PermaCOAT Liquid Epoxy DPM



Description

PermaCOAT Liquid Epoxy DPM is a two-component, solvent free, low odour epoxy resin membrane that is tolerant of residual moisture in concrete floors. Once cured, PermaCOAT Liquid Epoxy DPM creates a new surface damp proof membrane which enables earlier access onto the floor for the application of screeds, coatings and other floor coverings including tiles, vinyl, wood and carpets. It has good chemical resistance to mild chemical attack but is designed to be over-coated with other chemical resistant epoxy resin finishes when used in this environment.

PermaCOAT Liquid Epoxy DPM can be used on concrete floors and fine concrete screeds, of not less than 50mm thick in the case of un-bonded screeds. The surface should be of sufficient quality and mechanical strength to ensure an even coating.

The product can also be applied to polymers, screeds and certain types of smoothing under-layments, provided these are well bonded. These under-layments must be stable to the effects of water. If not, then the concrete floor must contain an integral damp-proof membrane to prevent further ingress of water from the ground.

Where the product is laid onto a concrete surface where there is no damp proof membrane or where damage may have rendered the damp proof membrane ineffective you should give due consideration to the possible presence of hydrostatic pressure and the consequences of creating a barrier layer resulting in the pressure/water flow being directed elsewhere.

Benefits

- Easy Application
- Solvent Free
- Low Odour
- Application onto surfaces with hygrometer readings of up to 97%
- Good adhesion to non-porous substrates
- Fast curing/short overcoat time
- Can be subjected to mechanical loads
- Can be subjected to chemical loads
- Conforms to BS EN 13813:2002

Preparation

New Concrete Floors: New concrete must be clean, sound, dry and fully cured and surface laitance removed preferably by enclosed shot blasting or mechanical grinding, a minimum strength of 25N/mm2 is required.

Existing Concrete Floors: Remove all dirt, oil, grease and other surface contaminants by enclosed shot blasting, scarification or mechanical grinding. Fats, oils or greases must be removed by mechanical means and detergent washing. Local repairs should be carried out using floor repair compounds.

All traces of concrete hardeners or other contaminants must be removed. The surface must be thoroughly vacuumed to remove concrete dust and then protected against further contamination by suitable means. Surfaces must be free from liquid water and the atmosphere must not be condensing.

PermaCOAT Liquid Epoxy DPM can also be applied to existing coatings and to other cementitious screeds which should be clean and sound with an appropriate mechanical key for adhesion.

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The system is selected on the basis of hygrometer readings in accordance with BS 8203. The number of coats to be applied is chosen in accordance with the following table.

RH Reading %	Required Coats	Thickness/ Coat
75-92	2 coats	200µ / 0.2mm
Over 92-97	3 coats	200µ / 0.2mm

Application

The ambient temperature of the area should not be allowed to fall below 10^0C throughout the application and the curing period, as this could have an adverse effect on the system. Surface temperature must be above 10^0C. Where possible it is recommended that the application area is heated to a minimum temperature of 15^0C ideally to allow the ambient and substrate temperature to stabilise prior to installation.

Mixing

Stir each component separately before mixing, thoroughly scraping the bottom and sides of each container. Transfer the entire contents of the hardener container into the base resin. Mix for 2-3 minutes using a slow speed mixer fitted with a suitable paddle, until the mixture is uniform and free from streaks.

The mixed unit should be applied immediately by roller or brush with a consistent procedure. Floor areas should be cross-rolled to ensure even application and to minimise roller marks.

Note: Apply immediately, do not wait to apply onto substrate

If applying further bonded coatings for example, self-levelling compounds, the last coat can be blinded with Permagard Quartz Aggregate at a rate of 1.5kg - 2kg/m² approximately 20-30 minutes after being laid to provide a key for further coatings to bond to.

Health & Safety

PermaCOAT Liquid Epoxy DPM is formulated from materials designed to achieve the highest level of performance as safely as possible. However, specific components require correct handling and suitable equipment, this information is given in the relevant safety data sheets. In all cases, spillages or skin contamination should be cleaned as soon as practically possible, by dry wiping of the affected area, and thorough washing with soap and water.

Product Information

SKU	ERDPMT
Thickness (Dry)	Approx. 200 microns 0.2 mm per coat
Pack Size	5 kg, 10 kg and 20 kg
Colour	Grey
Shelf Life	12 months
Storage	Store between 5°C and 30°C
Packaging	Two components supplied in tins

Drying Times & Coverage Rates

Coverage per coat	3.5-3.7 m²/kg
5 kg pack	17.5-18.5 m² per coat
10 kg pack	35-37 m² per coat
20 kg pack	70-74 m² per coat
Pot Life	25-50 minutes
Recoat Time	12-24 hours
Light Traffic	24-48 hours
Heavy Traffic	72 hours
Full Chemical Cure	Up to 7 days

At 20-24°C. Higher temperatures will reduce and lower temperatures will increase the times stated. Coverage depends on substrate condition, allow for the full number of coats required.

Technical Information

Bond Strength ASTM D4541-85	At least 3 N/mm² (concrete failure)
Mixed Density	1.30-1.40 g/cm³
VOC	Under 20 g/litre
Temperature Resistance	Tolerant of sustained temperatures up to 60°C
Chemical Resistance	Resistance to specific Materials
Compressive Strength	Approx. 20 N/mm²
Flexural Tensile Strength	Approx. 20 N/mm²

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