June, 2022

SRO 1542
Prefabricated Construction – Wet Areas with Vinyl Flooring

SCOPE
Systems for waterproofing, smoothing, and vinyl adhesives for prefabricated wet areas where vinyl flooring is to be installed

APPLICATIONS
This system is typically used in modular building scenarios where construction is carried out off-site.

SUBSTRATES
Suitable substrates for the prefabricated wet area system include:

- Lightweight, fibre reinforced concrete
- Compressed fibre cement sheeting
- Magnesium oxide boards – **contact ARDEX for suitable boards**
- Particleboard (floors only)
- Wedi (floors only)
- Plasterboard (walls only)

All substrates are to be installed as per manufacturers recommendations.

SUBSTRATE PREPARATION
By way of mechanical method and vacuum cleaning as necessary, remove all dirt, dust, curing compounds, oils, grease, surface sealers, and any other contaminants prior to application. Prepare surface to leave sound, clean, free from sharp edges, or other materials which may damage the membrane.

LEVELLING
ARDEX K65 levelling cement is a versatile levelling compound that can be applied from 3mm to 20mm or 20 to 50mm with 2-5mm aggregate. Another levelling compound that is suitable for this application is **ARDEX ARDITEX NA. ARDITEX NA** can be applied from feather edge to 12mm
For areas that only require a skim coat of feather edge up to 3mm, **ARDEX Feather Finish** is recommended.

PRIMING
Prior to the application of the ARDEX membrane, all prepared substrates should be primed with the appropriate ARDEX primer.
For lightweight, fibre reinforced concrete, compressed fibre cement sheeting, and ARDEX levelling cements, **ARDEX Multiprime** is used as the primer
ARDEX WPM 300 is the primer when using approved magnesium oxide boards as the substrate, and **ARDEX P9** is the primer for particleboard.
Wedi (floors only) is not required to be primed

MEMBRANE SYSTEMS
Two-part rapid drying cementitious waterproofing membrane:

- **ARDEX WPM 002** liquid applied membrane is applied in a minimum of two coats to achieve at least 1.2mm DFT (Dry Film Thickness). This membrane dries within 24 hours. This system uses neutral

cure silicone as the bond breaker in internal corners with **Deckweb** embedded in the membrane over the bond breakers.

Single part water-based polyurethane-acrylic hybrid waterproofing membrane:

- **ARDEX WPM 155 Rapid Plus** liquid applied membrane is applied in a minimum of 2 coats to achieve at least 0.5mm DFT. This system also uses neutral cure silicone as the bond breaker in internal corners with **Deckweb** embedded in the membrane over the bond breakers.

VINYL FLOOR COVERING INSTALLATION (FLOORS)

The dry membrane will show surface irregularities from the rollers and brushes used to apply the membrane. To achieve the smooth surface suitable for resilient floor coverings, trowel-on **ARDEX Feather Finish** (1.5 – 2.0mm) thick and smoothing as the application proceeds. This is a quick setting (< 30 minutes) cement based compound which provides the porosity for water based vinyl adhesives to set correctly.

When the **ARDEX Feather Finish** is dry, the vinyl floor and wall finishes may be applied using;

- **ARDEX AF 180 MS** for sheet vinyl and vinyl planks**.**

TILE INSTALLATION (WALLS) IF REQUIRED

ARDEX X68 with or without ARDEX E90 admix. A broadly used, general purpose light weight adhesive is nominated in this recommendation. It can be used for most types of tiles other than moisture sensitive natural stone.
The mixed adhesive is spread with a notched trowel (trowel size to be in accordance with the recommendations of AS3958) so that the lines of adhesive are parallel. The tile is placed onto the spread adhesive and, while pressing firmly, is slid back and forth across the adhesive lines. This pressing and sliding action collapses the adhesive and increases the contact to both the back of the tiles and to the substrate. The recommended (AS3958) adhesive contact is 90% for internal commercial floors. In addition, achieving this recommended contact reduces the voids in the adhesive layer that could hold moisture and give rise to efflorescence.
Once the adhesive has dried for at least 24 hours, the tiles may be grouted using one of the following cement-based grout;

- **ARDEX FSDD** un-sanded grout for joints from 1 to 4mm wide.

All cement-based grouts used can be mixed with **ARDEX Grout Booster** admix 50/50. This improves the grout performance and reduces penetration of water through the grout.

All tiled wall junctions and internal corners can be sealed with **ARDEX SE** silicone.

All transitions between the vinyl upturns and wall tiles should be sealed with **ARDEX ST** silicone.