

## Polymer / cementitious two part waterproofing membrane

### Uses

Emer-Proof Quick Dry Two Part is suitable for a wide range of waterproofing applications such as:

- Podiums, terraces, balconies, and deck areas – under toppings, tiles and other protected environments
- Wet areas and showers – Class II Membrane System
- Foot trafficable exposed roof top membrane (when overcoated with Emer-Proof Top Coat)
- Foot trafficable exposed balcony decks (when overcoated with Emer-Proof Top Coat)
- Foot trafficable exposed walkways, subject to regular density foot traffic (when over-coated with Emer-Proof Top Coat)
- Water tanks, water storage areas, including potable conditions (sand / cement slurry priming with Emer-Proof Multi-Purpose Primer and Additive is essential when applying in submerged applications)
- Tiled pools & water features (sand / cement slurry priming with Emer-Proof Multi-Purpose Primer and Additive is essential when applying in submerged applications)
- Foundation waterproofing applications
- Suitable for subterranean areas such as retaining walls

### Advantages

- Low VOC
- Solvent free, non hazardous
- Handles ponding and permanently wet conditions (will not re-emulsify once fully cured)
- Tough and flexible with good elongation properties
- Compatible bonding properties for Emer-Proof Tilebond Flex adhesive
- Suitable for internal and external surfaces
- Has a high shore A hardness
- Australian made

### Standards Compliance

Emer-Proof Quick Dry Two Part meets the requirements of:

- AS/NZS 4858:2004 Wet Area Membrane as a Class II membrane
- AS3740:2010 Waterproofing of Wet Areas Within Residential Buildings
- AS/NZS 4020:2005 Testing of Products for Use in Contact with Drinking Water

### Description

Emer-Proof Quick Dry Two Part is a water based, fast drying, flexible two component, polymer modified cementitious waterproofing membrane designed for podiums, terraces, balconies, and deck areas – under toppings, tiles and other protected environments.

It may also be used for foot trafficable exposed roof top membranes (when overcoated with Emer-Proof Top Coat) and foot trafficable exposed balcony decks (when overcoated with Emer-Proof Top Coat).

Emer-Proof Quick Dry Two Part offers excellent adhesion properties over primed building substrates including Scyon sheathing, CFC, wet area timber, ceramic tile, metals, plastics, concrete, masonry, renders, cement sheathing, wet area sheet surfaces and plaster board surfaces (once correctly primed and prepared).

It possesses excellent low water vapour transmission properties and fully compatible with polymer modified cement based tiles adhesives, screeds and renders.

### Technical Support

Parchem offers a comprehensive range of high performance, high quality waterproofing and construction products. In addition, Parchem offers a technical support package to specifiers, contractors and end-users, as well as on-site technical assistance.

### Properties

Data quoted is typical for this product, but does not constitute a specification.

#### Properties of wet membrane

<b>Specific gravity of mixed product:</b>	1.25kg / litre (20 litres per 25kg kit)
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<b>Appearance:</b>	
<b>Liquid</b>	Blue
<b>Powder</b>	Sandy/Grey
<b>Mixed</b>	Blue

#### Properties of cured membrane

<b>Elongation:</b>	>245%
<b>Tensile Strength:</b>	>1.1 MPa
<b>Adhesion to concrete (primed):</b>	>1.7 MPa
<b>Water Vapour Transmission:</b>	0.45g/24h/m <sup>2</sup>
<b>Shore A Hardness:</b>	87
<b>Colour:</b>	Blue

### Coverage

Emer-Proof Quick Dry Two Part is designed to be applied by brush, roller or spray.

In general wet area applications, Emer-Proof Quick Dry Two Part is applied as two (2) coats with a minimum total coverage of 1.5 ltr / m<sup>2</sup>.

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For permanently immersed conditions/applications, Emer-Proof Quick Dry is applied as a three (3) coat membrane system, with a minimum total coverage of 2.0 ltr / m<sup>2</sup>.

