

# TREMcoat M.P.E

Multi-Purpose for Priming, Binding, Bonding, Detailing & Concrete Repair

## PRODUCT DESCRIPTION

TREMcoat MPE is a high strength epoxy system that is specially formulated to serve a multitude of applications on a construction project. This versatility allows maximum application and minimum product specification. It can be used as a stand-alone product, or used in conjunction with other Tremco products to provide a complete system solution.

## USAGE/PURPOSE

TREMcoat MPE is an ideal epoxy for:

- Priming prior to coating system
- Binder for:
  - Starter Bar/Bolt Grout
  - Concrete Repair
  - Epoxy Cove Detail
- Epoxy injection
- Seal around polyurethane injection packer

## FEATURES & BENEFITS

- 24 hour cure time provides minimal delays
- Versatile product provides multiple uses
- Low VOC allows use in interior spaces
- Low viscosity assists with easy and uniform mixing
- Superior adhesive properties promotes adhesion of coatings

## PACKAGING

Stock: 8L Kit

Made to Order: 20L Kit

## COLOURS

Clear

## SHELF LIFE

12 months when stored as recommended in original unopened packaging.

## STORAGE

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

## LIMITATIONS

- Do not apply to damp or contaminated surfaces.
- Use with adequate ventilation.

## SUBSTRATE PREPARATION FOR METAL SURFACES

All surfaces shall be sand-blasted to meet the requirements in AS 1627.4, class 2.5 for "Near White Metal".



## SUBSTRATE PREPARATION FOR CONCRETE SURFACES

1. Concrete shall be water-cured and attain a 20 MPa minimum compressive strength. Moisture content in the concrete must be lower than 4.5% as measured using a moisture meter. Depending on concrete construction and job site location, additional concrete testing may be required. Please contact your local Tremco Representative.
2. Concrete shall be free of any laitance which can usually be achieved by shot-blasting (preferred method) or sandblasting the surface.
3. Concrete surface shall be properly cleaned so that the surface to receive the TREMcoat MPE coating is free of mould, paint, sealers, coatings, curing agents, loose particles and other contamination or foreign matter that may interfere with the adhesion.
4. Concrete surfaces shall have a concrete surface profile (CSP) of 3.
5. Surfaces shall be made free of defects that may telegraph and show through the finished coating. Surfaces that are rough (fins, ridges, exposed aggregate, honeycombs, deep broom finish etc.) shall be leveled and made smooth by applying a void filling coat of either sand mixed TREMcoat MPE or the appropriate TREMcrete concrete repair product.
6. All drains shall be cleaned and operative. Drains shall be recessed lower than the deck surface. The surface shall be sloped to drain to provide positive drainage. Drains should be detailed as instructed below.

## JOBSITE MATERIALS

Recommended materials and their uses are as follows:

- Tremco Sand Aggregate:
  - Various sizes to provide filler for TREMcoat MPE
  - Various sizes to provide non-slip surface and desired aesthetic finish.

### TYPICAL PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	TYPICAL VALUES
Pot Life @ 24°C, 50% RH		30 Minutes
% Solids (by Weight)	ASTM D1353	100%
Recoat Times @ 24°C, 50% RH		4 Hours
Compressive Strength		90 MPa
Tensile Strength		50 MPa
Full Cure @ 24°C, 50% RH		24 Hours
Mixing Ratio		3:1
Bond Strength to Concrete		2.7 MPa (Substrate Fail)

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## DETAIL WORK

*Note: Do not apply sealant or coatings to a frosty, damp or wet surface or when substrate temperature is below 40°C or the surface temperature is above 43°C. Cure times as stated below are based upon standard ambient conditions of 24°C, 50% RH. A decrease in ambient temperature and humidity will significantly lengthen the cure time.*

- Shrinkage cracks in the concrete surface that are 1.6mm wide or greater shall be routed out to a minimum 6mm x 12mm and filled with a sand/TREMcoat MPE mixture.
- Control Joints/Expansion Joints shall be cleaned prior to the TREMcoat MPE primer application. The TREMcoat MPE shall be turned down into the Control/Expansion Joint a minimum of 12 mm. After the epoxy has cured, the coating system shall be installed according to the relevant application instructions.

