

# Surface damp proof membrane Flowprime DPM

Flowprime DPM is a two-component solvent-free liquid applied surface damp proof membrane and residual moisture suppressant.

After curing, Flowprime DPM provides a surface membrane with excellent adhesion to damp concrete and polymer modified sand/cement screeds. Hygrometer readings up to 98% RH as measured in accordance with





## **FeRFA Classification**

N/A

#### **Colours**

Flowprime DPM is available in red and yellow as a visual aid for application and coverage.

#### **Pack Size**

5 and 10 kg units.

## **Advantages**

Permits early overlaying with vinyl, carpets and resin based products without the conventional "drying out" period being observed.

#### **Suitable Substrates**

Concrete and polymer modified cementitious screeds.

**Disclaimer:** FeRFa (The Resin Association) do not consider anhydrite, hemi-hydrate, and calcium sulphate screeds to be suitable for overlayment with resin floor finishes.

#### Uses

Flowprime DPM has been designed for use as a coating over cementitious surfaces which posses high levels of residual moisture. This practice should only be adopted subject to a survey confirming adequate underlying ground stability. Moisture testing should be carried out in accordance with BS 8203.

This product is not suitable for use over under-floor heating systems.

#### **Components**

Flowprime DPM comprises of: one part Resin and one part Hardener.

#### **VIRTUS RESINS**

The Shippon, Faenol

Pentrecelyn

Ruthin LL15 2SP

**Tel:** 01978 790 744

**Tel:** 0843 289 8422

**Email:** info@epoxyresinsuppliers.co.uk

www.epoxyresinsuppliers.co.uk



# **Technical Data**



#### **Thickness**

Approximately 450 microns from two coats.

## Typical Properties, 28 days at 20 °C\*

Abrasion resistance (EN 13892-4) AR 0.5
Abrasion resistance (BS 8204-2) Special Class
BRE Screed Test Category A
Adhesive strength to concrete (BS EN 13892-8:2002):
Dry concrete > 1.5 MPa
7 day old saturated surface dry concrete 3.2 MPa
Moisture vapour transfer rate 5g/m²/day

The typical physical properties given above are derived from testing in a controlled laboratory environment. Results derived from testing field-applied samples may vary dependent upon site conditions.

## Cure Schedule at 20 °C\*

Working life of full packs\*\* 30 minutes
Over-coating time (minimum)
Over-coating time (maximum)
48 hours

The material should be protected from water for 7 days.

\*The above cure times are approximate and given as a guide only. These times can vary due to prevailing site conditions. Higher temperatures will shorten working time and lower temperatures will extend cure times.

#### **Pack Size**

5 and 10 kg units

#### Coverage

 $4 \text{ m}^2$  /kg/coat at 225 microns/per coat. A minimum of two coats are required. Coverage will be reduced by rough, porous substrates and more material may be required to achieve the minimum wet film thickness requirements.

## **Substrate Strength**

The concrete substrate must be sound and of sufficient compressive strength (minimum 25  $\rm N/mm^2$  ) with a minimum pull off strength of 1.5  $\rm N/mm^2$  )

## **Surface Preparation**

Inadequate preparation will lead to loss of adhesion and failure. In coatings or flow-applied systems, there is a tendency for the finish to mirror imperfections in the substrate. Grinding or light vacuum contained shotblasting is therefore preferred over planning where these types of finishes are specified. Percussive scabbling or acid etching is not recommended for any grade of resin flooring. Refer to the Virtus Guide to Surface Preparation for further information.

#### **Movement Joints:**

Movement joints and cracks cannot be bridged with Flowprime DPM. These should be filled with a flexible jointing material.

#### **Hydrostatic Pressure:**

Hydrostatic pressure may, under certain circumstances, cause adhesive failure between the flooring and the substrate. Where this is likely to occur, such as in areas where the ground water table is higher than the substrate, and where external tanking has not been applied, pressure relief must be provided e.g. by direct drainage. In new construction, for concrete bases in contact with the ground, a damp-proof membrane should be incorporated into the slab design, in accordance with the requirements of CP 102, in order to prevent ground moisture adversely affecting the resin flooring. In the case of basement floors in contact with the ground, the provisions of BS 8102 should be followed.

