



SRO 850 Waterproofing Specification – Immersed Liquid Applied Membrane System for Tiled Pools

Scope

Liquid membrane systems compatible with tile adhesives are applied to prepared substrates inside swimming pool structures prior to the installation of the tile finish.

Application

The liquid applied membrane is applied as a positive side membrane system in pools and over adjacent areas such as;

- Concrete pool shell
- Surrounding coping
- Adjacent concourse areas

Substrates

These membrane systems may be applied to the following substrates;

- Concrete
- Reinforced and core filled concrete block
- Rendered surfaces

Substrate Preparation

All substrates must be structurally sound and have completed the recommended (AS3958) drying periods prior to the installation of the membrane. All surfaces must be free of contaminants such as concrete curing compounds and/or laitance, all holes/voids must be filled with a cement based patching mortar (e.g. [ARDEX A 46](#) or [ARDEX BR 345](#) system) or solid render, all protrusions and sharp edges are to be removed to achieve a flat surface. Contaminants are best removed, and steel float smooth concrete roughened by mechanical means to achieve an open porous surface with a fine textured profile similar to a wood float finish.

Membrane Systems

The following membrane may be applied.

- [Ardex WPM 002](#) Two part cementitious acrylic system

Priming

- Prime all prepared surfaces with [Ardex WPM 300](#) Hydrepoxy applied at a rate not exceeding 3m² per litre per coat. Let dry 24 hours (dependent on drying conditions at site as drying may be quicker in warm dry conditions)
- The primer shall extend up and over the coping to finish on the outer edge
- Prime any fittings in the pool onto which the membrane will be applied. Use the plumbers' solvent primer on any PVC fittings and use an appropriate metal primer on metal surfaces.

Membrane Installation

- Once the prime coat is dry, apply neutral cure silicone sealant to form the bond breakers in the internal corners and cold joints (excluding any movement joints)



- Apply a liberal coat of the liquid membrane over the bond breaker and immediately embed [Ardex Deckweb](#) carrier/reinforcement fabric into the wet membrane so it is wetted through from the bottom with no wrinkles or creases
- As soon as the Deckweb is wetted through, apply a top coat of liquid membrane to fully cover the Deckweb

- Once all the corners and joints (excluding any movement joints) have been treated, apply a minimum of two full coats of liquid membrane to achieve the recommended minimum dry film thickness as per the product data sheet for floors
- Extend the membrane application up and over the primed coping to finish on the outer edge. This finishes the membrane outside the pool with the termination edge secured by the coping tiles
- Let the membrane dry for the recommended time as per the product data sheet

Protection

Once the membrane is fully cured, the tile finish may be installed using a compatible Ardex adhesive system such as the [ARDEX Optima](#), or [ARDEX X 77 ± E 90](#) additive, or the [ARDEX STS 8 + E 90](#) additive or [ARDEX X 18 ± E 90](#) additive. Care must be taken to ensure the membrane is not damaged during the tile installation.

Topping screeds may be applied over the dry membranes. Ardex recommends the typical 3 or 4 parts (by weight) clean sand to 1 part Portland cement and mixed with [ARDEX WPM 405](#) admixture. This screed may be applied from 15mm minimum thickness.

Note: Wall renders must be applied to the base structure and not over the applied membrane

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).