PondShield-Pro

Product Description

PondShield-Pro is a two component water based epoxy polyamide membrane/barrier coating.
Approved for use with potable (drinking) water, independent testing confirms conformity with the requirements of AS4020.2000 & BS6920.

Features/Benefits

- Non-flammable & negligible odour.
- Can be applied to damp surfaces.
- Can be safely applied to freshly laid hardened (green) concrete.
- Conforms to requirements of the:- **Building Code of Australia** as a waterproofing membrane.
- Conforms to the requirements of:- **Australian standard 4020 -2000** and **British Standard 6920** for use in contact with potable water.
- When applied directly to the substrate the cured membrane will withstand 250kPa of hydrostatic pressure which is equivalent to a 25 metre head of water.
- When used wet on wet over PondShield-Pro Bonding Bridge the cured membrane will withstand 400kPa of pressure which is equivalent to 40 meter head of water.
- No maximum recoat time provided surface is clean and free from surface contaminants.
- Can be over coated using almost any decorative or industrial finishing paint.
- Safe to use in sensitive locations (e.g. around food or habitable areas) and environmentally sound.
- Prevents rising damp and the formation of efflorescence when used as a single coat barrier coat.
- Has excellent adhesion to most substrates including brick, masonry, concrete block, concrete, stone and timber.
- Easy clean-up using water.

Typical Applications

- As a low water vapour transmission coating in the building and construction industries and as a barrier/seal coating over freshly laid or damp concrete.
- As a hydrostatic pressure resistant waterproofing membrane to prevent water seepage or dampness penetration through to the interior of walls and floors.
- As a waterproofing barrier on the negative side in below grade surfaces such as basement, tunnels, lift wells, retaining walls and car parks.
- As a waterproofing membrane or barrier coating over freshly laid hardened (green) concrete, prior to the application of conventional levelling compounds, carpet and tile adhesives.
- As a waterproofing membrane in tanking applications, including potable water containment.
- As a barrier seal coating over damp, green or efflorescence producing concrete prior to over coating with conventional building paints.

Limitations

The product should be applied whilst the surface temperature is between 10 -35°C. The product will cease to cure below 10°C, but will recommence curing when the temperature rises above 10°C. Curing time will also be adversely affected in situations where relative humidity is >85%.

In enclosed areas, ventilation must be provided during the curing cycle to enable adequate evaporation of the water.

Car should be taken when sandwiching adhesives between PondShield-Pro and floor coverings to ensure the water vapour transmission of the covering is sufficient to allow the solvent to escape.

PondShield-Pro is not classified as a trafficable membrane.

Basic Application Instructions

Surface Preparation

All surfaces to be treated must be structurally sound; and existing coatings, adhesives, efflorescence should be removed to achieve maximum bond strength and resistance to hydrostatic pressure. Surfaces must be cleaned free of dirt, grease, oil, or other surface contaminants.
Holes, non-structural cracks or other surface deformities should be filled with an epoxy mortar or concrete repair systems and allowed to cure for 2-3 hours before coating is applied.

Installation
Each component should be individually mixed to form a homogenous component.

Thoroughly mix the two components in the ratio of 1:1 by volume until a homogeneous blend is obtained. Only mix as much as may be used within the pot life and avoid excessive aeration during mixing.

When the product is to be applied to dry concrete it is advisable to wet the surface with a fine mist of water before application and allow to just surface dry.

Floors - Spread the material using a squeegee or stiff nylon broom to achieve coverage and finish using a long nap roller.

Walls – Apply the product by roller or spray taking care to achieve required coverage.

Care must be taken to work the material into the surface to fill voids and avoid pin holing. A minimum of two coats is recommended and care should be taken to ensure uniformity of material and the required coverage is maintained. When finishing it is necessary to lay the material onto the surface and lightly finish to achieve the required dry film thickness per coat.

The coverage rate for all surfaces should be a total of 1.5 square metres per litre (3.0 square metres per litre per coat) to achieve optimum properties. In the event that this coverage rate is not achieved in two coats, further coats should be applied to achieve a total uniform coverage rate of 1.5 square metres per litre.

Allow to cure for 24 hours before applying adhesives, mortars, levelling compounds, decorative coatings or other surface treatments. Care is necessary to ensure the waterproofing membrane coating is not damaged in any way during subsequent treatments.

It is recommended that the final coating applied to floor surfaces should be allowed to cure for at least 3 days before further treatment to minimize the risks of mechanical damage.

Packaging
4L kit
20L Kit

Safety Precautions
PondShield-Pro Part A and Part B are hazardous goods and may cause sensitization by skin contact. They are harmful by inhalation, in contact with skin and if swallowed. Keep containers tightly closed in a well ventilated place. Avoid contact with skin and eyes. It is strongly recommended that protective clothing is worn at all times during use of epoxy material to prevent contact with skin.

Thinning & Clean up
The first coat should be thinned with water, as required depending on the porosity of the surface to be coated (up to 20% for dense surface to 5% for more porous surfaces) to ensure optimum penetration. Thinning of the second coat should be avoided since this increases the difficulty in achieving the required dry film thickness. Wash all equipment in water or water/detergent immediately on completion.

Technical Performance Data

Colour	Grey, Black
Finish	Semi-gloss going to matt with aging.
Volume solids	44%
Mixing ratio	1:1 (Part A:/Part B) by volume
Coverage	Must be applied at a rate of 1.5 square metres per litre to achieve an effective waterproofing membrane. Minimum two coats are recommended to achieve uniform coverage.
Wet Film Thickness	300 micrometers per coat
Recoat time	4 hours @ 25°C & 50% R.H.
Full cure	7 days @ 25°C & 50% R.H.
Pot life	2 hours @ 25°C

The Recommended wet film thickness specified produces a nominal dry film thickness of 150 micrometers per coat or 300 micrometers for two coats. The apparent dry film thickness with reduce depending on the porosity of the substrate, however the product absorbed by the substrate forms part of the waterproofing function.