Proteus
WATERPROOFING

PROTEUS PRO-COLD®
APPLICATION GUIDE

LIQUID APPLIED WATERPROOFING MEMBRANE FOR FLAT AND PITCHED ROOFS

Design, Develop, Deliver

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1. INTRODUCTION

This method statement outlines the step-by-step procedure for the application of **Proteus Pro-Cold®** liquid applied membrane for waterproofing flat and pitched roofs.

Proteus Pro-Cold® is a single pack, high performance, seamless and cold-applied waterproofing membrane for flat roofs, pitched roofs and a waterproofing coating to Proteus' Built-Up Roof systems.

Once cured, it provides seamless waterproof protection, making it suitable for use in all climates. **Proteus Pro-Cold®** does not brittle with age. It is a moisture curing polyurethane system that can cure under water without gassing or foaming. It also becomes quickly resistant to rain damage without loss of performance.

APPROVALS/STANDARDS

- LABC Certified
- Broof T4 fire tested

CHARACTERISTICS/BENEFITS

- Cold applied – eliminating the risk of fire
- Totally seamless membrane
- Elastomeric – retains flexibility even at low temperatures
- Single pack application – ready to use, no mixing necessary
- Fully reinforced using Pro-Force (225gsm GFM)
- Delivers cost efficient life cycle extension of failing roofs
- Good adhesion to most substrates
- Shower proof – typically the system will be shower proof within 30 minutes
- Can be used for roofs displaying complex detail areas, even when accessibility is limited.

REINFORCED ROOF WATERPROOFING

Proteus Pro-Cold® 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.

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

The system working life is up to 20 years.

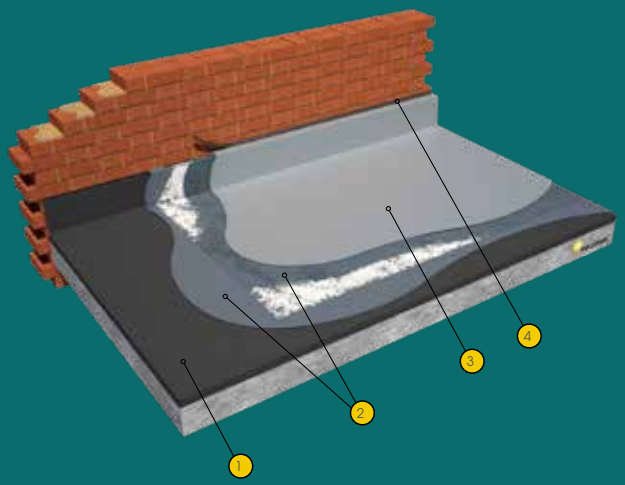
2. SYSTEM

SYSTEM BUILD-UP

All quantities are minimum material use

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

Proteus Pro-Cold® Waterproof System for Flat or Pitched Roofs.



1. Substrate
2. Proteus Pro-Cold® Slate Grey Embedment Coat with Pro-Force
3. Proteus Pro-Cold® Light Grey Top Coat
4. Proteus Sealant

Please see table on page 6 to establish if a primer is required. Please 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 loose aggregate removed. All roof surfaces should be power washed clean at a minimum of 2,000 psi. **Proteus Pro-Cold®** 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:

Asphalt

Remove, scrape and sweep away bulk of contamination, then clean any remaining contamination by power washing at a minimum of 2000 psi. All major cracks/blisters/slumping should be made good/repaired with Proteus Fastfill (**DO NOT** repair by heat or with new asphalt – a minimum of 28 days must be allowed before overcoating if repaired by this method).

Bituminous Felt

Remove, scrape and sweep away bulk of contamination, then clean any remaining contamination by power washing at minimum 2000 psi and allow to dry. Existing felt surfaces that are badly cracked, degraded or where blistering has occurred, should be locally removed back to a sound, straight cut, well adhered edge and replaced with Pro-Carrier Membrane SA, adhered with Pro-Prime® SA.

Bituminous Coatings – Remove loose, degraded, tacky or mobile coatings. Apply the Pro-Epoxy Primer or **Proteus Pro-Cold®** direct prior to application trials.

Solar Reflective Coating

Remove, scrape and sweep away bulk of contamination, then clean any remaining contamination by power washing at minimum 2000 psi. Apply Pro-Epoxy Primer to all Solar Reflective surfaces once dry, allow primer to cure before **Proteus Pro-Cold®** applications.

Cementitious Substrates

Laitance and friable concrete must be completely removed. All cracks, gaps, holes etc, should be raked out, suitably prepared and repaired. Hollows and blows in the existing substrate are to be levelled to leave a woodfloat finish. Any cracks above 5mm should be repaired with Proteus Fastfill. High spots must be removed by grinder/scabbling.

Clean any remaining contamination by power washing at minimum 2000 psi and allow to dry before installing Pro-Carrier Membrane SA adhered with Pro-Prime® SA to all concrete surfaces.

Brick and Stone

Remove, abrade and sweep away bulk of contamination, then clean remaining contamination by power washing at minimum 2000 psi. Thoroughly clean by power wash and allow to dry. Repair any spalling, flaking or other damage and replace any missing jointing.

Single Ply Membranes and EPDM

Prior to the installation of the **Proteus Pro-Cold®**, an adhesion test is to be carried out to confirm primer or Pro-Carrier Membrane SA. Remove, scrape and sweep away bulk of contamination, then clean any remaining contamination by power washing at a minimum of 2000 psi. Any blisters, ridges, delaminated lap joints in the existing single ply membrane are to be cut out and repaired with Pro-Carrier Membrane SA adhered with Pro-Prime® SA.

GRP

Mechanically grind (abrade) any loose and flaking GRP materials back, to provide a sound surface.

Remove, scrape, and sweep away bulk of contamination, then clean any remaining contamination by power washing at minimum 2000 psi. All surfaces to be wiped over with Proteus Surface Cleaner before applications. All cracks and voids should be cleaned and overlaid with Pro-Joint Tape SA (subject to movement) prior to application of **Proteus Pro-Cold®**.

All existing GRP Trims must also be prepared, and must be applied with the full **Proteus Pro-Cold®** and Pro-Force applications.

Metals – Lead, Aluminium, Zinc, Galvanized, Stainless Steel

Remove any rust by wire brush or mechanical abrasion back to bright metal before power washing. The surface must be free from grease and cleaned with Proteus Surface Cleaner before Pro-Metal Primer or Pro-Epoxy Primer is applied.