## **Mixing**

Flowprime DPM is a two-component product. Fully drain the contents of the hardener component into the lightly coloured resin component and mix thoroughly with a slow speed electric stirrer fitted with a spiral paddle, for a minimum of 3 minutes until homogeneous.

Care should be taken to ensure that any material adhering to the sides and bottom of the mixing vessel is thoroughly mixed in otherwise uncured patches may result.

**Important:** Both liquids are pre-weighed and designed to be mixed together in their entirety. It is essential that the full amounts are mixed together and until homogenous to ensure the product cures correctly and to the desired finish.

## **Application**

Apply evenly using a notched trowel (1.5 mm x 5 mm V shaped) and flatten out the ridges with a pre-wetted-out short pile roller whilst still wet. Do not exceed the coverage rate of 4 m²/kg under any circumstances. It is essential that each coat should be no less than 200 microns in thickness which should be checked using a wet film thickness gauge. Records of these measurements should be kept. Apply a second coat once cured at right angles to the first. It is essential that Flowprime DPM is pin-hole free and continuous with absolutely no gaps or cavities. If this is not the case, an additional coat should be applied. If a sand scatter is required for key or profile, this should be applied to a third coat of Flowprime DPM.

## **Application Conditions**

Ideal ambient and substrate temperature is 15 - 25 °C to achieve best results. Localised heating or cooling equipment may be required outside these parameters.

The substrate and uncured floor must be kept at least 3° C above the dew point to reduce the risk of condensation or blooming on the surface for at least 48 hours after application.

<sup>\*\*</sup> Usable working life of material following mixing and immediate spreading as per the application instructions.

## **Technical Data**



## EU Directive 2004/42/EC

Complies with category j type SB (< 500 g/l). The VOC content of Flowprime DPM is approx. 156 g/l (theoretical).

## **Health and Safety**

Refer to product Safety Data Sheet before use.

## **Storage**

Store off the ground in un-opened packs in a dry store, under cover between 10°C and 30°C out of direct sunlight. Protect from frost.

#### **Shelf Life**

12 months if stored in accordance with the above recommendations.

#### **Limitations**

Do not proceed with application if atmospheric relative humidity is, or is anticipated to be, >90% or if the surface temperature is <3  $^{\circ}\text{C}$  above the dew point. Application should not commence when the substrate temperature or the ambient temperature is, or is anticipated to be <5  $^{\circ}\text{C}$  during the application or within the curing period. The design strength of concrete surfaces must be a minimum of 25 MPa compressive strength at 28 days. The manufacture of Flowprime DPM is a batch process and despite close manufacturing tolerances, colour variation may occur between batches.

#### **Technical Advice**

For further information on this or any other Virtus product, please contact our office.

## **Availability**

3 - 5 working days. Country of Manufacture: United Kingdom

## You Might Also Need:

- Resin Painting Kit
- Mixing Drill Attachment

**Note:** The information contained in this document, and all further technical advice given is based on our present knowledge and experience. However, it implies no liability or legal responsibility on our part. In particular, no warranty or guarantee of product performance in the legal sense is intended or implied as the conditions of use and the competence of any labour involved in the application are beyond our control. Properties listed are for guidance purposes only. We reserve the right to make any changes according to technological progress or further developments.

Virtus Resins, The Shippon, Pentre-Celyn, Ruthin LL15 2SP, England				
(€	13		DOP RV0014	
EN 13813 SR-B2,0 Synthetic resin screed material for use internally in buildings not subject to reaction to fire regulations				
Reaction to fire Release of corrosive substances Water permeability Wear resistance Bond strength	NPD SR NPD NPD B2.0	Sound in Sound al Thermal	esistance Isulation bsorption resistance al resistance	NPD NPD NPD NPD NPD

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