

SRO 848 Waterproofing Specification – Internal Waterproofing Internal Wet Areas with Liquid Membranes - Tile Finishes

Scope

Liquid applied waterproofing membrane systems are applied to suitable substrates to form a fully bonded continuous barrier against water penetration prior to the installation of tile finishes.

Applications

ARDEX liquid applied waterproofing membranes complying with AS4858 and installed according to the recommendations of AS3740; are compatible with ARDEX tile adhesives and topping screeds.

Substrates

Suitable substrates for liquid applied membranes include;

- Concrete
- Cement based renders and screeds
- Fibre cement and/or plasterboard wall sheeting
- Compressed fibre cement floor sheeting
- Internal Particleboard floor sheeting

Substrate Preparation

Substrates to which the liquid applied membranes are to be applied must be structurally sound and all sheeting is to be securely fixed to the support framing in accordance with the sheet manufacturers' instructions. All substrates are to be clean and with no contaminants or loose particles on the surfaces. Concrete is to have an open porous surface while topping screeds are to be compacted with a wood float finish. Steel trowel smooth concrete is to be roughened and any contaminants (e.g. concrete curing compounds, laitance, paint over-spray and/or waxy, oily residues) are to be removed by mechanical means such as diamond grinding or shot-blasting, to achieve the open porous surface with a fine profile. All surfaces shall be flat with all holes/voids removed and all protrusions and sharp edges removed. Concrete shall have cured for the recommended 4-6 weeks and screeds left to dry for at least 7 days prior to the membrane application.

The preferred system for particleboard floor substrates in internal wet areas is to install fibre cement sheet over the particleboard. The Waste outlet should incorporate a Leak Control Flange BTW.

Ensure all floor wastes are the type with a large flange to which the membrane can be applied onto. PVC flanges and other pipe penetrations may be prepared by sanding with abrasive paper and/or etched using the plumbers solvent that is generally used prior to joining PVC pipes. Metal floor wastes require the appropriate metal primers. <u>ARDEX P 9</u> can be used for this purpose but it **MUST** be protected by the waterproofing membrane.

Membrane Systems

The liquid applied undertile membrane systems include;

- ARDEX WPM 002 Two part cementitious acrylic
- ARDEX WPM 155 Rapid Premixed Acrylic/Polyurethane hybrid

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Priming

All prepared substrates are to be primed and the primer left to dry prior to application of the selected membrane system. The nominated primers are;

- <u>ARDEX WPM 265</u> preferred primer that dries with a reddish tint showing where the primer has been applied
- <u>ARDEX Multiprime</u> can also be used on porous substrates (e.g. fibre cement sheet) prior to tiling, dries clear
- <u>ARDEX WPM 300</u> Two part water-based epoxy used where concrete substrates and/or bedding screeds are damp
- <u>ARDEX WPM 368</u> One part polymer based system used instead of ARDEX WPM300 where concrete substrates and/or bedding screeds are damp

Membrane Installation

After the substrates have been primed and the primer has dried, internal corners, construction joints, cold joints and cracks shall be covered with neutral cure silicone sealant that is spread to form a continuous film across and extending to at least 5mm either side of the corner/joint/crack. The silicone forms the bond breaker in areas where movement may be anticipated. Apply a liberal coat of the selected membrane over the silicone and embed the <u>ARDEX Deckweb</u> polyester carrier fabric into the wet coat so that it becomes wet through from the bottom. Apply a top coat of the nominated membrane to completely cover the fabric. Once all the corners/joints cracks have been treated, apply 2 coats of liquid membrane over all surfaces to achieve the recommended minimum dry film thickness.

Where <u>ARDEX WPM155R</u> is used, <u>ARDEX Deckweb</u> can be replaced with <u>ARDEX</u> <u>STB</u> tape installed as per the product sheet.

Allow the nominated membrane to fully cure for the recommended times prior to adhesive fixing the tiles and/or placing a topping screed.

Precautions

- Do not use premixed adhesives to bond tiles to these membranes as prolonged drying will occur. Use polymer improved cement based adhesives.
- Sand:Cement topping screeds can be placed directly onto the membrane as a bonded screed (utilizing a slurry and are typically from a minimum 15mm thickness to around 50mm thick.
- Unbonded screeds with a minimum thickness of 40mm, can also be placed on these membranes by first laying two plastic slip sheets over the membrane and then installing the topping screed.
- Movement joints in the substrates must be maintained through the topping screeds and/or tile finish.
- All tile installations shall comply with the recommendations of AS3958.



Disclaimer:

The recommendation selected is based upon questions answered on the ARDEX Australia website. This recommendation is designed as a general application for your described situation and should not be considered site specific documentation for general distribution. Always consult the latest relevant ARDEX Technical Bulletins and information on the product packaging and/or product data sheets (available on the ARDEX Website). Australian and other relevant standards should be followed during installation. If you have any further questions or would like further clarification please contact the ARDEX Technical Services Hotline on 1800 224 070 (9am to 5pm Monday to Friday).