Paints/Coatings

Remove loose or degraded coatings returning to a firm, feathered firm edge. Remaining coatings are to be overcoated if soundly adhered. Ensure the surface is clean and free from grease before Pro-Epoxy Primer is applied.

Existing Polyurethane Systems

Remove, scrape and sweep away bulk of contamination, then clean any remaining contamination by power washing at minimum 2000 psi. Apply Pro-Reactivation Primer once all surfaces are dry and allow primer to cure before **Proteus Pro-Cold®** applications.

Roof Chippings/Stones

Remove loose and embedded chippings from roof surface by mechanical scabbling or other suitable means. Ensure consideration is taken into the weight of equipment and internal décor.

Remove, scrape and sweep away bulk of contamination, then clean any remaining contamination by power washing at minimum 2000 psi.

Timber Substrates

ALL timber surfaces require Pro-Carrier Membrane SA encapsulation prior to the **Proteus Pro-Cold®** applications. All surfaces must be dust and contamination free before applying Pro-Prime® SA.

Apply the Pro-Carrier Membrane SA to the primed surfaces. Weight should be applied to all areas to ensure a full bond (For best results use a weighted roller). When lapping Pro-Carrier Membrane SA, side and end laps are to be a minimum of 75mm to ensure a watertight seal.

Metal Sheet Roofs

Remove any rust by wire brush or mechanical abrasion back to bright metal before power washing. The surface must be clean and free from grease by Proteus Surface Cleaner before Pro-Metal Primer or Pro-Epoxy Primer is applied. Adhesion tests will be required prior to **Proteus Pro-Cold®** application, primer my not be required on powder coated surfaces.

All metal sheet joints (side and end laps) are to be treated/overlaid with Pro-Joint Tape SA, this tape is to receive a coat of **Proteus Pro-Cold®** @ 0.5ltr m^2 before the **Proteus Pro-Cold®** applications.

Asbestos Cement Sheeting

Asbestos exposed roof cladding will require cleaning back to a firm substrate. The cleaning needs to comply with all health & safety guidelines. Once panels are cleaned professionally, they must be treated with fungicidal wash and left for a minimum of 7 days prior to overcoating. This is to ensure all vegetation microbes are killed off before **Proteus Pro-Cold®** applications.

All side and end laps are to be treated/overlaid with Pro-Joint Tape SA, this tape is to receive a coat of **Proteus Pro-Cold®** @ 0.5ltr m^2 before the **Proteus Pro-Cold®** applications.

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 on Page 6 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
Felt and Stable Bitumen	NO	Apply Direct	N/A	N/A	N/A	N/A	N/A
Mineral felt	NO	Apply Direct	N/A	N/A	N/A	N/A	N/A
Exposed Asphalt	NO	Apply Direct	N/A	N/A	N/A	N/A	N/A
Coated Asphalt	YES	Pro-Epoxy Primer	4ltr unit	Two Pack: Part A & B – Mix by Drill/Paddle	20m²	0.2ltr m²	5°C & Rising
Concrete Aged	YES	Cold Melt® DPM Primer, Apply Direct	5kg & 10kg Units	Two Pack: Part A & B – Mix by Drill/Paddle	5kg: 12.5m² 10kg: 25m²	0.4kg m²	5°C & Rising
New Concrete	YES	Cold Melt® DPM Primer NB: Pro-Carrier Membrane maybe required	5kg & 10kg Units	Two Pack: Part A & B – Mix by Drill/Paddle	5kg: 12.5m² 10kg: 25m²	0.4kg m²	5°C & Rising
Dry Brickwork	NO	Apply Direct	N/A	N/A	N/A	N/A	N/A
Porous or Wet Brick work	NO	Cold Melt® DPM Primer	5kg & 10kg Units	Two Pack: Part A & B – Mix by Drill/Paddle	5kg: 12.5m² 10kg: 25m²	0.4kg m²	5°C & Rising
Metal	NO	Pro-Epoxy Primer	4ltr unit	Two Pack: Part A & B – Mix by Drill/Paddle	20m²	0.2ltr m²	5°C & Rising
Lead	NO	Pro-Epoxy Primer	4ltr unit	Two Pack: Part A & B – Mix by Drill/Paddle	20m²	0.2ltr m²	5°C & Rising
Aluminium	NO	Pro-Epoxy Primer	4ltr unit	Two Pack: Part A & B – Mix by Drill/Paddle	20m²	0.2ltr m²	5°C & Rising
Galvanised	NO	Pro-Epoxy Primer	4ltr unit	Two Pack: Part A & B – Mix by Drill/Paddle	20m²	0.2ltr m²	5°C & Rising
Stainless Steel	NO	Pro-Epoxy Primer	4ltr unit	Two Pack: Part A & B – Mix by Drill/Paddle	20m²	0.2ltr m²	5°C & Rising
Timber	NO	Pro-Prime® SA & Pro-Vapour Control/ Carrier Membrane SA	Pro-Prime® SA – 5ltr unit. Pro-Carrier Membrane SA (20-metre Roll)	Pro-Prime® SA: Single Pack	25m²	0.2ltr m²	5°C & Rising
PVC Membranes	YES	Pro-PVC Primer	1ltr, 5ltr or 15ltr units	Single Pack	10, 25, 75m²	0.2ltr m²	5°C & Rising
EPDM	YES	Pro-EPDM Primer	1ltr or 5ltr	Single Pack	10 or 25m²	0.2ltr m²	5°C & Rising
Other Single Ply Membranes	YES	Pro-Epoxy Primer	4ltr unit	Two Pack: Part A & B – Mix by Drill/Paddle	20m²	0.2ltr m²	5°C & Rising
		Pro-Prime® SA & Pro-Vapour Control/ Carrier Membrane SA	Pro-Prime® SA – 5ltr unit. Pro-Carrier Membrane SA (20-metre Roll)	Single Pack	25m²	0.2ltr m²	
GRP	YES	Pro Epoxy Primer	4ltr unit	Two Pack: Part A & B – Mix by Drill/Paddle	20m²	0.2ltr m²	5°C & Rising
		Pro-Prime® SA & Pro-Vapour Control/ Carrier Membrane SA Pro Epoxy Primer	Pro-Prime® SA – 5ltr unit. Pro-Carrier Membrane SA (20-metre Roll)	Single Pack	25m²	0.2ltr m²	
Asbestos Cement	YES	Pro Sealer WB	5ltr Unit	No – Stir before use.	25m² 5kg: 12.5m²	0.2ltr m²	5°C & Rising
		Cold Melt® DPM Primer	5kg & 10kg Units	Two Pack: Part A & B – Mix by Drill/Paddle	10kg: 25m²	0.4kg m²	
Brittle Bitumen	YES	Abrade/Remove – Pro-Epoxy Primer	4ltr unit	Pro-Epoxy Primer: Two Pack: Part A & B – Mix by Drill/Paddle	20m²	0.2ltr m²	5°C & Rising
Solar Reflective Paint	YES	Pro-Epoxy Primer	4ltr unit	Pro-Epoxy Primer: Two Pack: Part A & B – Mix by Drill/Paddle	20m²	0.2ltr m²	5°C & Rising
Metal Surfaces – Spot Priming	NO	Pro-Metal Primer	250ml Canister	Shake Before Use	5 to 2.5m²	50ml to 150ml m²	5°C & Rising

4. PROTEUS PRO-COLD® APPLICATIONS

4.1 APPLICATIONS TEMPERATURES

The system can be applied within an ambient and surface temperature range between +2°C and +30°C rising. Please refer to the table below for exact details.

