pro-Carrier Membrane SA** between Insulation board and **Pro-BW® Plus** system.
- Volatile bituminous materials may stain and/or soften below the coating.
- Areas with high movement, irregular substrates, or timber-based roof decks require a complete layer of **Pro-Carrier Membrane SA**.

Terminations

Chases:

Cut out all new chases ensuring that the new chase is W15mm x D25mm deep. All chases must be cleaned and dust free prior to coating. Dress the **Pro-BW® Plus** Base and Top Coat into the prepared chase. Seal the chase with **Proteus Sealant** or a sand and cement pointing once the coating has fully cured.

Lead Flashings:

Pull existing or new lead flashings up to allow **Pro-BW® Plus** application. Dress the **Pro-BW® Plus** up the upstand by a minimum of 150mm under the lead flashing. Once **Pro-BW® Plus** is fully-cured, dress down the lead flashings.

Termination Bars:

Bed a Termination Bar into **Proteus Sealant** and mechanically fix the bar at 300mm centres. Apply a bead of **Proteus Sealant** to the top of the Termination Bar to achieve a complete seal.

Render Stop, Coping Stones:

Dress the **Pro-BW® Plus** up to the underside of the render stop bead or coping stone overhang. Once **Pro-BW® Plus** is fully cured, seal off with a bead of **Proteus Sealant**.

Window Cills or Door Threshold:

Apply **Pro-BW® Plus** to the underside the window cill or door threshold. Ensure the **Pro-BW® Plus** is applied to a minimum height of 150mm above the finished waterproofing level. Seal with **Proteus Sealant**.

Pipes and Penetrations:

Apply the **Pro-BW® Plus** to pipes and penetrations by a minimum of 150mm above the finished waterproofing. Once **Pro-BW® Plus** is fully-cured, install a stainless-steel jubilee clip around the collar of the **Pro-BW® Plus** finished edge.

Eave & Pitched Roof Tiles:

Remove bottom tile courses and set tiles aside to allow any lay-board extension to achieve the required height. Any new timber extension will require a **Pro-Carrier Membrane SA** overlay. Apply **Pro-BW® Plus** and when fully cured, reinstate the tiles to cover the **Pro-BW® Plus** applied.

Rainwater Outlets:

Remove all leaf guards/clamping rings located in/over the outlet. Prime if required and dress the **Pro-BW® Plus** into the outlet. Once fully-cured, reinstate the clamping ring and/or leaf guard.

Perimeter Edge Trim:

Fix a new **Proteus Edge Trim** of a required depth to the perimeter edge. The trims are to be mechanically fixed with screws at 300mm centres. A trim insert is to be placed behind the trim between each section joint.

The **Pro-BW® Plus** is to be terminated tightly into the top lip of the trim and, once fully cured, this will need to be sealed off with **Proteus Sealant**.

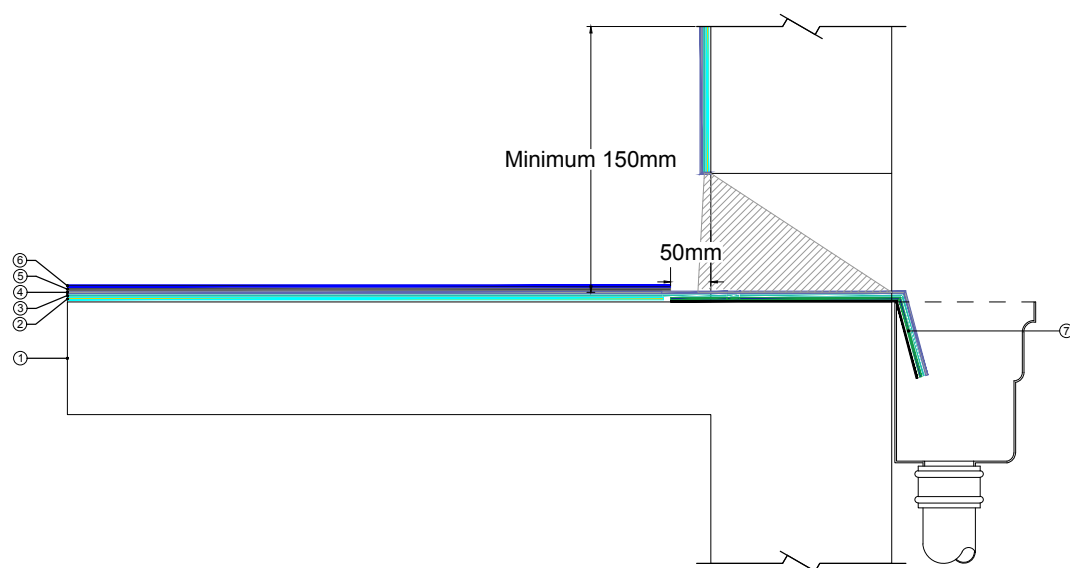
Perimeter Drip Trim:

