

Board and Trim Selection and Application

For new roofs or when overboarding is necessary, we recommend using an 18mm Far Eastern WBP plywood or 18mm OSB3 in line with standard roofing practice. Before laying the deck ensure the joists are of sound condition, and ensure the boards are securely fixed.

When attaching the deck, ensure all nail heads finish flush with the surface of the deck. Any flat roofing trim or hand made plywood trims can be used, however we recommend using readily available GRP trims from your local roofing merchant, as these are cost effective and easy to apply and detail. Mechanically fix all trims to the timber decking ensuring the face is vertical to the fascia.



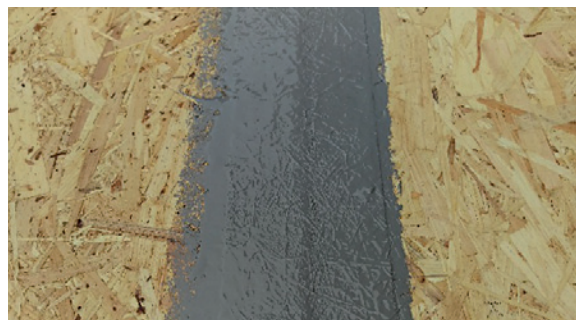
Board and Trim Joints

Tecnoband matting must be used on any Joints between deck boards, where trims meet the deck boards and on any change of material.

Accelerated Desmopol is applied to the surface first, then Tecnoband matting is rolled into the membrane (until Desmopol is drawn through), then another coat of Desmopol is applied ensuring the matting is fully embedded.

This must be repeated on all relevant areas before the main flat roof area is covered. Joints must be lapped 50mm each side and on any change of material, trims should be lapped 50mm on the board and 50mm on the trim and covering the fixing, (SEE BELOW).

**SHOWING UPSTAND WITH TILT FILLET
(GRP TRIMS CAN ALSO BE USED)**



Board and Trim Joints (Continued)



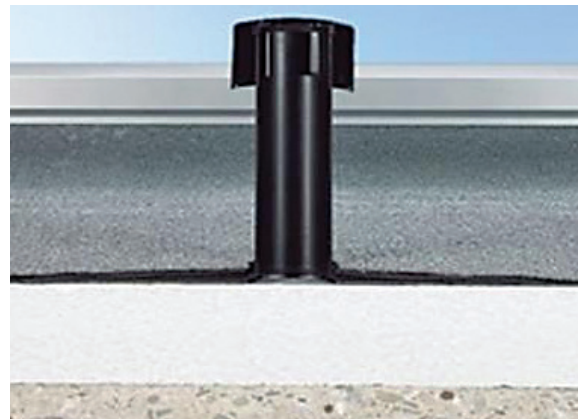
Outlets

PENETRATIONS AND OUTLETS

Penetrations through the roof are a typical source of water ingress. They are difficult to waterproof satisfactorily in traditional materials, but can easily be formed around such details with Tecnoband reinforcing mat, again ensuring the matting is fully embedded in accelerated Desmopol.

INTERNAL OUTLETS

Any internal outlets, apply the system into the pipe itself, ensuring that the junction between the waterproofing and the outlet pipe is encapsulated. This will ensure that if the outlet backs up, water cannot creep under the existing waterproofing and into the building.



PHOTOGRAPH OF OUTLET PREPARED

Perimeter, upstands and flashings

Before coating the main area, apply accelerated Desmopol to perimeter upstands and dry roll the Tecnoband matting (until the Desmopol is drawn through), then apply another coat of Desmopol ensuring the matting is fully embedded, this method is used to allow the required thickness to be applied (without slumping).

Desmopol is self terminating if the brickwork is okay, strike a line with tape and coat up to it, no lead flashing is required. A termination bar similar flashing is required if the brickwork is in poor condition.

These areas will be coated again when the main area of the roof is coated. Significant cracks must filled using a polyurethane based mastic.

AVOID the use of silicone based mastics as they are not compatible. In the presence of roof repair coatings on the roof, check compatibility with Desmopol before applying the product.

