

Water-Based Acrylic Trafficable Membrane

Compliant to AS4654

Single component – ready to use

Safe to use, low odour with ease of cleanability

Excellent UV resistance – suitable for exposed environments

Excellent slip resistance and abrasion resistant performance

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PRODUCT DESCRIPTION

ARDEX WPM 909 is a water-based single component acrylic membrane designed for pedestrian trafficable environments. ARDEX WPM 909 has been specially designed for applications requiring excellent UV resistance, anti-slip performance, abrasion resistance, with ease of cleanability for maintenance requirements.

FEATURES

- Compliant to AS4654
- Single component ready to use
- · Safe to use, low odour with ease of cleanability
- Excellent UV resistance suitable for exposed environments
- Excellent slip resistance and abrasion resistant performance

USES

- Rooftops
- Podiums
- Walkways

For other types of environments please contact ARDEX Technical Services (technicalservices@ardexaustralia.com).

SUBSTRATE PREPARATION

By way of mechanical methods and vacuum cleaning as necessary, remove all dirt, dust, curing compounds, oils, grease, surface sealers, existing coatings, and any other contaminants prior to membrane application. Prepare surface to leave sound, clean, dry, free from sharp edges, loose or other materials which may damage the membrane.

Damaged concrete between 2mm - 30mm can be treated with ARDEX A 46. Spalling concrete must be treated accordingly with the ARDEX Concrete Repair range such as ARDEX BR 345, please review the respective product data sheets on treating spalling concrete.

New concrete to be cured for a minimum of 28 days before application commences. New render or screed to be cured for a minimum of 7 days before application commences.

SUBSTRATE PRIMING

The below ARDEX primers can be applied to the prepared substrate prior to ARDEX WPM 909 application:

- ARDEX WPM 300
- ARDEX WPM 265
- ARDEX Multiprime

When masonry or concrete substrate moisture content is measured at greater than 80% relative humidity (ASTM F2170) or exceeds 15g/m²/24hrs (ASTM F1869), a minimum

two coats of ARDEX WPM 300 (HydrEpoxy) must be the nominated primer. This is typically equivalent to 5% or greater moisture content from a digital non-destructive moisture meter, however Australian Standards must be followed.

DETAILING

Before the application of ARDEX WPM 909, either below products can be used to detail all prepared joints, cracks, internal/external junctions, drainage outlets, and seal around penetrations.

- ARDEX CA 20 P PLUS
- ARDEX STB/STA Tape

When using sealant, all junctions and change of directions must have a 45° fillet ($15\text{mm} \times 15\text{mm}$) in accordance to AS4654.

JOINT PREPARATION

All joints must be prepared accordingly with all dirt, dust, curing compounds, oils, grease, surface sealers, existing sealant, and any other contaminants removed prior to sealant application.

Do not bond sealant directly to the bottom of the prepared joint. Use appropriate backer rod or self-adhesive bond breaker tape prior to sealant application to avoid three sided adhesion and to control sealant depth. Extrude the ARDEX CA 20 P PLUS into the prepared joint, ensuring complete adhesion to the joint sides and avoiding air entrapment. Tool the sealant flush with the finished surface, or the sealant may be tooled 2mm - 3mm below the finished surface within trafficable areas to prolong sealant service life.

When ARDEX STB Tape is used, a suitable backing rod should be inserted into the prepared joint prior to ARDEX STB Tape installation.

Where the movement joint is expected to exceed the movement capabilities of ARDEX WPM 909, the joint may be sealed using ARDEX CA 20 P PLUS with ARDEX WPM 909 applied up to the edge of the prepared joint only.

Allow 1 - 2 hours (minimum) drying time of the ARDEX CA 20 P PLUS prior to application of ARDEX WPM 909.

ARDEX CA 20 P PLUS joint capabilities: Minimum/Maximum width: 5mm/40mm Minimum/Maximum depth: 5mm/15mm

CRACK PREPARATION

All cracks must be prepared accordingly and can be sealed with ARDEX CA 20 P PLUS. Grind out crack (6mm wide x 6mm depth minimum) with all dust, debris, and loose contaminents completely removed. Use appropriate backer rod or self-adhesive bond breaker tape prior to ARDEX CA 20 P PLUS application to avoid three sided adhesion and to control sealant depth. Tool the sealant flush with the finished surface.

Water-Based Acrylic Trafficable Membrane

Other ARDEX structural crack rectification methods may include:

- ARDEX RA 56
- ARDEX RA 142
- ARDEX RA 144
- ARDEX Concrete Crack Lock

All suggested methods must be applied in accordance to their product data sheet found at www.ardexaustralia.com.au.

APPLICATION

Product must be stirred before use. Two coats (minimum) of ARDEX WPM 909 can be applied by brush and or roller to the primed substrate. The wet film thickness must be 0.9mm (minimum) per coat to achieve a total dry film thickness of 1.0mm after two coat application.

For areas expecting higher pedestrian traffic (entry/exit points, servicing equipment etc), it is highly recommended to apply a total of three coats to prolong the products service life

Recoat time between coats is generally 2 – 4 hours (@ 23°C/50% R.H.). Both ambient temperature and or substrate temperature will affect the drying/curing process.

CURING

ARDEX WPM 909 may accept pedestrian traffic between 24 - 48 hours after final coat application (@ 23°C/50% R.H.). Both ambient temperature and or substrate temperature will affect the drying/curing process.

