SRO 859 Waterproofing Specification – Roof Gardens
ARDEX Single Ply (TPO) Sheet Membrane – Covered

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 landscaping finishes that may be 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
- Engineered timber sheeting (e.g. approved plywood)
- Steel
- Insulation board such as **ARDEX Polyiso Board** or **ARDEX HD Cover Board** where the insulation board has been applied over the above structurally sound substrates.

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). 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

Membrane Installation

ARDEX WPM 615 / **ARDEX WPM 612** may be installed by adhesive fixing to prepared substrates using **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. For roof gardens, the ballast system may consist of a protective layer over the membrane, rounded aggregate or gravel, or a layer of soil with turf or suitable vegetation. The ARDEX technical manual provides guidelines regarding the size and thickness of the gravel layer and/or the soil layer with additional guidelines regarding suitable protective layers under the landscaping materials. These may include drainage cells wrapped in geotextile fabric.

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** / **ARDEX WPM 612** membrane. The **ARDEX HD Cover Board** must not be used under landscaping 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.

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).