



## SRO919 – TILE ON TILE - EXTERNAL CONCRETE FLOORS

### SCOPE

This recommendation is regarding the installation of new tile finishes over existing tiles on external concrete floors. It does not apply to external floors subject to rising damp or immersed conditions (including any ponding of water on the tiled surface), nor to external floors subject to vehicular traffic. This means the external floor is to have adequate falls with sufficient drainage to remove water from the area.

***Note:** This recommendation does not apply to tiling over porous and mechanically weak bodied tiles such as some terracotta tiles, nor over tiles that are not rated by the tile manufacturer for external floor applications. The underlying tile adhesive must be in sound condition.*

### PREPARATION

The existing in-situ tiles must be well bonded to structurally sound substrates with no loose and/or drummy tiles. Any movement joints in the existing tiles shall be checked and any damaged and/or incomplete joints are to be raked out to full depth of the tile and adhesive layer prior to reinstating with new compressible backer rod (where required) and flexible sealant. The backer rod is to maintain the sealant thickness at approximately half the joint width.

Loose and/or drummy tiles are to be removed and the voids filled with selected ARDEX levelling cements and/or patching mortars such as [ARDEX K 301](#) or [ARDEX A 46](#). These levelling and/or patching mortars are to be used as directed with the primer nominated on each product data sheet. Allow the levelling and/or patching mortar to dry before proceeding.

The surface of the existing tiles is to be mechanically ground to remove at least 80% of the surface glaze and/or remove any contaminants such as applied sealers. Vacuum to remove all residual dust from the grinding process.

### PRIMING

This application is best suited with [ARDEX Multiprime](#) applied as per data sheet.

### TILING

Tiles should be fixed in accordance with Australian Standard AS 3958. Type and size of the tiles determine the selection of the trowel. As a general guide, use at least a 10 x 10 x 10mm notch trowel for floor tiling. Achieve minimum 90% coverage. The tiles must be pressed firmly into the freshly combed mortar bed to ensure good contact with the mortar. Slide the tile at right angles to the notch pattern to ensure maximum coverage on the back of the tile. Tiles with ribbed or keyed back profiles should also be back-buttered to ensure complete coverage. Tiles greater than 400 x 400 mm should be back-buttered. Lift a tile from time to time to check appropriate coverage and that there



are no voids beneath the tile. Any surplus adhesive must be removed from the surface of the tile and joints, before the adhesive sets. Do not spot fix.

Suitable ARDEX adhesives;

	<b>Good</b>	<b>Better</b>	<b>Best</b>
<b>Porous Bodied Tiles</b> Terracotta/Glazed ceramic	X18 ; Abaflex	X77 ; X18+E90	X77+E90 ; X78+E90
<b>Glazed Mosaics</b>	X18 ; Abaflex	X77 ; X18+E90	X77+E90 ; X78+E90
<b>Dense Bodied Tiles</b> Vitrified/ porcelain	X18 ; Abaflex	X77 ; X18+E90	X77+E90 ; X78+E90
<b>Natural Stone Tiles</b> (excluding moisture sensitive stone)	X18 ; Abaflex	X77 ; X18+E90	X77+E90 ; X78+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, X78 and X18 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

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).*