## MIXING INSTRUCTIONS

- Mix each component individually to minimise settling and ensure a homogeneous mixture.
- Add the entire content of the Part B into the Part A and mix using a low speed (600 rpm) drill until a uniform colour and consistency has been achieved.
- During mixing, scrape the sides and the bottom of the pail to ensure that the catalyst is sufficiently mixed.
- Make sure not to lift the mixing paddle, as to avoid whipping air into the epoxy mixture, as this could cause bubbles/blisters during application.

## PRIMING

- TREMcoat MPE can be applied by brush, roller or squeegee.
- Usage 6m<sup>2</sup>/L.
- TREMcoat MPE shall be installed to create a smooth, void free surface. In most cases this can occur in a single coat. If the substrate is porous or containing minor imperfections, a second coat may be necessary:
  - Single Coat: 200 micron WFT/ 200 micron DFT.
- Apply the respective Tremco coating/flooring epoxy within 24 hours of the final TREMcoat MPE coating. If the TREMcoat MPE is left longer than 24 hours, minor abrasion and a solvent wipe will be necessary prior to coating/flooring epoxy application.

## BINDER/MORTAR

TREMcoat MPE can be used as a binder to create various grades of epoxy mortar. Use the following chart to get the right epoxy mortar consistency for the desired application.

Desired Consistency	Litres of Sand Filler	Litres of Mixed TREMcoat MPE
Self-Levelling Mortar	2	1
Flowable Mortar	3	1
Trowel-able Mortar	5	1

## CLEAN UP

- Clean all adjacent areas to remove any stains or spills with Tremco Xylol.
- Clean tools or equipment with Tremco Xylol before material cures.
- Cured TREMcoat MPE can only be removed with mechanical abrasion.

## USAGE

The following is a guide to estimate material usage:

- TREMcoat MPE, Each Coat: 6m<sup>2</sup>/L
- Tremco Sand Aggregate: 1kg for every 3.5m<sup>2</sup> of epoxy coating

## TROUBLESHOOTING

This section describes common industry application issues when certain environmental conditions exist and their remedies. If any of these should occur, it is always recommended that you contact your local Tremco Representative.

- When a deck contains too much moisture, the moisture may change into a vapour, which then condenses at the concrete membrane interface before the coating has cured and may cause blisters or bubbles, ultimately interfering with proper adhesion. If this should occur, the blisters can be cut out, allowing moisture to escape. After moisture has escaped and the surface is dry, the area can be repaired.
- If the coating application has been installed at a thickness that is greater than our installation instructions, pinholes, blisters or bubbles may develop in the coating. To avoid this occurrence, the material should be applied in accordance to the installation instructions.
- If the coating is applied in very hot ambient temperatures, the air in the small spaces between the concrete particles increases in volume and forms blisters. A primer coating of TREMcoat MPE is highly recommended. Contact your Tremco Representative should this occur.
- If the first coat is exposed to moisture (condensation, spillage) it must be lightly sanded to provide a mechanical bonding surface for the second coat. Failure to mechanically abrade may result in interlaminary adhesion issues.

## WEATHER IMPACT ON COATING APPLICATION

This section discusses the impact of applying these coatings outside the ideal temperature application range of 18.3°C to 29.4°C at 50% RH.

- At temperatures lower than the ideal range, the material will become viscous and it will cure at a slower rate. Refer to the chart at the end of this document for approximate cure rates at varying temperatures.
- Deck temperatures may affect cure rates even when ambient temperatures are high.

## APPROXIMATE CURE TIMES IN HOURS AT 50% RH

Temperature at 50% RH	TREMcoat MPE
4.4°C to 12.8°C	18 to 72
12.8°C to 18.3°C	12 to 60
18.3°C to 29.4°C	8 to 48
29.4°C	4 to 24

Variations in temperature and humidity can affect the cure rate of the coating. The above chart should be used as a guide only to determine the approximate rate of cure. Other factors can also influence the cure rate such as substrate temperature and enclosed environments. For more information about proper application procedures please refer to Installation Instructions or contact your local Tremco Representative.

## HEALTH & SAFETY PRECAUTIONS

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

## TECHNICAL SERVICE

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

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## CONTACT OUR TEAM

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