

# TECHNICAL BULLETIN – TB096

## SUPPORTING SCREEDS FOR ATHENA PRODUCTS PREFORMED SHOWER BASES

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### INTRODUCTION & SCOPE

Prefomed shower base trays require a level surface to be laid on and need to be fully supported. The use of water resistant floor levelling cement provides a solution for concrete subfloors, and non bonded sand cement screeds can be applied onto timber substrates.

### STRUCTURAL CONSIDERATIONS

All timber and Compressed Fibre-Cement sheeted floors must have maximum deformation between joists less than 1 in 360th of the joists' span.

Installation of timber floors must comply with good installation practice and design in order to provide for effective under-floor ventilation and minimal exposure to localised heating, drying and moisture.

Concrete surfaces should be sound and free of all contaminating or loose materials. Ensure that the concrete is at least 28 days old.

### CLIMATIC CONDITIONS

Preparation of the screed should be performed between 10 and 35 degrees Celsius to provide correct conditions for the curing of cementitious based materials.

### PRIMARY SURFACE PREPARATION

#### **Timber – self supporting screed**

The surface shall be prepared to remove any loose material, or surface irregularities that may penetrate the plastic sheet membrane.

#### **Concrete**

Concrete floors must be sound and solid. Overwatered, frozen or otherwise weak concrete must be removed mechanically to provide a sound base. In addition, concrete should be evaluated for moisture and be free of oil, grease, wax, dirt, asphalt, curing compounds, latex and gypsum compounds, dust, paint or any contaminant which might act as a bond breaker.

The best way to remove any contamination in a concrete substrate is by an approved mechanical method. Mechanical cleaning removes the contaminant and the concrete to which it is adhered leaving only a clean, sound and solid surface behind. ARDEX recommends that all concrete substrate preparation proceeds using one or more of the following mechanical methods: scarifying, diamond grinding/shaving, sandblasting, scabbling (bush hammering) and chiselling.

Refer to Ardex Technical Bulletin TB041 for further details on concrete preparation.

#### **Fibre-Cement**

All surfaces must be clean, dry, and free of all dirt, dust, grease, oil and other surface contaminants.

#### **Waste Holes**

Where not already present, the hole for the waste should be marked prior to the application of the screed and a section of waste pipe of the appropriate diameter inserted in the hole to



prevent the hole being blocked up by the screed. The top of the pipe shall be plugged to prevent any material entering any installed waste plumbing.

### INSTALLATION OF SUPPORTING SCREED

#### System 1 – Timber floors

1. Apply one layer of PVC sheeting to provide a slip sheet for the applied Sand/Cement screed.
2. Sand/Cement screed to be improved with Ardex Abacrete improver as per the product technical data sheet.
3. Install a re-enforced self supporting sand/cement screed in accordance with the New Zealand Building Code and relevant local legislation.
4. Minimum installation thickness of the Sand /Cement screed shall be 40mm.
5. The Sand/Cement screed shall be re-enforced with a Galvanised Metal Mesh 25mm x 25mm aperture and minimum 5-8mm gauge steel.
6. The Sand/Cement screed shall be cured in accordance with the New Zealand Building Code and relevant local legislation and allowed a minimum 7 days drying at 20°C and 50% R.H. prior to base installation.

#### System 2 – Timber floors with fibre-cement sheeting overlay

1. Install a single piece of the Fibre Cement Underlay as per manufacturers written instructions. It is recommended that the sheeting is mechanically fastened to the timber subfloor.
2. Prime the Fibre-Cement sheet with Ardex 51 Primer and allow to dry as per the product datasheet.
3. Apply a screed of Ardex DPF005 with a minimum thickness of 15mm and a maximum of 120mm as per the product datasheet.
4. Allow the screed to dry thoroughly for a minimum of 4-6 hours.

#### System 3 – Concrete and Fibre-Cement subfloors

1. Prime the Fibre-Cement sheet with Ardex 51 Primer and allow to dry as per the product datasheet.
2. Apply a screed of Ardex DPF005 with a minimum thickness of 15mm and a maximum of 120mm as per the product datasheet.
3. Allow the screed to dry thoroughly for a minimum of 4-6 hours.
4. *NOTE.* If the Fibre-Cement floor sheeting has any joints within the area to be covered by the shower base, it is recommended that the screeding be performed in accordance with System 1 as for timber floors.

#### **IMPORTANT**

This Technical Bulletin provides guideline information only and is not intended to be interpreted as a general specification for the application/installation of the products described. Since each project potentially differs in exposure/condition specific recommendations may vary from the information contained herein. For recommendations for specific applications/installations contact your nearest Ardex Australia Office.

#### **DISCLAIMER**

The information presented in this Technical Bulletin is to the best of our knowledge true and accurate. No warranty is implied or given as to its completeness or accuracy in describing the performance or suitability of a product for a particular application. Users are asked to check that the literature in their possession is the latest issue.

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