Fix a new **Proteus Drip Trim** of a required depth to the perimeter edge. The trims are to be mechanically fixed with screws at 300mm centres. Apply **Pro-BW® Plus** to the roof area and fully encapsulate the trim, terminating tightly at the bottom of the drip edge.

Standard Detail Drawings

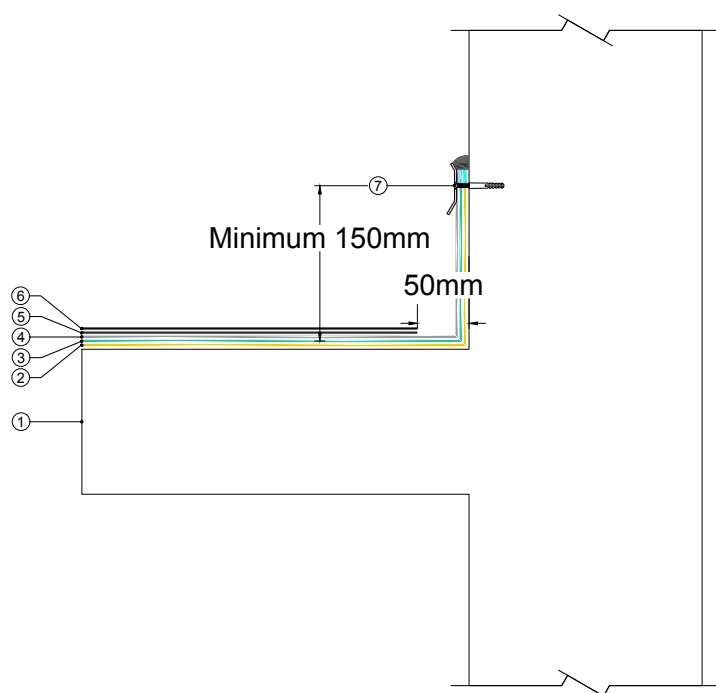
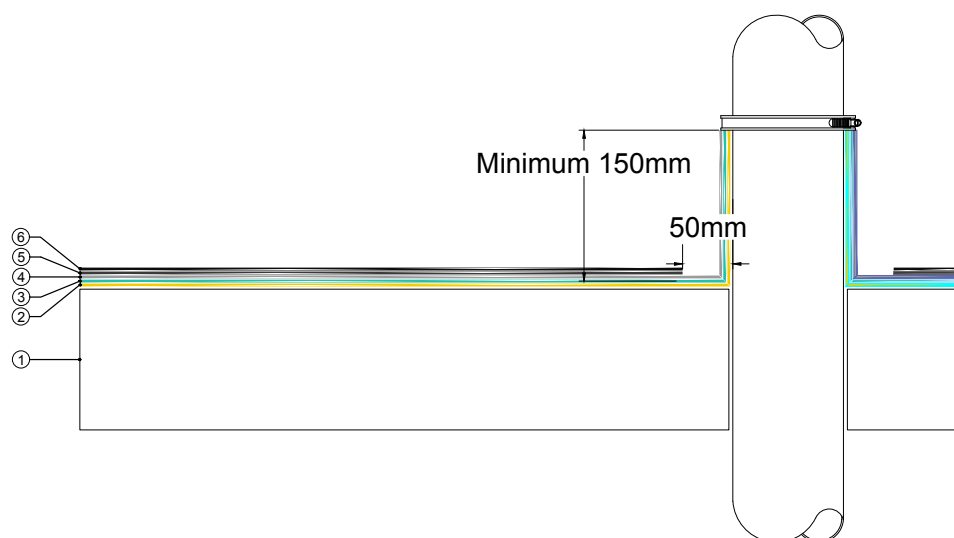
Drainage Internal Outlet

- ① Existing deck/substrate; for timber substrates, install Pro-Carrier Membrane SA
- ② Pro-Prime® BW
- ③ Pro-BW® Plus Resin Embedment with Pro-Force 450
- ④ Pro-BW® Plus Resin Top Coat
- ⑤ Pro-BW® Plus Resin with Pro Aggregate EM (slip resistant finish)
- ⑥ Pro-BW® Sealer
- ⑦ Pro-Metal Primer



