

### **Below Ground Waterproofing Coating**

Contains root inhibitors designed to repel root growth

Excellent elongation, and adhesion to concrete & masonry substrates

Suitable for planter boxes, retaining walls, and other below ground applications

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### **Below Ground Waterproofing Coating**

### **DESCRIPTION**

ARDEX WPM 179 is a one component liquid applied, latex modified, bituminous elastometric waterproofing coating designed for below ground applications. When cured it forms a permanently flexible waterproof lining to most common porous substrates.

#### **FEATURES**

- Excellent elongation
- Water-based very low odour
- Retains flexibility at low temperatures
- Excellent adhesion to concrete & masonry

#### **USES**

- Planter boxes / garden beds
- Basement and retaining walls
- Underground Structures / tunnel lining

### SUBSTRATE PREPARATION

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

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

ARDEX WPM 179 is designed to be self-priming on most common porous substrates. For highly porous substrates, dilute first coat of ARDEX WPM 179 with clean water (1:1 by volume) and apply to the prepared substrate. Once dry, apply a second neat coat (undiluted) to ensure the correct wet film thickness is achieved.

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**

#### Option 1:

Install ARDEX STB/STA Tape to seal around drains, penetrations, floor/wall junctions, wall/wall junctions, joints, and change of substrate type before the application of ARDEX WPM 179. The self-adhesive underside of the ARDEX STB/

STA Tape creates superior adhesion to multiple substrates, and the fleeced surface creates optimal adhesion for ARDEX WPM 179.

Remove the release paper and centrally install the ARDEX STB/STA Tape onto the prepared substrate. ARDEX recommends using the ARDEX Brass Roller and the ARDEX Small Hand Roller to ensure uniform adhesion to the prepared substrate and all edges are removed. Overlapping of tape end to end must be 50mm (minimum).

### Option 2:

ARDEX RA 050 can be used to seal around drains, penetrations, floor/wall junctions, wall/wall junctions, and joints before the application of ARDEX WPM 179. Ensure three sided adhesion does not occur. A bead size of 15mm x 15mm must be used for all change of directions/junctions.

### 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 ARDEX STB/STA Tape or ARDEX Sealant application.

When ARDEX STB Tape is used, apply suitable ARDEX primer to the prepared substrate (primer not to be applied within prepared joint) and allow primer to fully dry/cure. A suitable backing rod should be inserted into the prepared joint prior to ARDEX STB Tape installation. Remove the release paper and centrally install the ARDEX STB/STA Tape over the prepared joint. ARDEX recommends using the ARDEX Brass Roller and the ARDEX Small Hand Roller to ensure uniform adhesion to the prepared substrate is sound and all edges are removed. Overlapping of tape end to end must be 50mm (minimum).

When ARDEX RA 050 is used, 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 050 into the prepared joint, ensuring complete adhesion to the joint sides and avoiding air entrapment. Tool the sealant flush with the finished surface. Allow 1 - 2 hours (minimum) drying time of the ARDEX RA 050 prior to application of ARDEX WPM 179.

### **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. Allow all pre-treated crack(s) to fully cure before general application of ARDEX WPM 179.

### Static cracks < 2.0mm wide

Apply suitable ARDEX primer within prepared crack and 200mm equidistantly across and along the crack length. Once primer has dried/cured, apply two coats of ARDEX WPM 179.

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#### Static cracks >2.0mm wide

When using ARDEX STB Tape, apply suitable ARDEX primer 200mm equidistantly across and along the crack length. Once primer has dried/cured, centrally place ARDEX STB Tape over prepared crack. ARDEX recommends using the ARDEX Brass Roller and the ARDEX Small Hand Roller to ensure uniform adhesion to the prepared substrate and all edges are removed. Apply two coats of ARDEX WPM 002 to encapsulate ARDEX STB Tape. Overlapping of tape to tape must be 50mm (minimum).

When using ARDEX RA 050, grind out crack (6mm wide x 6mm depth minimum). Use appropriate backer rod or self-adhesive bond breaker tape prior to ARDEX Sealant application to avoid three sided adhesion and to control sealant depth. Tool sealant flush with surface before covering with a suitable bond breaker tape, then apply two coats of ARDEX WPM 179. Allow 1 - 2 hours (minimum) drying time of the ARDEX RA 050 prior to application of ARDEX WPM 179.

Other ARDEX 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 179 can be applied by brush and or roller to the prepared 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. Allow 2 - 4 hours between coats (@  $25^{\circ}\text{C}$  / 50% R.H). The second coat must be applied in a cross direction to the first coat.

### **CURING**

	@23oC / 50% R.H.
Recoat	2 - 4 hrs
Hard Dry	24 - 48 hrs
Backfilling	3 - 4 days

Both ambient temperature and or substrate temperature will affect the drying/curing process. The slowest drying areas are those where the product has been applied over ARDEX STB Tape and or ARDEX Sealant. The product must not be backfilled or covered until these critical areas are completely cured

### **BACKFILLING AND DRAINAGE APPLICATION**

The cured product must be protected against potential damage by the placement of protection material between the product and granular backfill. A suitable protection board and

drainage system should be used for effective drainage and product protection requirements.

### **COVERAGE**

Approximately 7m<sup>2</sup> - 8m<sup>2</sup> (1.0mm DFT)

### **TECHNICAL DATA**

CHARATERISTICS	VALUES
Appearance	Black
Specific Gravity	1.05kg/L (approx)
Solids Content	59%
Application Temperature	10°C - 35°C
Tensile Strength	1.2 MPa
Elongation at Break	>300%

### **STORAGE**

Shelf life is 12 months when stored in original unopened container, in a dry place at  $25^{\circ}$ C / 50% R.H. Do not store in direct sunlight. Replace lid tightly after use.

### **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.

### **SAFETY DATA**

May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of causing cancer. Harmful to aquatic life with long lasting effects. May cause an allergic skin reaction. Use only outdoors or in a well-ventilated area. Wear protective gloves and protective clothing. Avoid breathing mist/vapours/spray. Avoid release to the environment. IF exposed or concerned: Get medical advice/ attention. IF ON SKIN: Wash with plenty of water and soap. Call a POISON CENTER/doctor/physician/first aider/if you feel unwell. If skin irritation or rash occurs: Get medical advice/ attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. 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 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 Kemps Creek

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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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