This system will need to be applied to a 'slurry' prime coat of Emer-Proof Multi-Purpose Primer and Additive, mixed with sand and cement – see priming instruction below.

<b>Approximate total coverage:</b>	1.5L/m <sup>2</sup> (for non-immersed applications)
<b>Approximate total coverage:</b>	2L/m <sup>2</sup> (for immersed applications)
<b>Wet Film Thickness</b>	1.5mm (for non-immersed applications)
<b>Dry Film Thickness</b>	1.5mm (for non-immersed applications)
<b>Wet Film Thickness</b>	2mm (for immersed applications)
<b>Dry Film Thickness</b>	2mm (for immersed applications)

## Specification Clause

Where so designated on the drawings, surfaces shall have a low VOC, liquid applied, water based, fast drying, flexible two component, polymer modified cementitious waterproofing membrane applied. The membrane shall be Emer-Proof Quick Dry Two Part.

Areas shall be prepared and the membrane applied in accordance with the current Emer-Proof Quick Dry Two Part Technical Data Sheet.

## Design Criteria

Emer-Proof Quick Dry Two Part is designed to be applied by brush, roller or spray. In general wet area applications Emer-Proof Quick Dry Two Part is applied as two (2) coats with a minimum WFT of 1.5mm (coverage of 1.5 litres/m<sup>2</sup>) resulting in a minimum DFT of 1.5mm.

For permanently wet or submersed conditions Emer-Proof Quick Dry Two Part is to be applied as three (3) coats with a minimum with a minimum WFT of 2.0mm (coverage of 2.0 litres/ m<sup>2</sup>) resulting in a minimum DFT of 2.0mm.

## Application Instructions

### Surface preparation

All new concrete surfaces must be allowed to cure for at least 7 days and have a wood float finish. Steel trowelled finished slabs must be chemically or mechanically abraded prior to commencing waterproofing.

Rendered surfaces must be allowed to cure for at least 16 hours in normal ambient conditions prior to commencing waterproofing. Ensure all rendered surfaces have a wood float finish.

All screw / nail heads must be sealed with Emer-Seal MS sealant and all sheet joints must be covered with Emer- Proof Elastic Joint Band Tape. See Emer-Proof Elastic

Joint Band System technical data sheet.

Ensure all surfaces are sound, dry and free from excessive movement, oil, dust, grease, wax, curing compounds, release agents, paint and any other loose contaminants. Also remove any protrusions from the surface that may pierce the membrane.

### Priming

Substrates must be primed, prior to the application of Emer-Proof Quick Dry Two Part.

Primer choice is defined by substrate requirements:

- For porous masonry surfaces, Emer-Proof Multi-Purpose Primer and Additive may be selected (see TDS for further details)
- For non-porous substrates, such as ceramic tile, metals and plastics, Emer-Proof Non-Porous Primer may be selected (see TDS for further details)
- For submerged applications such as ponds, pools and water retaining structures, a slurry primer 'must' be used
- Forming a waterproof and high bonding slurry coat - mix the following parts by volume: 1 part Primer + 1-1.5 parts of Portland cement + 0.5 -1.0 parts sand. Once mixed to a brushable consistency, apply to substrate with a brush, broom etc. When applying Emer-Proof Quick Dry Two Part over this slurry, optimum adhesion results are achieved as a "wet on wet" application.

### Damp surfaces - entrapped moisture

Seek technical advice from Parchem.

### Cracks

Cracks larger than 2 mm or structural shrinkage cracks must be firstly cleaned and any loose material removed then filled with Emer-Seal MS sealant or covered with Emer- Proof Elastic Joint Band Tape. See Emer-Proof Elastic Joint Band System technical data sheet.

### Emer-Proof Elastic Joint Band Tape, Corners and Detailing Accessories

The Emer-Proof Elastic Joint Band System has been specifically developed by Parchem as a superior bond breaker system to traditional sealants and bond breaker tapes.