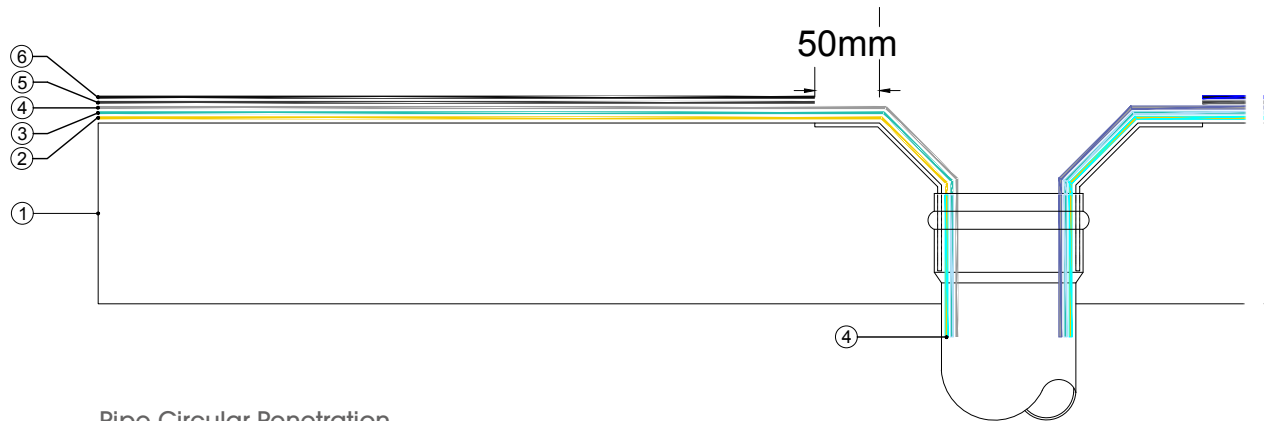
Pipe Circular Penetration

- ① Existing deck/substrate; for timber substrates, install Pro-Carrier Membrane SA
- ② Pro-Prime® BW
- ③ Pro-BW® Plus Resin Embedment with Pro-Force 450
- ④ Pro-BW® Plus Resin Top Coat
- ⑤ Pro-BW® Plus Resin with Pro Aggregate EM (slip resistant finish)
- ⑥ Pro-BW® Sealer








Uprand Termination Bar






- ① Existing deck/substrate
- ② Pro-Prime® BW
- ③ Pro-BW® Plus Resin Embedment with Pro-Force 450
- ④ Pro-BW® Plus Resin Top Coat
- ⑤ Pro-BW® Plus Resin with Pro Aggregate EM
- ⑥ Pro-BW® Sealer
- ⑦ Proteus Termination Bar with Proteus Sealant

