PermaSEALPRO One Coat Epoxy DPM

Fast Curing Damp Proof Membrane



PermaSEAL[®] PRO One Coat Epoxy DPM is a professional fast curing, two-component, solvent free, epoxy resin damp proof membrane.

One coat creates a barrier against residual moisture in concrete floors and acts as a damp proof membrane in the absence of a structural DPM, for hygrometer readings up to 98%. With rapid curing and one coat application, the high quality PermaSEAL® PRO One Coat Epoxy DPM enables earlier access onto the floor for the application of screeds, coatings and other floor coverings including tiles, vinyl, wood and carpets.

It is designed to be overcoated with appropriate chemical resistant epoxy resin finishes when used in chemical environments but has good resistance to mild chemical attack.

PermaSEAL® PRO One Coat Epoxy DPM can be used on concrete floors and sand/cement screeds, of not less than 50mm thick in the case of unbonded screeds. The surface should be of sufficient quality and mechanical strength to ensure an even coating.

The product can also be applied to polymer screeds and certain types of self-levelling compounds provided these are well bonded.

These 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.

Note: For areas with hygrometer readings over 98%, two coats should be applied.

PERMASEAL® PRO ONE COAT EPOXY DPM	PRODUCT TECHNICAL DETAILS	
Thickness (Dry)	350 Microns	
	0.35mm (Per Coat)	
Solids Content by weight	100%	
Pack Size	2.5kg & 5kg	
Shelf Life	12 months minimum	
Storage	Keep out of direct sunlight. Store above 15°C	
Packaging	Metal Tin	
Colour	Black	
Abrasion Resistance	n/a	
Temperature Resistance	Tolerant of sustained temperatures up to 60°C	
Chemical Resistance	Resistance to specific Materials	
Compressive Strength	Approx. 20 N/mm ²	
Flexural Tensile Strength	Approx. 20 N/mm ²	
PERMASEAL [®] PRO ONE COAT EPOXY DPM	DRYING TIME & COVERAGE RATES	
Coverage Rate	@0.5kg/m ²	
	2.5kg tin = $5m^2$	
	5kg tin = 10m²	
Pot Life	Approx. 20 mins @ 20°C	

Recoat Time

Light Traffic

Heavy Traffic

Full Chemical Cure

Compressive Strength

Min. 4-6hrs - Max. 24hrs

Approx. 20 N/mm²

24-48hrs

72 hours

Up to 7 days

PREPARATION, PRIMING, MIXING & APPLICATION

PREPARATION

New Concrete Floors: New concrete must be clean, sound, dry, 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.

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
<97	1 coat	350µ / 0.35mm
≥98	2 coats	350µ / 0.35mm

MIXING

Mix the entire contents of the base with the hardener. If a separate mixing bucket is being used mix thoroughly ensuring all contents of both components are removed from the tins supplied. Mix using a slow speed electric mixer for approximately two to three minutes until the two components are fully combined. 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 or adhering tiles, a second coat of PermaSEAL[®] PRO One Coat Epoxy DPM should be applied but at a thickness of 175 microns or 0.2mm, rather than 350 microns. After approximately 20-30 minutes this can be blinded with Permagard Fine Quartz Aggregate at a rate of 1.5kg – 2kg/m², to provide a key for further coatings to bond to.

BENEFITS

- Rapid curing and short overcoat time
- Easy application
- Solvent free
- Low odour
- One coat application onto surfaces with hygrometer readings of up to 98%
- Excellent adhesion to concrete
- Good adhesion to non-porous substrates
- Compatible with underfloor heating
- Can be subjected to mechanical loads
- Can be subjected to chemical loads
- Excellent resistance to water, grease, oil, aqueous salt solution and dilute mineral and organic acids
- Conforms to BS EN 13813:2002

APPLICATION

The ambient temperature of the area should not fall below 10°C throughout the application and curing period, as this could have an adverse effect on the system. Surface temperature must be above 10°C. Where possible it is recommended that the application area is heated to a minimum temperature of 15°C but ideally 20°C to allow the ambient and substrate temperature to stabilise prior to installation and achieve the fastest recoat time.

HEALTH & SAFETY

PermaSEAL[®] PRO One Coat 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.

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