TILING PEDESTAL INSTALLATION

DTA BOSS Tiling Pedestals from DTA Australia are an approved system to be used with ARDEX WPM 909. Visit www.dta-aus.com.au for more information.

Tiling pedestals (paver pads) are to be installed as per manufactures recommendations. When placing the tiling pedestals onto the cured waterproofing membrane the DTA BOSS pedestal rubber matting must be placed under each pedestal to greatly reduce potential membrane damage and prolong the service life of the waterproofing membrane.

SLIP RESISTANCE

ARDEX WPM 909 provides excellent slip rating performance, with no additional aggregate required.

Slip Resistance Technical Data

TEST METHOD	NOMINAL VALUES	
AS4586-2013 Appendix A (Wet Pendulum Test Slider 96)	P5	
AS4586-2013 Appendix A (Wet Pendulum Test Slider 55)	P5	
AS4586-2013 Appendix B (Dry Floor Friction Test Slider 96)	D1	

TECHNICAL DATA

CHARACTERISTICS	TEST METHOD	NOMINAL VALUES
Colour		Light grey
Form		Medium viscosity liquid
Solids Content		53%
Shore Hardness A		90
Specific Gravity		1.19g/cm³
Service Temperature		0°C - 80°C
Tensile Strength (Min)	AS4654.1 Appendix A	5.03 MPa
Elongation at Break	AS4654.1 Appendix A	164%
Bond Strength	ASTM C794	24.65 N
Abrasion Resistance: Trafficable	AS1580.403.2	Pass (0.105mm)
Acceptance of Cyclic Movement	AS4654.1 Appendix B	Pass (No failure)
Durability	AS4654.1 Table A4	Pass
Durability (UV exposure)	ASTM D624	Pass
VOC Content		70g/L
Water Vapour Transmission	ASTM E96	1.41g/m²/24 hours

COVERAGE

8m² - 9m² per pail (two coat application).

Coverage rate may vary depending on application technique.

PACKAGING

15L drum

CLEAN UP

Clean all equipment with water and detergent prior to the product drying. Once product has been allowed to cure, removal may require mechanical methods.

STORAGE

ARDEX WPM 909 has a shelf life of 12 months when stored in original unopened packaging, in a dry place at 23°C and 50% R.H.

LIMITATIONS

ARDEX WPM 909 is designed for light to medium pedestrian traffic only - the ARDEX WPM 812/WPM 822 system must be used for heavy pedestrian traffic environments. Do not apply ARDEX WPM 909 if ambient temperature and or substrate temperature is below 10°C or above 35°C . Do not add solvent or water to product. Do not apply if rain is imminent. Not suited for vehicle/heavy equipment type traffic.

Water-Based Acrylic Trafficable Membrane

Before any substrate preparation, installation or finishing methods relating to ARDEX product are undertaken, please be aware of any potential risks and use appropriate PPE (personal protective equipment). This may involve contacting substrate manufacturers for Safety Data Sheets.

SAFETY DATA

Repeated exposure may cause skin dryness and cracking. May cause allergic skin irritation. Suspected of causing genetic defects. May cause cancer. Harmful to aquatic life with long lasting effects. In case of contact with the eyes rinse with running water until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Wear protective gloves, clothing, eye, and face protection. Avoid inhaling dust/fumes/ gas/mist/ vapours/spray. Ensure adequate ventilation during mixing and application. Store locked up. Check with your local Council regarding the disposal of contents. Keep out of the reach of children. Call the Poisons Information Centre on 131 126 (AUS) and 0800 764 766 (NZ) or call a doctor if you feel unwell. At times updates can occur to data. For additional information and to ensure you have the most current technical and safety information please consult the latest safety data sheets (SDS) and technical data sheets found on the product page at www. ardexaustralia.com.

GUARANTEE

ARDEX Australia Pty Ltd ("we" or "us") guarantees this product ("our goods") is free from manufacturing defects and will perform to any applicable specification published by us for 10 years from the date of purchase. Our liability under this guarantee is limited at our option to replacement of the product, repair of any damage to the immediate surface or area of application of the product, or compensation, in each case if we are satisfied loss or damage was due to a breach of this guarantee. This guarantee does not apply if damage or loss is due to failure to follow published instructions or any act or circumstance beyond our control, including shade variations and efflorescence. If you wish to make a claim under this guarantee you must notify us (ARDEX Australia Pty Ltd, 20 Powers Road Seven Hills NSW 2147; Toll Free: 1800 224 070; Email: technicalservices@ ardexaustralia.com) and provide evidence of your purchase of the product within 30 days of any alleged loss or damage occurring. We reserve the right to ask you for satisfactory evidence of any alleged loss or damage. Any claim under this guarantee is at your cost. This guarantee is in addition to any rights or remedies you may have as a "consumer" under the Australian Consumer Law and to that extent you need to be aware that: "Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss of damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure".

DISCLAIMER

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 Australian Standards. Our instructions and recommendations are only for the uses they are intended. Users are advised to confirm that this product is suitable for their application and conforms with the specifications of the system. 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 affect 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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This data sheet was issued in December 2023 and is valid for 3 years, in some instances a newer version may be published. Always refer to www.ardexaustralia.com for the latest technical data from ARDEX Australia Pty Ltd.