

TREMproof RT Plus

Two Component, Acrylic Modified Cementitious Waterproofing Coating

PRODUCT DESCRIPTION

TREMproof RT Plus is primarily used for internal waterproofing of concrete tanks. It is a two component, acrylic modified cementitious coating that can be fully immersed. TREMproof RT Plus can also be used as a negative barrier to mitigate against water ingress in hydrostatic conditions.

USAGE/PURPOSE

Typical applications for TREMproof RT Plus include:

- ☐ Water Retaining Structures.
- ☐ Retaining Walls.
- ☐ Suitable to be used as a negative barrier to mitigate water ingress in hydrostatic conditions.

FEATURES & BENEFITS

- ☐ Designed for applications where positive hydrostatic pressure resistance is required which makes it a great product for water retention like OSD tanks, firewater retention tanks, etc.
- ☐ Can be applied to damp/green concrete surfaces, 24 hours after formwork has been removed, expediting the construction schedule. (Consult Tremco Technical Services for advice).
- ☐ Tested to and complies with AS 4020:2018 - Testing of products for use in contact with drinking water. Consult Tremco Technical Services for further information.
- ☐ Low VOC
- ☐ Ability to withstand up to 250 kPa (25m) hydrostatic pressure head when fully cured and applied onto a suitable, sound substrate (@1.6mm DFT).

PACKAGING

20L Kit

Part A: 20kg Powder

Part B: 10L Liquid

COLOUR

Black



SHELF LIFE

12 months when stored as recommended in original unopened packaging.

STORAGE

Store in a dry cool place in an upright position in original unopened packaging.

LIMITATIONS

- ☐ Do not apply to contaminated surfaces.
- ☐ Not to be used as an exposed or trafficable surface.
- ☐ Not approved for direct contact with asphalt-based products.
- ☐ Do not apply over a curing or forming oil compound.
- ☐ Due to limited elongation, TREMproof RT Plus will not tolerate movement/cracking of substrate. Separately seal and waterproof dynamic cracks/gaps/joints.
- ☐ If water is treated with chlorine, ensure free chlorine is maintained at normal levels (ie less than 6 parts per million at temperatures lower than 30°C).
- ☐ Not to be UV exposed or pedestrian/vehicular trafficable membrane.

TYPICAL PHYSICAL PROPERTIES

PROPERTY	TYPICAL VALUES
Drying Time @ 23°C, 50% RH	2 - 4 Hours
Full Cure Time @ 23°C, 50% RH	12 - 24 Hours
% Solids	83%
Bond Strength	Concrete Masonry - 60 N Plywood - 39 N
Cyclic Movement	Pass
Elongation at Break	10%
Heat Ageing	0.79 MPa, 0.8% Elongation
Temperature Resistance	Pass
Ultraviolet Resistance	N/A - Non-Exposed
Tensile Strength	0.48 MPa
Durability	Pass
Water Vapour Transmission Rate	10.50 g/m ² /24 Hours
Hydrostatic Head Resistance	250 kPa (25 m head) at 1.6mm DFT

* Drying times will vary depending on ambient temperature and relative humidity.

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SUBSTRATE PREPARATION FOR CONCRETE SURFACES

- Concrete shall be water-cured and attain a 20 MPa minimum compressive strength. TREMproof RT Plus may be applied to green concrete (minimum 24 hours after formwork removal), however the substrate must be free from all standing, surface water. Please contact your local Tremco Representative for further information.
- Concrete shall be free of any laitance which may inhibit adhesion. Removal of laitance can be achieved through a variety of physical abrasion methods, such as shot blasting (preferred method), sandblasting or grinding. Where a physical abrasion method has been used, a minimum of 2x coats a suitable Tremco CPG Australia primer shall be applied.
- Surfaces shall be made free of defects that may telegraph and show through the finished coating. All 90° transitions shall be modified to 45°, to eliminate sharp edges/corners. Surfaces that are rough (fins, ridges, exposed aggregate, honeycombs, deep broom finish, etc.) shall be levelled and made smooth by applying a coat of sand-filled epoxy using TREMprime EP.
- Concrete surface shall be properly cleaned so that the surface to receive the coating, sealant or liquid-applied flashing is free of mould, paint, sealers, coatings, curing agents, loose particles, and other contamination or foreign matter that may interfere with the adhesion.
- In the event of exposed reinforcing steel, it is recommended that the structural engineer of record be contacted for investigation and for best repair method.
- Spalled areas shall be cleaned free of loose contaminants prior to repair. Because jobsite conditions vary, it is recommended that you contact your local Tremco Representative. Depending on the substrate and depth of the spalled areas, a EUCOcrete repair product will be recommended as the best method of repair.
- Shrinkage cracks in the concrete surface that are 1.6mm wide or greater shall be ground out to a minimum 6mm wide x 12mm deep and treated according to the instructions in 'Detail Work' section.
- Structural cracks regardless of width shall be ground out to a minimum 6mm wide x 12mm deep and treated according to the instructions in 'Detail Work' section.
- All drains shall be cleaned and operative. Drains shall be recessed lower than the deck surface. The surface shall be sloped to a drainage point to provide positive drainage (refer to the relevant Australian Standards/NCC for required fall). Drains should be detailed as instructed below:
Cut a 6mm wide x 12mm deep keyway into the concrete surface at any point where the coating will have an exposed terminating edge - that is, any point where the coating will end in an open area subject to traffic, for example, at the end of a ramp, around drains and alongside expansion joints.
- If the project is a restoration deck, old sealant and membrane material shall be removed. The joint interface will require a thorough wire brushing, grinding, sandblasting, solvent washing and/or primer.

