



## **SRO 830 Waterproofing Specification – Lift Pit Membrane Two Layer Bituminous Sheet Membrane - Protected System**

### **Scope**

Two layer bituminous membrane system applied in sheets to approved substrates to form a fully bonded, protected continuous barrier against water penetration.

### **Applications**

This two layer membrane system may be used in a number of situations such as;

- Under basement structural slabs, including lift pit bases and adjacent below grade basement walls and/or retaining walls.

### **Substrates**

Suitable substrates for the bituminous sheet membrane system include

- Concrete
- Compacted hard fill or unreinforced concrete blinding layer
- Core filled and reinforced concrete block walls
- Reinforced brick 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. laitance). The substrates must 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 BR 345](#)) and all surface protrusions ground flat. All internal corners are to be shaped with a cement based coving fillet ([ARDEX BR 345](#) minimum 50 x 50mm). Ensure all penetrations for pipework through the membrane are suitable for the torch applied membrane to be applied and seal onto.

### **Membrane Systems**

The two layer membrane system can be one of the following combinations;

- Two layers of [ARDEX WPM 150](#)
- Two layers of [ARDEX WPM 188](#) SBR modified bituminous sheet membrane

### **Priming**

- Prime all prepared substrates with [ARDEX WPM 240](#) Bituminous primer and allow to dry where the membrane is to be bonded
- The bottom layer of the membrane can be loose laid onto blinding layers (concrete or compacted fill) but do not apply the prime coat

### **Membrane installation**

- Apply the sheet membranes to the prepared substrates using LPG or LNG torch techniques with sheet overlaps (75mm side-laps and 100mm 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
- The membrane is applied to a suitable blinding layer first and then the reinforced concrete base for the lift shaft is installed over the membrane. Once the walls have been constructed on the base, the wall membrane can be applied and joined to the base membrane

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

- [ARDEX Pressure Seal](#) mechanically fixed in position followed by the installation of a suitable sealant (e.g. [ARDEX Bituminous Roof Sealant](#)) to the pressure seal/wall junctions

### Protection

The bituminous sheet membranes must be protected from sunlight and from mechanical damage from the backfill materials or the self-supporting topping slabs placed over the installed membrane. Protective materials include the following;

- ARDEX Protection Board
- Geotextile fabric minimum 5mm thick
- Geotextile wrapped drainage cells. e.g. [ARDEX DRS 10/18 GC](#)
- Plastic sheet (approx. 300micron thick) in two layers under toppings

### Notes:

- *ARDEX has other bituminous sheet membrane and/or applied waterproofing systems that may also suitable for these applications.*

### 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).*