SRO1275 Rendering Specification
ARDEX WR 80 FR, ARDEX WR 100 and ARDEX WR 120 FR
Acrylic Rendering Systems – General Purpose

Scope

ARDEX WR 80 FR: Is a fine-medium grade render that is suitable for rendering walls both internally and externally at an application thickness of 2 – 10mm. When spray applied with appropriate apparatus, a build-up of 40 mm can be achieved in one coat.

ARDEX WR 100: Is a fine-grade acrylic render suitable for rendering walls, both internally and externally, at application thicknesses of 2-10 mm. ARDEX WR 100 is easy to use due to its superior non-slump and creamy consistency.

ARDEX WR 120 FR: Is a fine-grade, fibre-reinforced, acrylic render suitable for rendering walls, both internally and externally, at an application thickness of 2-12 mm. When spray applied with appropriate apparatus, a build-up of 30 mm can be achieved in one coat.

ARDEX WR 80 R, ARDEX WR 100 and ARDEX WR 120 FR

Substrates

ARDEX WR 80 FR, ARDEX WR 100 and ARDEX WR 120 FR can be applied over the following surfaces:

- Masonry (Brickwork & Blockwork)
- Concrete walls
- AAC - Autoclaved Aerated Concrete Blocks and Panels (Hebel)
- EPS – Expanded Polystyrene Panels
- Blueboard *(ARDEX WR 80 FR only)*
- Painted Surfaces *(ARDEX WR 80 FR only)*

Surface Preparation

The application surface must be clean, firm and free of dust, dirt, oil, grease, curing compounds, release agents and other barrier materials.

Green concrete should be allowed to cure for 28 days prior to rendering.

Priming

Brickwork and Blockwork: If dry and porous, dampen the substrate by brushing or sponging the surface or applying a light mist spray of water to prevent rapid drying of the render.

Concrete Walls: If dry and porous, dampen the substrate by brushing or sponging the surface or applying a light mist spray of water to prevent rapid drying of the render. If dense and non-porous, use the render with **ARDEX WR Prime** at a dilution rate of 1:5 (**ARDEX WR Prime** / water) for first coat. Concrete over 35MPa may require for the pores to be opened by mechanical means.

AAC - Autoclaved Aerated Concrete Blocks and Panels (Hebel): Apply 1-2 coats of **ARDEX WR Prime** (diluted 1:2 with water) over the surface.

EPS Foam Panels: Use **ARDEX WR 80 FR** / **ARDEX WR 100/ ARDEX WR 120 FR** with **ARDEX WR Prime** at a dilution rate of 1:5 (**ARDEX WR Prime**/ water) for first coat. Alkali-resistant mesh shall be applied between first and subsequent coat for added stability and to minimise cracking.

Mixing
Note: *Safety precautions must be taken. i.e., eye protection, chemically resistant gloves and a dust mask must be worn.*

ARDEX WR 80 FR
Add approximately 3.5 to 4.0L of clean water to a 20 Litre pail. Gradually add 15kg (three quarters) of the **ARDEX WR 80 FR** to the water whilst mixing (slow to medium speed) with an electric mixer to disperse the powder into a creamy, lump free consistency. Remove the mixer from the pail then scrape the internal wall of the pail with a spatula. The remaining 5kg (one quarter) of the powder should then be gradually added while mixing at slow speed for 2 minutes.

ARDEX WR 100 Add approximately 3.0 to 3.5L of clean water to a 20 Litre pail. Gradually add 15kg (three quarters) of the **ARDEX WR 100** to the water whilst mixing (slow to medium speed) with an electric mixer to disperse the powder into a creamy, lump free consistency. Remove the mixer from the pail then scrape the internal wall of the pail with a spatula. The remaining 5kg (one quarter) of the powder should then be gradually added while mixing at slow speed for 2 minutes.

Render Application (ARDEX WR 80 FR / ARDEX WR 100 / ARDEX WR 120 FR)
Note: *Safety precautions must be taken. i.e., chemically resistant gloves must be worn.*

The render is applied with a steel trowel, ensuring there is an even spread over the surface. A straight edge can be used to check for level or flatness of the render.

Work can begin on the surface after 10 – 30 minutes if surface conditions allow. Mixed material is useable for up to 30- 40 minutes.

Render Application (ARDEX WR 80 FR - Painted Surfaces)
ARDEX WR 80 FR can be applied over alkali stable paints. These surfaces must be mechanically roughened or washed with a pressure cleaner to ensure loose or unstable paint is removed. It is advisable to contact the paint manufacturer to determine if the paint is suitable to be rendered over. It is not recommended to tile over the existing render when it is applied over existing paint.

Finishing

The surface finish can be dense and smooth by using a wooden or plastic float or coarse and sandy by using a sponge to give the required effect.

It is recommended that the render be protected by either tiling or the application of a decorative finish. (i.e., paint or façade membranes such as **ARDEX WPM 310** or **ARDEX WPM 330**).

Drying Time
The render surface will generally be 'touch' dry in 1-2 hours @ 23ºC.

A second coat can be applied after 4-8 hours depending on the external temperature and application thickness. It is expected that the surface of the render will reach full cure after 7 days.

Clean Up
All tools should be washed up immediately with water.

Tiling over the Render (ARDEX WR 80 FR / ARDEX WR 100)
The render must be applied at a minimum thickness of 2mm and have a sandy finish before tiling. Prime with **ARDEX Multiprime** and apply tiles with the recommended ARDEX adhesive for that type of tile. The tiling must be performed in accordance with AS3958.1-2007.

These renders are only suitable to be tiled over if used over concrete, concrete blockwork, brickwork and AAC Concrete blocks and panels.
Please note that weight loading limits apply for tiling over these rendered surfaces. i.e., The weight of the tiles and mortar bed must not exceed 32kg/m².

It is not recommended to tile over the render when applied over existing paint, fibre cement sheets, Blueboard, EPS Foam Panels or existing render.

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).