The surface temperature must be at least +2°C above dew point during application and curing.

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

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. Allow 4 to 6 hours to overcoat at 20°C. Cure times may be extended at low temperatures and low humidity.

EQUIPMENT/TOOLS

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

BASE COAT – Reinforcement

Materials: **Proteus Pro-Cold® – Light Grey and Slate Grey – 13 Litre Unit**
Pro-Force (225g GFM) – 20m² or 125m² roll

Details

1. Prepare the required sizes/lengths of Pro-Force for each detail. Tear the reinforcement to give a feathered edge. Set the Pro-Force aside until this is required.
2. Apply **Proteus Pro-Cold®** by brush or mini roller at a minimum of 1.0 Ltr/m² onto the desired detail.
3. Place the pre-cut Pro-Force into the wet **Proteus Pro-Cold®** saturate the Pro-Force by brush or a mini roller into the wet **Proteus Pro-Cold®**. Ensure a minimum overlap of 75mm to end and side laps of the Pro-Force 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 into the desired detail until completely encapsulated with the **Proteus Pro-Cold®**.
5. The embedded details must be left to cure for 4-6 hours before Top Coat can be applied.

Flat Areas (Base Coat):

1. Roll off full lengths of Pro-Force for the flat areas of the roof – these can be pre-measured. Set the Pro-Force aside until this is required.
2. Apply **Proteus Pro-Cold®** with a 9 inch medium pile roller at a minimum of 1.0 Ltr/m² onto the desired flat roof area.
3. Place the pre-rolled Pro-Force into the wet **Proteus Pro-Cold®**, saturate the Pro-Force with the medium pile roller into the wet **Proteus Pro-Cold®**. Ensure a minimum overlap of 75mm to end and side laps of the Pro-Force 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 until completely encapsulated with the **Proteus Pro-Cold®**.
5. The embedded flat area must be left to cure for 4-6 hours before Top Coat can be applied.

	Base Coat 10 Year	Base Coat 15 Year	Base Coat 20 Year	Square Meter Per 13 Litre Unit
Exposed Asphalt	1.0ltr m^2	1.0ltr m^2	1.0ltr m^2	13m^2
Coated Asphalt	1.0ltr m^2	1.0ltr m^2	1.0ltr m^2	13m^2
Felt & Stable Bitumen	1.0ltr m^2	1.0ltr m^2	1.0ltr m^2	13m^2
Solar Reflective Paint	1.0ltr m^2	1.0ltr m^2	1.0ltr m^2	13m^2
Mineral Felt	1.5ltr m^2	1.5ltr m^2	1.5ltr m^2	8.5m^2
Brittle Bitumen	1.0ltr m^2	1.0ltr m^2	1.0ltr m^2	13m^2
Concrete Aged	1.0ltr m^2	1.0ltr m^2	1.0ltr m^2	13m^2
Concrete New/Damp	1.25ltr m^2	1.25ltr m^2	1.25 ltr m^2	10m^2
Dry Brickwork	1.25 ltr m^2	1.25 ltr m^2	1.25 ltr m^2	10m^2
Brickwork Porous/Damp	1.25 ltr m^2	1.25 ltr m^2	1.25 ltr m^2	10m^2
Metal	1.0ltr m^2	1.0ltr m^2	1.0ltr m^2	13m^2
Lead	1.0ltr m^2	1.0ltr m^2	1.0ltr m^2	13m^2
Aluminium	1.0ltr m^2	1.0ltr m^2	1.0ltr m^2	13m^2
Stainless Steel	1.0ltr m^2	1.0ltr m^2	1.0ltr m^2	13m^2
Galvanised	1.0ltr m^2	1.0ltr m^2	1.0ltr m^2	13m^2
Proteus Pro-Carrier Membrane SA	1.0ltr m^2	1.0ltr m^2	1.0ltr m^2	13m^2
PVC Membranes	1.0ltr m^2	1.0ltr m^2	1.0ltr m^2	13m^2
EPDM Membrane	1.0ltr m^2	1.0ltr m^2	1.0ltr m^2	13m^2
Other Single-ply Membranes	1.0ltr m^2	1.0ltr m^2	1.0ltr m^2	13m^2
GRP	1.0ltr m^2	1.0ltr m^2	1.0ltr m^2	13m^2
Asbestos Cement	1.0ltr m^2	1.0ltr m^2	1.0ltr m^2	13m^2
Existing Proteus Roof Coatings	1.0ltr m^2	1.0ltr m^2	1.0ltr m^2	13m^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 **Proteus Pro-Cold®** Top Coat
- **Wicking Fibres** – Sand/Cut down before applying **Proteus Pro-Cold®** Top Coat
- **Tenting/Voids** – Cut out and re-apply Base Coat (**Proteus Pro-Cold®** and Pro-Force), allow to fully cure before applying the **Proteus Pro-Cold®** Top Coat.
- **Lack of Proteus Pro-Cold® (Base Coat)** – Ensure all areas of embedment below the coverage rate are applied with additional **Proteus Pro-Cold®** to achieve the required thickness.

TOP COAT

Materials: Proteus Pro-Cold® – Light Grey or Slate Grey – 13 Litre Unit

Upstands & Flat Areas (Top Coat)

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

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 **Proteus Pro-Cold®** may disrupt the surface finishes.

