



SRO1536

Waterproofing Specification – Retaining Walls

ARDEX Root Repell – Protected

SCOPE

Waterproofing systems are recommended here for planter boxes using the ARDEX Root Repell system.

SUBSTRATES

Suitable substrates for this sheet membrane system include,

- Concrete,
- Core filled and reinforced concrete block walls,
- Brick walls that have been finished with flush joints and/or rendered.

SUBSTRATE PREPARATION

Substrates to which the sheet membranes are to be applied must be structurally sound and free of all contaminants (e.g. laitance, form release agents). Contaminants are removed, and smooth steel trowel finished concrete prepared by mechanical methods (such as diamond grinding or shot blasting) to achieve an open pored surface with a fine profile (typically CSP2).

Concrete substrates should have completed the recommended minimum curing/drying periods (e.g. 28 days) with all holes/voids filled with **ARDEX A46** external patching compound and all surface protrusions ground flat.

○ Verify that the moisture content of the substrate is compatible with the water vapour transmission rate of the membrane system by testing to AS 1884 Appendix A.

Measurements taken in accordance with ASTM F2170 - max. 80% rel. Humidity

Damp concrete substrates shall be primed with **ARDEX WPM 300** applied at not less than 2.5m²/litre per coat. Allow the prime coat to dry overnight prior to proceeding.

If substrates are sound and smooth, priming is not normally required for this adhesive fixed sheet membrane. If the substrate is porous then a prime coat using a 50:50 mix of **ARDEX WA 98** Adhesive with **ARDEX WA 98 SOLVENT** can be applied and be allowed to dry.

Timber substrates shall be clean, dry and free of surface coatings. Timber treated with a Light Organic Solvent Preservative (LOSP) should not be used.

Ensure all drainage wastes are fitted with suitable flanges/bowls/clamp rings into which the sheet membrane can be securely terminated.



DRAINAGE

To be created in accordance with AS4678-2002 – Earth Retaining Structures

WATERPROOFING

ARDEX Root Repell Weldable Waterproofing Membrane is a high performance, single-ply, butyl-based membrane that can be heat welded. It is suitable for waterproofing planter boxes, living roofs and as a damp proofing membrane.

It is specially formulated to contain a premium root inhibitor that repels root growth without killing the root. It is designed primarily for areas covered with or exposed to soil and plants and can be bonded to most building surfaces. Once installed, it will remain a permanently flexible waterproof lining.

The **Ardex Root Repell** Sheet rubber is adhered using **ARDEX WA 98** adhesive as per datasheet.

MEMBRANE INSTALLATION

Mechanical fixing may be required for some applications.

Details of the fixing methods for this membrane can be provided by ARDEX upon request with the installation to be completed by accredited installers only.

Ardex Root Repell should be rolled out and cut to the measured length. It should be smoothed on contact to minimise air entrapment beneath the membrane.

Seams and laps should be welded with the Leister Triac S Hot Air Gun.

Once the membrane system has been applied, the top edge termination of the membrane shall be secured in the following way;

- **Termination in a chase** - using **ARDEX RA 88**
- **ARDEX Pressure Seal** mechanically fixed in position and sealed on the top edge
- **Liquid flashing termination** using **ARDEX STB Tape** or **Deckweb** in conjunction with **ARDEX WPM 310**

MEMBRANE PROTECTION

The sheet membranes must be protected from mechanical damage from the backfill materials placed over the installed membrane. Protective materials include the following;

- Geotextile wrapped drainage cells (e.g. **ARDEX DRS 10/18 GC**)

NOTE

We note that all membrane upturns should be terminated at least 50mm above the soil level.



The above waterproofing system recommendations are provided as requested although they may be modified and/or changed as information regarding site conditions or proposed surface finishes becomes available.

WARRANTY

1. **ONE LAYER OF [ARDEX Root Repell](#) =** Sheet rubber membrane – single layer – product warranty Period = **20 years**

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).