



# forticrete

## Fortiscreed

### Premixed Sand Cement Screed

- Easy to use
- Internal and External

#### DESCRIPTION

Fortiscreed is a factory proportioned premixed sand/cement screed for internal and external use. It is especially designed to achieve falls for water run-off and to economically level uneven floors prior to tiling or waterproofing.

Fortiscreed meets the Green Building Council of Australia Green Star IEQ-13 requirements for Ceramic Tile Adhesives when tested in accordance with SCAQMD Method 304-91 Determination of Volatile Organic Compounds (VOC) in Various Materials as referenced by South Coast Air Quality Management Division (SCAQMD) Rule 1168.

#### TO (SUBSTRATES)

Concrete floors, fibre-cement sheets, timber floors (internal)

#### SUBSTRATE PREPARATION

Surfaces must be free from dust, oil, grease and all loose contaminating materials. Alternatively, use a separating layer (heavy-duty plastic sheet) to isolate the background from Fortiscreed. Ensure surfaces are dry with no residue or permanent damp.

#### Concrete

This includes precast, in-situ and wood floated concrete. As concrete exhibits drying shrinkage, allow to cure for at least 4 weeks prior to tiling. Any surface laitance, concrete sealers, curing compounds, and other materials should be removed from the surface prior to tiling. Steel trowel finished concrete should be roughened mechanically to remove laitance and provide a good key. The concrete should have adequate surface profile (e.g. broom finish) to provide a mechanical key. Smooth surfaces and/or dense concrete greater than 35MPa must be mechanically roughened.

#### Fibre-Cement Sheets

Fix sheets according to manufactures instructions making sure the surface is completely clean. Tape sheet joints with PVC ducting tape or masking tape.

#### Timber Floors

Timber floors must be structurally sound and free from abnormal deflection. The maximum load deflection must not exceed 1/360 of the span. Use a separating layer (heavy-duty plastic sheet) to isolate the background from Fortiscreed.

#### MIXING

Fortiscreed powder is added to clean water in a clean container and mixed thoroughly to give a moist semi-dry mix for optimal application. A 20kg bag of Fortiscreed requires approximately 2 litres of water.

To achieve a stronger, more resilient screed and for all timber substrates, replace water with 3:1 water to ARDEX Abacrete dilution.

1. Pour clean water into a container and add Fortiscreed, Mix thoroughly to achieve a firm paste consistency.
2. Alternatively, create a mound of Fortiscreed, form a cavity in the centre and fill with required amount of water. Fold the powder over the water and combine until a firm, consistent mix is achieved.

Do not apply at temperatures below 10°C.

#### APPLICATION

A minimum thickness of 10mm is recommended when using diluted ARDEX Abacrete instead of water; 15mm when mixed with water. For a thickness greater than 40mm, reinforcing mesh is required.

1. Using a roller, paint brush or a flat trowel, coat the prepared area with a slurry of 2:1 neat cement: ARDEX Abacrete to improve adhesion of Fortiscreed to the substrate. Slurry coat not required if isolating layer (plastic sheet) is used.
2. If necessary, cut plastic sheet to size allowing for 100mm overlap at joints and upturn at walls above screed height (trim after Fortiscreed sets). Tape overlapping sheet joints.
3. Apply the Fortiscreed mix whilst the slurry coat is still wet or screed directly over the plastic sheet.
4. Use a straight edge, trowel or timber batten to level the material. Achieve falls in shower recesses to a minimum 1:60, internal wet areas (e.g. bathrooms) to a minimum of 1:80 and external areas to a minimum of 1:100. When reinforcing the screed with galvanised mesh, apply first layer of Fortiscreed, lay in the mesh and apply the second layer of Fortiscreed. Do not lay the mesh directly onto the substrate.

Fortiscreed should be left with a wood float finish to create a key for tiling and waterproofing.

#### Drying Time

Fortiscreed is trafficable after 24 hours at 23°C and 50% relative humidity with an initial set time of 3-5 hours. Tiling and waterproofing to take place after 7 days (23°C and 50% R.H.)

