Technical Data Sheet



Emer-Proof Ecoflex

High performance water based rubberised bitumen waterproofing membrane

USES

Waterproofing of: Retaining walls

Building Foundation Walls
Below Ground Tanking Structures

- Waterproofing/damp proof sandwich membrane
- Key joints and dowel bars
- Patch and repair of old bitumen membranes

ADVANTAGES

- Low VOC (0.065 grams per litre)
- Australian Made
- Durable/ tough and flexible
- Excellent adhesion to primed surfaces
- UV resistant (up to 18 months exposed)
- Non-toxic
- Solvent free and non-flammable

DESCRIPTION

Emer-Proof Ecoflex is a high performance single component water based bituminous rubberised waterproofing membrane. Developed for the Residential & Commercial construction industry.

It is solvent free, non-flammable, and forms a highly flexible monolithic waterproofing membrane.

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.

Solids:	68%
Colour:	Black
Tensile strength:	43.5 psi (0.3 MPa)
Hydrostatic resistance ASTM D-751:	Passed
Elongation:	>470%

COVERAGE

Emer-Proof Ecoflex should be applied in 2-3 coats and have a dry film thickness of 1-1.2 mm.

Coverage will vary depending on the porosity and condition of substrate.

Approximate total coverage: 1.5-2L/m²

Wet Film Thickness = 1.2-1.5mm

Dry Film Thickness = 1-1.2mm

SPECIFICATION CLAUSE

Where required, a water based bituminous rubberised liquid membrane is to be applied to offer a durable and waterproof area. The membrane must be low VOC, Australian made and non-toxic. The Emer-Proof Ecoflex from Parchem Construction Supplies meet the performance criteria and is an approved product.





PARCHEM CONCRETE REPAIR FLOORING JOINTING SYSTEMS WATERPROOFING TECHNICAL DATA SHEET MAY 2013	w.parchem.com.au 7 Lucca Roa	d, Wyong NSW 2259 Phone 1300 73	7 787	ABN 80 069 961 968
PARCHEM CONCRETE REPAIR FLOORING JOINTING SYSTEMS WATERPROOFING	HNICAL DATA SHEET MAY 2013			
	CHEM CONCRETE P	EPAIR FLOORING	JOINTING SYSTEMS	WATERPROOFING

Emer-Proof Ecoflex



DESIGN CRITERIA

All cracks >2mm must be suitably prepared and primed according to the substrate with either, Emer-Proof Multi-Purpose Primer and Additive for porous substrates or Emer-Proof Non-Porous Primer for non-porous substrates.

The Emer-Proof Elastic Joint Band system should be installed first in accordance with the Technical Data Sheet for the system.

The stirred Emer-Proof Ecoflex is laid onto the surface continually in one direction and each successive coat should be applied perpendicular to the previous coat. Allow 2-4 hours for film to dry between coats, use 2-3 coats to achieve a dry film thickness of 1.2 mm and a uniform coverage.

Emer-Proof Ecoflex should be protected from mechanical damage with Impraboard, or Emer-Proof Drain V drainage and protection sheet, both are available from Parchem.

APPLICATION INSTRUCTIONS

PRIMING

Substrates must be primed, prior to the application of Emer-Proof Ecoflex

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 metals and plastics, Emer-Proof Non-Porous Primer may be selected (see TDS for further details)

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 Ecoflex requires a suitable bond 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.

APPLICATION

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

Emer-Proof Ecoflex may be applied with a roller (12 mm nap recommended), brush or standard airless sprayer (piston pump unit, 21 -25 thou tip size - thoroughly mix product before spraying). Its smooth texture and non-sag formulation make it suitable for vertical and horizontal application.

The Emer-Proof Elastic Joint Band System should be installed first. Apply the mixed Emer-Proof Ecoflex across the substrate joins extending approximately 70mm either side of the join.

Whilst the Emer-Proof Ecoflex 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 tape 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 Emer-Proof Ecoflex liquid membrane between the overlapping faces. Each successive coat should be applied at 90 degrees to the previous coat.

Emer-Proof Ecoflex is laid onto the surface continually in one direction; it should not be brushed out. Brooms, brushes etc. should be regularly washed during the operation and at any breaks as follows: Keep available a container filled with sufficient strong detergent / water salutation to fully cover the broom or brush. Soak the brush in the solution and shake out before use. As work progresses, rinse the brush at frequent intervals to prevent it clogging, and again shake out before resuming. During any breaks in work the brushes should be left to soak in this solution.

Allowing a drying time of 2-4 hours between coats.

Conduct a final inspection on the surface of the membrane prior to commencing back-filling to ensure no pinholes exist. A further coat may be required if imperfections or pinholes are present in the membrane.

