### PRODUCT DATA SHEET

# **DUROFLEX TANK**

POLYMER CEMENTITOUS MEMBRANE



#### **DESCRIPTION**

Duroflex tank is a two component polymer modified cementitious coating designed for waterproofing concrete and masonry surfaces in a variety of applications. Applied by roller, brush, trowel or spray methods, once cured Duroflex tank provides a protective barrier to concrete surfaces against salts, chlorides and carbonation. Designed for use in permanently wet and damp conditions including applications such as:

- Internal wet areas, bathrooms, laundries and tiled areas
- Balconies, decks, podiums, terrace floors
- Parapet and feature walls
- Water features, swimming pools
- Potable water storage facilities, retention tanks and general water tank areas
- Planters, retaining walls, earth shelters
- General tiled areas to prevent moisture ingress

Based on unique cross linking polymer technology, Duroflex tank displays outstanding adhesion properties over numerous building substrates including concrete, masonry, renders, screeds and cement based mineral surfaces. No priming is required as Duroflex basement bonds to clean pre-dampened surfaces free of surface water. For applications where finishes need to be applied over this membrane, tiles, renders, textures and solvent free paints are able to be directly applied to the cured Duroflex tank surface.

#### **PACKAGING**

 Part A – 20 kg powder and Part B - 10 litre resin

#### **FEATURES**

- Handles ponding and permanently wet conditions,
  will not re-emulsify
- Bonds to damp surfaces
- Flexible with good elongation properties
- Can be applied on vertical and horizontal surfaces
- Resistant to chloride attack, carbonation and salts
- Bonds to concrete surfaces after 48 hours of application;
  bonds to renders, screeds etc after 16 hours of application
- Compatible bonding properties for tile adhesives, screeds, renders and texture coatings
- Suitable for internal and external surfaces
- Suitable for immersed and underground areas

#### **GENERAL TECHNICAL DATA**

Wet Form	
Specific gravity of mixed product	1.4kg/litre
Appearance	liquid – white; powder –sandy; mixed - cement grey
Cured membrane	
Elongation	50%
Tensile Strength	>1.4MPa
Adhesion to concrete	>1.5MPa
Water pressure resistance	12bar of pressure (positive); 2 bar negative
Shore A hardness	68





#### **GENERAL APPLICATION DETAILS**

- Surfaces must be clean, suitably prepared and in a sound state prior to beginning the application. Substrates do not require to be primed however surfaces must be damp or pre-wetted ensuring that they are free of surface water.
- For movement joints Durotech Elastic Detailing Tape is to be applied over joints followed by the application of Duroflex tank. For non-movement cracks, these are to be filled first with Duroflex tank and reinforced using durotech reinforcing tape prior to over coating with membrane. For waterproofing applications on the positive sides, wall/ floor junctions are to be protected with the DurotechBond breaker Detailing Tape embedded into the coat of Duroflex tank. For negative applications a waterproof fillet is recommended to be used at junctions using Duro additive or duroflex Plug.
- Duroflex tank membrane is formed by mixing 1 litres of Part B liquid to 2 kg of Part A dry, or full unit mix of 10 litres of Part B to 20kg of Part A. An electric stirrer and paddle is recommended to be used to ensure a homogenous state is formed. Starting with a slowmixing speed, the powder component should be slowly added to the liquid, increasing the mixing speed as the powder addition increases. Mixing should continue until product is consistent and lump free, then allow product to settle for a few minutes before restirring lightly. Product will then be ready to use.
- First coat is to be applied at a coverage of 1L/m<sup>2</sup> (approx. 1Litres of mixed compound) using a roller or trowel at a nominal 1mm wet film thickness. Allow first coat to dry which may take 30-60 minutes depending on surface porosity and ambient conditions. Once touch dry apply second coat at right angles to the first coat, repeating the coverage of the first coat of 1L/m<sup>2</sup> at 1mm(min thickness).

Subsequent coats can be applied of required.

#### **IMPORTANT NOTES**

- Pot life for the mixed membrane is approximately 45-60 minutes in normal ambient conditions of < 20C
- Drying times are:
- Recoat 1-2hours
- Dry time 6-8hours
- Immersion 21 days
- Based on normal ambient conditions of 20 C
- Allow 48 hours drying before applying light foot traffic over the membrane. For immersed areas, allow 4 days drying prior to filling. A light wash down and removal of first water is recommended prior to filling for intended purpose.
- For applications where renders or screeds are applied over the membrane, ensure these compounds are enhanced with an additive such as Duroadditive or acrylic/latex bonding additives. Polymer modified cement based tile adhesives are recommended for direct adhesion
- Best storage conditions for liquid and dry components is in a dry area at room temperature, avoiding humidity and frost
- Product while in a wet state will clean up with water. Once dried product will need to be removed by mechanical means or with solvent cleaners.
- Application temperature surface temperature should be minimum 5C and maximum 30C.

#### Shelf life

Shelf life Powder: 9 months in unopened container Shelf life Liquid: 9 months in unopened container

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## **DUROTECH INDUSTRIES**



