Proteus Pro-Cold® Top Coat Roof Application	10 Year	15 Year	20 Year
Coverage Rate	0.5ltr m^2	0.75ltr m^2	1.0ltr m^2
Sqm per 13 Litre Unit	26m^2	17m^2	13m^2

Proteus Pro-Cold® Top Coat Gutter Application	10 Year	15 Year	20 Year
Coverage Rate	0.75ltr m^2	1.0ltr m^2	1.25ltr m^2
Sqm per 13 Litre Unit	17m^2	13m^2	10m^2

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

5. LIMITATIONS

- Do not apply **Proteus Pro-Cold®** on substrates with rising moisture. **Proteus Pro-Cold®** is not suitable for permanent water immersion.
- 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 **Proteus Pro-Cold®** with any solvent.
- Do not use **Proteus Pro-Cold®** for indoor applications.
- Do not apply close to the air intake vent of a running air conditioning unit.
- Do not apply **Proteus Pro-Cold®** directly on Insulation boards. Instead use Pro-Carrier Membrane SA between Insulation board and **Proteus Pro-Cold®** 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 **Proteus Pro-Cold®** 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 **Proteus Pro-Cold®** application. Dress the **Proteus Pro-Cold®** up the upstand by a minimum of 150mm under the lead flashing. Once **Proteus Pro-Cold®** 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 **Proteus Pro-Cold®** up to the underside of the render stop bead or coping stone overhang. Once **Proteus Pro-Cold®** is fully cured, seal off with a bead of Proteus Sealant.

Window Cills or Door Threshold:

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

Pipes and Penetrations:

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

Eve & 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 **Proteus Pro-Cold®** and when fully cured, reinstate the tiles to cover the **Proteus Pro-Cold®** applied.

Rainwater Outlets:

Remove all leaf guards/clamping rings located in/over the outlet. Prime if required and dress the **Proteus Pro-Cold®** 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 place behind the trim between each section joint.

The **Proteus Pro-Cold®** 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.

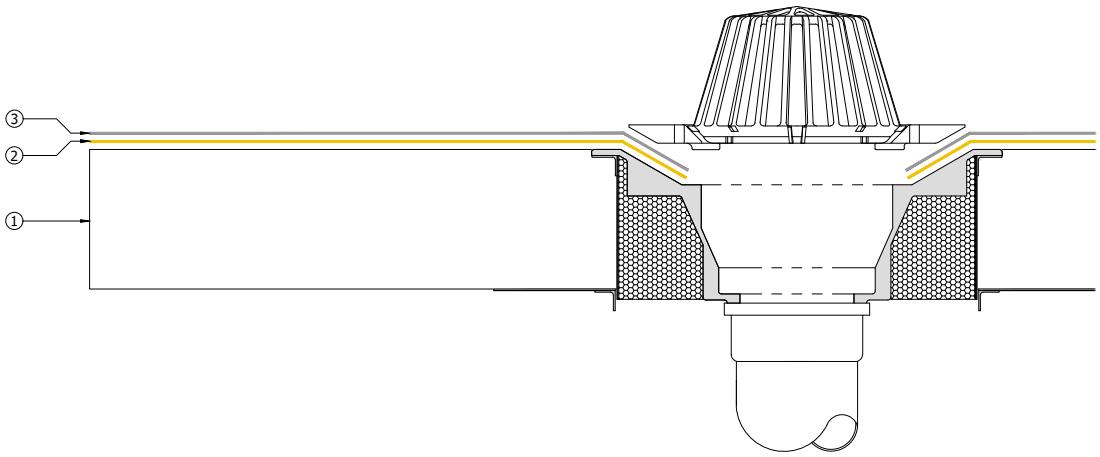
Perimeter Drip Trim:

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 **Proteus Pro-Cold®** to the roof area and fully encapsulate the trim, terminating tightly at the bottom of the drip edge.