Emer-Proof Ecoflex



MIXING

Emer-Proof Ecoflex membrane should be lightly stirred before using, and can be applied to both vertical and horizontal surfaces using a roller or brush.

RECOATING

Emer-Proof Ecoflex may be recoated between 2 and 4 hours after previous coat has been allowed to dry.

Shorter times may be acceptable in good drying times.

METHOD:

KEY JOINTS AND DOWEL BARS

Emer-Proof Ecoflex is recommended as a coating on key joints and dowel bars. Provided the Emer-Proof Ecoflex is allowed to dry prior to pouring the next section of concrete, it forms an effective slip layer and so allows relative movement between sections.

COOLER TEMPERATURE ACCELERANT

Mix Portland cement with water until a slurry mixture is formed. Add 10% slurry solution to volume of Emer-Proof Ecoflex and disperse using drill/paddle mixer.

When using slurry mixture into Emer-Proof Ecoflex ensure all the product is used, as it cannot be stored.

Emer-Proof Ecoflex is normally totally dry in 24 hours at 25°C /50% RH but can take up to 72 hours at 10°C/ 50% RH. Drying times will vary depending on temperature, humidity, condition and porosity of substrate.

PROTECTION

Where the membrane is to be back filled, such as with basement applications, Emer-Proof Ecoflex should be protected from mechanical damage with Impraboard or Emer-Proof Drain V drainage/protection system also available from Parchem.

CLEANING

Splashes of Emer-Proof water-based membrane on paintwork etc. should be wiped off immediately using a cloth dampened with water and 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.

Where Emer-Proof Ecoflex has been allowed to dry on equipment or surfaces it may be removed using either Solvent 10 or mechanical means.

MAINTENANCE

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

LIMITATIONS

Emer-Proof Ecoflex is not recommended for continuous water immersion or as a membrane on internal walls subject to back pressure.

Emer-Proof Ecoflex has not been designed as an exposed wearing course membrane. Emer-Proof Ecoflex must be covered and cannot be exposed to UV on a permanent basis. Not designed to be finished directly over with tiles, screeds, renders or paints.

DRYING TIMES

Recoat: 2 - 4 hours

Dry film: 24 hours

Backfilling, covering over: 4 days. Ensure surface is cured before back filling

Based on normal ambient conditions of 23°C @ 50% RH

Drying times @ 10°C – allow a 'minimum' 24 hours extra drying time on standard recommendations at this temperature.

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).

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 Ecoflex



ESTIMATING SUPPLY

- 730730 Emer-Proof Ecoflex 20L Pail (2L/m² total)
- 743124 Emer-Proof Non-Porous Primer 1L Pail (1L/10m²)
- 743123 Emer-Proof Non-Porous Primer 4L Pail (1L/10m²)
- 743121 Emer-Proof Multi-Purpose Primer and Additive 4L Pail (1L/6-8m²)
- **743120 Emer-Proof Multi-Purpose Primer and Additive** 15 L Pail $(1L/6-8m^2)$
- 743265 Emer-Proof Elastic Joint Band Tape 120mm W x 50M Roll
- 743270 Emer-Proof Elastic Joint Band Corner Internal 90° 135mm x 135mm – Each or 50/Box
- 743275 Emer-Proof Elastic Joint Band Corner External 270° 135mm x 135mm - Each or 50/Box
- 743125 Emer-Proof Elastic Joint Band Corner Adjustable Internal – 135mm x 135mm – Each or 50/Box
- 743126 Emer-Proof Pipe Detailing Square Small Each or 50/Box
- 743127 Emer-Proof Pipe Detailing Square Medium Each or 50/Box
- 743128 Emer-Proof Pipe Detailing Square Large Each or 50/Box
- 743129 Emer-Proof Butyl Square Floor Waste Detailing Collar – Each or 25/Box
- 405015 Emer-Proof Aquabarrier (Grey) 20LTwo Part Kit (1L/1.5m² per coat)

PACKAGING

20L

STORAGE

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.

ADDITIONAL INFORMATION

Parchem provides a wide range of complimentary products which include:

- Waterproofing membranes
 liquid applied, cementitious and bituminous sheet membranes
- Architectural coatings
- Joint sealants building, civil and chemical resistant
- Waterstops pvc and swellable
- Industrial flooring systems cementitious and epoxy
- Concrete repair cementitious and epoxy
- Filler boards swellable cork, bituminous and backing rod
- Grouts and anchors cementitious and epoxy
- Ancillary products

For further information on any of the above, please consult with your local Parchem sales office.

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.





TECHNICAL DATA SHEET MAY 2013	
PARCHEM CONCRETE REPAIR FLOORING JOINTING SYSTEMS WATERPRO	OFING