Accelerating Desmopol



When first opening Desmopol tins, the product must be stirred thoroughly ensuring any settlement at the bottom is mixed in. Desmoplus Accelerator is

then added at the exact ratio of 110ml (of Desmoplus Accelerator) per litre of Desmopol (or 2Ltr/25kg tin or 500ml/6kg tin of Desmopol) and mixed at a slow speed to avoid air entrapment/bubbles.*

Make sure the Desmoplus Accelerator and Desmopol are thoroughly mixed together before applying (This should take a couple of minutes).

***For measurements see chart on page 7.**

PLEASE NOTE:

You have approximately 20-30 minutes working time for mixed product. Only mix what you will use in this time, ie mix small tins for detail work, until you get familiar with the working time. Once applied the Desmopol will be touch dry in 30-40mins.

Applying the Desmopol Membrane

Apply accelerated Desmopol to the whole area of the roof in 1 layer using a roller (solvent resistant is best). Desmopol is self-levelling, do not overwork the product, its easier to work out the coverage for the mixed tin, pour and spread by roller. Products to be installed at 1.5 - 2kg per sqm evenly to achieve a minimum thickness of 1.4mm.

Any big variation in levels should be reinforced to make sure the product is not applied too thin on raised areas (big variations in thicknesses will cause weak spots on any thin areas).

On completing inspect for any pinholes and apply another thin layer if required. Drying time 1-2 hours (depending on temperature and humidity). Application temperature range -5 °C to 35°C.

Should you require a further site visit or more information, please contact the Eagle Technical Department on 07880 230253.

Once the accelerated Desmopol starts to go off after 20-25 minutes it must not be applied as the product may have some retraction which may cause cracks during curing process.

Avoid a big difference in thickness in the product in close areas ie. 1.4mm to 3mm. This may cause tensions in the product. In case of substrate irregularities it is recommended to use Tecnoband matt.

In case of high pitch roofs, Desmopol must be applied in 2 or 3 layers to avoid product running or can be applied in one layer with Desmothix liquid. (Application described later in this document).

TECNOTOP 2C – TOPCOAT APPLICATION

The use of Tecnotop 2C is recommended to increase UV stability, for trafficable areas or achieve longer guarantee.

Tecnotop comes in two parts 4.3Lts + 0.7Lts drums which must be mixed completely and applied at a ratio of 6-1 and yield 150grs per sqm in one layer, to cover around 25sqm per pack.

Tecnotop 2C must be applied no later than 48 hours after Desmopol was applied and on a clean and dry surface.

Tecnotop has a pot life of 2 hours and drying time once applied, of 2 hours. For car parks and high traffic areas 2 layers of Tecnotop 2C must be applied.

Applying the Desmopol Membrane, continued...

BALCONIES, WALKWAYS AND ANTI-SLIP SURFACES

To achieve the desired surface, we have 3 options which need to be considered depending on the level of traffic and aesthetic required

Tecnoplastic must be mixed with the mixed Tecnotop 2C and applied with a roller onto Desmopol.

Silica sand to be broadcasted onto the Tecnotop to cover completely the area. Allow the Tecnotop to dry and brush the loose sand. For a stronger bonding it is recommended to give an additional coat of Tecnotop 2C over the silica sand, once the first layer is completely dry.

Mineral slate granules to be broadcasted onto the Tecnotop to cover completely the area. Allow the Tecnotop to dry and brush the loose granules. For a stronger bonding or higher gloss finish it is recommended to give an additional coat of Desmopol T clear coating, over the slates granules, once the first layer is completely dry.

DESMOPOL IN VERTICAL SURFACES – DESMOTHIX LIQUID

When Desmopol needs to be applied to vertical surfaces, Desmothix liquid will be used to facilitate application. Desmothix liquid will provide Thixotropic properties to Desmopol which will allow it to be applied easily without runs and drops.

Desmothix liquid comes in 1Lt tins and can be mixed up to 1Lt per 25Kg of Desmopol. Usually adding 250ml per 25kg drum is enough to reach the desired consistency.

If no Desmoplus Accelerator is used, Desmopol must be applied in 2 layers of a maximum 1kg per layer.