Standard Detail Drawings

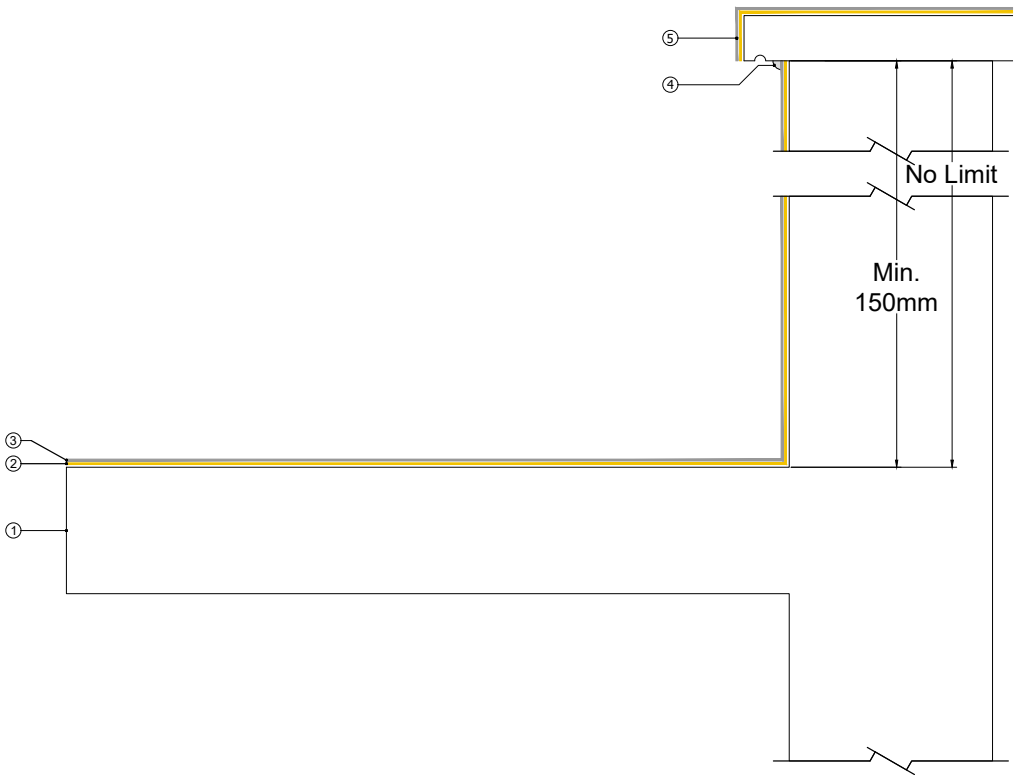
Drainage Internal Outlet

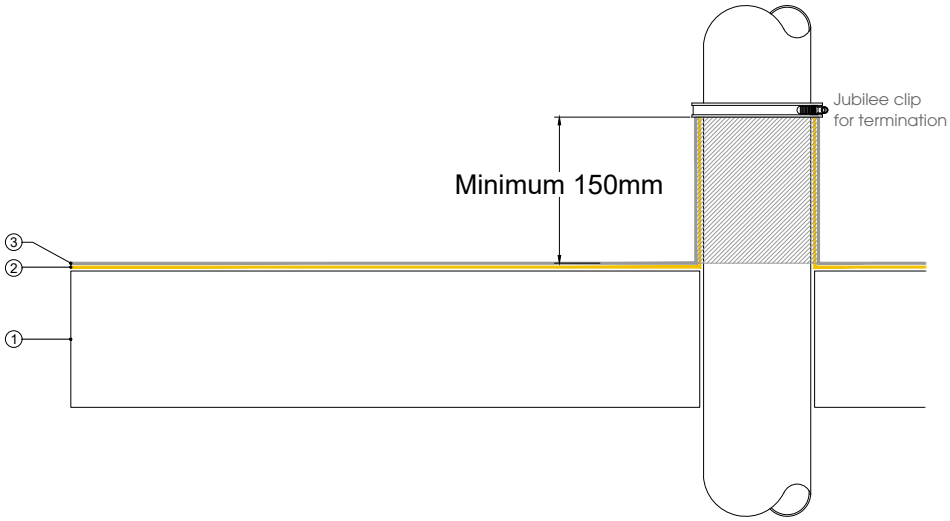
1. Existing deck/substrate
2. **Proteus Pro-Cold®** Embedment with Pro-Force
3. **Proteus Pro-Cold®** Top Coat



Parapet Coping

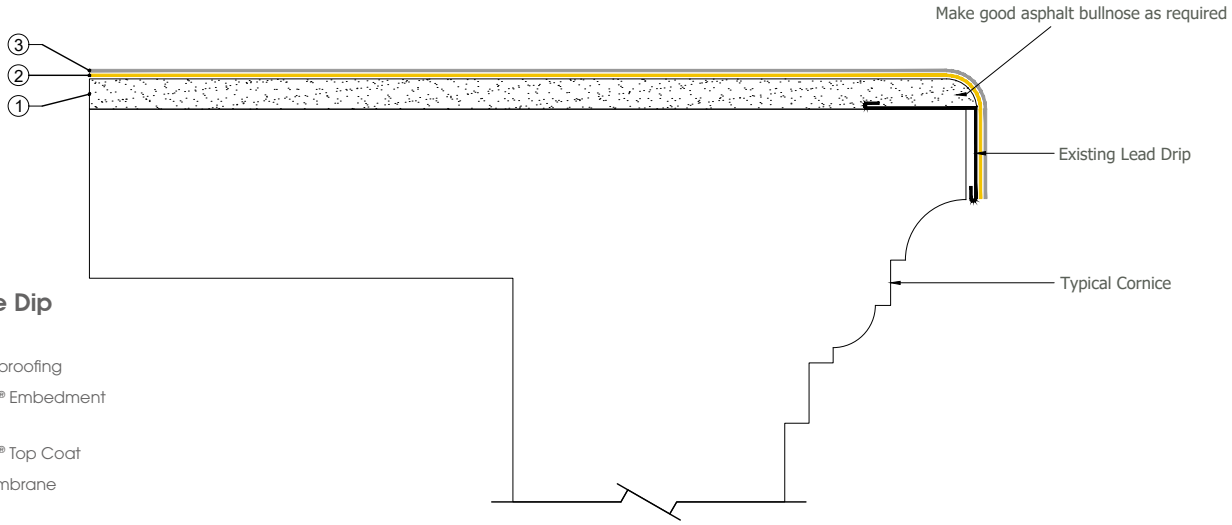
1. Existing deck/substrate
2. **Proteus Pro-Cold®** Embedmentwith Pro-Force
3. **Proteus Pro-Cold®** Top Coat
4. **Proteus Pro-Cold®** terminated tight under the existing coping stone. Seal with Proteus Sealant
5. **Proteus Pro-Cold®** applied to existing copings