The Emer-Proof Elastic Joint Band System includes tape (for change of direction – such as wall/wall and wall/floor joints etc.), both 270° external and 90° internal corners, an adjustable internal corner as well as three (3) size variations on pipe detailing squares (suitable from 6mm > 150mm pipe diameters). Parchem also incorporate a fully fleeced, self-adhesive butyl rubber floor waste detailing collar that is suitable for all wet area leak control flanges, for optimum sealing capabilities.

If being used in tanking and waterproofing applications, the Emer-Proof Quick Dry Two Part requires a suitable bond

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breaker at all substrate junctions. Parchem nominates the Emer-Proof Elastic Joint Band System which includes tape, corners and pipe penetration detailing squares or equivalent bond breaking methods compliant with local waterproofing standards and building recommendations.

## Mixing

Emer-Proof Quick Dry Two Part should be mixed in equal parts by volume or the ratio of 1kg Part A liquid to 1.5kg Part B dry powder.

Add the Part A liquid to a suitable mixing vessel. Then whilst mixing slowly with a helical mixer fitted to a suitable drill, slowly add the Part B dry powder.

The mixing speed can be increased as more powder is added. Continue mixing for around 3 minutes, until homogeneous and lump free.

Cease mixing and 'allow the mixed material to stand for 3 minutes, and then lightly re-mix'. The Emer-Proof Quick Dry Two Part is then ready to apply.

## Application

Ensure the surface has been appropriately prepared in accordance with this TDS.

The Emer-Proof Elastic Joint Band System should be installed first. Mix an appropriate amount of the Emer-Proof Quick Dry Two Part waterproofing membrane that can be used within its working life (e.g., 1kg Part A liquid to 1.5kg Part B dry powder) as per the instructions in this TDS.

Apply the mixed Emer-Proof Quick Dry Two Part across the substrate joins extending approximately 70mm either side of the join. Whilst the Emer-Proof Quick Dry Two Part is still in a wet state install the Emer-Proof Elastic Joint Band tape, corners and accessories ensuring that all air voids are expelled. Emer-Proof Elastic Joint Band Corners should be placed in first followed by the Emer-Proof Elastic Joint Band tape.

The Emer-Proof Elastic Joint Band tape, corners and pipe detailing squares can be joined via a 50mm overlap, sandwiching a small amount of Emer-Proof Quick Dry Two Part liquid membrane between the overlapping faces.

In general wet area applications Emer-Proof Quick Dry Two Part is applied as two (2) coats with a minimum total coverage of 1.5litres/m<sup>2</sup>.

For permanently immersed conditions/applications Emer-Proof Quick Dry Two Part is applied as three (3) coats with a minimum total coverage of 2.0 litres/m<sup>2</sup>. – (see special priming instructions under PRIMING in this TDS and drying times for submerged applications.

Each successive coat should be applied at 90 degrees to the previous coat. Allowing a drying time of 1-3 hours between coats.

Conduct a final inspection on the surface of the membrane prior to commencing tiling to ensure no pin holes exist. A

further coat may be required if imperfections or pinholes are present in the membrane.

Once the waterproofing is completed, do not disturb the area for at least 24 hours. Tiling can commence approximately 24 hours after final Emer-Proof Quick Dry Two Part coat.

Polymer modified cement based tile adhesives, such as Emer-Proof Tilebond Flex are recommended for tiling application.

Emer-Proof Multi-Purpose Primer and Additive used as a bonding agent is recommended for applications of cement based screeds or renders – as per TDS.

Emer-Proof Quick Dry Two Part should be installed in accordance with AS3740.

## Curing and protection

Emer-Proof Quick Dry Two Part is not UV stable and must be cured for a minimum of 24 hours at 25°C before placing protection. Tiling should commence within 5 days.

Where damage to the membrane is possible (by traffic backfilling, etc.), it should be protected by a cementitious screed or protection board such as Impraboard or Emer-Proof Drain V.

**Emer-Proof Quick Dry Two Part can be over-coated with Emer-Proof Top Coat to make the membrane foot trafficable and UV stable.**

## Maintenance

No special requirements, any damage identified during normal inspections should be repaired or replaced as appropriate.

