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AUSTRALIA
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Eraproof M100

SINGLE-PACK WATERPROOFING MEMBRANE

TECHNICAL DATASHEET

Description

Eraproof M100 is a high performance, hand-applied, low VOC, moisture-curing single-pack elastomeric polyurethane waterproofing membrane. Eraproof M100 is directly foot-trafficable.

Uses

It is designed for waterproofing diverse parts of a building including balconies, terraces, podium decks, wet areas, roofs, …

Features

- Monolithic membrane – no lap, wield or seams
- Low VOC, complies with Green Star requirements
- Low smell
- UV resistance
- Quick tack-free surface
- High resistance to puncture
- High resistance to fouling
- High resistance to stagnant water
- High elongation, >300%
- No reinforcement required
- Excellent crack bridging capability
- Elastomeric behaviour: remains flexible at low temperatures
- Single-pack: no mixing, ready to use
- Available in grey

Physical Properties

Properties presented below are to be used as a guide and not intended for specification purposes.

		Eraproof M100	Test Method
Composition		Single-Pack moisture curing Polyurethane	-
Density (Liquid)	(g/cm^3)	1.25 – 1.35	ASTM D1475-13
Density (Cured)	(g/cm^3)	1.4 – 1.45	AS 1683.4
Service Temperature	(°C)	-20 to +80	-
Curing time	(hours)	Cured overnight	-
Shelf life	(months)	9	-
***Viscosity @ 30 RPM**	(cP)	10,000 – 18,000	-
Non volatiles	(%)	81	ASTM D2369-10
VOC content	(g/L)	250	ASTM D2369-10
Odour		Mild Odour	-
Tensile Strength	(MPa)	6	AS 1683.11
Elongation	(%)	>300	AS 1683.11
Hardness	(Shore A)	70	AS 1683.15.2
Angle Tear Strength	(kN/m)	20	AS 1683.12
UV resistance		2000 hrs accelerated testing, no reduction in elongation, no visible cracks or blistering. Chalking evident.	ASTM G154-12a Lamp: UVB-313-EL Wavelength: ~310nm Irradiance: 0.71 W/m2/nm Cycle: 4 hours UV @ 60°C + 4 hours Humidity @ 50°C
Re-coating interval	(days)	Maximum 2 days after application	-
Recommended substrate temperature	(°C)	+5 to +35	-
Recommended substrate moisture	(%)	Up to 5	-
Recommended relative humidity	(%)	Between 20 and 90	-

*Viscosity measurements are conducted on a Brookfield LVDV-II+P using Spindle #4 @ 25°C.

Application

Eraproof M100 is supplied in ready-to-use pails.

Preparation:
Surface must be clean, sound, smooth and dust-free as well as oil-free.
A compatible primer, such as Eraprime LV452, Eraprime MV601 or Erabond 2K Epoxy should be applied to ensure the adhesion of the membrane to the substrate as well as preventing outgassing from the concrete.
In the case of high porosity, wet concrete (humidity >5%) or in any doubt, it is recommended to use a hydro-epoxy primer. Compatibility of the primer with the membrane must be checked prior to application.

Application:
Eraproof M100 can be applied with a brush or a roller to the desired thickness.
2 coats of 0.8 L/m^2 (1.04 kg/m^2) are required to achieve a dry film thickness (DFT) of 1.2 mm.
(For UV resistance, coating thickness must abide by numbers given on this PDS. A thinner coating will result in premature degradation.)

Application temperature of Eraproof M100 is >5°C to 35°C.

Eraproof M100 can be subject to light foot traffic after 24 hours.
Vehicle traffic is not permitted on Eraproof M100 without the application of a top coat.

Where extended UV resistance is required, it is recommended that Eraproof M100 should be coated with an Eracoat topcoat system such as Eracoat 2K Rapid. Check with your Era Polymers representative for compatibility before application.

Recoating instructions:
In normal conditions, Eraproof M100 can be recoated with another layer of Eraproof M100 after one night and within 2 days. In case of rain or if the recoating interval was exceeded, come back to the substrate by grinding.
Contact your Era Polymers representative with any questions.

Coverage

2 coats of a minimum of 0.8 L/m^2 (1.04 kg/m^2) each are required to achieve a 1.2 mm dry film thickness (DFT).

Limitations

Do not install without the use of a primer.

Do not under apply coating as this will impact UV resistance and cause premature degradation. (It is highly recommended to use a UV topcoat in areas which have consistent high ground temperatures.)

Clean-up

Reusable tools should be cleaned carefully with Xylene or MEK before curing.

Shelf life

Shelf life of sealed Eraproof M100 in its original container is 9 months. Once opened use entire contents immediately.
Always store closed containers in cool, ventilated, and dry location, away from heat and oxidizing agents. Do not store in direct sunlight or in temperatures below 5°C or above 35°C.

Safety

Please refer to the Material Safety Data Sheet (MSDS) for personal protection, proper handling and storage.

Warranty

Written claims to be made to seller within 7 days of goods received. Era Polymers (Era) warrants its' products to be free of defects in materials, and within their manufacturing specification but makes no warranty as to application and installation. As methods of application and on site conditions are beyond the manufacturers' control and can affect performance, Era makes no other warranty, expressed or implied, including warranties of merchantability and fitness for a particular purpose. Era Polymers sole obligation shall be, at its option, to replace, or refund the purchase of the quantity of coatings proved to be defective and Era shall not be liable for any loss or damage including incidental or consequential damages arising from the use of Era products.

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