



June 2022

SRO 1541 Prefabricated Construction – Tiled Wet Areas

SCOPE

Systems for waterproofing, tiling, and grouting prefabricated wet areas where tiles are 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

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. It may also be applied as the rapid installation using the **ARDEX STB Tape** in the internal corners in lieu of the **Deckweb** fabric over silicone bond breakers.



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 breakers in internal corners with **Deckweb** embedded in the membrane over the bond breakers. **ARDEX STB Tape** can also be used in this application.

Single layer rubber-based sheet waterproofing membrane:

- **ARDEX WPM 750** sheet membrane is to the substrate using **ARDEX CA750** water-based contact adhesive. This membrane is ready to receive direct stick tiles 60 minutes after installation is complete. Solvent based contact adhesives are not recommended for internal use.

NOTE: ARDEX Australia offer various waterproofing solutions to produce a variety of specifications tailored to suit the individual waterproofing needs. The exact specification will depend on the functional and economic requirements.

TILE INSTALLATION

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 should 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 floor junctions and internal corners can be sealed with **ARDEX SE** silicone

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).