SUBSTRATE PREPARATION FOR METAL SURFACES

All surfaces shall be sand-blasted to meet the requirements in AS1627.4, class 2.5 for "Near White Metal". (Consult Tremco Technical Services for further information.)

JOBSITE MATERIALS

Recommended materials and their uses are as follows:

- ☐ Dymonic 100: A one-part, exceptional movement (+100/-50%) moisture-curing, gun grade polyurethane sealant for use in forming cant/fillet bead.
- ☐ TREMproof 200EC: A low-VOC, two-part, water based epoxy primer for use on porous substrates, such as wood and concrete to provide a vapour retarder. Also can be used on concrete based substrates to provide an efflorescence barrier.

- ☐ PermaAFab: 100% stitch bonded, polyester fabric that offers an unusual combination of high strength properties with good elongation for excellent resistance against thermal stress.

USAGE

The following is a guide to estimate material usage:

NON-CHLORINATED APPLICATIONS			
Application Coat	Coverage Rate	Thickness	
First Coat	1m ² /L	1.0 mm WFT	0.8 mm DFT
Second Coat	1m ² /L	1.0 mm WFT	0.8 mm DFT

CHLORINATED APPLICATIONS			
Application Coat	Coverage Rate	Thickness	
First Coat	1m ² /L	1.0 mm WFT	0.8 mm DFT
Second Coat	1m ² /L	1.0 mm WFT	0.8 mm DFT
Third Coat	1m ² /L	1.0 mm WFT	0.8 mm DFT

**All coverage rates are approximate & vary with substrate conditions.*

JOINT PREPARATION

All perpendicular junctions (floor/wall and wall/wall) should be appropriately treated to eliminate 90 degree angles. Suggested treatment methods include:

- ☐ Non-shrink cementitious mortar coving, such as; TREMcrete HB Ultra.
- ☐ Flexible mastic, such as; Dymonic 100.

Please note: TREMproof RT can withstand normal building movement but has limited elongation, and hence will not tolerate excessive movement or cracking of the substrate. Dynamic (moving) cracks and gaps must be independently sealed and waterproofed. All movement and expansion joints should have the TREMproof RT Plus applied into the joint, past the deepest part of the joint filling material (sealant, mastic, etc.) Consult Tremco for further information.

METHOD OF MIXING

- TREMproof RT Plus consists of two components Part A powder and Part B liquid.
- Only mix what can be applied within 10 – 30 minutes. The mixing ratio is 2.0kg of powder to 1L of liquid. Always add powder to the liquid to avoid lumps of dry powder.
- Pour the Part B (liquid) into a clean suitable mixing vessel i.e. pail.
- Gradually add the Part A into the Part B while mixing with a low speed paddle mixer until a smooth lump free mixture is obtained.
- Do not remix with additional liquid.

METHOD OF APPLICATION

- Wet all surfaces with clean water prior to application of the TREMproof RT Plus. Ensure that no ponding/free standing water is present.
- Apply TREMproof RT Plus using a brush, roller or trowel to the entire area to be coated, excluding all movement joints. Once the first coat is dry to the touch, additional coats may be added. As best practice, Tremco suggests that TREMproof RT Plus is optionally reinforced with PermaAFab, polyester reinforcement embedded into the first wet coat of TREMproof RT Plus.
- Apply the second coat of TREMproof RT Plus perpendicular to the first coat, to ensure complete coverage and a monolithic system is achieved.
- The total application should not exceed 3mm thick, otherwise splitting or cracking may occur.
- While curing, TREMproof RT Plus should be protected from mechanical damage and the elements.

6. Tanks and other water retention structures can be filled with water approximately 72 hours after the final coat of TREMproof RT Plus has been applied, provided that the membrane has fully cured.

CLEAN UP

Wash all equipment in water or water/detergent immediately on completion of application and mixing.

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.

Any information provided by Tremco CPG Australia in this document in relation to Tremco CPG Australia's goods or their use is given in good faith and is believed by Tremco CPG Australia 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 CPG Australia 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.

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