## Limitations

Do not apply Emer-Proof Quick Dry Two Part in temperatures above 35°C or below 5°C.

Emer-Proof Quick Dry Two Part cannot be used in areas where negative hydrostatic pressure is evident.

## Drying times

Recoat:	1 - 3 hours
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Dry film:	5 - 7 hours
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Immersion:	21 days
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Allow a further drying time of 24 hours (on top of standard drying time) @ 10°C

## Please Note:

Application of all liquid applied membranes and primers should always refer to the surface temperature conditions before commencing and not just ambient temperatures. (There are limitations to how hot/cold the surface temperature can be, when applying liquid based membrane or primer).

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For example: ambient temperatures may be 10°C but the substrate could be 0°C and have frost issues. The same applies with higher temperatures: ambient temperature may be 26°C but have a substrate temperature of 36°C

Emer-Proof Tile Bond Flex polymer modified cement based tile adhesive is recommended for direct adhesion to the membrane.

Emer-Proof Multi-Purpose Primer and Additive is recommended within screeds and renders directly over the membrane as a waterproof and adhesion enhancer.

## Cleaning

Prior to hardening Emer-Proof Quick Dry Two Part can be cleaned from tools and equipment using water. Hardened material will need to be removed via mechanical means.

Splashes of Emer-Proof water based membrane on paintwork etc. should be wiped off immediately using a cloth dampened with a strong detergent solution. Brushes and brooms etc. should be soaked in a strong detergent solution immediately after application has finished. Hands and skin may be cleaned using a proprietary waterless hand cleaner, but prevention of soiling is better practice by wearing gloves and overalls.

## Supply

<b>743110</b>	Emer-Proof Quick Dry Two Part / Part A 25Kg Kit 10L Pail
<b>743115</b>	Emer-Proof Quick Dry Two Part / Part B 25Kg Kit 15Kg Bag
<b>Complete 25Kg Kit:</b>	1. (1.5L/m <sup>2</sup> total - non-immersed applications) 2. (2L/m <sup>2</sup> total - immersed applications)
<b>743124</b>	Emer-Proof Non-Porous Primer – 1L Pail (1L/10m <sup>2</sup> )
<b>743123</b>	Emer-Proof Non-Porous Primer – 4L Pail (1L/10m <sup>2</sup> )
<b>743121</b>	Emer-Proof Multi-Purpose Primer and Additive 4L Pail (1L/6-8m <sup>2</sup> )
<b>743120</b>	Emer-Proof Multi-Purpose Primer and Additive 15 L Pail (1L/6-8m <sup>2</sup> )
<b>743265</b>	Emer-Proof Elastic Joint Band Tape 120mm W x 50M Roll
<b>743270</b>	Emer-Proof Elastic Joint Band Corner Internal 90° 135mm x 135mm – Each or 50/Box

<b>743275</b>	Emer-Proof Elastic Joint Band Corner External 270° 135mm x 135mm – Each or 50/Box
<b>743125</b>	Emer-Proof Elastic Joint Band Corner Adjustable Internal – 135mm x 135mm – Each or 50/Box
<b>743126</b>	Emer-Proof Pipe Detailing Square Small Each or 50/Box
<b>743127</b>	Emer-Proof Pipe Detailing Square Medium Each or 50/Box
<b>743128</b>	Emer-Proof Pipe Detailing Square Large Each or 50/Box
<b>743129</b>	Emer-Proof Butyl Square Floor Waste Detailing Collar – Each or 25/Box
<b>405016 / 405017</b>	Emer-Proof Aqua-Barrier (Grey) – 20L Two Part Kit (1L/1.5m <sup>2</sup> per coat)

## Shelf life

12 months if kept in a cool, dry store.

## Storage conditions

Store in dry conditions at temperatures between 5°C and 30°C in the original, unopened containers. If stored at high temperatures, the shelf life may be reduced.

### 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.

**Emer-Proof**

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