TREMCO
Construction Products Group

TREMproof 260

Single Component, Water Based Bitumen Emulsion Waterproofing Membrane

PRODUCT DESCRIPTION

TREMproof 260 is a polymer-enhanced, single component, fluid-applied, bitumen emulsion, waterproofing membrane. It is designed for roller or spray application to concrete, masonry and other structural substrates, primarily in vertical installations below grade such as back-filled basement walls.

USAGE/PURPOSE

Typical applications for TREMproof 260 include:

- ❑ Foundation walls
- ❑ Retaining walls
- ❑ Most backfilled applications

FEATURES & BENEFITS

- ❑ Single component minimises application errors with improper mixing of plural component products.
- ❑ 71 g/L VOC allows the product to be used on projects trying to achieve Green Star.
- ❑ The ability to rapidly cure the membrane using a salt-water solution helps protect the membrane application against unexpected rain events.
- ❑ Primer-less installation allows for rapid installation of the waterproof system.

PACKAGING

197L

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 wearing surface. Limit UV exposure to a maximum of 30 days.
- ❑ Requires the use of protection and/or drainage course.



- ❑ Do not let the product freeze prior to being applied to the substrate. It is best to store TREMproof 260 off the floor at an ambient temperature above 10°C. Opened drums should be tightly sealed before storage.
- ❑ Material should not be applied at temperatures below 4°C. As the material contains water, the water will freeze and may cause crystal cracking in the membrane.
- ❑ Not approved for direct contact with TREMproof 250GC and TREMproof 201/60. Contact Tremco for transition details if condition exists on a project.
- ❑ Not for use in horizontal waterproofing applications.
- ❑ Not for use in submerged conditions.
- ❑ Not to be used as a trafficable and or UV stable coating.

SUBSTRATE PREPARATION FOR CONCRETE SURFACES

1. Concrete shall be water-cured and attain a 20 MPa minimum compressive strength. Moisture content in the concrete shall be lower than 4.5%, as measured using a Tramex CME Moisture Meter. Where the moisture content is 4.5% or above, a minimum of 2x coats of TREMproof 200EC primer will be required. 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 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.

TYPICAL PHYSICAL PROPERTIES		
PROPERTY	**TEST METHOD**	**TREMproof 260**
Drying Time @ 23°C, 50% RH	ASTM D1640	8 Hours
Full Cure Time @ 23°C, 50% RH	ASTM D1640	16 - 24 Hours
% Solids	By Volume	64%
Water Resistance	ASTM C836: AATC-127	Pass
Adhesion-in-Peel after Water Immersion	ASTM C836; ASTM C794	Exceeds
Low Temperature Flexibility (Mandrel Bend Test)	ASTM C836	Pass
Low Temperature Crack-Bridging	Modified ASTM C1305	Pass
Elongation at Break	ASTM D412	800%
Hardness (Type 00)	ASTM D2240	>50
Water Vapour Transmission Rate	ASTM E96 Desiccant Method	0.0044 g/m^2/24 Hours
Water Vapour Transmission Rate	ASTM E96 Water Method	0.084 g/m^2/24 Hours

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

3. 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.
4. 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.
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. 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.
7. 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.
8. 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.
9. 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.
10. 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".

JOBSITE MATERIALS

Recommended materials and their uses are as follows:

- ❑ Vulkem 171: A one-part, film-forming primer to be used on porous surfaces.
- ❑ TREMprime EP: A 100% solids, two component epoxy primer recommended for use on porous substrates (concrete, brick, stone) and also as a compatible tie-in coat to create connectivity between otherwise incompatible membranes.
- ❑ 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.
- ❑ TREMprime Non-Porous Primer: A low-VOC primer for use in applying urethanes to non-porous substrates such as metal, PVC and glass.
- ❑ Vulkem 191 QD Primer: A low-VOC compliant, one-part, interlaminar primer for use in applying a fresh coat of Vulkem coating or sealant after preceding coat has been exposed to rain or for periods of time greater than 24 hours.
- ❑ Dymonic 100: A one-part, exceptional movement (+100/-50%) moisture curing, gun grade polyurethane sealant for use in precast, masonry, expansion joints, control joints and for use in forming cant/fillet bead.
- ❑ Tremflex 25FC: A one-part, fast curing, flexible fillet joint sealant for use in professional waterproofing applications.

USAGE

The following is a guide to estimate material usage:

COVERAGE RATE		THICKNESS	
0.32m²/L	63m²/197 L Drum	2.5 mm WFT	1.6 mm DFT

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

CRACK PREPARATION

- ❑ Shrinkage cracks in the concrete < 2mm wide nominally can be detailed with a 150mm wide x 1mm WFT strip of TREMproof 260.
- ❑ Shrinkage and non-structural cracks >2mm wide must be appropriately prepared and filled prior to application of the TREMproof 260 membrane.
  - ▪ Grind out cracks to a minimal 6mm wide x 12mm deep.
  - ▪ Remove all loose debris and concrete dust that may inhibit adhesion.
  - ▪ Apply closed cell polyethylene backer rod or bond breaker tape into joint to prevent 3 sided adhesion of the sealant.
  - ▪ Install appropriate Tremco polyurethane sealant, TREMflex 25FC or Dymonic 100 into the crack in the correct depth to width ratio.
  - ▪ Apply a 150mm wide x 1mm WFT strip of TREMproof 260 un-reinforced.

