

# PPG EP001

## Epoxy DPM Floor Primer

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### DESCRIPTION

PPG EP001 Epoxy DPM Floor Primer is a two-component solvent-free liquid applied surface damp proof membrane and residual moisture suppressant. After the product has sufficiently cured, PPG EP001 provides a surface membrane with good adhesion to damp concrete and other cementitious substrates. PPG EP001 can be used on floors with hygrometer readings up to 98% RH as measured in accordance with BS 8203:2001. PPG EP001 is coloured yellow to give a visual aid for application and to ensure full coverage of the substrate.

### USES

PPG EP001 has been developed for use as a coating over cementitious surfaces which contain high levels of residual construction moisture within them. The application of PPG EP001 should only be carried out after a full survey to determine adequate underlying ground stability and substrate compatibility has been carried out. The moisture testing of concrete substrates should be carried out in accordance with BS 8203.

PPG EP001 enables the early application of floorcoverings such as vinyls and carpets as well as PPG Cementitious and Resin Systems, without the traditional "drying out" period being observed. This product is not recommended for use in conjunction with under-floor heating systems.

### THICKNESS

450 microns applied in 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 > 3.0 MPa

Moisture vapour transfer rate approx. 5g/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.

### PRODUCT CURE SCHEDULE AT 20°C

Working Time / Pot Life \*30 minutes

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

Minimum overcoat time 16 hours

Maximum overcoat time 48 hours

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

### AVAILABLE PACK SIZES

PPG EP001 is available in pack sizes of 5, 10 and 25Kg

### SUBSTRATE REQUIREMENTS

For successful application of PPG EP001 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>. Substrates should be clean and free of surface laitance and contaminants such as dirt, dust, loose material, oil, grease, poorly bonded coatings and surface treatments.

### SUBSTRATE PREPARATION

All concrete surfaces should be mechanically prepared prior to installing any PPG Cementitious or Resin Flooring System. This preparation is very important to ensure the product fully adheres to the substrate.

If inadequate preparation is carried out this can lead to potential delamination and failure of the product.

The selected method of preparation is dependent on the thickness of the material that is going to be applied. In some cases of application of coating or flow applied systems, there can be the potential for the finish to mirror any imperfections in the substrate. Therefore, grinding or light vacuum contained shot-blasting is preferred over other heavier methods of mechanical substrate preparation. Refer to PPG Extra for further information about suitable methods of floor preparation.

### MOVEMENT JOINTS

Movement joints and cracks cannot be bridged or filled with PPG EP001. These should be filled with a suitable jointing or crack sealing material.

### HYDROSTATIC PRESSURE

Hydrostatic pressure can, under certain circumstances, cause a 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. 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

PPG EP001 is a two-component epoxy resin product. Precise and thorough mixing of this product is required to ensure the product cures correctly. Therefore ensure that all the contents of the hardener component are fully drained into the lightly coloured resin component and mixed thoroughly with a slow speed electric drill / stirrer fitted with a spiral paddle, for a minimum of 3 minutes until the mixture is homogeneous in appearance. Do not add solvent/thinners to the product.

### APPLICATION CONDITIONS

We would recommend that an ambient and substrate temperature of 15 - 25°C is maintained within the application area to achieve best results. Localised heating or cooling equipment may be required outside of these temperatures to assist application and curing. To avoid the risk of condensation or blooming on the surface, the substrate and uncured floor must be kept at least 3°C above the dew point for at least 48 hours after application.

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### 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. Apply a second coat once cured at right angles to the first. It is essential that PPG EP001 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 to create a key for subsequent PPG Cementitious or Resin Systems, this should be applied to a third coat of PPG EP001.

### 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 PPG EP001 is approx. 116 g/l (theoretical).

### STORAGE

Materials should be stored in their original unopened containers in a dry weatherproof area maintained within a temperature range of 10°C to 30 °C on pallets and away from walls. Protect from frost and direct sunlight.

### 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, >75% 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. A functioning damp proof membrane should be installed within the substrate.

### WARRANTY


PPG warrants (i) its title to the product, (ii) that the quality of the product conforms to PPG's specifications for such product in effect at the time of manufacture and (iii) that the product shall be delivered free of the rightful claim of any third person for infringement of any U.S. patent covering the product. THESE ARE THE ONLY WARRANTIES THAT PPG MAKES AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, UNDER STATUTE OR ARISING OTHERWISE IN LAW, FROM A COURSE OF DEALING OR USAGE OF TRADE, INCLUDING WITHOUT LIMITATION, ANY OTHER WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR USE, ARE DISCLAIMED BY PPG. Any claim under this warranty must be made by Buyer to PPG in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life of the product, or one year from the date of the delivery of the product to the Buyer, whichever is earlier. Buyer's failure to notify PPG of such non-conformance as required herein shall bar Buyer from recovery under this warranty.

### TECHNICAL ADVICE

For further information on this or any other PPG product, please contact PPG Extra on 01924 354354 or [ppgextra@ppg.com](mailto:ppgextra@ppg.com)

### LIMITATIONS OF LIABILITY

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PPG Architectural Coatings UK Limited, Huddersfield Road, Birstall, Batley, West Yorkshire, WF17 9XA			
	17	DOP PPG EP001 17131DUT010/11	
EN 13813 SR-B2,0 Synthetic resin screed material for use internally in buildings not subject to reaction to fire regulations.			
Reaction to fire	E <sup>(1)</sup>	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

(1) According to Commission Decision 2010/85/EU of 9 February 2010, the product satisfies all requirements of the performance characteristics 'reaction-to-fire' class E without need for further testing.