



ARDEX WPM 300

Water Based Epoxy Membrane

Water resistant, prevents rising damp, efflorescence and with stands hydrostatic pressure

Excellent adhesion to most substrates including damp surfaces and freshly laid green concrete

Safe to use in sensitive locations



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Water Based Epoxy Membrane

DESCRIPTION

ARDEX WPM300 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 and BS6920.

FEATURES/BENEFITS

- Non-flammable &negligible odor
- Can be applied to damp surfaces
- Can be safely applied to freshly laid hardened(green) concrete
- 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 hydrostatic pressure which is equivalent to a 25 meter head of water
- When used wet on wet over ARDEX WPM256 Bonding Bridge the cured membrane will withstand 400kPa pressure which is equivalent to 40 meter head of water
- Can be over coated using almost any decorative or industrial finishing paint
- 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 vapor transmission coating in the building and construction industries and as a barrier/sealer 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 basements, 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 leveling 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

Tiling can commence after 24 hours cure of ARDEX WPM 300 although should not exceed a maximum of five days. Installer is to ensure that there is no surface contamination during this period.

The product should be applied whilst the surface temperature is between 10–35°C. The product will cease to cure below 10°C. Curing time will also be adversely affected in situations where relative humidity is >85%.

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

Care should be taken when sandwiching adhesives between ARDEX WPM 300 and floor coverings to ensure the water vapor transmission of the covering is sufficient to allow the solvent to escape.

ARDEX WPM 300 is not classified as a trafficable membrane.

BASIC APPLICATION INSTRUCTION

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 from dirt, grease, oil, or other surface contaminants.

Holes, non-structural cracks or other surface deformities should be filled with an ARDEX concrete repair system and allowed to cure sufficiently before coating is applied.

MIXING RATIO

1:1 (part A:part B) by volume.

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.

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.

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 meters per liter (3.0 square meters per liter 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 meters per liter.

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.

TILING APPLICATIONS

Substrates such as screeds and renders should be normally allowed to dry for 7 days prior to the fixing of ceramic tiles. Alternatively ARDEX WPM 300 can be applied in one coat by brush or roller application at a coverage rate of 3m²/L. Whilst the coat is wet, clean dry sand of 0.5mm diameter shall be broadcast over the surface at a rate of 700g/m² to achieve at least 90% coverage. After overnight cure the excess sand shall be swept and vacuumed from the surface.

FLOORING APPLICATIONS

Where concrete subfloors are damp (moisture content exceeds 5.5% or have a relative humidity of 70%) ARDEX WPM 300 can be applied as a moisture barrier.

Two coats are applied at 3.0 square meters per liter per coat. The second coat can be sand seeded as is done for tile applications, or left neat and ARDEX P 82 primer applied before the smoothing cement. A single coat of ARDEX WPM 300 applied at 2.5 square meters per liter per coat acts as a moisture stop for 'green concrete' not subject to rising damp or permanent moisture.

Clean - Up

Wash all equipment in water or water/detergent immediately on completion.

COVERAGE

Must be applied at a rate of 1.5 square meters per liter to achieve an effective waterproofing membrane. Minimum two coats are recommended to achieve uniform coverage.

PACKAGING

2L(PART A)+2L(PART B)
10L(PART A)+10L(PART B)
15L(PART A)+15L(PART B)

STORAGE & SHELF LIFE

Can be stored for approximately 24 months in originally sealed packaging in place free from frost.

TECHNICAL DATA

Color:	grey
Finish:	semi-gloss going to matt with ageing
Volume solids:	~44%
Wet film thickness:	300 micrometers per coat
Dry film thickness:	300 micrometers two coats
Recoat time:	4 hours @ 23°C& 50% R.H.
Full cure:	7 days @ 23°C& 50% R.H.
Pot life:	2 hours @ 23°C 1 hour @ 35°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 will reduce depending on the porosity of the substrate, however the product absorbed by the substrate forms part of the waterproofing function.

SAFETY AND HEALTH

ARDEX WPM 300 is hazardous and may cause sensitization by skin contact. Keep containers in a well-ventilated place and tightly closed. Take off immediately all contaminated clothing. In case of eye contact, rinse with plenty of water and contact Doctor or Poisons Information Centre. If swallowed immediately contact Doctor or Poisons Information Centre. Avoid release to the environment.

Refer to the material safety data sheet for further information.

The information supplied in our literature or given by our employees is based upon extensive experience and, together with that supplied by our agents or distributors, is given in good faith in order to help you. Our Company policy is one of continuous Research and Development; we therefore reserve the right to update this information at any time without prior notice. We also guarantee the consistent high quality of our products; however, as we have no control over site conditions or the execution of the work, we accept no liability for any loss or damage which may arise as a result thereof. Regional specific recommendations, standards, codes of practice, building regulations or industry guidelines may affect specific installation recommendations.