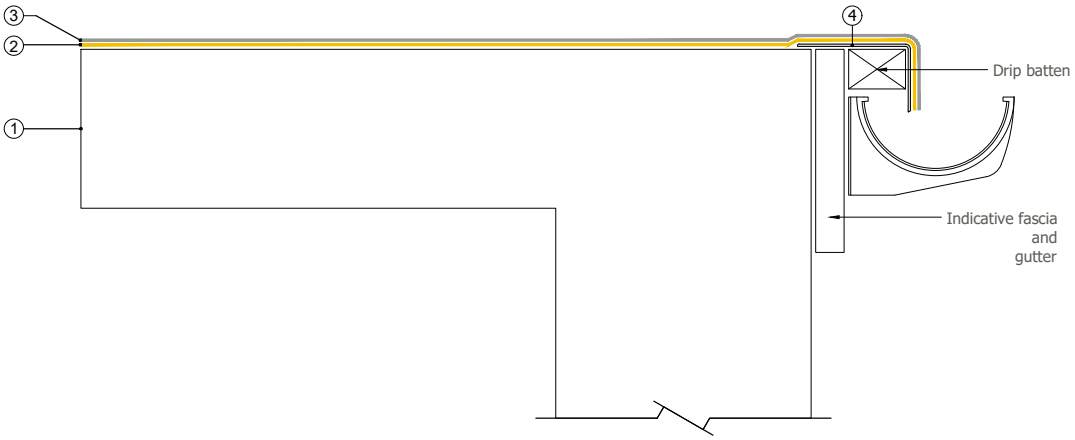
Pipe Circular Penetration

1. Existing deck/substrate
2. **Proteus Pro-Cold®** Embedment with Pro-Force
3. **Proteus Pro-Cold®** Top Coat



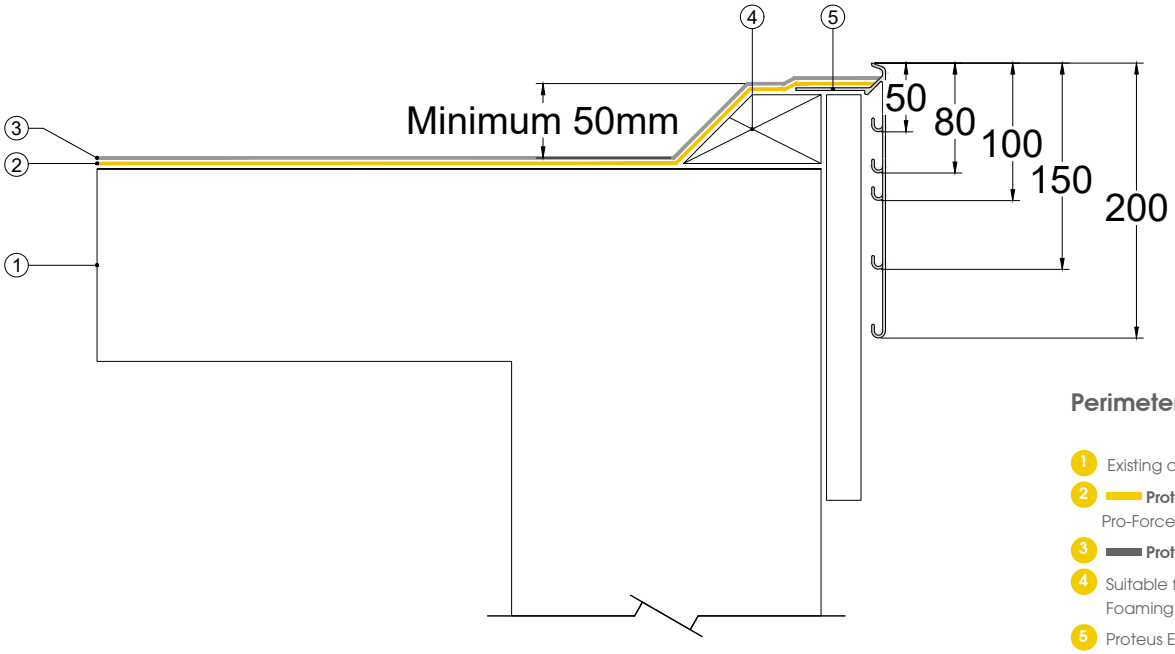
Perimeter Bullnose Dip

1. Existing asphalt waterproofing
2. **Proteus Pro-Cold®** Embedment with Pro-Force
3. **Proteus Pro-Cold®** Top Coat
4. **Proteus Pro-Cold®** membrane terminates on the existing lead drip edge



Perimeter External Gutter

1. Existing deck/substrate
2. **Proteus Pro-Cold®** Embedment with Pro-Force
3. **Proteus Pro-Cold®** Top Coat
4. Proteus Drip Trim 100 x 60mm



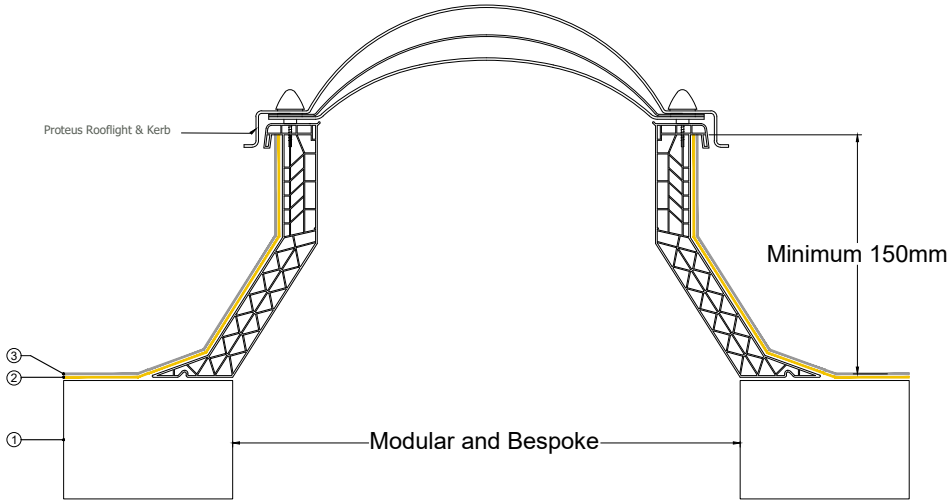
Perimeter Typical Watercheck

1. Existing deck/substrate
2. **Proteus Pro-Cold®** Embedment with Pro-Force
3. **Proteus Pro-Cold®** Top Coat
4. Suitable fillet adhered with Pro-Bond Foaming
5. Proteus Edge Trim (options as dimensioned)

Standard Detail Drawings

Proteus Rooflight

1. Existing deck/substrate
2. **Proteus Pro-Cold®** Embedment with Pro-Force
3. **Proteus Pro-Cold®** Top Coat

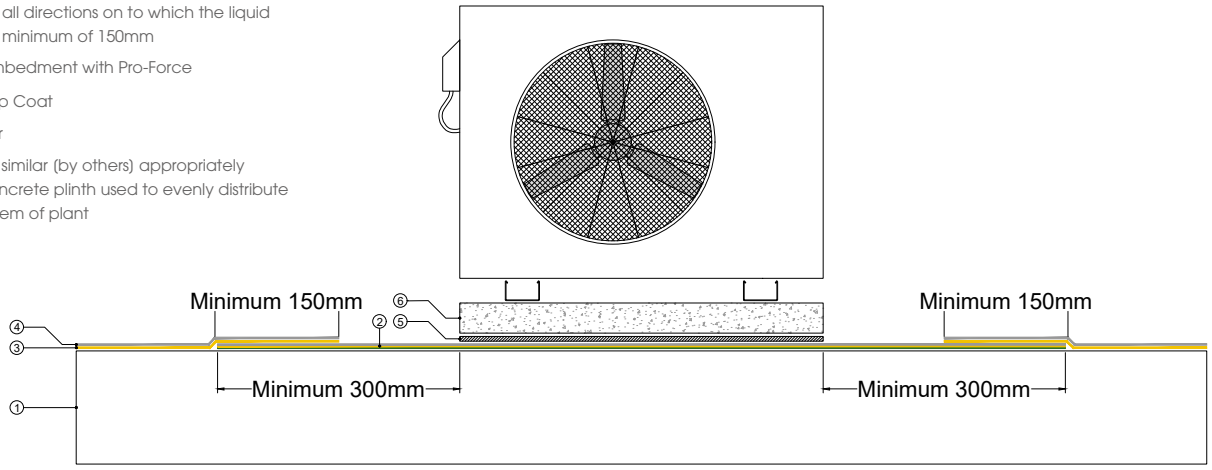


Small Plant Preformed Membrane

1. Existing deck/substrate
2. Preformed **Proteus ProCold®** (comprising: Pro Carrier Membrane SA coated with **Proteus Pro-Cold®** Embedment with Pro-Force and **Proteus Pro-Cold®** Top Coat).

