

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
- Planter Boxes/Green-Scapes
- Under Tile Waterproofing (external only)
- 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.
- Tested to AS 4654.1 – Material requirements for waterproofing membranes for external above ground use to comply with the relevant waterproofing standard in the National Construction Code of Australia.
- 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	TEST METHOD	TYPICAL VALUES
Drying Time @ 23°C, 50% RH	ASTM D1640	2 - 4 Hours
Full Cure Time @ 23°C, 50% RH	ASTM D1640	12 - 24 Hours
% Solids	By Volume	83%
Bond Strength	ASTM C794	Concrete Masonry - 60 N Plywood - 39 N
Cyclic Movement	CSIRO Moving Joint Test	Pass
Elongation at Break	AS4654.1 Appendix A	10%
Heat Ageing	AS/NZS 4858	0.79 MPa, 0.8% Elongation
Temperature Resistance	AS4654.1 Clause 2.6	Pass
Ultraviolet Resistance	AS4654.1 Table A4	N/A - Non-Exposed
Tensile Strength	AS4654.1 Table A4	0.48 MPa
Durability	AS4654.1 Table A4	Pass
Water Vapour Transmission Rate	ASTM E96	10.50 g/m ² /24 Hours
Hydrostatic Head Resistance	ASTM D7088-17	250 kPa (25 m head) at 1.6mm DFT

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

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Two Component, Acrylic Modified Cementitious Waterproofing Coating

SUBSTRATE PREPARATION FOR CONCRETE SURFACES

1. Concrete shall be water-cured and attain a 20 MPa minimum compressive strength. 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 may inhibit sufficient adhesion. Removal of laitance can be achieved through a variety of physical abrasion methods, such as, shot blasting (preferred method), sandblasting or grinding.
3. 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.
4. 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 TREMCrete repair product will be recommended as the best method of repair.
5. 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.
6. 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 levelled and made smooth by applying a TREMCrete repair product.

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:

- TREMproof RT Plus: Two Component, Acrylic Modified Cementitious Waterproof Coating.
- Dymonic 100: A one-part, exceptional movement (+100/-50%) moisture-curing, gun grade polyurethane sealant for use in forming cant/fillet bead.
- TREMCrete HB Ultra: Ultra High Performance, Re-Profiling Mortar & Decorative Facades Design for use in forming cant/fillets.
- PermaAFab: Permafabric is 100% stitchbonded, 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	1 m ² /L	1.0 mm WFT	0.8 mm DFT
Second Coat	1 m ² /L	1.0 mm WFT	0.8 mm DFT

CHLORINATED / AS 4654 APPLICATIONS			
Application Coat	Coverage Rate	Thickness	
First Coat	1 m ² /L	1.0 mm WFT	0.8 mm DFT
Second Coat	1 m ² /L	1.0 mm WFT	0.8 mm DFT
Third Coat	1 m 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

1. TREMproof RT Plus consists of two components Part A powder and Part B liquid.
2. 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.
3. Pour the Part B (liquid) into a clean suitable mixing vessel i.e. pail.
4. 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.
5. Do not remix with additional liquid.

METHOD OF APPLICATION

1. Wet all surfaces with clean water prior to application of the TREMproof RT Plus. Ensure that no ponding/free standing water is present.
2. 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.
3. Apply the second coat of TREMproof RT Plus perpendicular to the first coat, to ensure complete coverage and a monolithic system is achieved.
4. The total application should not exceed 3mm thick, otherwise splitting or cracking may occur.
5. 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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