

# TREMproof® PU300

Liquid Applied, Hybrid Polyurethane, Elastomeric Waterproofing Membrane

### **DESCRIPTION**

TREMproof PU300 is an elastomeric liquid applied hybrid PU Acrylic based waterproof coating formulated to give long-lasting, maintenance free and superior waterproofing protection for concrete substrates. TREMproof PU 300 offers the most advanced waterproofing technology and is guaranteed to provide long term performance.

### **BASIC USES**

Waterproofing or vapour barrier protection of:

- Foundation and basements
- Kitchens and bathrooms
- Exposed roof, domes, balconies, terraces
- Car park deck roof
- Inverted roof & sunken slabs
- Damp proof membrane for sandwich construction

# **FEATURES & BENEFITS**

- Chemical resistance: Resist deterioration from dilute acids & alkali, oil, salts, bacteria and common ground salts.
- Single component, ready-to-use
- · Water miscible and solvent free
- Easy application using roller, brush, squeegee or air spray machine
- Excellent adhesion to green and cured concrete with elastic recovery
- Long term resistance to ponded water
- High elongation permits membrane to stretch with movement in the substrate
- Excellent crack bridging properties
- Excellent UV resistance

## **PACKAGING**

Packed in 20 kg pails.

### **COLOUR**

Grey and white

### **DIRECTIONS FOR USE**

**Surface Preparation:** Surface must be structurally sound, clean, dry and free from dust, grease, curing compounds, paint coatings and other loose debris. Surface should ideally have a "sand paper" profile roughness. Concrete surfaces should have a slope of at least 1% to allow water run-off. Allow surface to be pressure-jet water washed and slightly moistened (free from surface water), before application of coating, especially in hot climates over 35°C.

If bond of TREMproof PU300 to the substrate is highly critical or a poor-quality substrate is anticipated, reinforce the membrane with 50 GSM fibre glass or polyester fabric to increase tenacity, bond and performance. All shrinkage and non-structural cracks should be pre- treated with a 1.0 mm thick coating of TREMproof PU300 extending at least 50mm on both sides of the crack. Right angles or corners should have angle fillets installed with polyester or fibreglass reinforcement mat. Allow all repair and preparatory works to cure for at least 24 hours prior to application of waterproofing system.

**Expansion Joint:** Fill level with surface of concrete with a suitable Tremco approved polyurethane or polysulfide joint sealant depending on the project specifications. Apply 50mm width strip of flexible self-adhesive tape. Where movement is expected between elements, treat as an expansion joint. Sharp corners as between parapets, concrete deck and junctions should be treated by placement of proprietary mastic at the corner as a fillet or prepare angle fillet. Note: Where moisture is trapped in the surface to be treated, an approved venting system consisting of a perforated base felt together with vents shall be used in accordance with the manufacture's application procedures.

**Priming:** Normally TREMproof PU300 can be applied directly onto clean damp concrete surfaces. For porous concrete surfaces apply a primer coat produced at site by diluting TREMproof PU 300 1:4 with clean water, apply the rate of 4 – 5 m² per Kg and allow to fully dry prior to over coating with TREMproof PU300.

#### Coverage:

Recommended application rate areas follow: Waterproofing Membrane: 2.0 – 3.0Kg/m<sup>2</sup> Sandwich Membrane for Floor: 1.5 – 2.0Kg/m<sup>2</sup> Theoretical coverage rate for 20 kg pail is around 9 – 10 m<sup>2</sup> at 1mm dry film thickness.

Application Method: TREMproof PU300 can be applied by trowel, brush, short haired pile roller or sprayed using and airless sprayer. Mix for 2 -3 minutes with a mechanical drill fitted with a proprietary paddle prior to application so that a homogenous mix is achieved. Allow first coat to dry out prior to second coat application. The second coat should be applied in the opposite direction (right angles) to the first coat as this will allow the polymer in the mix to be distributed more uniformly. Always allow the final coat to dry out fully before applying protection courses such as screed or boards. Allow full cure of 7 days before subjecting the waterproofing system to actual service conditions. If better tensile properties are required of the coating system, use polyester or fibreglass reinforcement between first and second coats, all over the surface to be waterproofed. To ensure compliance to standards, minimum dry thickness of 1.5 – 2.0 mm recommended.

### **CLEAN UP**

Clean all the tools and application equipment with water immediately after use. Hardened and/or cured material can only be mechanically removed.

#### **SAFETY PRECAUTIONS**

The Technical and Safety Data Sheets must be read and understood before use.

### **WARRANTY**

Tremco warrants its Products to be free of defects in materials but makes no warranty as to appearance or colour. Since methods of application and on-site conditions are beyond our control and can affect performance, Tremco makes no other warranty, expressed or implied, including warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE with respect to Tremco Products. Tremco's sole obligation shall be, at its option, to replace or to refund the purchase of the quantity or Tremco product proved to be defective and Tremco shall not be liable for any loss or damage.

PROPERTY	DESCRIPTION
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Appearance	Grey
Density	1.35 +/- 0.05
Solid Content	65 - 70% by weight
Flash Point	None
Tensile Strength (ASTM D412)	> 1.5 MPa
Elongation (ASTM D412)	> 500%
Shore A Hardness (ASTM D2240)	50 -55
Water Permeability (BSEN 12390)	No penetration @ 5 bar pressure
Water Vapour Permeability (ASTM E96)	0.15gsm/m <sup>2</sup> /24hours
Crack Bridging Ability	1.0 – 1.5 mm
Resistance to Water (ASTM D2939)	No blister or re-emulsification
Adhesion in Peel (ASTM C794)	> 1.0 N/mm <sup>2</sup>
Abrasion Resistance	Good
Touch Dry	4 – 6 hours depending on coat thickness, temperature, wind conditions, humidity and substrate.
Full Cure	7 days
Minimum Thickness Recommended	1 -2 mm over concrete
Application Temperature	+5°C - +45°C
Shelf Life	12 months in original sealed container stored in a dry cool place under cover out of direct sunlight

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