



SRO860 Waterproofing Specification – Roof ARDEX Single Ply (TPO) Sheet Membrane

Scope

Single layer roofing membranes are applied to prepared substrates to achieve a continuous membrane barrier against water penetration in exposed roof situations. This membrane system can be used over the nominated ARDEX Insulation Boards if required.

Applications

Single ply sheet membranes are suitable for use under the exposed finish when fully exposed to all climatic conditions in situations such as

- Roof and exposed deck areas

Substrates

Suitable substrates for these sheet membrane systems include

- Concrete
- Compressed fibre cement sheeting (15 – 24mm)
- Engineered timber sheeting (e.g. approved plywood)
- Steel with insulation board such as [ARDEX Polyiso Board](#) or [ARDEX HD Cover Board](#)

Substrate Preparation

Substrates to which the sheet applied membranes are to be applied must be structurally sound and free of all contaminants (e.g. laitance, curing compounds, form release agents). Contaminants are best removed, and smooth steel trowel finished concrete ground by mechanical methods 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 and 7 days for sand/cement screeds) with all holes/voids filled with cement based patching mortars (e.g. [ARDEX A 46](#) or [ARDEX BR 345](#) system) and all surface protrusions ground flat.

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

Where the ARDEX insulation boards are to be installed, care must be taken to ensure the boards are neatly fitted around all penetrations, projections and fittings.

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

Sheet Membranes

ARDEX single layer sheet membranes include;

- [ARDEX WPM 615](#) Thermoplastic Polyolefin (TPO) available in WHITE only
- [ARDEX WPM 612](#) TPO Roofing Membrane
- [ARDEX WPM 612 FL](#) TPO Roofing Membrane (fleece backed)



Membrane Installation

[ARDEX WPM 615](#) / [ARDEX WPM 612](#) may be installed by adhesive fixing to prepared substrates ([ARDEX WPM 649 Adhesive](#)); or by mechanically fixing to prepared substrates; or by loose laying over prepared substrates with ballast and/or landscaping cover materials to hold it in place.

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.

The ARDEX Insulation boards are mechanically fixed to the roof substrate prior to the installation of adhered or mechanically fixed [ARDEX WPM 615](#) / [ARDEX WPM 612](#) single ply roof membrane. The fixing system must be using ARDEX approved adhesives and/or fasteners.

[ARDEX Polyiso Board](#) is suitable for adhered, ballasted and mechanically fixed [ARDEX WPM 615](#) / [ARDEX WPM 612](#) membrane installations.

[ARDEX HD Cover Board](#) is suitable for application over existing roof surfaces, including contaminated surfaces, prior to the installation of the adhered and/or mechanically fixed [ARDEX WPM 615](#) membrane. The [ARDEX HD Cover Board](#) must not be used under ballasted roof membranes.

For further information regarding the insulating performance of these boards, and for the fixing method suitable for the project, please contact ARDEX Technical Services.

Once the membrane installation is completed, the following systems can be installed;

- Topping screeds. These must be applied as reinforced self-supporting screeds, 40mm minimum thickness, applied over a two layer slip sheet system
- The screed may be finished with adhesive fixed tiles/pavers as tiles cannot be adhesive fixed to the membrane
- Paving tiles may be placed over the membrane using proprietary paving pads or loose laid on sand bedding. If sand bedding is used, the membrane must be protected by a geotextile fabric slip sheet
- Landscaping materials may also be applied over the membrane with the geotextile slip sheet protection ([ARDEX DRS 10/18 GC](#)) protecting the membrane

Note:

- *ARDEX product data sheets and relevant ARDEX Technical Bulletins must be read in conjunction with this specification.*

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).