JOINT PREPARATION

- ❑ All joints must be clean, sound, dry, and free of dirt, grease, oil, release agents and other contaminants.
- ❑ All floor to wall and hob to wall joints must have a 35mm wide bond breaker sealant of Tremco's TREMflex 25FC or Dymonic 100 prior to installation of the TREMproof 260 membrane. Install a 1.5mm detail coat of TREMproof 260 extending a minimum 100mm into both the wall and hob/slab.
- ❑ Install a 1.5mm detail coat of TREMproof 260 extending 100mm onto the pipe/conduit penetration and 100mm onto the surrounding substrate.
- ❑ All expansion and movement joints should be treated with the appropriate Tremco sealant, TREMflex 25FC or Dymonic 100, based on joint expected movement requirements, and applied to the correct width to depth ratio (2:1). A closed cell polyethylene bond breaker tape must be used prior to sealant installation to prevent 3 sided adhesion.
  - ▪ If the joint is expected to expand to a full width > 50mm, Tremco's Dualflex membrane will be needed in lieu of sealant.

METHOD OF APPLICATION

1. Minimum application requirements set forth by the application requirements, as well as project specific detail requirements/recommendations recommended by Tremco should be followed.
2. Using a medium-nap (9mm to 13mm) roller cover or a Graco sprayer (see pump requirements below), apply TREMproof 260 at the following rates to the entire area to be coated, including over applications of TREMproof 260 detail coats, but excluding expansion joints.

PUMP RECOMMENDATIONS*

Pump Name	Pump Pressure	Spray Tip Size
Graco GH733	2,200 - 2,800 psi	539/627
Graco GH833	2,200 - 2,800 psi	539/627
Graco GH933	2,200 - 2,800 psi	539/627

Tremco recommends contacting your local Graco or other pump distributor for equipment recommendations.

3. Allow TREMproof 260 to cure a minimum of 24 hours prior to backfill. Cure rates depend on temperature and humidity. Refer to cure rate guidelines in chart at the end of this document. If the TREMproof 260 has been applied for 24 hours or longer during the ideal temperature application range (see chart on last page of document) and requires an additional coat to achieve the required dry film thickness, it should be cleaned with a damp cloth of Tremco Xylol (do not saturate it).
   - If rapid curing of the membrane is needed to protect the TREMproof 260 from an un-expected rain event, a salt solution can be used. See below for details on the salt solution.

SALT SOLUTION RECOMMENDATIONS

Prepare salt solution by mixing salt flakes with water as follows:

- 250g of 77% concentrate Calcium Chloride or Sodium Chloride (Salt) flakes per 10 litres of water.

CLEAN UP

- ❑ Clean all adjacent areas to remove any stains or spills with Tremco Xylol.
- ❑ Clean tools or equipment with Tremco Xylol before materials cure.
- ❑ Clean hands with Acetone or other mild solvent then brush with a stiff-bristle brush and rinsing thoroughly with water.

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.

1. 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.
2. If the coating application has been installed at a thickness that is greater than our installation instructions, dry times could be extended significantly. As a result, Tremco recommends that the material is applied in accordance with the installation instructions.
3. 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. Contact Tremco should this occur as a vapour retarding primer (TREMproof 200EC) may be required.
4. If the previous coating application has not fully cured, water may become trapped between the coats and lead to large blisters. When cut out, they may still be tacky on the underside. Blisters may be cut out and repaired after the surface has been allowed to fully dry. Also, additional application will dramatically reduce the rate the material cures and full cure will take dramatically longer than normal.

WEATHER IMPACT ON COATING APPLICATION

This section discusses the impact of applying these coatings outside the ideal temperature application range of 18 to 30°C at 50% RH.

1. At temperatures lower than the ideal range, the material will become viscous and it will cure at a slower rate. Refer to the chart below for approximate cure rates at varying temperatures.
2. Storing materials at cooler or warmer temperatures than ideal, will affect the handling and curing characteristics of the materials.
3. Substrate temperatures may affect cure rates even when ambient temperatures are high.
4. Enclosed areas may slow the cure rate of the coating because air flow tends to be minimal in these areas.
5. In high relative humidity conditions, the material will cure slower as it relies on the water in the product to evaporate.

APPROXIMATE CURE TIMES IN HOURS AT 50% RH

The following is a guide to estimate cure time:

Temperature at 50% RH	TREMproof 260
4.4 - 12.8°C	>72 Hours
12.8 - 18.3°C	24 to 72 Hours
18.3 - 29.4°C	16 to 24 Hours
29.4°C	8 to 16 Hours

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 contact Tremco.

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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