



ARDEX X18

Fibre Reinforced Flexible Non Slump Wall and Floor Tile Adhesive

Fibre reinforced for extra strength and peace of mind

Excellent workability with low sand content

Flexible – achieves S1 classification (S2 with ARDEX E 90)

Ideal for all tile types including fully vitrified, porcelain and mosaics

Non slump – ideal for large format and heavy tiles on floors and walls

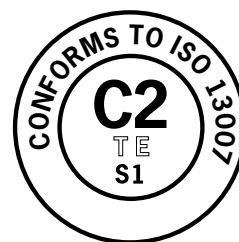
Extended open time

Use over early age concrete/screeds and render

For internal and external use

Suitable for swimming pools and wet areas.

Low VOC content - meets Green Building Council of Australia Green Star IEQ-13 requirements



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DESCRIPTION

ARDEX X18 is a superior white polymer fortified cement-based wall and floor tile adhesive that has been specially formulated with mastic type properties. 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 IEQ-13 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 16 hours 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.

Ceramic Tile Underlay (CTU)

Should be fixed as per the CTU 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. Please refer to Ardex Technical Services for further details.

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. Tiling over existing tiles is not recommended in immersed applications.

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. Allow to stand for 3 minutes. Restir the mixture thoroughly and the adhesive is ready for use.

A 20kg bag of ARDEX X18 requires 5-6 litres of water.

The consistency of the adhesive can be slightly adjusted to suit site conditions and size, weight and type of tiles and location the tiles are 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.

For improved resilience to movement, and also performance in swimming pools, ARDEX X18 can be mixed with ARDEX E 90 in the following ratio 2.0 litres of E 90 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 joint.

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 ranges 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.

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 Safety Data Sheet.

TECHNICAL DATA

Colour:	White Powder
Mixing Ratio:	5 - 6 litres water per 20kg powder
Application Properties at 23°C and 50% RH	
Open Time:	30 minutes
Adjustment Time:	30 minutes
Grouting Time:	24 hours
Pot life:	3 hours
Sagging:	None
Underfloor Heating:	Yes

Mechanical Properties (ISO 13007)

Tensile Adhesion Strength after 28 days dry:	> 1MPa
Water Immersion:	> 1MPa
Heat:	> 1MPa
Freeze Thaw:	> 1MPa
Mixing Time:	8 minutes
Coverage:	11m ² (walls) 7m ² (floors)
Classification:	C2 TE S1 (S2 with E90)

Toll Free Technical Services: 1300 788 780 (Australia) 0800 227 339 (NZ)

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