

# TREMPly PVC

UV Resistant, Polyester Reinforced, Multi-Layer, PVC Sheet Membrane

## PRODUCT DESCRIPTION

TREMPly PVC is a polyester reinforced, multi layer, synthetic waterproofing membrane, based on polyvinyl chloride (PVC) technologies, containing ultraviolet light stabilisers. TREMPly PVC is designed to be hot air welded and mechanically fixed or loose laid in place.

## USAGE/PURPOSE

TREMPly PVC is suitable for use in areas such as:

- Roofs
- Planter Boxes
- Lift/Stair Overruns
- Podiums
- Mechanical/Plant Rooms
- Box Gutters

## FEATURES/BENEFITS

Tested to AS 4654.1 to ensure compliance with the NCC for external waterproofing in Australia

- Excellent workability
- Fast installation
- High dimensional stability
- High resistance to mechanical forces
- Low water vapour transmission rate (WVTR)
- Excellent root resistance
- Zero open flame equipment required

## PACKAGING

- 1.5mm x 2.0M x 20M

## COLOUR

- Top side: Light grey
- Underside: Dark grey

## SHELF LIFE

- When stored correctly, product has no expiry



## STORAGE

- Store in original, undamaged packaging in a clean, dry and protected location

## JOBSITE MATERIALS

- TREMPly Contact Adhesive: A low-VOC adhesive, to be used with TREMPly PVC FB, Tremco Dualproof C or TREMProof Torch Fleece.
- TREMPly Roofing Screws: Heavy duty roofing screws (various sizes), to be used with the TREMPly PVC and TREMProof Torch waterproofing membranes.
- TREMPly Roofing Plates: Heavy duty roofing plates (various sizes) to be used with the TREMPly PVC and TREMProof Torch waterproofing membranes.
- TREMPly PVC Metal: PVC coated metal termination bars/angles (various sizes), to be used with the TREMPly PVC and Tremco Dualproof C waterproofing membranes.
- TREMPly PVC FB: 1.5mm x 2M x 40M, UV resistant, non-reinforced, fleece backed PVC single ply roofing sheet membrane.
- TREMPly PVC Detail Sheet: 1.5mm x 300mm x 20M, non-reinforced PVC detail sheet, to be used with both the TREMPly PVC and Tremco Dualproof C waterproofing membranes.

PROPERTY REQUIRED	METHOD	RESULTS		
		MD	CD	PASS/FAIL
Abrasion Resistance	AS 1580.403.2	0.02mm		Pass
Bond Strength	ASTM C794	PLY 1.93 N	Concrete 4.86 N	N/A
Cyclic Movement	Moving Joint Test	Tested to Class III		Pass
Dimensional Stability	ASTM D6207	Plus 1mm		N/A
Elongation at Break	AS 4654.1-2012 Appendix A	117.58%	179.95%	N/A
Field Seam Strength	EN 12316.2, EN 12317.2	No Joint Failure		N/A
Heat Ageing	AS 4654.1-2012	105.82%	147.22%	Pass
Temperature Resistance	AS 4654.1-2012 Clause 2.6	102.60%	160.07%	Pass
Ultraviolet Resistance	AS 4654.1-2012 Table A4	117.43%	159.57%	Pass
Tensile Strength	AS 4654.1-2012 Table A4	23.49 MPa	20.76 MPa	N/A
Durability <sup>2</sup>	AS 4654.1-2012 Table A4	N/A	N/A	Pass
Water Vapour Transmission Rate	ASTM E96	1.31 g/m <sup>2</sup> /24 hours		Pass

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- ❑ TREMPly PVC Internal Corner: Prefabricated 1.5mm x 100mm x 100mm, 90 degree, non-reinforced PVC internal corner.
- ❑ TREMPly PVC External Corner: Prefabricated 1.5mm x 100mm x 100mm, 90 degree, non-reinforced PVC external corner
- ❑ TREMPly Open Pipe Boot: Prefabricated open pipe boots, for 100mm and 150mm diameter pipes.
- ❑ TREMPly Horizontal Scupper: Prefabricated 112mm (external diameter), horizontal pipe insert.
- ❑ TREMPly Vertical Dropper: Prefabricated 112mm (external diameter), vertical pipe insert.
- ❑ TREMPly U Bar: 2M length 'U' channel termination bar, to be used with TREMPly PVC and Tremco Dualproof C waterproofing membranes.
- ❑ Tremco Pressure Seal: 3M length aluminium K-Bar, for use with the TREMPly PVC, Tremco Dualproof C and TREMPproof torch range of waterproofing membranes.
- ❑ Dymonic 100: Polyurethane sealant, to be used with the Tremco Pressure seal (K-Bar).

