EP 25

WATER BASED EPOXY MOISTURE BARRIER

Product Overview

EP25 is a two part water based epoxy compound used both as a primer and protective coating to prevent moisture penetration and rising damp through mineral surfaces. EP25 can be applied to damp surfaces and over freshly laid concrete ("green concrete"), screeds and renders with excellent hydrostatic pressure resistance. With excellent moisture resistance in positive and negative applications, EP25 provides a compatible surface for finished decorative coatings, membranes and adhesives to be directly applied over. Suitable for internal, external, underground and immersed applications.

Product Features

- Non-flammable, low odour and low VOC
- Outstanding adhesion properties to concrete, masonry, stone and timber surfaces
- Excellent positive and negative hydrostatic resistance
- Able to be applied to damp surfaces and freshly laid concrete
- Easy water clean up
- Excellent pot life 1-2 hours (@ 25°C)
- Compatible surface for bonding a wide range of coatings and adhesives

Typical Applications

- Moisture barrier/dry lining on negative sides of underground wall surfaces preventing ingress of moisture, e.g. lift pits, basement walls, tunnels, cellars, car parks, retaining walls.
- Protective primer over damp concrete and mineral surfaces to enable application of TWS membranes or finished coatings, preventing vapour blisters and de-bonding from the substrate.
- Low water vapour transmission protective coating over "green" or damp concrete.
- Protective moisture barrier against rising damp of floors, enabling direct adhesion of vinyl, carpet, tiles, timber, levelling compounds, screeds etc.

General Application Details

- Surfaces must be clean, sound, stable and free of: loose foreign material; existing coatings; laitance; release agents; curing compounds and oil/grease residues. Smooth or polished concrete should mechanically abraded/roughened to promote optimal adhesion.
- In negative waterproofing or rising damp applications, efflorescence must be removed from the surface to enable maximum adhesion strength and hydrostatic pressure resistance
- Surface voids, cracks (non-movement), pitted areas, low points, holes or any deformed areas to be repaired and filled/levelled using repair mortar or epoxy mortar repair systems before applying EP25.

Mixing Components:

- Lightly stir Part A and Part B to ensure a homogenous state before mixing commences.
- Measuring by volume, add equal parts of Part A and Part B into a clean pail or mixing container. Thoroughly mix the two components for approx. 3 minutes on low medium speed until a homogenous mix is formed. Measure the desired mix quantity to ensure only enough compound is formed that can be used within an hour of pot life. Allow the product to settle for 5-10 minutes after mixing before using.

Application

- If applying over damp surfaces, areas must be free of surface water. Dried surfaces, including aged concrete, should be lightly dampened via water mist prior to application. Application onto floor areas best achieved using a squeegee or stiff nylon broom, working the EP25 into surfaces to promote optimum absorption into the substrate. All pinholes or voids to be worked over when applying by broom or squeegee.
- Application onto wall surfaces, best achieved using medium-long nap roller.

Coverage

- Best results always achieved with 2 coats.
- For rising damp or prevention of efflorescence, a minimum 1 coat application can be applied at overage of 3.0m2/litre.
- For waterproofing or creating a moisture protective barrier on the negative side of walls, a minimum of 2 coats is recommended at 3.0m2/litre per coat.

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- Ensure a uniform application and required coverage is achieved. If the recommended coverage hasn't been achieved in 2 coats, further coats should be applied until the recommended coverage is formed.
- Over porous surfaces, first coat can be diluted up to 5% with water. For denser surfaces dilution up to 10% can be considered. Note: Only 1st coat to be diluted. 2nd coat to be applied neat.

General

- Allow 24 hours curing after final coat before the application of membranes, adhesives, mortars, levelling compounds and other coatings. Curing will be prolonged in cooler temperatures and in high humidity.
- Do not to leave EP25 for more than 5 days before covering over with tiles, self-levellers etc.
- Clean surfaces, tools etc with water or soapy water while in a wet state.

Important Notes

- Gloves and eye protection to be used when handling this material.
- Keep containers in well ventilated areas, ensuring lids are correctly secured.
- Store under cover at temperatures not exceeding 30°C. Store product away from frost.
- Ensure adequate ventilation while using and avoid inhalation of any vapours.
- Avoid spillage into water courses, drains where possible.

Packaging

- 20Litre kit – 10Litre Part A + 10Litre Part B
- 4 Litre kit – 2Litre Part A + 2Litre Part B

General Technical Data

Drying times	
Pot Life	1-2 hours
Recoat	4 hours
Toppings/finishes	24 hours
Full Cure	7 days

**Based on normal ambient temperatures of 25°C, 50% RH*

Physical Properties	
Mix ratio	1:1 on volume
Wet film thickness	300 micron/0.3mm per coat
Solids content	48%
VOC	9 grams/Litre
Appearance	Wet - Part A – Grey; Part B – White Dry - semi gloss, matt when aged
Adhesion to primed concrete	ASTM 4541 – 8N/mm2
Water Vapour Transmission	ASTM E96 – 15g/m2 1 coat; 9g/m2 2 coats (300micron/0.3mm DFT)

Contact Details

TOTAL WATERPROOFING SUPPLIES CORPORATE PTY LTD
Telephone: +61 (2) 4940-3000

Email: sales@totalwaterproofingsupplies.com.au