

# ARDEX X17

# Flexible Non Slump Wall and Floor Tile Adhesive

Superior flexibility – achieves S1 classification

Non slump – ideal for large format and heavy tiles

Extended open time

Great workability with low sand content

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

24 hours green bonded screed capable

For internal and external use

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

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## ARDEX X17

## Flexible Non Slump Wall and Floor Tile Adhesive

#### DESCRIPTION

ARDEX X17 is a white polymer fortified cement-based wall and floor tile adhesive that has been specially formulated with mastic type properties. ARDEX X17 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 light commercial applications. ARDEX X17 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) Ceramic Tile Underlay (CTU)

#### 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.

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. CSP 2-3) to provide a mechanical key. Smooth surfaces and/or dense concrete greater than 35MPa must be mechanically prepared 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. For bonded screeds allow 24 hours to cure prior to tiling. For unbonded screeds allow at least 7 days to cure prior to tiling.

#### Plasterboard/Medium Density Fibre-Cement Sheet (Walls)

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

#### Compressed Fibre-Cement Sheet (Floors) **Internal Applications**

These sheets must be fixed strictly in accordance with manufacturer's instructions and be deemed suitable for the application by the manufacturer.

Tiling over compressed fibre-cement sheet for external flooring applications should be carried out as per sheet manufacturer's recommendations and Australian Standard AS 3958.

#### **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 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.

#### Ceramic Tile Underlay (CTU)

Should be fixed as per the 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

#### MIXING

ARDEX X17 powder is added to clean water in a large clean container whilst stirring vigorously with a paddle mixer. Mix thoroughly to give a lump free easily worked mortar of a thick creamy consistency. Mix for at least 2 minutes allow to stand for 5 minutes, and mix a second time for 2 minutes. A 20kg bag of ARDEX X17 requires approximately 6-6.5 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.

#### **FIXING TECHNIQUE**

Before fixing ensure the substrate has been prepared and the tiles are free from dust. 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 X17 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 X17 has an open time of 30 minutes and an adjustment time of 20 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 X17 is sufficient for approximately 8m<sup>2</sup> on walls, using a 6 x 6 x 6mm notched trowel and 6m<sup>2</sup> 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 X17 is packed in polylined paper sacks - net weight 20kg.

ARDEX X17 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 ARDEX X17 in continuous immersion applications e.g. swimming pools, tanks, etc. ARDEX provides other systems.

ARDEX X17 should not be used on floors with a deflection greater than the joist span divided by 500. Joist span must comply with AS 1684.

ARDEX X17 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 Material Safety Data Sheet.

#### **TECHNICAL DATA**

White Powder Colour:

Mixing Ratio: 1 vol water: 3 vol powder,

approximately 6-6.5 litres water per 20kg powder

Application Properties at 23°C and 50% RH

Open Time: 30 minutes Adjustment Time: 20 minutes **Grouting Time:** 24 hours Pot life: 3 hours Sagging: None **Underfloor Heating:** 

Mechanical Properties (ISO 13007) Tensile Adhesion Strength after

1.0 – 1.5 MPa 28 days dry: Water Immersion: 1.0 - 1.5 MPa Heat: 1.0 - 1.5 MPa Freeze Thaw: 0.5 - 1.0 MPa Classification: C1TES1

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