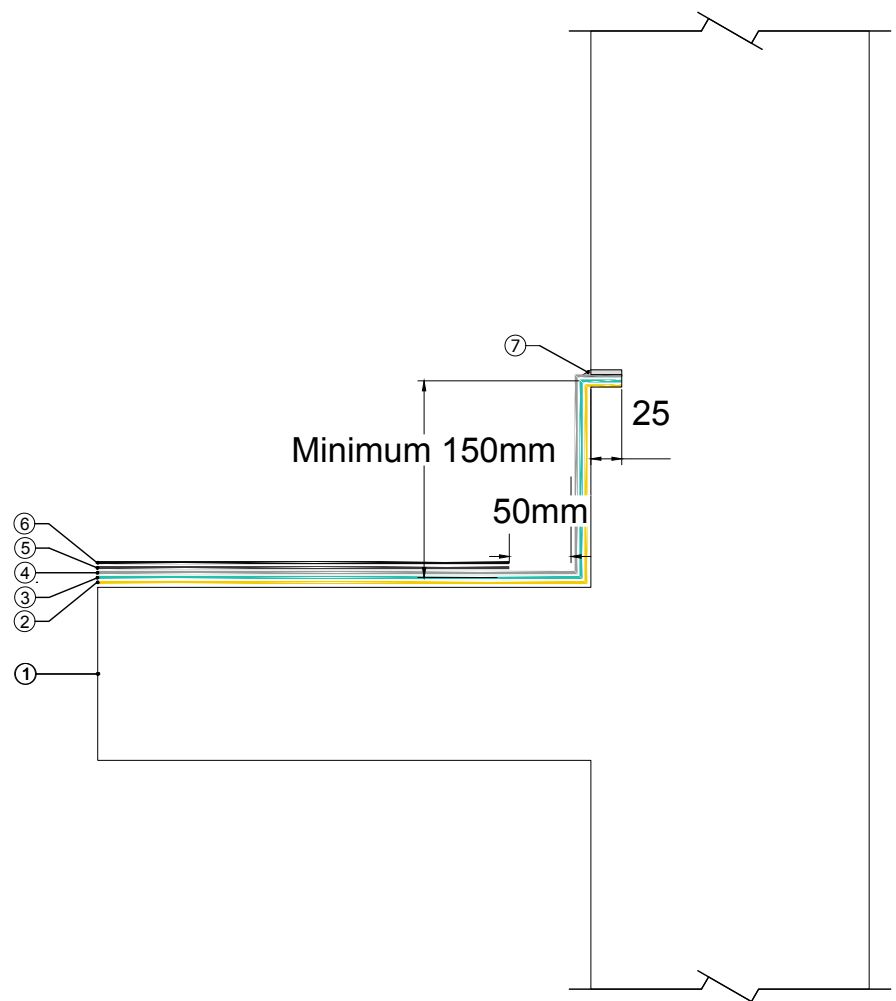


Pipe Circular Penetration

- 1 Existing deck/substrate
- 2  Pro-Prime® BW
- 3  Pro-BW® Plus Resin Embedment with Pro-Force 450
- 4  Pro-BW® Plus Resin Top Coat
- 5  Pro-BW® Plus Resin with Pro Aggregate EM
- 6  Pro-BW® Sealer

Chase

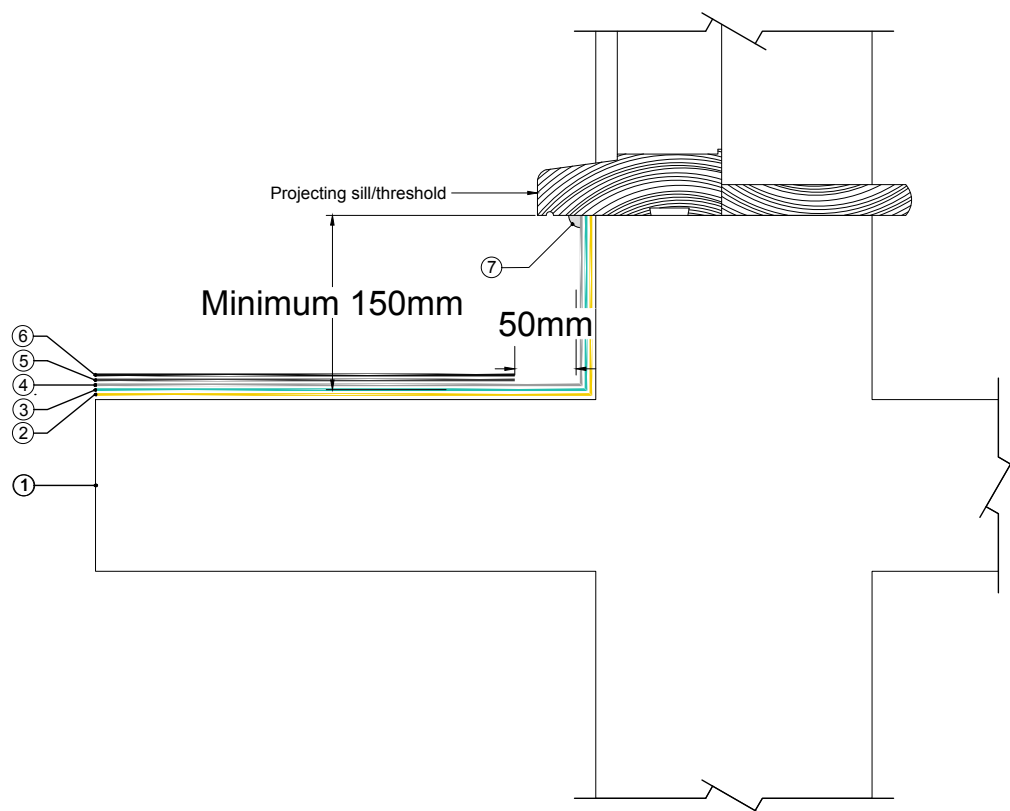
- Existing deck/substrate;
for timber substrates, install
Pro-Carrier Membrane SA
-  Pro-Prime® BW
-  Pro-BW® Plus Resin Embedment
with Pro-Force 450
-  Pro-BW® Plus Resin Top Coat
-  Pro-BW® Plus Resin with
Pro Aggregate EM (slip resistant finish)
-  Pro-BW® Sealer
- Chase detail sealed with
Proteus Sealant



