



SRO 838 Waterproofing Specification – Roof or Deck Two Layer Bituminous Sheet Membrane

Scope

A two layer bituminous sheet membrane applied in sheets to approved substrates to form a fully bonded, continuous barrier to eliminate water penetration with a mineral chip finish embedded into the top layer for protection against UV light when left exposed.

Applications

This two layer system is typically used on non-trafficable roof top areas and/or projecting sun-shade structure.

Substrates

Suitable substrates for the bituminous sheet membrane system include

- Concrete roofs & decks
- Core filled and reinforced concrete block parapet walls
- Reinforced brick parapet walls that have been finished with flush joints and/or rendered

Substrate Preparation

Substrates to which the bituminous sheet membrane are to be applied must be structurally sound and free of all contaminants (e.g. Curing Compounds, Form Release Agents and laitance). The substrates must have completed the recommended minimum curing/drying periods (e.g. 28 days for concrete) with all holes/voids filled with a cement based patching mortar (e.g. [ARDEX A 46](#) or [ARDEX BR 345](#) system) and all surface protrusions ground flat. All internal corners are to be shaped with a cement based coving fillet (minimum 50 x 50mm).

Ensure all drainage wastes are the bowl type with clamp rings to secure the sheet membrane into the bowl.

Membrane Systems

The two layer exposed membrane system is composed the following;

- Base layer of [ARDEX WPM 150](#) + top layer of [ARDEX WPM 185](#) Mineral

The two layer protected membrane system is composed the following;

- Base layer of [ARDEX WPM 150](#) + top layer of [ARDEX WPM 150](#)

Note: This system must be protected by either concrete or a reinforced sand/cement screed.

Priming

- Prime all prepared substrates with [ARDEX WPM 240](#) Bituminous primer and allow to dry.

Membrane installation

- Apply the sheet membranes to the prepared substrates using LPG or LNG torch techniques with sheet overlaps (100mm side-laps and 150mm end-laps) fully welded together
- Begin application from the lowest point and work upward to the highest points
- Apply the base layer first before commencing to apply the second layer



- The second layer is to be placed so the overlaps of the base layer are covered by the mid-sections of the second layer sheet membrane. This ensures the bottom overlaps are resealed with the molten bitumen of the top layer

Once the two layers have been applied, the top edge termination of the membrane shall be secured one of the following systems;

- [ARDEX Pressure Seal](#) mechanically fixed in position and sealed on the top edge
- Liquid applied flashing such as the [ARDEX WPM 179](#) Bituminous latex where this over-flashing will be coated with [ARDEX WPM 310](#) or [ARDEX WPM 330](#) façade coatings

Protection

The bituminous sheet membrane is protected from sunlight by the mineral chip finish embedded in the top layer. Protection against mechanical damage is generally not required as this system is intended for use only in areas where the membrane is not subject to frequent pedestrian traffic (occasional maintenance staff foot traffic is possible)

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).