

Emer-Proof HDPE

Self adhesive, polymer modified bitumen waterproofing membrane, incorporating cross laminated HDPE film

USES

Emer-Proof HDPE is used to waterproof:

- Foundations
- Basements
- Retaining walls
- Tunnels

ADVANTAGES

- Self adhesive – allows installation without the use of heating torches and their associated problems
- Uniform thickness – eliminates any likelihood of thin application commonly found with liquid applied membranes
- Cross laminated High Density Polyethylene (HDPE) carrier film ensures dimensional stability whilst allowing adequate flexibility during installation and service
- Excellent adhesion to vertical and horizontal surface
- Excellent resistance to chlorides, sulphates, alkalis and acids
- Good tear and puncture resistance
- Excellent tensile strength

DESCRIPTION

Emer-Proof HDPE is a self-adhesive bituminous membrane incorporating a cross laminated HDPE film. The bitumen compounds used to manufacture the product are modified with SBS to promote maximum adhesion to the substrate. The HDPE film provides the product with excellent physical and application properties.



PROPERTIES

Top surfacing:	Cross laminated HDPE film
Thickness:	1.6 mm
Mass per unit area:	1.6 kg/m ²
Softening point (R&B): (ASTM D36)	103°C
Tensile strength (film): (ASTM D882)	42 N/mm ² Longitudinal 48 N/mm ² Transverse
Elongation (film): (ASTM D882)	230% Longitudinal 180% Transverse
Tear strength (film): (ASTM D1004)	340 N/mm Longitudinal 310 N/mm Transverse
Adhesion strength: (ASTM D1000)	2.0 N/mm (primed substrate) 2.4 N/mm (self)
Puncture resistance: (ASTM E154)	220 N
Hydrostatic pressure:	>50m (5 bar)
Water absorption: (ASTM D570)	0.14% @ 24 hours
Water vapour transmission: (ASTM E96)	0.06 g/m ² /24 hours
Chemical resistance: (ASTM D543)	pH 2.0-11.5
Low temp. flexibility:	-15°C
Crack bridging ability: (ASTM C836)	>1.5 mm

Note: all values given are subject to 5-10% variation.

SPECIFICATION CLAUSES

Where so designated on the drawing, surfaces shall have a self-adhesive modified bituminous waterproof membrane applied. The membrane shall be 1.6 mm total thickness, incorporate a cross laminated HDPE film and utilise a selvage strip to ensure bitumen to bitumen bond at longitudinal joints. Such a product is Emer-Proof HDPE as supplied by Parchem. Areas shall be prepared and the

membrane applied in accordance with current Emer-Proof HDPE data sheet, paying attention to priming requirements.

MAINTENANCE

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

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

All surfaces to which Emer-Proof HDPE is applied must be smooth and free from contaminants and any loose material. Rough concrete should be 'faired up' before application.

PRIMING

Emer-Proof Self Adhesive Primer should be applied at the rate of 6 - 8 m² / litre to surfaces which will have Emer-Proof HDPE applied. The coverage rate for the primer will vary depending on the porosity of the surface being treated. Allow the primer to dry for at least 15 minutes at temperatures of 25°C and above, and up to 60 minutes when ambient temperatures are approaching 5°C. Priming should only be carried out on surfaces which will be covered with Emer-Proof HDPE the same day.

APPLICATION

Planning the installation of the membrane is important to ensure joins occur in suitable locations and not at corners and penetrations.

Longitudinal overlaps should be 50 - 60 mm and transverse laps 70 - 80 mm.

Application of membrane should always start from lowest point on a surface to ensure laps are self-flashing. Apply suitable lengths of Emer-Proof HDPE membrane by first carefully aligning the roll and applying an initial 300 mm of material, then pull the siliconised release paper and press the membrane on to the prepared surface. Take care not to incorporate air bubbles under the membrane or wrinkles in the membrane.

When finishing the membrane into perimeter flashings or around penetrations, use Plastiseal, a bituminous rubber mastic to assist in achieving a waterproof seal.

PROTECTION

Emer-Proof HDPE is not suitable for long term exposure to UV. The membrane should therefore be protected in some way within 3 months of application. When the membrane is to be backfilled such as with basement applications, Emer-Proof HDPE should be protected from physical damage by using Tema Tefond drainage/protection system also available from Parchem.

LIMITATIONS

Do not apply to uncured green concrete or to concrete with high moisture content levels. In such applications blistering of membrane may occur due to vapour pressure building up at interface of membrane and the substrate. Similarly, Emer-Proof HDPE should not be applied to substrates subject to hydrostatic pressure from below the membrane.

Emer-Proof HDPE must be protected from UV exposure within 3 months of application.

ESTIMATING

PRODUCT CODE

Emer-Proof HDPE: 742034

Emer-Proof Self Adhesive Primer: 742041

SUPPLY

Emer-Proof HDPE: 1 m wide, 20 m long roll

Emer-Proof Primer: 20 litre pail

COVERAGE

Emer-Proof HDPE: approx. 18.9 m² / 20 m roll allowing for overlaps

Emer-Proof Self Adhesive Primer: 6 - 8 m²/litre

Note: No allowance has been made for wastage.

STORAGE

12 months in cool, dry conditions i.e. not exceeding 25°C. Storage above this temperature may reduce storage life.

IMPORTANT NOTICE

A Material Safety Data Sheet (MSDS) and Technical Data Sheet (TDS) are available from the Parchem website or upon request from the nearest Parchem sales office. Read the MSDS 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 product based on the information available at the time. Read TDS carefully and consider the information in the context of how product will be used, including in conjunction with any other product and 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.

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