Standard Detail Drawings

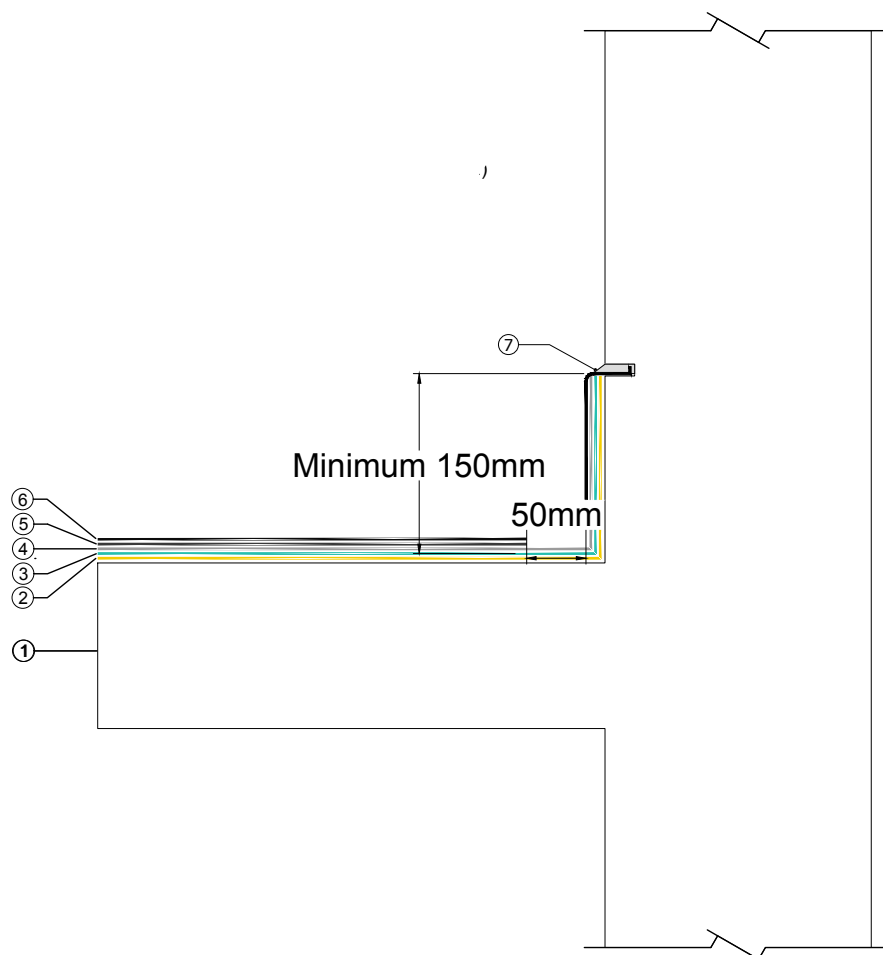
Projecting threshold

- ① Existing deck/substrate;
for timber substrates; install
Pro-Carrier Membrane SA
- ② Pro-Prime® BW
- ③ Pro-BW® Plus Resin Embedment
with Pro-Force 450
- ④ Pro-BW® Plus Resin Top Coat
- ⑤ Pro-BW® Plus Resin with
Pro Aggregate EM (slip resistant finish)
- ⑥ Pro-BW® Sealer
- ⑦ Waterproofing terminating at sill and
sealed with Proteus Sealant



Lead Flashing

- ① Existing deck/substrate;
for timber substrates, install
Pro-Carrier Membrane SA
- ② Pro-Prime® BW
- ③ Pro-BW® Plus Resin Embedment
with Pro-Force 450
- ④ Pro-BW® Plus Resin Top Coat
- ⑤ Pro-BW® Plus Resin with
Pro Aggregate EM (slip resistant finish)
- ⑥ Pro-BW® Sealer
- ⑦ Waterproofing terminating at sill and
sealed with Proteus Sealant



6. SAFETY MEASURES ON SITE

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent material safety datasheet containing physical, ecological, toxicological and other safety-related data.

Personal Protection:

The following protective equipment is essential for anyone working with **Pro-BW® Plus**.



