

# Permaroof

*LIQUID COATINGS*



## Permaroof<sup>500</sup>

### Waterproofing System

### Installation Guide



## Permaroof 500 Waterproofing System

### DESCRIPTION

High Performance Waterproofing System for applications on to asphalt and felt roofs.

### PRODUCT APPLICATION

<b>Surface preparation and cleaning:</b>	As required.
<b>Primer application (where required):</b>	Permaroof 500 Prime PU primer @ 120 $\mu$ per coat Theoretical coverage rate at 120 $\mu$ is 8m <sup>2</sup> /litre
<b>Detailing and Joints:</b>	PERMAROOF 500 EMBEDMENT Chopped Strand Reinforcing Mat 225gsm (1m wide)
<b>Embedment Coat:</b>	<u>Flat Deck:</u> PERMAROOF 500 EMBEDMENT @ 1.2 litre/m <sup>2</sup> Chopped Strand Reinforcing Mat 225gsm
	<u>Pitched Deck:</u> PERMAROOF 500 EMBEDMENT @ 0.5 litre/m <sup>2</sup>
<b>UV Finish Coat:</b>	PERMAROOF 500 UV TOP COAT @ 0.75 litre/m <sup>2</sup>
<b>Walkways (if required):</b>	PERMAROOF 500 UV TOP COAT @ 0.5 litre/m <sup>2</sup> Aggregate 0.8-1mm @ 0.75kg/ m <sup>2</sup> .

### SURFACE PREPARATION

Dirt/ Soil/ Contamination must be removed from the surface prior to installation of the system.

Surfaces should now be power washed and rinsed to remove all residual dirt and other contamination after which the surface should be dried.

Surfaces which have been subject to moss and lichen must now be treated with a proprietary fungicidal wash and allowed to dry in accordance with manufacturers' instructions.

Adhesion of the existing coating system must be checked and all defective coating removed back to a firm edge.

Any ballast chippings present must be removed with a mechanical flail. Deeply embedded chippings need not be removed if removal would result in extensively damaging the asphalt.

Badly degraded asphalt must be removed.

Asphalt blisters are to be cut open exposing the surface, which should be dried then rebuilt with a cementitious mortar.

Failure to remove all loose chippings will invalidate any offer of warranty.

Roofing felt is to be inspected; weak and degraded felt to be replaced. Blisters in the roofing felt are to be star cut, the exposed surface dried and the felt re-bonded to the substrate.

This system can extend up and over brick/concrete parapet walls if required. Any cracks in these surfaces are to be cleaned out and filled with cementitious mortar in accordance with the manufacturer's recommendations and allowed to dry prior to coating with **Permaroof 500 Prime PU primer** in accordance with the product data sheet.

Corroded metal surfaces are to be thoroughly wire brushed to remove corrosion products and then primed with **Permaroof 500 Prime PU primer** in accordance with the product data sheet.

All wood or wood based materials are to be primed with **Permaroof 500 Prime PU primer** in accordance with the product data sheet.

## DETAILING AND JOINTS

All upstands, movement, cracks and expansion joints along with any other areas where movement could occur must be first be covered with Tape as a bond break detail, care taken to ensure the tape edges are fully adhered.

It is not normally necessary to reinforce felt/carrier membrane overlap joints unless there is doubt about the integrity of the overlap.

**Chopped strand reinforcing mat 225gsm** must now be used as a reinforcement membrane over treated movement joints together with all angle joints with protrusions and upstands.

**Chopped strand reinforcing mat 225gsm** must also be used to reinforce all valley gutters with the membrane being overlapped up onto the roof panels.

**Permaroof 500 Prime PU primer** is then to be applied to the areas to be treated at a nominal rate of 8 linear meters per litre on joints and 0.7 litre/m<sup>2</sup> in gutters.