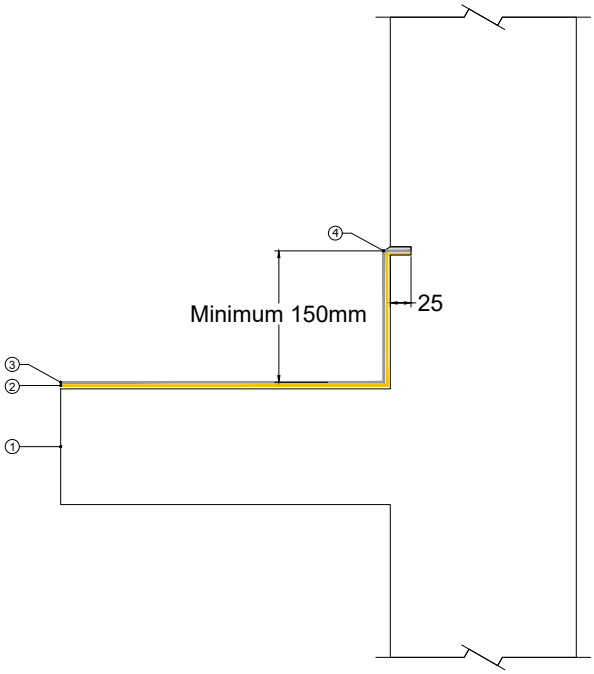
Slide the fully cured 'preformed **Proteus Pro-Cold®** membrane' under small plant allowing 300mm in all directions on to which the liquid **Proteus Pro-Cold®** will lap by a minimum of 150mm

3. **Proteus Pro-Cold®** Embedment with Pro-Force
4. **Proteus Pro-Cold®** Top Coat
5. Sacrificial protection layer
6. Concrete paving slabs or similar (by others) appropriately proportioned pre-cast concrete plinth used to evenly distribute loadings exerted by the item of plant

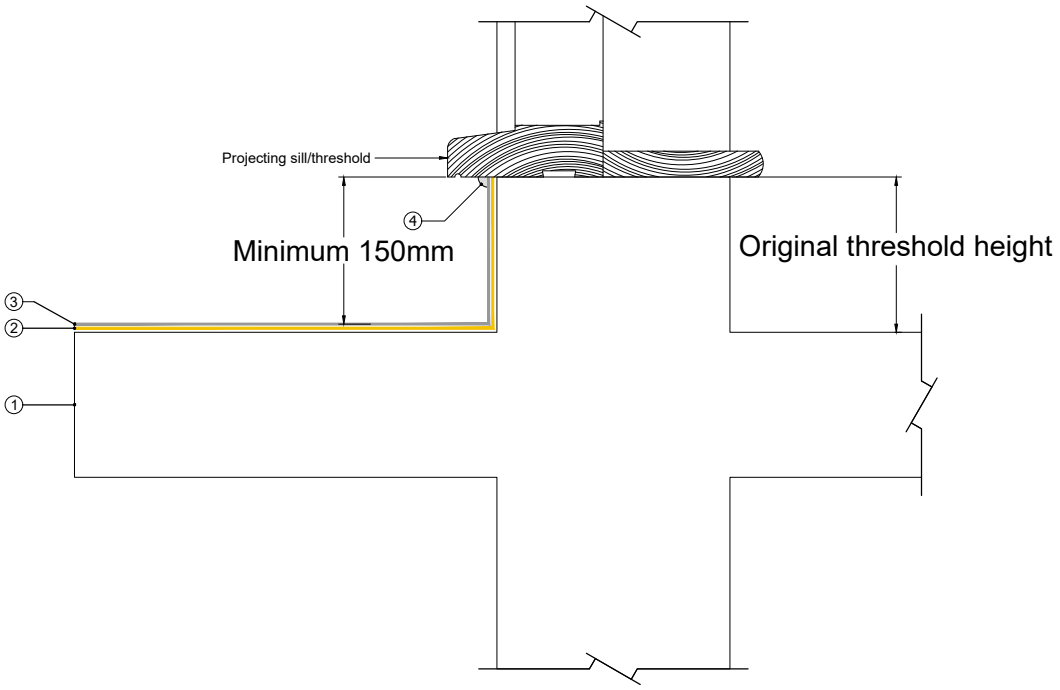


Upstand Chase

1. Existing deck/substrate
2. **Proteus Pro-Cold®** Embedment with Pro-Force
3. **Proteus Pro-Cold®** Top Coat
4. Chase detail sealed with Proteus Sealant

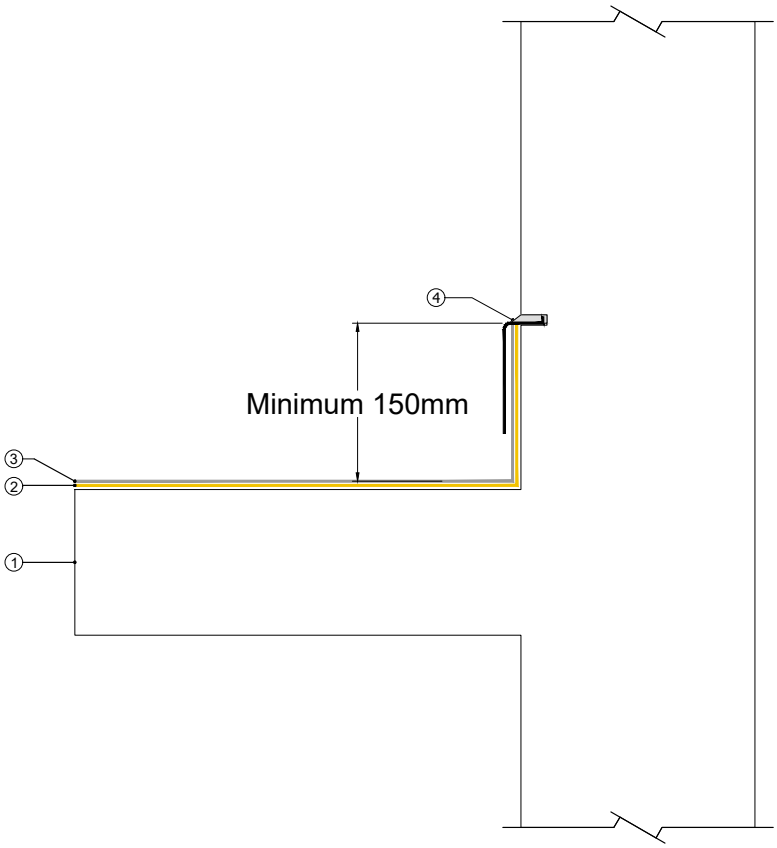


Upstand Threshold at Cill



1. Existing deck/substrate
2. **Proteus Pro-Cold®** Embedment with Pro-Force
3. **Proteus Pro-Cold®** Top Coat
4. **Proteus Pro-Cold®** terminated tightly at the junction with the projecting cill. Seal with Proteus Sealant.