## TOOLS

- ❑ Large Water Filled Roller
- ❑ Hand Held Hot Air Welding Gun (for small areas and detailing)
- ❑ Automatic and Semi Automatic Hot Air Welders (AKA Robots - for large areas)
- ❑ 40mm 15° Welding Nozzle (for straight runs)
- ❑ 20mm 60° Welding Nozzle (for detailing)
- ❑ 40mm Silicone Pressure Roller
- ❑ Brass 'Penny' Roller
- ❑ Seam Pick/Probe
- ❑ Wire Brush
- ❑ Heavy Duty/Tradesman Scissors
- ❑ Utility Knife
- ❑ Impact Drive or Screw Gun (for mechanical fixing)
- ❑ Tin Snips
- ❑ Tape Measure and Ruler
- ❑ Chalk Line

## SUBSTRATE PREPARATION FOR CONCRETE SURFACES

1. Concrete shall be water-cured and attain a 20 MPa minimum compressive strength. For fully bonded systems, moisture content in the concrete must be lower than 4.5% as measured using a Tramex CME Moisture Meter. Depending on concrete construction and job site location, additional concrete testing may be required. Please contact your local Tremco Representative.
2. For fully bonded systems, 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. For fully bonded systems, 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. Where structural or dynamic cracks are present, please contact your local Tremco CPG representative.
5. 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.
6. 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.
7. 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 coat of sand-filled epoxy using TREMPprime EP.

8. 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 (minimum 1:100) as per AS4654.2.

## PREPARATION

### HOT AIR WELDING

1. Tremco CPG recommends that hot air welding is completed at an operating temperature of between 450°C – 600°C, however the exact required operating temperature is going to vary depending on the ambient temperature, the temperature of the product itself and the speed in which the installer can work at. There may also be some general variation in the true temperature of each individual hot air welding machine.
2. Membrane laps must be a minimum of 75mm for fully bonded or loose laid systems. Laps must be a minimum of 150mm for mechanically fixed systems.
3. The weld width must be a **minimum of 40mm.**
4. Prior to the application of the TREMPly PVC, 'Test Welds' must be completed on site by the installer to ensure the correct temperature and speed/technique has been achieved. Tremco CPG recommends 'peel tests' be completed at the beginning of the day and at various intervals throughout the day, as the ambient temperature changes.
5. Hot air welding a lap of TREMPly PVC should be completed in 3x stages:
  - a) Spot/Tack Weld – Complete every 500mm O.C to ensure TREMPly PVC stays firmly in place while welding. This is not a true 'weld' and can be removed if needed.
  - b) Pre-Weld – Weld the rear off the lap, leaving a 35mm opening (when using a 40mm 15° nozzle).
  - c) Final Weld – Weld the remaining 35mm of the opening, ensuring 5mm off the nozzle is left protruding out from the lap to ensure it is completely sealed.
6. Once a lap of TREMPly PVC has been welded, a seam check must be completed using a 'Seam Pick/Probe' to ensure a 100% sealed, waterproof lap has been achieved.

## APPLICATION

Application of the TREMPly PVC membrane/s, should be completed with strict adherence to the National Construction Code and AS 4654.2.

1. TREMPly PVC can be either mechanically fixed or loose laid.
2. Loose laid installations must be restrained via the installation of overburden finishes.
3. For mechanically fixed applications, TREMPly PVC should be fixed using TREMPly Roofing Plates and Screws. Consult your local Tremco CPG representative for project specific advice on fixing details and spacings.
4. For mechanically fixed applications, all adjoining sheets are to overlap the previous sheet by a minimum of 150mm. This is to allow for sufficient space to completely conceal the TREMPly fixing plate and allow for a minimum 40mm weld.
5. For loose laid applications, all adjoining sheets are to overlap the previous sheet by a minimum of 75mm. This is to allow for sufficient space for a minimum 40mm weld.
6. TREMPly PVC field membrane must be fixed in place at all horizontal to vertical transitions, using a TREMPly U bar fixed at 150mm O.C. This step is to restrain the field membrane from any horizontal forces that may occur over the life of the TREMPly PVC.
7. Ensure a separate sheet of TREMPly PVC is used at the horizontal to vertical transition to overflash the TREMPly U Bar by a minimum of 150mm, allowing for a minimum 40mm weld.
8. Terminations should be in line with AS 4654. 2, using either a Tremco Pressure Seal, TREMPly PVC coated angle or reglet termination.
9. Ensure all laps (field membrane, penetrations, internal and external corners) be in the same direction as the fall to allow promote efficient water shedding.

**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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