When mixing Desmoplus Accelerator and Desmothix liquid at the same time, the Desmoplus Accelerator must be mixed first at the same ratio of 110ml per litre of Desmopol and later mixed with a maximum of 250ml of Desmothix liquid for 25kg drum or 60ml per 6kg tin.

General Repairs on Desmopol

In case of damage caused to a Desmopol roof, the system can be repaired very easily. It must be cleaned, gently sanded to slightly open the pore. Accelerated Desmopol can be applied directly on top of the existing coat.

In case of repairs to larger areas the use of Tecnoband matt it is recommended.

Use of Primer

Desmopol has an excellent adhesion to most substrates including, metal, plywood, bitumen felt, lead, GRP systems and PVC single ply.

However if you are unsure of the substrate, it is important to make a small test area to check the compatibility.

Primer must be used on concrete, TPO single ply and some other single plies with different composition than PVC.

If there is any doubt please contact our technical department for advice as a coat of primer may be required.

PRIMER PU-1000 is a mono-component, low viscosity, high solids content. It has been specifically designed to increase bonding to porous surfaces and improve the surface level of the substrates prior to the application of the Desmopol.

IMPORTANT: If the surface to be treated is very uneven, apply an initial coat of PRIMER PU-1000 mixed with mineral fillings (ie silica sand) to level it first before applying the primer to the whole area.

PRIMER PU 1000 must be used on concrete, TPO single ply, EPDM & Rubber outlets. For all single ply membranes, it is always recommended to contact the Eagle Insulations Technical Department with the brand name, so they can advise if primer is required.

APPLICATION

PRIMER PU-1000 can be applied with a roller or brush straight out of the tin at a coverage rate of 150-200ml per m².

Tin size is 5ltr (Therefore minimum coverage of 25m² can be achieved).

Tack time: 60 minutes (20C) – Wait until completely dry before applying Desmopol.

Characteristics / Advantages

- Easy and quick application
- Cost effective – provides an expected cycle extension of failing roofs in excess of 25 years.
- Seamless membrane with over 600% elongation.
- Vapour permeable
- Resistant to extreme temperatures: -40°C to 80°C

PROPERTIES	VALUES
Specific gravity (kg/m ³)	1.320 ~ 1.420 (ISO 1675)
Dry extract at 105°C (% weight)	>90 (EN 1768)
Ashes at 450°C (% weight)	42 ~ 47 (EN 1879)
Application temperature range	-5°C ~ 35°C
Storage recommendation	1 year at temperature +5°C ~ 35°C
Resistance to water vapour transmission (g/m ² * hour)	0,8
Tensile Strength (at 23°C) (N/mm ² – MPa)	5 ~ 7
Concrete adherence (N/mm ² – MPa)	>2
Hardness	>75 (Shore A)
Drying time	30 mins tack free, 1 ~ 2 hours (depending on temperature and humidity), 4 hours trafficable. Fully cured 24hrs
Recoat Time	From 2 hours to 24hrs
Yield	1.5 to 2kg/sqm min 1.4mm Maximum in 1 layer 2kg
Elasticity (at 23 °C)	±600% ~ ±750%

PLEASE NOTE: Temperature and humidity conditions may affect the curing times.

Work out the area you will cover with the 27kg tin of mixed product (please check coverage rates for different guarantees available), do not spread the product too thin.

Packaging Available: 25kg and 6Kg drums Desmopol membrane + 2Lts & 500ml Desmoplus Accelerator.

In case of accidental damage to the Desmopol waterproofing system, it can be repaired easily by using a piece of Tecnoband Mat, embedded in Desmopol.

Desmoplus Accelerator Chart

DESMOPOL QUANTITY FULL TINS	DESMOPOL QUANTITY IN LTRS	DESMOPLUS ACCELERATOR IN LTRS
25kg drums		2Lts - full tin
6kg drums		Full small tin
	5Lts	550ml
	4Lts	440ml
	3Lts	330ml
	2Lts	220ml
	1Lt	110ml

***Mix thoroughly on slow speed to ensure Desmoplus Accelerator is mixed with Desmopol completely**