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# ARDEX WPM 170

## Water-based Aliphatic PU Membrane

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One component

Solvent free

Low VOC

Easy application

Water vapour breathable

Permanent elasticity

Resistant to weathering and UV radiation

Suitable for vertical or horizontal applications

Internal or external use

Adaptable to any substrate geometry

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# ARDEX WPM 170

## Water-Based Aliphatic Polyurethane Membrane

### DESCRIPTION

ARDEX WPM 170 is a water-based aliphatic polyurethane polymer dispersion which creates an elastic waterproof membrane.

ARDEX WPM 170 is resistant to weathering and colour change due to UV radiation, and is solvent free with low VOC. The membrane has permanent elasticity at any temperature, therefore accommodates normal building movement.

### USES

- As a waterproofing membrane over Concrete substrates
- Refurbishment and maintenance coating over existing waterproofing membranes including modified bitumen.
- Waterproofing roofing tiles
- Temporary protection of PU foam
- Suitable on concrete decks with min. 1:60 fall
- Detailing in conjunction with other ARDEX systems.

### SURFACE PREPARATION

Ensure that the substrate is hard, dry, solid and free of laitance, grease, dust or other loose particles such as paint, release agents, lime scale, mortar, plaster, adhesive residues, etc., which may impair adhesion.

Remove all traces of varnish, waxes, fats, oils and similar contaminants prior to mechanical preparation. Mechanically treat any concrete surfaces which are contaminated, using sanding or diamond tools, then vacuum.

Static joints and cracks <1mm can be filled with a putty made with a mix of ARDEX WPM 170 and fine, clean sand. Wider joints and cracks should be filled with a suitable ARDEX product. Allow to dry before applying a top coat. Properly treat and seal all joints or gaps in the concrete substrate where differential movement is expected (e.g. expansion joints).

### PRIMING

Prime using Ardex WPM 400 PRIMER, unless the substrate is under hydrostatic pressure.

If hydrostatic pressure is present prime using Ardex WPM 300.

For existing Butyl/EPDM/Butynol Membranes, prime using WPM 299 Primer at a coverage rate of 5 square metres per litre.

### APPLICATION

Stir before use. Pour ARDEX WPM 170 directly on the cured primed substrate and spread using a brush or wool roller until the film desired thickness is reached. It can also be applied by an airless sprayer.

Successive layers can be applied after former layers are no longer tacky.

It is strongly advised to bridge singular points by embedding ARDEX Deckweb into the first layer of ARDEX WPM 170. This same treatment on the whole surface will help ensure consistent coverage and improve resistance to wear and tear.

### REFURB/MAINTAIN EXISTING MEMBRANES

ARDEX WPM 170 can be used to coat over existing membranes to provide a new surface and enhance the life of the existing membrane. Existing membranes should have any defects repaired prior to overcoating.

An exact recommendation should be sought from ARDEX for the specific application.

### LIMITATIONS

Do not use ARDEX WPM 170 where ambient and/or substrate temperatures are less than 5°C or less than 3°C above dew point. Do not use where ambient or substrate temperatures exceed 30°C or where ambient humidity exceeds 85%. Do not cover the membrane. Avoid application in strong winds.

All ARDEX products are manufactured subject to rigorous quality controls and procedures; however, if strict colour consistency is required, it is recommended to use products from the same batch.

### MAINTENANCE

No maintenance of the membrane is normally required provided significant substrate movement does not occur. In the event of damage to the membrane, the membrane must be repaired. Drainage outlets must be maintained to operate effectively. The product should be regularly checked for any signs of damage and abrasions.

Washing down yearly will help prolong the life of the membrane. Avoid allowing moss and lichen to grow on the surface. An additional coat should be applied every 5-7 years.

### CLEAN UP

Clean tools and equipment immediately after use with water. Hardened product will need to be removed mechanically or using organic solvents.

Any spillage from any of the products must be removed immediately with sand, vermiculite or other inert material and collected in a suitable container for proper handling and treatment. Residues from spillage and empty containers must be dealt with in accordance with local regulations. See product safety sheet for further information.

## STORAGE

ARDEX WPM 170 can be stored for up to 9 months in its original unopened packaging. The product should be stored in a dry place between 5°C and 30°C. Keep away from frost, direct sunlight and sources of heat.

## COVERAGE

Approximately 2-3kg/m<sup>2</sup> (minimum two layers).

## PACKAGING

ARDEX WPM 170 is available in Grey colour and 20kg pail.

## PRECAUTIONS

Harmful if inhaled, swallowed, and if comes into contact with eyes or skin. Safety goggles and gloves must be worn at all times during application. If in eyes, flush immediately with water and consult a doctor. If on skin, wash with soap and water (do not use solvents). If swallowed, do not induce vomiting. Seek immediate medical attention.

Additional information is in the Safety Data Sheet at [ardex.co.nz](http://ardex.co.nz)

## TECHNICAL DATA

Characteristics	Result
Density	1.25kg/L
Working time @ 20°C	Approx. 60 mins
Touch dry @ 20°C	5 hours
Recoat time @ 20°C	
Dry substrates	Min 6 hrs; max 24 hrs
Wet substrates	Min 12 hrs; max 24 hrs
Full cure @ 20°C	7 days
Elongation at break	200%
Tensile strength	2MPa
Bending at -5°C	No cracking
Resistance to rain @ 20°C	7 hours

## Toll Free Technical Services:

**0800 227 339 (New Zealand)**

The technical details, recommendations and other information contained in this data sheet are given in good faith and represent the best of our knowledge and experience at the time of printing. It is your responsibility to ensure that our products are used and handled correctly and in accordance with any applicable New Zealand & Australian Standards, our instructions and recommendations and only for the uses they are intended. We also reserve the right to update information without prior notice to you to reflect our ongoing research and development program. Country specific recommendations, depending on local standards, codes of practice, building regulations or industry guidelines, may effect specific installation recommendations. The supply of our products and services is also subject to certain terms, warranties and exclusions, which may have already been disclosed to you in prior dealings or are otherwise available to you on request. You should make yourself familiar with them.

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