

EPOFLEX MMA

Flexible Liquid Waterproof Membrane

DESCRIPTION

EPOFLEX MMA is two-component rapid-cure flexible waterproof membrane. The applied membrane provides an extremely durable finish which retains a degree of elasticity for the lifetime of the structure. It is highly impact resistant, making it suitable for areas which are to be trafficked. It remains completely impervious to water and when subjected to normal service condition it will provide an effective barrier to water and moisture for the life span of the structure. A slip resistant finish can be achieved by incorporating a quartz aggregate into the membrane.



USES

EPOFLEX MMA is designed for use as a waterproof membrane for application to roofs, podium slabs, carpark decks and suspended walkways. It is particularly suitable for application to structures that are susceptible to minor cracking. The flexibility of the cured membrane insured that the integrity of the membrane remains uncompromised in the event of a degree of movement in the base substrate.

ADVANTAGES

- Extremely rapid curing.
- Extremely durable and impact resistant.
- Excellent chemical resistance.
- Retains a degree of flexibility once cured.
- Suitable for internal and external use.
- Gas and hydrocarbon resistant

PROCEDURE

Surface Preparation: Concrete and cementitious substrates should be a minimum of 28 days old and the residual moisture content should be less than 6%. The concrete should be clean and free from dust, laitance, grease, oil and other deleterious substances. Any defect in the substrate should be repaired using a suitable PREMCRETE repair product. The top surface of the substrate to which the coating is to be applied should be prepared by mechanical means such as diamond grinding or grit blasting to ensure that a good mechanical key is achieved. Tarmac and asphalt surfaces must be clean, dry, and free from contaminants. New tarmac should be allowed to weather to ensure any excess oils are released before application of the coating.

Substrate Priming: Concrete substrates should be primed using EPOPRIME MMA is supplied as a two-component system, a Base component, and a Catalyst component. The product should be applied with a brush or roller at a rate of 0.4 – 0.8 kg/m². The surface profile of the substrate will greatly affect the application rate that is achieved. Allow the primer to cure for a minimum of 45 minutes before application of the EPOFLEX MMA commences. Primer is not normally required for application to asphalt and tarmac substrates.

Mixing: EPOFLEX MMA is supplied as a two-component system, consisting of the Base component, the Catalyst component. The catalyst should be mixed into the base component using a mechanical mixing paddle for at least two minutes until a uniform consistency is achieved. The filler component should then be slowly added whilst mixing. Continue mixing until a uniform consistency is achieved.

Application: EPOFLEX MMA is supplied in two grades. The Vertical Grade is for use on upstands and for detail work, whilst the Horizontal Grade is for application to horizontal deck areas. Typically, upstands and detail work is carried out before the horizontal deck areas are coated. Epoflex MMA should be applied immediately once mixed onto the prepared substrate and spread to the correct thickness using a roller (approx. 1.5kg/m²). Once the correct level has been achieved, the Fibremat reinforcing layer should be embedded into the wet coating.

Laps between adjacent sheets of Fibremat should be 50mm. Immediately after the Fibremat has been embedded a further 1kg/ M² should be applied before de-aerating with a spiked roller.

If a non-slip finish is required, then an appropriate quartz aggregate should be broadcast into the freshly applied coating at a rate of 6-15kg/M². Once the membrane is hardened the excess aggregate may be swept off. If the membrane is to be left exposed, then it should be sealed using EPOSEAL MMA to provide a sealed surface which is easily cleaned.

Curing: Allow 1 hr @ 20°C for light foot traffic commences and 24 hr @ 20°C before vehicular traffic. The membrane will be fully chemical resistant after 24 hr @ 20°C.

Equipment Cleaning: Clean equipment using PREMCRETE CLEANING SOLVENT immediately before the coating cures.

PACKAGING & COVERAGE

Pack Size:

Horizontal Grade: 10kg

Vertical Grade: 10 kg

Primer: Epoprime MMA 5kg (10m²)

Fibremat: 1m x 100m.

Coverage: A 10 kg pack of Epoflex MMA will cover 4.5 M² with the recommended 2 coat treatment at 2 mm thickness onto a smooth surface.

STORAGE & SHELF LIFE

Store in dry conditions at temperatures between 5°C and 20°C. It is important to provide adequate ventilation to the storage area. This product has a shelf life of 12 months, when stored in un-opened containers.

HEALTH & SAFETY

See separate material safety datasheet.

Property	Test Standard	Value
Colours		Red any BS4800 or RAL colour can be supplied.
Pot Life @20° C		25 minutes
Curing Time @ 20° C		Foot traffic after 1 hr Vehicular traffic after 24 hrs
Temperature range during application		-10°C to +40°C
Temperature range in service		-40°C to +60°C
Elongation @ Break		120%
Adhesive bond to concrete		>3 MPa (Substrate failure)
Dry film thickness		2 – 3mm
Water Vapour Transmission Rate	BS EN ISO 15106-3	3.13 g/m ² /day
Resistance to Delamination	EOTA TR004	380 kPa
Tensile Strength	BS EN ISO 527-1	3.72 MPa
Fatigue Movement	EOTA TR008	No Leakage
Reaction to Fire	BS EN 13501-1	E/ E _{fl}
Gas and VOC Transmission Rates		
Carbon Dioxide	BS ISO 15105-1	17/ml/m ² /day atm
Methane		11.4 ml/m ² /day atm
Vinyl Chloride	BS ISO 15105-2	0.127 mg/m ² /day
Ethyl Benzene		0.034 mg/m ² /day
Trichlorethene		0.951 mg/m ² /day
Xylene		0.034 mg/m ² /day
Benzene		0.039 mg/m ² /day
Napthalene		0.001mg/m ² /day
Tolulene		0.048 mg/m ² /day
Hexane		0.112 mg/m ² /day
Tetrachlorethene		0.003 mg/m ² /day