#### COVERAGE

20kg of Fortiscreed is sufficient for approximately 1m<sup>2</sup>, at 10mm thickness. To achieve adequate falls to the waste, a 1m<sup>2</sup> shower base will require approximately 40kg of Fortiscreed (depending on minimum bed thickness).

#### CLEAN UP

All tools should be cleaned with water immediately after use.

#### PACKAGING

Fortiscreed is packed in polylined paper sacks – net weight 20kg.

#### SHELF LIFE

Fortiscreed has a shelf life of not less than 12 months when stored in the original unopened packaging, in a dry place at 23°C and 50% relative humidity.

### Pay attention to the following:

Protect from wind and direct sunlight whilst Fortiscreed is setting (3-4hours @ 23°C and 50% relative humidity).

Do not add sand as this will lower performance.

Reinforce Fortiscreed with galvanised mesh in the following cases:

- screeds over 40mm
- when used in conjunction with a separating layer eg, heavy-duty plastic sheet
- for all framed construction (e.g, F/C sheets over joists).

Fortiscreed must be mixed with ARDEX Abacrete when used over timber substrates.

A minimum thickness of 40mm is required when Fortiscreed is unbonded i.e, over a separating layer such as heavy-duty plastic sheet; 15mm where screed is bonded directly; 10mm when mixed with ARDEX Abacrete.

Do not use 'chicken wire' as reinforcement. 25x25mm (min 0.8mm thick) galvanised mesh is recommended.

Keep water content in mixture to a minimum to avoid shrinkage.

Not intended for smoothing floors prior to installation of resilient floor coverings.

Keep damp with water for at least 7 days to reduce shrinkage stresses whilst curing.

### SAFETY PRECAUTIONS

This product is considered non hazardous in normal usage. The presence of cement in the product gives an alkaline mortar which may cause some irritation if prolonged contact with skin takes place.

Avoid contact with skin and eyes; in case of contact with the eyes, rinse immediately with plenty of water and seek medical advice; wear suitable gloves and eye protection and keep the product out of the reach of children. Avoid generation of airborne dust during mixing. If swallowed do not induce vomiting, give a glass of water and contact a doctor.

For further material safety data, consult the latest Material Safety Data Sheet.

### TECHNICAL DATA

<b>Colour:</b>	Coarse Green Powder
<b>Mixing Ratio:</b>	Approx 2L water per 20kg powder
<b>Powder Bulk Density:</b>	1.65kg/L
<b>Mortar Density:</b>	2.2kg/L

<b>Mechanical Properties</b>	With water @16%	With water: Abacrete (3:1) @16%
Compressive Strength	20.2MPa	22.6MPa
Flexural Strength	4.0	5.5

### QUALITY PRODUCT

Fortiscreed is manufactured and tested to procedures, which are maintained in accordance with Quality Standard ISO 9001. Material Safety Data Sheets are available upon request.

### GUARANTEE

ArDEX Australia Pty Ltd ("we" or "us") guarantees this product (also referred to as "our goods") is free from manufacturing defects and will perform to any applicable specification published by us for 10 years from the date of application of the product if such application occurs within this product's specified shelf life. Our liability under this guarantee is limited at our option to replacement of the product, repair of any damage to the immediate surface or area of application of the product, or the cost of such replacement or repair, in each case if we are satisfied loss or damage was due to a breach of this guarantee. This guarantee does not apply if damage or loss is due to failure to follow our published instructions or any act or circumstance beyond our control, including shade variations and efflorescence and faulty workmanship on the part of any installer or applicator of the product. If you wish to make a claim under this guarantee you must notify us (address: 7/20 Powers Road Seven Hills NSW 2147; phone: 1800224070; email: techinfo@ardexaustralia.com), identify the product and provide evidence of your purchase and the subsequent application of the product within 30 days of any alleged loss or damage occurring. We reserve the right to ask you for satisfactory evidence of any alleged loss or damage and to undertake any inspections and tests necessary to establish your rights under this guarantee. Any claim under this guarantee is at your cost. This guarantee is in addition to any rights or remedies you may have as a "consumer" under the Australian Consumer Law and to that extent you need to be aware that: "Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss of damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure".

### DISCLAIMER

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