TECHNICAL BULLETIN – TB096

SELF-SUPPORTING SCREEDS FOR ATHENA SHOWER BASES - NZ

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INTRODUCTION & SCOPE

Preformed shower base trays need to be installed on a level surface and fully supported. Water-resistant levelling cement provides a solution for concrete subfloors. Unbonded sand cement screeds can be applied over timber substrates.

STRUCTURAL CONSIDERATIONS

All timber and compressed fiber cement sheeted floors require the maximum deformation between joists to be less than 1 in 360th of the joists' span.

Timber floor installation must comply with good installation practice and design, providing effective under-floor ventilation and minimal exposure to localized heating, drying, and moisture.

Concrete surfaces should be sound and free of all contaminants and loose materials. Concrete substrates must be at least 28 days old.

CLIMATIC CONDITIONS

The screed should be prepared between 10 and 35 degrees Celsius to provide the 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. To provide a sound base, overwatered, frozen, or weak concrete must be removed mechanically. 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 that might act as a bond breaker.

An approved mechanical method is the best way to remove any contamination on a concrete substrate. 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 mechanical methods: scarifying, diamond grinding/shaving, sandblasting, scabbling (bush hammering), and chiseling.

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

Fibre-Cement

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

Waste Holes

Where not already present, the waste hole should be marked before the application of the screed, and a section of waste pipe of the appropriate diameter should be inserted in the hole to prevent the screed from blocking it. The top of the pipe should be plugged to prevent material from entering any installed waste plumbing.

INSTALLATION OF SUPPORTING SCREED

System 1 – Timber floors

1. Apply one layer of polyethylene to provide a slip sheet for the applied sand/cement screed.
2. The sand/cement screed should incorporate ARDEX Abacrete or ARDEX WPM405, per the product technical data sheets.
3. Install a reinforced self-supporting sand/cement screed in accordance with the New Zealand Building Code and relevant local legislation.
4. The minimum installation thickness of the sand /cement screed is 40mm.
5. The sand/cement screed should be reinforced with galvanized metal mesh with a 25mm x 25mm aperture and a minimum of 5-8mm gauge steel.
6. The sand/cement screed should be cured in accordance with the New Zealand Building Code and relevant local legislation and allowed to dry for a minimum of 7 days at 20ºC and 50% R.H. prior to base installation.

System 2 – Timber floors with fibre-cement sheeting overlay

1. Install a single piece of fibre cement underlay according to the manufacturer's instructions. The sheeting should be mechanically fastened to the timber subfloor.
2. Prime the fibre-cement sheet with ARDEX Multiprime and allow it to dry as per the product datasheet.
3. Waterproof with two coats of ARDEX WPM002.
4. Apply a sand/cement screed of incorporating ARDEX Abacrete or ARDEX WPM405 with a minimum thickness of 15mm and a maximum thickness of 60mm as per the product datasheet.
5. Allow the screed to dry thoroughly for at least 7 days.

System 3 – Concrete subfloors

1. Prime the concrete substrate with ARDEX 51 Primer and allow it to dry as per the product datasheet.
2. Apply a sand/cement screed of incorporating ARDEX Abacrete or ARDEX WPM405 with a minimum thickness of 15mm and a maximum thickness of 60mm as per the product datasheet.
3. Allow the screed to dry thoroughly for at least 7 days.
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 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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