Upstand Lead Flashing

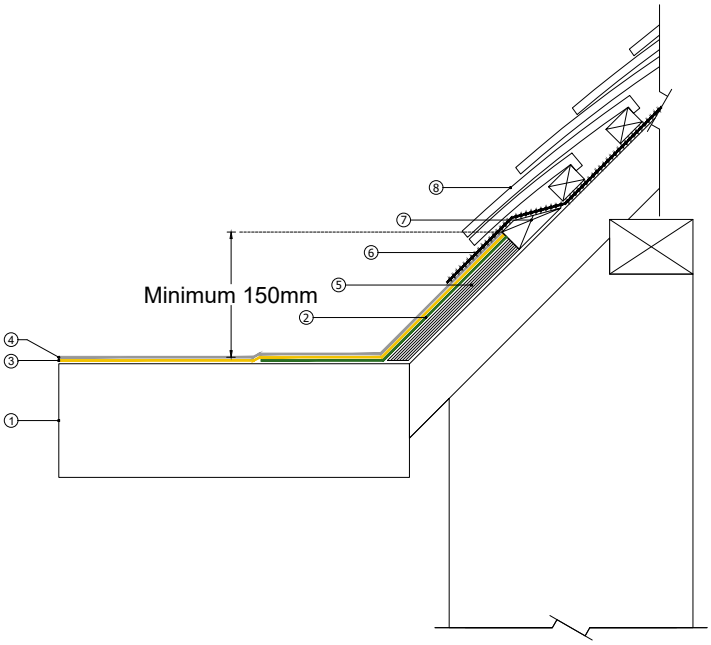


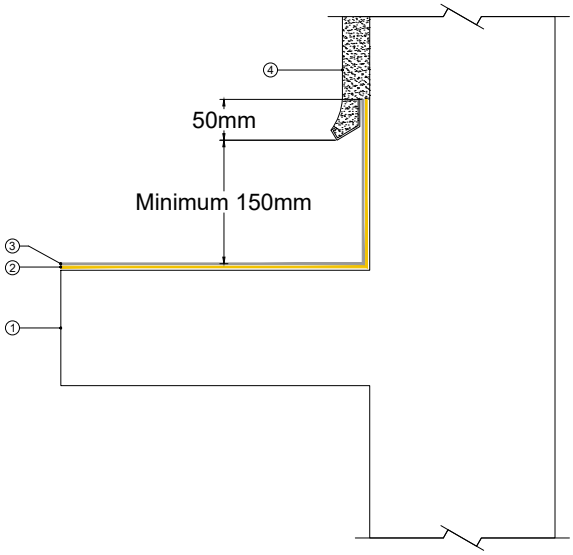
1. Existing deck/substrate
2. **Proteus Pro-Cold®** Embedment with Pro-Force
3. **Proteus Pro-Cold®** Top Coat
4. Lead Flashings sealed with Proteus Sealant

Standard Detail Drawings

Upstand Pitched Roof Abutment Layboard

1. Existing deck/substrate
2. Pro-Carrier Membrane SA adhered with Pro-Prime® SA
3. **Proteus Pro-Cold®** Embedment with Pro-Force
4. **Proteus Pro-Cold®** Top Coat
5. Plywood layboard
6. Existing sarking
7. Timber batten
8. Existing slates/roof tiles



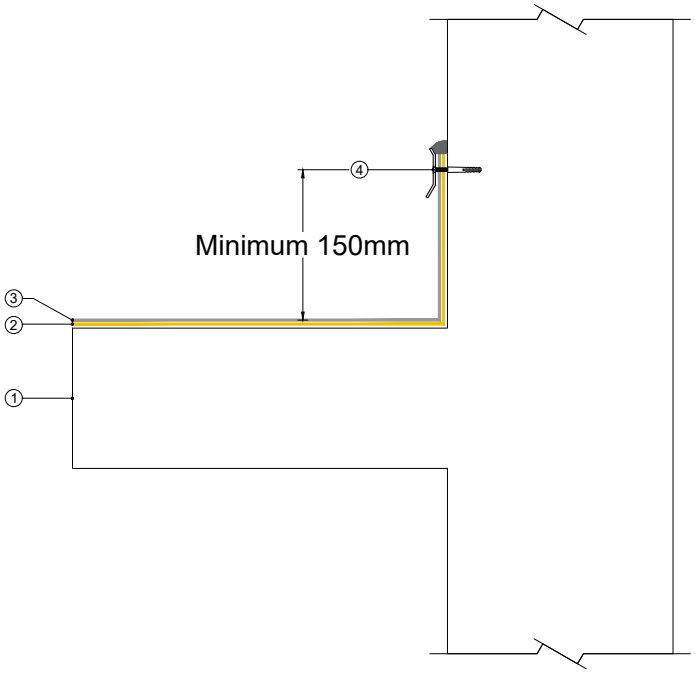


Upstand Rendered New

1. Existing deck/substrate
2. **Proteus Pro-Cold®** Embedment with Pro-Force
3. **Proteus Pro-Cold®** Top Coat
4. New render

Upstand Termination Bar

1. Existing deck/substrate
2. **Proteus Pro-Cold®** Embedment with Pro-Force
3. **Proteus Pro-Cold®** Top Coat
4. Proteus Termination Bar



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 **Proteus Pro-Cold®**.



In addition to protective 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 protect well if they are not frequently flushed with solvents. However, barrier creams are only a supplement and are not a replacement for protective gloves, so always wear gloves. Always ensure there is no contamination inside gloves before reusing them.

Eye protection 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 protection 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.

Proteus WATERPROOFING

Proteus Waterproofing is one of the most innovative and fastest growing companies in the waterproofing market. Proteus Waterproofing is a single source supplier, with an array of hot and cold-applied waterproofing and protection systems. The company's 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.

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

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

- *Liquid-applied waterproofing: Proteus Pro-System® Plus*
- *Inverted roof waterproofing: Cold Melt®, Proteus Hot Melt®*
- *High performance felts: Proteus Pro-Felt®, Ultima, Ultima Plus, Extra, Extra Plus*
- *Balconies and walkways: Pro-BW® Plus, Cold Melt®*
- *Car park decking systems: Deckmaster*
- *Coating protection: Pro-Cryl®, Pro-Solar Reflect*
- *Exterior walls waterproofing: Monosil, Monodex & Monodex Textured*

The Proteus Waterproofing Specification includes:

- *On-going technical support*
- *Comprehensive guarantees*
- *Free roof evaluations 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*
- *National contractor base*
- *Technical manager inspections throughout the project*
- *Installation sign off*

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