

Water borne epoxy membrane / barrier for porous surfaces

Uses

As a moisture barrier coating to restrict passage of dampness through concrete and masonry substrates. Uses include interior faces of walls, floors, basements, tunnels, cellars, retaining walls, lift wells, underground car parks etc

Advantages

- Solvent Free
- Very Low VOC Emission
- Anti-microbial Formulation
- Very Low Odour
- Compatible with damp substrates
- Compatible bonding of most subsequently applied coatings, bonding agents, and water based adhesives
- Water based with no odour or volatile emissions
- Easy clean up using water
- Excellent adhesion to a variety of substrates including, concrete, brick, masonry, block, compressed fibre board, stone and timber
- Readily sanded if required

Description

Emer-Proof Aqua Barrier is a grey, two-component, matt to semi-gloss epoxy coating. When applied at 300 microns dry film thickness will provide a tenaciously bonded coating controlling the transmission of liquid moisture.

Technical support

Parchem offers a technical support package to specifiers, end-users and contractors, as well as on-site technical assistance throughout its own national outlets and via international appointed distributors.

Standards compliance

Emer-Proof Aqua Barrier is approved for use with potable (drinking water) - conforms to AS/NZS 4020:1999.

Properties

The values and properties below are achieved under laboratory conditions. Actual on-site values may show minor variations from those quoted.

Material properties

Base Appearance	Grey liquid
Volume Solids	49% approx
Viscosity (Base)	100,000 cps approx
Specific Gravity	1.50 approx (mixed)
Hardener Appearance	White liquid
Mixing Ratio	Equal parts, weight or volume
Pot Life	1 hour @ 25°C
Surface Appearance	Matt
Touch Dry	2 hours
Hard Cure	24 hours, 20°C
Complete Cure	7 days, 20°C
Minimum curing temp	5°C
Permeance	0.37 x 10 ⁻⁸ g/ Pa.s.m ² ASTM E96 94: Sect. 12 (Dessicant Method) @ 200µ

Design Criteria

Emer-Proof Aqua Barrier is designed to be applied in two coats to achieve an appropriate uniform theoretical dry film thickness of 300 microns. A minimum of 2 hours (temperature dependent) should elapse between the two coats and application of further coats or any subsequent products must occur within 3 days of application of the last coat.

Application Instructions

Surface preparation

It is essential that Emer-Proof Aqua Barrier be applied to a sound, clean substrate, free of previous coatings, grease, oil, dirt, adhesives, laitance and any other surface contamination.

A variety of methods can be used in the surface preparation, and is dependent on the state and type of contamination. This can range from high pressure water blasting to mechanical scarification. Any holes, non structural cracks etc should be repaired with the appropriate repair mortar.

Very dry and highly porous surfaces should be sprayed with a fine mist of water prior to the application of the first coat of Emer-Proof Aqua Barrier.

Mixing

Individually mix each component Base and Hardener to homogenous state prior to combining. Ensure the mixing paddle is changed before mixing the second part.

Emer-Proof® Aqua Barrier

Add equal parts 1:1 by volume of the Base and Hardener in a total volume suitable for application within the pot life of the product. Mix for another 3 minutes with a slow speed power stirrer, until a uniform mix is achieved, avoiding aeration of the material.

It is advisable to allow the mixed product to stand for five to fifteen minutes before application.

Application

Spread the material with a suitable squeegee or stiff nylon broom, working the Emer-Proof Aqua Barrier into the surface to ensure total absorption into any pin holes and voids. Finish off using a medium to long nap roller. Spray application is also acceptable. Care must be taken to ensure the required application rates are achieved to obtain the minimum dry film thickness per coat.

If the first coat is to be spray applied an addition of 10% water will assist spraying and penetration.

Curing

Cured at room temperature Emer-Proof Aqua Barrier will be ready to accept foot traffic next day.

Emer-Proof Aqua Barrier has been formulated to show optimum curing and application characteristics in the temperature range from 15-25°C. At lower temperature the rate of cure will slow down considerably and at higher temperatures the working life of the mixed composition will be reduced.

Complete cure is normally achieved after 7 day @ 20°C.

In general, it is not advisable to use water-based coatings under conditions of low temperature and high humidity.

Clean Up

Clean up of brushes, roller sleeves and spraying equipment is by means of soapy water.

Coverage

300 µm is the minimum theoretical dry film thickness to be achieved to ensure all the advertised performance properties of Emer-Proof Aqua Barrier are met. This is achieved by applying two coats at 3.0 m²/litre total (undiluted) and is dependent upon substrate porosity as to the final dry film build achieved.

The diluted first coat is to be applied at 1.3 m²/litre (minimum 2 hours at 25°C / 50% R.H.) followed by the second coat at 1.5 m²/litre.

Supply

20 litre kits

PC: 405015

Storage

Shelf life / Storage

12 months if stored in dry conditions between 10°C and 30°C in the original, unopened packs. If stored at high temperatures the shelf life may be reduced. Emer-Proof Aqua Barrier should be protected from frost.

Important notice

A Safety Data Sheet (SDS) and Technical Data Sheet (TDS) are available from the Parchem website or upon request from the nearest Parchem sales office. Read the SDS and TDS carefully prior to use as application or performance data may change from time to time. In emergency, contact any Poisons Information Centre (phone 13 11 26 within Australia) or a doctor for advice.

Product disclaimer

This Technical Data Sheet (TDS) summarises our best knowledge of the product, including how to use and apply the product based on the information available at the time. You should read this TDS carefully and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied. Our responsibility for products sold is subject to our standard terms and conditions of sale. Parchem does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.