In addition to **Pro-BW® Plus** clothing it is also recommended to use a barrier cream on the skin. The use of a barrier cream is more useful and effective than often reputed. They are inexpensive, convenient, and **Pro-BW® Plus** well if they are not frequently flushed with solvents. However, barrier creams are only a supplement and are not a replacement for **Pro-BW® Plus** gloves, so always wear gloves. Always ensure there is no contamination inside gloves before reusing them.

Eye **Pro-BW® Plus** must be worn. In the event of any spillage or contact into the eyes, always rinse and clean the eyes with clean water. seek medical advice immediately.

Ensure sufficient ventilation during application in closed or confined spaces. Dependent on local regulations respiratory masks may be required. Please observe all relevant local regulations.

Hard hats, safety shoes and ear **Pro-BW® Plus** are required on construction sites. Please observe all necessary requirements

Wash any exposed skin during the workday. If any liquid applied product contacts the skin, it must be washed immediately. Avoid using solvents to clean yourself as they are harmful to the skin and can penetrate the liquid deeper into the skin.

Adequate clean water should always be available. If water is not available, clean the contamination with sand instead. Certain hand cleaners also work without harmful effects, for example, citrus skin cleaners are effective and mild. Using soap and water will take time but will eventually work for small areas.

A professional eyewash kit should also be available to use during the application process.

7. LEGAL NOTES

The information and recommendations relating to the application and use of Proteus products are given in good faith based on Proteus' current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Proteus Waterproofing's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability, or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose.

Proteus Waterproofing reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

Design, Develop, Deliver

Manufactured in the UK and Europe, Proteus Waterproofing is an innovative and fast growing company in the waterproofing market. Proteus Waterproofing is a single source systems supplier, with an array of hot and cold-applied waterproofing and protection systems. The company's comprehensive product range is suitable for high performance roofing, balconies, walkways and car parks. It offers a vast range of systems, that have been engineered to meet the harshest of weather conditions and provide a lasting and robust waterproofing solution, in both refurbishments and new builds.

Experts in all forms of liquid applied and bituminous membrane roofing and waterproofing, Proteus Waterproofing is adaptable to each client's individual needs and circumstances, and offers long-term performance product reliability and a simple installation as standard.

Total Peace of Mind

Proteus Waterproofing roofing systems are tested to the most rigorous international standards, ensuring they will outperform the initial design life. This will give your project a durable, reliable and long-lasting waterproofing finish, that will last for many years to come, providing excellent value to clients and building owners.

Guaranteed Performance

Proteus Waterproofing presents clients with a robust choice of guarantees for its bespoke systems, from an offer that also incorporates enhanced independently-backed warranties, for total peace of mind.

For further information, please contact Proteus Waterproofing to discuss the most suitable option to meet your requirements.



Proteus Waterproofing Limited

21a Sirdar Road
Brook Road Industrial Estate
Rayleigh, Essex SS6 7XF
T: +44 (0) 1268 777871

Date: 10/25

enquiries@proteuswaterproofing.co.uk
www.proteuswaterproofing.co.uk

   @Proteus_UK

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

Proteus Waterproofing's range of lasting and robust systems includes:

- ⌘ *Liquid applied waterproofing: Cold Melt®, Proteus Pro-Cold®, Proteus Hot Melt®*
- ⌘ *High performance felts: Proteus Pro-Felt® Ultima Plus, Extra Plus, Endura, Endura AIRdhesive*
- ⌘ *Balconies and walkways: Pro-BW® Plus, Pro-BW® LO, Cold Melt®*
- ⌘ *Technical Insulation Design: Proteus Pro-Therm*
- ⌘ *Coating Protection: Pro-Cryl®*
- ⌘ *Exterior walls waterproofing; Monosil, Monodex, Monodex Textured*

The Proteus Waterproofing Specification includes:

- ⌘ *On-going technical support*
- ⌘ *Comprehensive guarantees*
- ⌘ *Free roof evaluation service*
- ⌘ *Roof condition surveys, reports, and bespoke specifications*
- ⌘ *Expert advice on low maintenance solutions*
- ⌘ *Site survey and design stage involvement*
- ⌘ *Thermal value calculations to building regulations*
- ⌘ *Part 'L' Tapered insulation scheme design*
- ⌘ *Wind uplift calculation*
- ⌘ *Building regulations Part B (fire) compliance options*

The Proteus Waterproofing service package includes:

- ⌘ *Detailed specifications calculation*
- ⌘ *National contractor base*
- ⌘ *Technical manager inspections throughout the project installation and sign off*

