SRO908 – TILING ON ENGINEERED SHEET TIMBER
Internal floors only

SCOPE
This recommendation applies to the adhesive fixing of tiles directly onto internal dry area floors composed of engineered sheet timber such as plywood and particleboard.

PREPARATION
Engineered sheet timber floors must be checked to ensure the timber is recommended by the sheet manufacturer for the application. Both the sheet and the structural framing must be of the correct dimensions to thickness to support the added weight of the tile finish. The floor must not deflect in excess of the allowable deflection calculated by the formula “Span divided by xxx” where the span is the distance between the supporting frames.

- For tiles up to 300 x 300mm, allowable deflection is “Span divided by 360”.
- For tiles up to 500 x 500, allowable deflection is “Span divided by 600”
- For tiles > 500 x 500mm, allowable deflection may be “Span divided by 750+”

Ensure the sheet timber is securely fixed (i.e. screwed/nailed) as per the sheet manufacturers’ instructions and that all screws/nails are finished below the sheet surface. All edges must the sanded flat. Sand (with 24 grit sandpaper) the sheet surfaces to remove any surface contaminants and vacuum to remove dust.
Ensure there is adequate ventilation under the timber floor to prevent moisture condensation leading to dimensional instability of the timber floor.

PRIMING
There are 2 priming options for timber substrates as follows:

- System 1 - Prime all prepared surfaces with **ARDEX P 9** primer and let dry.
- System 2 - Prime the sanded surface with **ARDEX P 82** two part primer and let dry (3 hours minimum). This primer is pink when first applied and is clear when dry.

When the applied primer has dried, cover all joints between sheets using a self – adhesive tape (e.g. PVC duct tape or polyethylene filament tape). The tape should be in the range from 20 to 50mm wide

TILING

Tiles should be fixed in accordance with Australian Standard AS 3958. The type and size of the tiles determines the selection of the trowel. For this application, ARDEX recommends at least a 12 x 12 x 12mm notch trowel achieving 80% coverage in residential and 90% coverage in commercial areas. 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 shall also be back-buttered to ensure complete coverage. Tiles greater than 400 x 400 mm shall 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 adhesives are in the following table;

	Good	Better	Best
Porous bodied tiles Terracotta & Glazed Ceramic	X56	Isoflex	Optima
Glazed Mosaic		Isoflex	Optima
Dense bodied tiles Vitrified/porcelain Glass	X56	Isoflex	Optima
Natural Stone tile Excluding moisture sensitive stone	X56	Isoflex	Optima
Natural Stone Tiles Moisture sensitive stone	WA100	Please Refer to Ardex Technical Bulletin TB010	

GROUTING

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

- **ARDEX FG 8** sanded grout is for joints from 1 to 8mm and is a general purpose grout available in a large range of colours. In this application it is mixed with 80% **ARDEX Grout Booster**.
- **ARDEX FS-DD** is a 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. In this application, it is mixed with 80% **ARDEX Grout Booster**.

- **ARDEX WJ 50** sanded grout for joints 5 to 50mm. In this application it is mixed with 100% **ARDEX Grout Booster**.
- **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 is required. It is available in 8 colours and is suitable for grot widths that range from 1.5mm to 15mm.

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 and **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.