



ARDEX X 18

Fibre Reinforced Flexible Non Slump Wall and Floor Tile Adhesive

Extended open time and excellent workability with low sand content

Use over early age concrete, screeds and render

Suitable for swimming pools and wet areas



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ARDEX X18

Fibre Reinforced Flexible Non Slump Wall and Floor Tile Adhesive

DESCRIPTION

ARDEX X18 is a superior polymer fortified cement-based wall and floor tile adhesive that has been specially formulated with mastic type properties, available in both white and grey. It contains specially developed fibres that add strength to the tiled area. ARDEX X18 has an extended open time, is non slump and flexible. Mix with water to achieve a mortar suitable for internal and external use in residential and commercial applications, including swimming pools. ARDEX X18 meets the Green Building Council of Australia Green Star requirements for Ceramic Tile Adhesives.

FOR FIXING (TILE TYPES)

Fully vitrified and ceramic tiles, porcelain, natural stones (excluding moisture sensitive) and mosaics.

TO (SUBSTRATES)

- Concrete, renders, screeds
- Fibre-cement sheet, plasterboard on walls
- Compressed fibre-cement sheet on floors
- ARDEX Liquid applied undertile waterproofing membranes
- Existing ceramic tiles (internal dry areas)
- CTU (Ceramic Tile Underlay) over particleboard and plywood timber floors

SUBSTRATE PREPARATION

The surface being adhered to must be clean, firm and free of dust, dirt, oil, grease, curing compounds, release agents and other barrier materials, as well as being strong enough to support the weight of the tiles being fixed. Ensure surfaces are dry before tiling, with no residue or permanent damp.

Ensure that the substrate's required drying time, as given in the relevant part of AS 3958, is allowed to elapse prior to fixing the tiles. Prime porous substrates with ARDEX Multiprime.

Concrete (Including early age concrete)

Early age concrete must be a minimum of 7 days old and no less than 20 MPa. Prior to tiling, remove any concrete sealers or curing compounds from the surface, e.g. resin, wax sealers. 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. Smooth surfaces and/or dense concrete greater than 35 MPa 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 24 hours to cure prior to tiling. For unbonded allow at least 7 days to cure prior to tiling.

Plasterboard/Medium Density Fibre-Cement Sheet (Internal walls only)

Tiles can be fixed directly provided these boards are firmly and rigidly fixed in accordance with manufacturer's instructions to adequately support the tile bed. Priming is recommended for fibre-cement sheet but is not usually necessary for plasterboard except when jointing compound is used.

Compressed Fibre-Cement Sheet (Floors)

For both internal and external applications, tiling over compressed fibre-cement must be carried out as per sheet manufacturer's recommendations and Australian Standard AS 3958.

External Fibre Cement Sheet

Intended for tiling and also specialised floor sheets (eg. Scyon Secura), Refer to ARDEX technical services for the specific systems recommended for use with these types of boards.

ARDEX Liquid Applied Undertile Waterproofing Membranes

ARDEX undertile waterproofing must be applied according to instructions and thoroughly dry prior to tiling.

Existing Ceramic Tiles (Internal dry areas only)

These include sound, clean, glazed and unglazed tiles. Existing tiles must be firm and stable. Roughen the surface by mechanical means, clean off contamination and dust before tiling. Ensure that at least 80% of the glaze is removed. Prime with ARDEX Multiprime or ARDEX P9. Tiling over existing tiles is not recommended in immersed applications.

Ceramic Tile Underlay (CTU)

Should be fixed as per manufacturer's instructions. The CTU must be a minimum of 6mm and made specifically for this purpose. Tiles under 100mm edge length cannot be fixed using this method. CTU can be applied to plywood and particleboard but not strip timber. Please refer to Ardex Technical Services for further details.

MIXING

ARDEX X18 powder is added to clean water in a large clean container whilst stirring vigorously and mixed thoroughly to give a lump free easily worked mortar of a thick creamy consistency. Mix for at least 2 minutes and allow to stand for 5 minutes, and mix a second time for 2 minutes.

A 20kg bag of ARDEX X18 requires 5 - 6 litres of water. Do not add additional water. The consistency of the adhesive can be slightly adjusted to suit site conditions and size, weight and type of tiles to be fixed. Do not apply at temperatures below 5°C. The pot life of the mixed mortar is approximately 3 hours at 23°C and 50% relative humidity.

