

Denpox™ EPR

General purpose solvent free epoxy resin based primer

DESCRIPTION

Denpox™ EPR is a solvent free, low viscosity, two component epoxy resin based primer.

FEATURES AND BENEFITS

- Low viscosity
- Easy to apply
- Excellent penetration
- Seals pores and capillaries
- Excellent bond to substrate

FIELDS OF APPLICATION

Denpox™ EPR is designed for use as a primer on mineral substrates such as concrete and cementitious screeds prior to the application of **Denpox™** flooring systems and **Denpox™** waterproofing membranes. Please refer to individual system data sheets. A functioning damp proof membrane must be installed under on-grade concrete and known to be effective.

SUBSTRATE PREPARATION

All substrates must be structurally sound, clean and dry and free from oil, grease and loose material and any other contamination which might impair adhesion. Mechanical preparation such as captive shot blasting, scarification, and diamond grinding for edge work should be used to produce a substrate surface profile suitable for the application of a resin finish. The tensile strength of the substrate should exceed 1.5MPa. The residual moisture content should be less than 4%. **Denpox™ EPR** should be applied when substrate temperatures are constant or falling to minimise the risk bubble and void formation due to

expansion of air within the substrate when temperatures are rising. This is particularly important to note on external applications. The curing reactions are influenced by the ambient, material and substrate temperatures. Low temperatures lengthen the pot life, open- and curing times. High temperatures shorten pot life, open- and curing times. The temperatures should not fall below the minimum stated until the material is fully cured. The temperature of the substrate must be at least 30C above the dew point both during the application and for at least a further 24 hours (at 15°C).

APPLICATION

Denpox™ EPR (part A) is supplied in prepacked units along with **Denpox™ Hardener (part B)**. Before mixing, precondition both A and B components to a temperature of approximately 15 to 20°C. Pour the entire contents of part B into the container of part A. Mix with a low speed (ca.300 rpm) electric drill and paddle for at least 3 minutes until homogeneous. Scrape the sides and the bottom of the container several times during mixing to ensure complete mixing. Keep the mixing head submerged to avoid entrapping air. Do not work out of the original container. Decant the mixed material into a fresh container and remix for another minute. If required **Denpox™ EPR** can be extended with **Dencoat™ Quartz** to produce a scratchcoat slurry for uneven substrates, this should be added to the fully mixed materials under continuous mixing until uniformly distributed. Scratchcoats are applied by trowel.

Denpox™ EPR is applied by squeegee and finished by roller. Ensure that the primer layer is complete to fully seal the substrate concrete. Broadcast **Dencoat™ Quartz** into the still wet primer to provide a bond bridge for subsequent layers. Protect the fresh primer from water and condensation which can cause a white bloom and tackiness which will be detrimental to subsequent layers.

CONSUMPTION

Denpox™ EPR: Typically 0.3-0.5 kg/m² depending upon surface texture and porosity of the substrate concrete. Very porous substrates may require double priming.

Dencoat™ Quartz: Typically 1.0kg/m²

CLEANING AGENT

Tools must be cleaned immediately after use with **Dencoat™ Tool Cleaner** or other suitable solvent.

PACKAGING

Denpox™ EPR is supplied in 10 kg, 190 kg or 900 kg units.

SHELF LIFE

Minimum 12 months stored in original containers under dry conditions at a temperature between 15-20°C. Do not expose to direct sunlight.

Technical data for Liquid material

Property	Method	Values
Mixing Ratio A:B		10 kg : 5 kg
Mixed density		1.07 kg/l
Mixed Viscosity at 23°C	Brookfield DV-II	300 cP
Working time at 23°C		20 minutes
Ready for traffic at 23°C		12 hours
Fully cured 23°C		7 days
Substrate temperature		Min 5°C max 30°C
Max relative humidity		Max 85%

Technical data cured material

Property	Method	Values
Thickness		0.3 mm
SHORE D hardness	DIN 53505	80
Tensile strength	DIN 53504	78 MPa
Elongation at Break	DIN 53504	>50%
Crack bridging ability		1 mm
Temperature resistance		Max 90°C
Water penetration		Impervious
Chemical Resistance		See separate datasheet
Adhesion to concrete	BS/EN 24614	>1.5 MPa
Abrasion resistance (Taber)	EN 1504-2	<3000 mg
Impact resistance	EN 1504-2	Class II
Fire classification	EN 1504-2	D _{fl}



Dencoat™ International · E-mail: info@dencoat.com · Website: www.dencoat.com	
22 ¹⁾	
EPR - 001	
EN 13813 SR-AR1-B1,5-IR4	
Synthetic resins for internal uses (Application in accordance with the newest technical information)	
Reaction to fire:	D _{fl}
Release of corrosive substances (Synthetic Resin Screed):	SR
Water permeability:	NPD ²⁾
Wear resistance (Abrasion Resistance):	< AR 1 ³⁾
Bond strength:	> B 1,5
Impact resistance:	< IR 4
Sound insulation:	NPD ²⁾
Sound absorption:	NPD ²⁾
Thermal resistance:	NPD ²⁾
Chemical resistance:	NPD ²⁾

CE-labelling

- 1) Last two digits of the year in which the ce marking was affixed.
- 2) NPD = No performance determined.
- 3) Refers to a smooth surface without broadcasting.

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