

# PUMAPRIME DPM

Surface Damp Proof Membrane & residual Moisture Suppressant



## Description

**Pumaprime DPM** is a two-component solvent-free liquid applied surface damp proof membrane and residual moisture suppressant. After curing, **Pumaprime 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 BS 8203:2001 can be accommodated. **Pumaprime DPM** is available in red and yellow as a visual aid for application and coverage.

## Uses

**Pumaprime DPM** has been designed for use as a coating over cementitious surfaces which possess 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.

**Pumadur DPM** permits early overlaying with vinyl, carpets and resin based products without the conventional "drying out" period being observed. This product is not suitable for use over under-floor heating systems.

## Thickness

450 microns (two coat system)

## 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	5 g/m <sup>2</sup> /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

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

Minimum time to overcoat 16 hours  
Maximum time to overcoat 48 hours

\* The above cure times are approximate and given as a guide only. These times can vary due to prevailing site conditions.

## Substrate Strength

The concrete substrate must be sound and of sufficient compressive strength (minimum 25 N/mm<sup>2</sup>) with a minimum pull off strength of 1.5 N/mm<sup>2</sup>.

## 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 shot-blasting 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 **Resdev Guide to Surface Preparation** for further information.

## Movement Joints

Movement joints and cracks cannot be bridged with **Pumaprime 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

**Pumaprime 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.

## 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.

## Resdev Limited

Pumafloor House, Ainleys Industrial Estate  
Elland, West Yorkshire, HX5 9JP, England  
Tel: +44 (0) 1422 379131  
fax: +44 (0) 1422 370943  
info@resdev.co.uk  
www.resdev.co.uk



**Pumaprime DPM**  
Surface Damp Proof Membrane & Residual Moisture Suppressant

### Application Technique

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 m<sup>2</sup>/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 **Pumaprime 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 **Pumaprime DPM**.

### Estimating

4 m<sup>2</sup>/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.

### Health and Safety

Refer to product Safety Data Sheet before use.

### EU Directive 2004/42/EC

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

### 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 °C above the dew point. Application should not commence when the substrate temperature or the ambient temperature is, or is anticipated to be <5 °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 **Pumaprime 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 Resdev product, please contact our office.

### 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.

Resdev Limited, Pumaflor House, Ainleys Industrial Estate Elland, West Yorkshire, HX5 9JP, England			
CE		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	NPD	Impact resistance	NPD
Release of corrosive substances	SR	Sound insulation	NPD
Water permeability	NPD	Sound absorption	NPD
Wear resistance	NPD	Thermal resistance	NPD
Bond strength	B2,0	Chemical resistance	NPD

### Resdev Limited

Pumaflor House, Ainleys Industrial Estate  
Elland, West Yorkshire, HX5 9JP, England  
Tel: +44 (0) 1422 379131  
fax: +44 (0) 1422 370943  
info@resdev.co.uk  
www.resdev.co.uk



Resin Development

### Pumaprime DPM

Surface Damp Proof Membrane & Residual Moisture Suppressant