TREMCO
www.tremco.com.au

TREMcrete MPR
Waterproofing & Corrosion Protecting Cementitious Coating

PRODUCT DESCRIPTION

TREMcrete MPR is a unique penetrative cementitious coating specially designed for the waterproofing, protection and repair of old and new concrete. TREMcrete MPR prevents the penetration of water and other liquids into the concrete by causing reactions that produce non-soluble cementitious formations within the pores and capillaries of concrete.

TREMcrete MPR contains a Corrosion Inhibitor which significantly increases the corrosion protection of steel reinforcement in concrete.

USAGE/PURPOSE

- Rain Damaged Slabs
- Roof Decks
- Underground Tunnels
- Basement & Foundations
- Bridge Pylons, Beams and Decks
- Marine Structures
- Below Ground Car Parks

FEATURES & BENEFITS

- Forms an indivisible body with base concrete
- Significantly increases impermeability of concrete
- Can seal hairline cracks up to 0.5mm
- Enhances the properties of the concrete against reinforcement corrosion
- Significantly reduces chloride penetration
- Allows concrete to breath
- Does not require a dry surface
- Life span greater than 10 years if applied correctly

PACKAGING

20kg Pail

APPEARANCE

Grey powder

SHELF LIFE

12 months when stored as recommended in original unopened packaging.

STORAGE

Store in original, undamaged packaging in a clean, dry, protected location.

TREMcrete MPR – Multi-Purpose Resurfacer

TYPICAL PHYSICAL PROPERTIES		
PROPERTY	STANDARD	TYPICAL VALUES
Grain Size		Max 0.5mm
Layer Thickness		0.5mm-1.5mm
Fresh Wet Density		Approx 2100 kg/m^3
Mixing Water per 20kg Pail		4.0-4.4 litres
Working Time		30 minutes
Temperature for Application		5 to 40^{0}C
Final Hardening		3-6 hours
Impermeability	DIN 1048	Waterproof
Chloride ion diffusion	NT Build 443-1955-11	Reduced approx 2 times
Impact Abrasion	AS/NZS 4469.9.2003	Resistance is significantly increased
Compressive Strength (MPa)		1 day: 26.3 28 days: 52.5
Flexural Strength (MPa)		28 days: 8.2
Bond Strength (MPa)		28 days: 6.1
Carbonation	"Colourmetric Method"	Resistance is significantly increased
Water Absorption		Decreased by approx 3 times
Steel Reinforcement	"Polarisation curves method"	Steel corrosion is inhibited
Acidic Medium Resistance at pH 3-4		Approx 2 times higher than conventional Portland cement mortar

SURFACE PREPARATION

- ❑ Remove any weak, spalling, unconsolidated concrete and any existing coating and thoroughly clean surface.
- ❑ If steel reinforcement is exposed, remove any rusting on the steel surface.
- ❑ If patching is required, please patch with TREMcrete HBM or TREMcrete HB Ultra (TREMcrete MPR is a fine coating only).
- ❑ Concrete must have the open capillaries and rough surface. If surface is too smooth or covered with oily matter, the concrete must be lightly sandblasted, acid etched or pressure washed.
- ❑ Then hose the concrete surface to fully impregnate it with water and allow drying to a wet dull lustre and puddle free.

PRIMING

- ❑ We recommend priming as a part of the installation process described below. TREMcrete Activator (as a primer) is applied on the concrete substrate in order to passivate the steel reinforcement embedded beneath the concrete and completely harden the concrete surface, creating an appropriate adhesion platform and as a result, increasing bond strength of TREMcrete MPR coating.
- ❑ Apply TREMcrete Activator at the rate of one litre per 3-5m^2 on the dry touch concrete substrate to fully impregnate with TREMcrete Activator (instead of the water impregnation in the process of surface preparation) and allow drying to a wet dull lustre and puddle free.

MIXING EQUIPMENT

Low sheer mechanical mixer.

MIXING INSTRUCTIONS

- ❑ Normal water requirement is 4.0-4.4L per 20kg pail dependant on required viscosity.
- ❑ Place 4 litres of water in a clean mixer bucket.
- ❑ While stirring gradually add TREMcrete MPR and mix thoroughly for 2-3 minutes.
- ❑ If necessary, add additional water, until a mix of the desired workability is obtained.
- ❑ Mix for a further minimum 1 minute.
- ❑ Use within 30 minutes.

APPLICATION

Apply by concrete brush to a wet, puddle free surface. With a concrete brush, use an aggressive circular motion to coat the concrete with the TREMcrete MPR slurry mix. To ensure complete coverage with no missed or thin sports, we recommend always applying two coats. The second coat can be applied as soon as the first has set hard. It is usually after about 4 hours depending on conditions.

CURING

- ❑ Keep damp for at least 3 days and provide suitable protection against extreme weather conditions (sun, wind, frost) while setting. The continued curing for several days will be beneficial in most cases.
- ❑ The freshly treated surface should be protected from rain for a minimum period of 12 hours.

Note: Finishes containing Portland cement may be applied over TREMcrete MPR following the curing period but other paint and coating finishes should not be applied before 28 days.

COVERAGE

Applied Thickness (mm)	Approximate m² per 20kg Bag
0.5mm	23m²
1mm	11.5m²
1.5mm	7.6m²

HEALTH & SAFETY PRECAUTIONS

The Safety Data Sheet (SDS) must be read and understood prior to use.

TECHNICAL SERVICE

TREMCO has a team of Representatives who provide assistance in the selection and specification of products. For more detailed information or service and advice, call Customer Service on (02) 9638 2755 or fax (02) 9638 2955.

GUARANTEE/WARRANTY

TREMCO products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with TREMCO written instructions and (b) in any application recommended by TREMCO, but which is proved to be defective, will be replaced free of charge.

Any information provided by TREMCO in this document in relation to TREMCO's goods or their use is given in good faith and is believed by TREMCO to be appropriate and reliable. However, the information is provided as a guide only, as the actual use and application will vary with application conditions which are beyond our control. TREMCO makes no representation, guarantee or warranty relating to the accuracy or reliability of the information and assumes no obligation or liability in connection with the information. To the extent permitted by law, all warranties, expressed or implied are excluded.