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For improved resilience to movement, and also performance in swimming pools, ARDEX X18 can be mixed with ARDEX E90 in the following ratio 2.0 litres of ARDEX E90 to 4.5 litres of cool clean water.

FIXING TECHNIQUE

Before fixing ensure the substrate has been prepared and the tiles are free from dust or contaminants. Tiles should be fixed in accordance with Australian Standard 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 notch trowel for walls and 10 x 10 x 10mm notch trowel for floor tiling. ARDEX X18 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.

ARDEX X18 has an open time of 30 minutes and an adjustment time of 30 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 can proceed once the tile bed has hardened sufficiently so that tiles will not be dislodged. 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 ARDEX X18 is sufficient for approximately 11m² on walls, using a 6 x 6 x 6mm notched trowel and 7m² 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

ARDEX X18 is packed in polylined paper sacks – net weight 20kg.

SHELF LIFE

ARDEX X18 has a shelf life of 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:

Do not use over metal or similar substrates.

ARDEX X18 should not be used on floors with a deflection greater than the joist span divided by 500 for tiles less than 600mm and divided by 700 for greater sized tiles. Joist span must comply with AS 1684.

ARDEX X18 should not be used over substrates subject to shrinkage and other movement e.g. timber, ARDEX provides other systems. For setting of moisture sensitive natural stones, please refer to products in the ARDEX Natural Stone System.

Dimensional instability in natural stone is often difficult to detect visually and may require thermal and moisture stability testing to ensure that adhesive recommendations can be warranted. Contact your tile supplier for further information or ARDEX technical services for information and testing.

Before any substrate preparation, installation or finishing methods relating to ARDEX product are undertaken, please be aware of any potential risks and use appropriate PPE (personal protective equipment). This may involve contacting substrate manufacturers for Safety Data Sheets.

TECHNICAL PROPERTIES

Colour	White or Grey
Mixing Ratio	5 - 6 litres water per 20kg powder
APPLICATION PROPERTIES AT 23°C AND 50% RH	
Open Time	30 mins
Ajustment Time	30 mins
Grouting Time	24 hours
Pot Life	3 hours
Sagging	None
Underfloor Heating	Yes
Grouting Time	24 hours
Pot Life	3 hours
Sagging	None
Underfloor Heating	Yes

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MECHANICAL PROPERTIES (ISO 13007) Tensile Adhesion Strength after	
28 Days Dry	≥1.0 MPa
Water Immersion	≥1.0 MPa
Heat	≥1.0 MPa
Freeze Thaw	≥1.0 MPa
Coverage	11m ² (walls) 7m ² (floors)
Classification	C2 TE S1

SAFETY DATA

This product causes skin irritation and may cause an allergic skin reaction. The product may cause respiratory irritation. It causes serious eye damage and in case of contact with the eyes rinse with running water until advised to stop by the Poisons Information centre or a doctor, or for at least 15 minutes. Wear protective gloves, clothing, eye and face protection. Avoid inhaling dust/fumes/gas/mist/vapours/spray. Ensure adequate ventilation during mixing and application. This product is suspected of causing genetic defects and may cause cancer. Store locked up. Check with your local Council regarding the disposal of contents. Keep out of the reach of children. Call the Poisons Information Centre on 131 126 (AUS) and 0800 764 766 (NZ) or call a doctor if you feel unwell. Additional information is in the Safety Data Sheet (SDS) at www.ardexaustralia.com

GUARANTEE

ARDEX Australia Pty Ltd ("we" or "us") guarantees this product ("our goods") is free from manufacturing defects and will perform to any applicable specification published by us for 10 years from the date of purchase. 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 compensation, 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 published instructions or any act or circumstance beyond our control, including shade variations and efflorescence. If you wish to make a claim under this guarantee you must notify us (ARDEX Australia Pty Ltd, 20 Powers Road Seven Hills NSW 2147; Toll Free: 1800 224 070; Email: technicalservices@ardexaustralia.com) and provide evidence of your purchase 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. 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 Standards. Our instructions and recommendations are only for the uses they are intended. Users are advised to confirm that this product is suitable for their application and conforms with the specifications of the system. 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 affect 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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This data sheet was issued in October 2022 and is valid for 3 years, in some instances a newer version may be published. Always refer to www.ardexaustralia.com for the latest technical data from ARDEX Australia Pty Ltd.