Emer-Proof<sup>®</sup> Vapour Control



(Replaces Emer-Proof Aqua Barrier Vapour Control NOTE: this new formulation is NOT compatible with the previous base & hardeners)

# Water borne epoxy membrane / barrier for porous surfaces

### Uses

As a moisture barrier coating to restrict the passage of dampness through concrete and masonry substrates. Use on interior faces of walls for basements, tunnels, cellars, retaining walls, lift wells and underground car parks. It can also be used on floors where a suitable floor covering is used over the Emer-Proof Vapour Control.

### **Advantages**

- Primer for acrylic and polyurethane waterproofing membranes
- Can be over-coated with acrylic based paints and renders to provide a decorative finish
- Solvent Free
- Low VOC
- Anti-microbial Formulation
- Compatible with damp substrates withstands a head water pressure of 25 metres or up to 250Kpa hydrostatic pressure
- Compatible bonding of most subsequently applied coatings, bonding agents, and water based adhesives
- 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 Vapour Control is a grey, two-component, matt to semi-gloss epoxy coating. When applied at a total dry film thickness of 200 microns it will provide a tenaciously bonded coating controlling the transmission of liquid moisture. It can also be used as a primer for Emer-Proof waterproofing membranes.

As a primer for Emer-Proof waterproof membranes, Emer-Proof Vapour Control is applied as a single coat at  $5m^2$  / litre to achieve a dry film thickness of 100 microns.

# **Standards compliance**

Emer-Proof Vapour Control conforms to AS/NZS 4020:2005 -products in contact with drinking water.

# **Design Criteria**

Emer-Proof Vapour Control is designed to be applied in two coats to achieve an appropriate uniform theoretical dry film thickness of 200 microns. A minimum of 3 hours (temperature dependent) should elapse between the two coats and application of further coats or any subsequesnt products must occur within 3 days of application of the last coat.

#### **Properties**

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

#### **Material properties**

Colour (mixed)	Grey
Volume Solids	49% approx
VOC content:	<5 g/litre
Specific Gravity	1.25 approx (mixed)
Mixing Ratio	1:1 by volume
Pot Life	1 hour @ 35°C
	2 hours @ 25°C
Surface Appearance	Satin/Matt
Recoat Time	3 - 4 hours, 25°C / 50% RH
Hard Cure	24 hours, 25°C / 50% RH
Complete Cure	5 - 7 days, 25°C / 50% RH
Minimum curing temp	5°C
Permeance	0.12g/24 hrs/m².mmHg @ 32°C and 50% RH

# **Application Instructions**

#### Surface preparation

It is essential that Emer-Proof Vapour Control be applied to a sound, clean substrate, free of previous coatings, curing compounds, 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 Emer-Patch 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 Vapour Control. Three coats may be required.

When applying as a primer for Emer-Proof waterproofing membranes, concrete and masonry substrates should have a moisture content reading not exceeding 5% when tested using a Tramex CMEX11 moisture meter.

#### Mixing

Individually stir each component Base and Hardener to homogenous state using a power stirrer and spiral mixer prior to combining. Ensure the mixing paddle is changed / cleaned before stirring the second part.

After stirring, 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. The sides of the container should be then scraped to ensure all material is incorporated and mixed for a further 2 minutes

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

#### Application

Apply the Emer-Proof Vapour Control to the surface using a suitable brush and roller. On floors spread the material with a suitable squeegee or stiff nylon broom, working the Emer-Proof Vapour Control 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 wet film thickness per coat of 200 microns. This can be checked using a Wet Film Thickness gauge.

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

Discard any leftover mixed material once it has exceeded the pot life.

#### Curing

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

Emer-Proof Vapour Control 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 5 to 7 day @ 25°C / 50% RH.

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.

# Supply

**Emer-Proof Vapour Control** is supplied in 20 litre two component kits.

Emer-Proof Vapour Control Base 10 litre:	FE200120-10L
Emer-Proof Vapour Control Hardener 10 litre:	FE200121-10L

NOTE: this new formulation is NOT compatible with the previous Emer-Proof Aqua Barrier Vapour Control base & hardeners.

#### Coverage

As a **moisture barrier**, 200  $\mu$ m is the minimum theoretical dry film thickness to be achieved to ensure all the advertised performance properties of Emer-Proof Vapour Control are met. This is achieved by applying two coats at 5 m<sup>2</sup>/litre each coat (undiluted) and is dependent upon substrate porosity as to the final dry film build achieved.

Total Coverage: 0.4 litre / m<sup>2</sup> (total 2 coats)

As a **primer** for Emer-Proof waterproofing membranes, 100  $\mu$ m is the minimum theoretical dry film thickness to be achieved. This is achieved by applying one coat at 5 m<sup>2</sup>/litre (undiluted) and is dependent upon substrate porosity as to the final dry film build achieved.

Total Coverage: 0.2 litre / m<sup>2</sup> (single coat)

# Storage

Emer-Proof Vapour Control should be protected from frost.

Shelf Life is 12 months in the original unopened containers stored in cool, dry conditions at temperatures between  $5^{\circ}$ C and  $30^{\circ}$ C. Storage above this temperature may reduce storage life.

#### Important notice

A Safety Data Sheet (SDS) is available from the Emer website. 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.

