



## SRO937 – 002 - Levelling Engineered Sheet Timber Internal Flooring

### SCOPE

This recommendation is regarding the levelling and smoothing of engineered sheet timber internal flooring such as plywood and particleboard prior to the installation of resilient floor coverings, carpet, hard floor coverings (i.e. ceramic & porcelain tiles) and floating floors. It does not apply to substrates composed of strip timber flooring or parquetry. In addition, the applications include smoothing a sheet timber floor prior to the installation of fibre cement sheet, hardboard or MDF underlay sheets as per **ARDEX** Technical Bulletin TB015.

### PREPARATION

The sheet timber must be structurally sound and in good condition. Damaged and/or oil contaminated sheet timber must be replaced and any loose “squeaky” boards re-nailed and open joints filled with a fast setting mortar. The deflection of the floor checked to ensure any deflection is not more than  $1/360^{\text{th}}$  of the span distance between joists.

Ensure there is adequate cross-flow ventilation under the timber floor and the minimum clearance to underlying soil is in accordance with Australian Standards to prevent moisture related issues in the completed installation.

Sand the sheet timber substrate with 24 – 40 grit paper to remove all contaminants such as the resinous coating on the surface of particleboard and achieve a clean surface. Vacuum to remove dust and sanding debris.

### APPLICATIONS

There are 3 options as follows;

- Smoothing sheet joints and filling gouges in closely fitted timber sheeting using the [ARDEX Feather Finish](#) as a skim coating. Priming the timber is not required.
- Using [ARDEX Arditec NA](#) or [ARDEX K 15 MICROTEC](#) as a patch fillers under underlay sheets compatible to the selected floor finish. Prime the prepared timber first
- Using [ARDEX Arditec NA](#) or [ARDEX K 15 MICROTEC](#) as the levelling/smoothing system prior to installation of the selected floor finish. Prime the prepared timber first.

#### **Option 1: ARDEX Feather Finish**

[ARDEX Feather Finish](#) is applied directly to the sanded sheet timber substrate using a steel trowel to fill gouges, grooves and to even up joints. Extra flexibility and adhesion can be achieved by mixing 1 volume of Feather Finish powder with 1.5 volumes of mixed [ARDEX P 82](#) primer. Ensure the Feather Finish is fully dry before the installation of floor coverings (e.g. resilient vinyl or linoleum) or carpet. The [ARDEX Feather Finish](#) is applied from a true Feather Edge to a maximum 3mm thickness.



**Note:** movement of the sheet timber substrate may result in the sheet joints becoming noticeable with subsequent damage to applied resilient floor coverings.

### **Option 2: ARDEX Levelling / patching cements with Underlay sheeting**

- Mix the [ARDEX P 82](#) two part primer and apply to the prepared timber substrate to achieve a thin even coat as per the instructions on the product data sheet. Ensure any thick accumulations of this primer are brushed out.
- Allow the primer to dry for a minimum of 3 hours, (24 hours (max.)) @ 23°C.  
Note: *ARDEX P9 primer may also be used as an alternative priming option. Refer to the product datasheets for limitations.*
- **System 1- recommended for ceramic & porcelain tile finishes.**
  - Apply the [ARDEX Arditec NA](#) mixed as per the product data sheet instructions to the depressions in the timber substrate and allow hardening to a walkable state (2-4 hours) prior to fixing the f.c sheet underlay sheets.
  - Minor surface variations in the fibre cement sheet underlay can be smoothed with [ARDEX Feather Finish](#).
- **System 2**
  - Mix 20kg [ARDEX K15 MICROTEC](#) powder with 1.6 litres of [ARDEX E 25](#) Improver and 4 litres of water. Apply the mixed material to the depressions on the sheet timber substrate and allow to harden to a walkable state (2-4 hours) prior to fixing the fibre cement underlay sheets.
- *In the case of Masonite & MDF underlay sheets, both the [ARDEX K 15 MICROTEC](#) and the [ARDEX Arditec NA](#) systems must be fully dry before these sheets can be installed.*
- The underlay sheets are secured to the timber substrate using long nails through the **ARDEX** Levelling/patching mortar and sheet timber substrate into the supporting joists.
- Avoid placing the sheet joints over the **ARDEX** levelling / patching mortar where possible.

### **Option 3: ARDEX Arditec NA**

- Mix the [ARDEX P 82](#) two part primer and apply to the prepared timber substrate to achieve a thin even coat as per the instructions on the product data sheet. Ensure any thick accumulations of this primer are brushed out.  
Note: *ARDEX P9 primer may also be used as an alternative priming option. Refer to the product datasheets for limitations.*
- Allow the primer to dry for a minimum of 3 hours, (24 hours (max.)) @ 23°C.
- Mix the [ARDEX Arditec NA](#) as per the product data sheet and apply as a flood coat over the whole floor. [ARDEX Arditec NA](#) may be applied from feather edge to 12mm on one application.
- **ARDEX** 2-5mm aggregate can be added where the required application is up to 30mm thick. If the aggregate filled surface is too rough for the installation of



resilient floor coverings, smoothing layer of [ARDEX Feather Finish](#) or [ARDEX Arditec NA](#) can be applied, after another layer of primer.

- Allow the [ARDEX Arditec NA](#) to fully dry (~24 hours, dependent on temperature and humidity) prior to application of floor finishes directly to the levelled surface.

Once the installation of the **ARDEX** levelling cement and/or the underlay sheets has been completed, the floor finishes can be installed. **ARDEX** has adhesive systems for ceramic & porcelain tiles, as well as for resilient floor coverings and carpet. Please consult **ARDEX** for a specific recommendation regarding these floor finishes.

*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).*