



forticrete

Fortiset

Cement Based Tile Adhesive

- Good workability
- Suitable for a range of tiles
- For floor tiling
- Internal use

DESCRIPTION

Fortiset is a standard grade cement-based floor tile adhesive. It is suitable for fixing ceramic tiles, terracotta, slate and quarry tiles in internal locations.

Fortiset 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 1.168.

FOR FIXING (TILE TYPES)

Ceramic tiles, terracotta, slate and quarry tiles with water absorption >6%.

TO (SUBSTRATES)

Concrete, renders, screeds

SUBSTRATE PREPARATION

Surfaces must be consistently flat and sound. Clean off dust, oil, grease and all loose contaminating materials. Ensure surfaces are dry before tiling, 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 for tiling. The surface should be true and level and pitched to drains where required. 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 prior to tiling.

Cement Render/Screeds

New renders and screeds should be finished with a wood float to the required surface regularity. Screeds should be pitched to drains where required. Allow at least 7 days to cure prior to tiling.

MIXING

Fortiset powder is added to clean water in a clean container whilst stirring vigorously and mixed thoroughly to give a lump free easily worked mortar of a thick creamy consistency. Allow to stand for 5 minutes. Restir the mixture thoroughly and the adhesive is ready for use. A 20kg bag of Fortiset requires approximately 4.6 litres of water.

For tiles of <6% water absorption and external applications water should be replaced with ARDEX Abalastic, in this instance a 20kg bag will require approximately 5.6L of ARDEX Abalastic.

The consistency of the adhesive can be adjusted slightly to suit site conditions and size, weight and type of tiles to be fixed. Do not apply at temperatures below 10°C. The pot life of the mixed mortar is approximately 2 hours at 23°C and 50% relative humidity.

FIXING TECHNIQUE

Before fixing ensure the substrate has been prepared and the tiles are free from dust. Tiles should be fixed in accordance with AS 3958.

Substrate surface, type and size of the tiles will determine the selection of the trowel. As a general guide use a 6 x 6 x 6mm notched trowel for walls and 10 x 10 x 10mm notched trowel for floor tiling. Fortiset can be applied at a bed thickness greater than 3mm or less than 10mm.

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 100% coverage on the back of the tile. Tiles with ribbed or keyed back profiles should also be buttered to ensure complete coverage. Lift a tile from time to time to check that there are no voids beneath the tile. Do not spot fix. Any surplus adhesive must be removed from the surface of the tile and joints, before the adhesive sets.

Fortiset has an open time of 15 minutes and an adjustment time of 15 minutes. Please be aware of site conditions when considering these times and only spread enough adhesive so that the tiles can be fixed while the mortar is still wet. All tools should be cleaned with water immediately after use.

MOVEMENT JOINTS

Movement joints must be in accordance with Australian Standard AS 3958.

GROUTING

Grouting and traffic may be allowed after approximately 24 hours at 23°C and 50% relative humidity. Allow longer for dense tiles/substrates, humid climates and low temperatures.

The tile joints should be grouted with the appropriate ARDEX grout.

COVERAGE

20kg of Fortiset is sufficient for approximately 6.5m² on walls, using a 6 x 6 x 6mm notched trowel and 5m² on floors using a 10 x 10 x 10mm notched trowel. The coverage will vary depending on substrate condition, tile type and application technique.

PACKAGING

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

SHELF LIFE

Fortiset 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:

Fortiset is only suitable for minimal movement. When setting tiles on substrates where movement is anticipated, we recommend the use of ARDEX X56, ARDEX X77, ARDEX Abaflex or ARDEX X78 where appropriate.

For setting of moisture sensitive natural stones, please refer to products in the ARDEX Natural Stone System.

Fortiset is not suitable for use over timber floors or fibre cement sheeted timber floors.

Not suitable for use with porcelain or highly vitrified tiles.

Do not use Fortiset in continuous immersion applications e.g. swimming pools, tanks, etc. ARDEX provides other systems.

External tiling must have adequate falls for drainage.

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

Colour: Off White Powder
Mixing Ratio: Approx 4.6L water per 20kg powder

Application Properties at 23°C and 50% RH

Open Time: 15 minutes
Adjustment Time: 15 minutes
Grouting Time: 24 hours
Pot Life: 2 hours

Mechanical Properties (AS 4992)

Tensile Adhesion Strength after:

28 days dry: 0.5-1.0 MPa
Water immersion: 0.5-1.0 MPa
Heat Ageing: 0.5-1.0 MPa
Freeze Thaw: 0.5-1.0 MPa

QUALITY PRODUCT

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

PRODUCT 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

The technical details, recommendations and other information contained in this data sheet are given in good faith and represent the best of our knowledge and experience at the time of printing. It is your responsibility to ensure that our products are used and handled correctly and in accordance with any applicable Australian Standard, our instructions and recommendations and only for the uses they are intended. We also reserve the right to update information without prior notice to you to reflect our ongoing research and development program. Country specific recommendations, depending on local standards, codes of practice, building regulations or industry guidelines, may effect specific installation recommendations. The supply of our products and services is also subject to certain terms, warranties and exclusions, which may have already been disclosed to you in prior dealings or are otherwise available to you on request. You should make yourself familiar with them.

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