**Chopped strand reinforcing mat 225gsm** should then be laid over the **PERMAROOF 500 EMBEDMENT** and then brushed to totally wet out and encapsulate the sheet, including the edges. Adjacent lengths/sections of the mat are to be overlapped to ensure a minimum 2cm overlap after coating.

Note: For treating joints, special 0.5m wide rolls of mat are available.

## APPLICATION OF PERMAROOF 500 EMBEDMENT

### Installation – Embedment Coat

**PERMAROOF 500 EMBEDMENT** is to be applied to the roof surface using a medium pile roller at an application rate of 0.5 lt/m<sup>2</sup> (pitched roof) and 1.0lt/m<sup>2</sup> (flat roofs).

### Reinforcement

#### Pitched roofs

These require local reinforcing, as described in the previous section. No further reinforcing is necessary.

#### Flat roofs

**225gsm Reinforcing Mat** is to be applied over the entire roof surface, following the roof contours. Adjacent widths of **Chopped strand reinforcing mat 225gsm** should be overlapped to ensure a minimum 2 cm overlap after coating.

**Chopped strand reinforcing mat 225gsm** should also be overlapped 3-6cm on to the treated reinforced up stands, parapets, joints and corners to maintain a continuous reinforcement.

### Completion of Embedment Coat

After the **225gsm Reinforcing Mat** has been laid out, it should be rolled in to the wet PERMAROOF 500 EMBEDMENT

A further application of **PERMAROOF 500 EMBEDMENT** should be rolled through the **Chopped strand reinforcing mat 225gsm** on any areas not completely wetted to totally encapsulate and impregnate the matting, if required.

For flat roof decks, the coverage rate of the **PERMAROOF 500 EMBEDMENT** will be 1.2 litre/m<sup>2</sup> with 225gsm CSM. This may increase on uneven or porous surfaces.

For pitched roofs, the coverage rate of the **PERMAROOF 500 EMBEDMENT** will be 0.5 litre/m<sup>2</sup>.

PERMAROOF 500 EMBEDMENT can be overcoated after a minimum of 16 hours @ 20°C. At lower temperatures, this time will be increased.

Provided surfaces are clean, there is no maximum overcoating time.

## APPLICATION OF PERMAROOF 500 UV TOP COAT

### Installation – Seal Coat

Prior to application of PERMAROOF 500 UV TOP COAT, **PERMAROOF 500 EMBEDMENT** must be dry and free from contamination.

**PERMAROOF 500 UV TOP COAT** is a single component high solids colour stable finish supplied ready for use.

PERMAROOF 500 UV TOP COAT should be applied by brush or roller, with rollers being preferred for large applications.

PERMAROOF 500 UV TOP COAT should be applied to give a uniform even coating totally obliterating the embedment coat at a nominal dry film thickness of 525 microns, this equates to a coverage rate of 0.75 litre/m<sup>2</sup> on smooth surfaces.

## APPLICATION OF SLIP RESISTANT FINISH

Where slip resistant walkways are required, this can be achieved by the application of an extra coat of **PERMAROOF 500 UV TOP COAT** incorporating an aggregate.

As soon as the overall coat of **PERMAROOF 500 UV TOP COAT** is dry, approximately 6 hours at 20°C, a second coat should be applied to the designated area. Aggregate 0.8-1mm should then be broadcast over the freshly applied product at a rate of 0.75Kg/m<sup>2</sup>, whilst the **PERMAROOF 500 UV TOP COAT** is still wet.

This can further be sealed with a UV stable clear sealer **Allsealed Sealer PU4965** at a typical coverage of 0.5 litre/m<sup>2</sup>, if required.

### Additional Precautions

1. Use industrial safety gloves.
2. Use suitable eye protection.
3. Before use, ensure that you read the relevant Safety Data Sheets for this product.

The company will supply, upon request, individual advice in writing in connection with the use and application of its products in all appropriate cases. Customers are urged to make use of this service. This leaflet is provided for general guidance only. All recommendations and suggestions are made in good faith but without guarantee and are subject to the company's terms and conditions.