



ARDEX WPM 812

Single Component Polyurethane Membrane

Compliant to AS4654

Single component with fast curing time

Extremely durable and permanently flexible

High viscosity with excellent non-sag performance

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Single Component Polyurethane Membrane

PRODUCT DESCRIPTION

ARDEX WPM 812 is a single component, low VOC, high performing polyurethane membrane designed to be used as part of the ARDEX System for pedestrian trafficable environments.

FEATURES

- Compliant to AS4654
- Single component with fast curing time
- Extremely durable and permanently flexible
- High viscosity with excellent non-sag performance

USES

- Rooftops
- Podiums
- Walkways
- Ramps and stairs
- Plant or mechanical rooms

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 installation. 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.

SUBSTRATE PRIMING

Porous Substrates

Either ARDEX WPM 801 or ARDEX WPM 300 (HydrEpoxy) must be used as the substrate primer. It is crucial to follow the substrate preparation and application guidelines outlined in the recommended ARDEX primer product data sheet.

ARDEX WPM 801 must be overcoated within 24 hours to avoid potential intercoat contamination. Please refer to the ARDEX WPM 801 product data sheet for more information.

ARDEX WPM 300 (HydrEpoxy) must be allowed to cure for 24 hours minimum (@ 23°C / 50% R.H.) prior to ARDEX WPM 812 application.

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.

Non-Porous Substrates

Mechanically abrade the metal or PVC surface and remove all loose debris. Solvent wipe surface with ARDEX WA 98 Solvent and allow to flash off. Prime prepared surfaces with ARDEX WPM 801, and allow to completely dry. The ARDEX WPM 801 once completely dry must be overcoated within 6 hours on non-porous applications.

If the ARDEX WPM 801 is left exposed longer than 6 hours, simply mechanically abrade and solvent wipe before recoating with ARDEX WPM 801.

For high density concrete substrates, the primer may be diluted by the addition of up to 10% (maximum) Xylene to increase substrate penetration.

DETAILING

Once the ARDEX primer has cured, apply ARDEX RA 040 polyurethane sealant to fill all prepared joints, cracks, internal junctions, drainage outlets, and seal around penetrations. All junctions and change of directions must have a 45° fillet in accordance to AS4654.

JOINT PREPARATION

During preparation all loose debris, dirt, dust, curing compounds, oils, grease, surface sealers, existing sealants, and any other contaminants must be completely removed.

All joints must be prepared accordingly and sealed with ARDEX RA 040 polyurethane sealant. 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 RA 040 into the prepared joint, ensuring complete adhesion to the joint sides and avoiding air entrapment. Tool the sealant flush with the finished surface.

To accommodate potential movement, a suitable self-adhesive bond breaker tape may be placed over the cured sealant prior to ARDEX WPM 812 application.

Allow 3 - 4 hours (minimum) drying time of the ARDEX RA 040 prior to application of ARDEX WPM 812.

Refer to the ARDEX RA 040 product data sheet for joint capabilities.

CRACK PREPARATION

During preparation all loose debris, dirt, dust, curing compounds, oils, grease, surface sealers, existing coatings, and any other contaminants must be completely removed.

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Static cracks <1.0mm wide

After substrate priming, apply a 150mm wide strip of ARDEX WPM 812 over the prepared crack. Allow 4 - 6 hours to dry before proceeding with standard ARDEX WPM 812 application process over these treated cracks.

Static cracks >1.0mm

Grind out crack (6mm wide x 6mm depth minimum) with all dust, debris, and loose contaminants completely removed. Use appropriate backer rod or self-adhesive bond breaker tape prior to ARDEX RA 040 application to avoid three sided adhesion and to control sealant depth.

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

ARDEX WPM 812 must be thoroughly mixed for 3 - 4 minutes with a suitable electric paddle mixer (500 - 600 rpm).

