

SRO 837 Waterproofing Specification—Retaining/Lift Shaft Walls Spray Applied Rubber Membrane – Protected

Scope

Liquid rubber membrane is spray applied to suitable substrates to form a continuous, positive side waterproofing barrier against water penetration. It is particularly suited to large areas where quick installation/ drying are required.

Application

Liquid Rubber spray applied membranes are suitable for the following applications;

- Large areas of below grade (basement and/or lift shaft) walls.
- As an under slab membrane applied to geotextile fabric carrier.
- Large areas of floor surfaces under self-supporting reinforced thick toppings.
- Corrosion protection of metal.
- As chemical resistant lining for sewerage and water containment structures.

Substrates

Suitable substrates for the liquid applied membrane systems include

- Concrete and concrete formwork
- Core filled and reinforced concrete block walls.
- Sand + cement based screeds and/or renders
- Reinforced brick walls that have been finished with flush joints and/or rendered.
- Steel tanks and structures.

Substrate Preparation

Substrates to which the liquid applied membranes are to be applied must be structurally sound and free of all contaminants (e.g. laitance, form release agents). Contaminants are best removed, and smooth steel trowel finished concrete scarified by mechanical methods such as shot blasting, grinding, abrasive blasting and scarifying to achieve an open pored surface with a fine profile. The substrates should have completed the recommended minimum curing/drying periods (e.g. 28 days for concrete) with all holes/voids filled with cement based patching mortars (e.g. ARDEX A46) and all surface protrusions ground flat.

Coving fillets (minimum 50 x 50mm) shall be provided to all internal corners and covered with <u>ARDEX Waterproofing Detail Tape</u>. The fillets can be formed using a rapid setting patching mortar such as <u>ARDEX A46</u>.

Membrane System

• ARDEX WPM172 Rapid Cure Rubber Membrane

Priming

Priming is not normally required although fresh (green) and/or damp concrete/screeds/renders shall be coated <u>ARDEX WPM300</u> Moisture Barrier system and allowed to dry prior to application of the <u>ARDEX WPM172</u> membrane.

Porous substrates (such as aerated lightweight concrete) shall be primed with one coat of <u>ARDEX WPM172</u> – Part A only. The <u>ARDEX Waterproofing Detail Tape</u> is also to be primed with the Part A and thoroughly wetted prior to application of the membrane proper.

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Detailing

Fillets (minimum 50mm across the face) are to be installed at all internal corners and covered with the <u>ARDEX Waterproofing Detail Tape</u> prior to the membrane spray application.

Membrane Application

The <u>ARDEX WPM172</u> is applied by specialist applicators using approved equipment. The Part A and Part B components must be stirred before and during application to ensure consistency of the mix.

For tanking applications onto prepared solid substrates, the <u>ARDEX WPM172</u> is best applied from 2 to 4mm thick, although any thickness may be achieved in one continuous spray application.

For under slab applications, a geotextile fabric is placed over the substrate (compacted gravel or concrete blinding layer). The ARDEX WPM172 is applied over the geotextile and between the fabric overlaps to achieve the recommended minimum dry film thickness (approx. 3mm). The geotextile fabric is also used where the ARDEX WPM172 is to be applied around penetrations such as precast sumps that are placed prior to the reinforced base slab being cast. Consult ARDEX for the geotextile details.

Membrane Protection

The fully cured/dry membrane must be covered with protection prior to backfilling or placement of the topping screeds. Protective materials include;

- 5mm minimum thickness Geotextile fabric
- ARDEX Protection Board
- Approved proprietary drainage cell systems

Note: these membranes are not compatible with tile adhesives

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).