



## SRO917 – TILING TO MEMBRANES ON INTERNAL WALLS

### SCOPE

This recommendation is regarding the adhesive fixing of tiles to compatible ARDEX liquid applied waterproofing membranes (i.e. [ARDEX WPM 001](#), [ARDEX WPM 002](#) & [ARDEX WPM 155 Rapid](#)) in areas such as shower recess walls. It is assumed the membrane has been applied to structurally sound substrates in accordance with the manufacturers' instructions to the requirements of AS3740-2012.

### PREPARATION

The applied membrane must be fully dry and free of all surface contaminants such as dust & debris from other trades. Any visible defect such as pinholes or insufficient or incomplete dry film thickness must be rectified by the application of extra coats of membrane before adhesive fixing the tiles.

ARDEX tile adhesives are compatible with the ARDEX liquid applied waterproofing membrane and can be applied directly onto the dry membrane – no priming required.

### TILING

ARDEX Technical Bulletins **TB001** & **TB148** provide guidelines for the adhesive fixing of tiles to wall surfaces. These guidelines, in the absence of an Australian Standard, recommend adhesive only for fixing tiles up to 32kg/m<sup>2</sup> and/or up to 3m height. Where these limits are exceeded, additional mechanical support fixings must be provided. The bulletins suggest metal angles as one type of support although proprietary (non-ARDEX) systems are now available. In addition, the Australian Stone Advisory Association (ASAA) Design Manual lists some of the types of mechanical support fixing systems more commonly used with heavy stone tiles.

AS3958 recommends at least 90% coverage for internal wet areas. This can be achieved by using a 6 x 6 x 6mm notched trowel (or greater) and spreading the mixed adhesive so the adhesive lines are parallel. Additional adhesive is to be buttered over the back of tiles larger than 400 x 400mm. Each tile is then pressed firmly into the adhesive with a back & forth sliding action perpendicular to the adhesive rib direction to collapse and merge the adhesive lines to achieve maximum contact between the tile and adhesive.

The adhesives in the table overleaf are suitable;



	Good	Better	Best
<b>Porous Bodied Tiles</b> Terracotta/Glazed ceramic	X10 ; X17	X18 ; X77	X56 ; S28*
<b>Glazed Mosaics</b>	X17 ; X18	X52 ; X77	X77+E90
<b>Dense Bodied Tiles</b> Vitrified/ porcelain	X17 ; X18	X52 ; X77	X77+E90
<b>Natural Stone Tiles</b> (excluding moisture sensitive stone)	X17 ; X18	X52 ; X77	X77+E90
<b>Natural Stone tiles</b> Moisture sensitive	WA100	Please refer to ARDEX Technical Bulletin TB010	

Note : As an optional add-on, you can use [ARDEX E 90](#) with X77, X18 and X10 as detailed in **TB231**. This will greatly improve their performance and longevity.

#### GROUTING

Once the adhesive has set, the tiles may be grouted with one of the following ARDEX grouts.

- [ARDEX FG 8](#) sanded grout for joints from 1 to 8mm is a general purpose grout available in a large range of colours.
- [ARDEX FS-DD](#) un-sanded grout for joints 1 to 4mm. This is recommended for polished tiles with rectified edges as the grout has a smooth finish and is available in a range of colours.
- [ARDEX WJ 50](#) sanded grout for joints 5 to 50mm.
- [ARDEX WA](#) Epoxy 2 part grout available in black, grey or white for installations where high standards of hygiene and/or chemical resistance is required.
- [ARDEX EG-15](#) Epoxy 3 part grout for installations where high standards of hygiene and/or chemical resistance are required. It is available in 8 colours and is suitable for grout widths ranging from 1.5 to 15mm.

**Note:** ARDEX cement based grouts may be mixed with [ARDEX Grout Booster](#) for increased performance such as resistance to water penetration, reduced potential for efflorescence, greater strength and flexibility.



## **MOVEMENT JOINTS**

Movement joints are to be included in the new tile finish in accordance with the recommendations of AS3958. These joints are installed (but not limited to) in the following locations:

- Over all existing movement joints in the substrate
- At all internal corners/changes in direction in the plane of the substrate
- Along all perimeters where the tiles butt against walls and/or built in furniture
- Around all penetrations through the tile finish
- At not more than 4.5m intervals in both directions of a grid pattern

Movement joints should be at least 6mm wide and are filled with a flexible sealant such as the [ARDEX SE](#) silicone or [ARDEX ST](#) neutral cure silicone for natural stone. Compressible backer rods may be required in deeper joints to maintain the recommended sealant thickness at half the joint width.

*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).*