By brush or roller, apply ARDEX WPM 812 to the prepared substrate at a rate of 1.25 litres per m². ARDEX WPM 812 is to be applied in two coats to achieve the required 1.2mm total dry film thickness (625 microns WFT per coat minimum). The second coat must be applied within 12hrs - 24hrs maximum (@23°C / 50% R.H.). A consistent wet edge during application must be achieved.

SLIP RESISTANCE APPLICATION

Dried kiln sand (0.1mm - 0.3mm) can be broadcast onto ARDEX WPM 812 during application to achieve a P5 slip rating. Whilst the second coat of ARDEX WPM 812 is wet, broadcast aggregate until refusal. After 24 hours (@23°C / 50% R.H.) remove excess sand, then apply ARDEX WPM 822 (two coats minimum) to encapsulate sand and provide protective finish.

CLASSIFICATION - AS4586:2013 Appendix A	
TEST SAMPLE	NOMINAL VALUES
Dried kiln sand (size 0.1mm - 0.3mm)	P5

When adding aggregate to ARDEX WPM 822 (top coat) during application, please refer to the ARDEX WPM 822 product data sheet for more information.

PROTECTIVE TOP COAT

ARDEX WPM 812 must be overcoated with ARDEX WPM 822 to provide a UV stable, hard wearing protective system for pedestrian traffic. Allow final coat of ARDEX WPM 812 to cure for 12 - 24 hours maximum (@23°C / 50% R.H.) before applying ARDEX WPM 822. Please refer to the ARDEX WPM 822 product data sheet for more information.

RECTIFICATION APPLICATION

Any necessary recoating due to membrane damage or exceeding the recommended application timeframe should be carried out in accordance with the following recommendation.

Wash surface with clean water under a low pressure spray. Ensure to remove all water residues and contaminants, and allow to completely dry. Solvent wipe the prepared surface with Xylene and allow to dry. Apply single coat of ARDEX WPM 801 to the prepared surface and allow to dry before applying ARDEX WPM 812 to the required wet film thickness. Allow the repaired area to fully cure before overcoating with ARDEX WPM 822.

TECHNICAL DATA

CHARACTERISTICS	TEST METHOD	NOMINAL VALUES
Appearance		Dark grey
Solids Content		97% ±2
Shore Hardness A		60
Elongation	AS4654.1 Appendix A	294%
Heat Ageing	AS/NZS 4858	361% (Pass)
Temperature Resistance	AS4654.1 Clause 2.6	368% (Pass)
Tensile Strength	AS4654.1 Table A4	1.43 MPa
Durability	AS4654.1 Table A4	Pass
WVTR	ASTM E96	6.06 g/m ² /d

COVERAGE

Approx. 10m² - 12m² per pail.

1.2mm total dry film thickness (DFT).

Coverage rate may vary depending on application technique.

PACKAGING

15L metal pail

CLEAN UP

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

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STORAGE

Packaging must be stored vertically, out of direct sunlight, away from sources of puncture and physical damage. Store in a dry place at 23°C and 50% R.H.

SHELF LIFE

ARDEX WPM 812 has a shelf life of 6 months when stored in the original, unopened packaging in a dry place at 23°C and 50% R.H.

LIMITATIONS

Do not apply ARDEX WPM 812 if ambient temperature and or substrate temperature is below 10°C or above 35°C. Applying membrane too thick, or within windy conditions, or lack of surface preparation, or highly porous substrates may cause pin-holing of the membrane during the drying/curing process. ARDEX WPM 812 is not to be used as a stand alone product for trafficable environments. Do not add solvent to product. Do not apply if rain is imminent. Exceeding the recommended application timeframe between coats greatly increases the risk of adhesion issues and achieving a uniform waterproofing 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

Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Suspected of causing cancer. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure. Do not breathe mist/vapours/spray. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Store locked up. Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation. Additional information is in the Safety Data Sheet (SDS) 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, 2 Buda Way Kempas Creek NSW 2178; 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 January 2025 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.