

ARDEX X 21

Standard Tile Adhesive

Excellent adhesion:

- Double bonding strength of ordinary cement mortar;
- Tensile adhesion strength greater than 0.5MPa: after water immersion after heat aging after freeze-thaw cycling

Low shrinkage: Due to Selective filler

Suits tiles with water absorption over 5%, internal and external areas





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ARDEX X 21

Standard Tile Adhesive

DESCRIPTION

ARDEX X 21 is a cement-based tile adhesive for fixing wall tiles with water absorption over 5%, and is suitable for interior and exterior use.

USE

ARDEX X 21 consists of special cements, selective filler, polymer and additives. The EN12004 C1 T designation for ARDEX X 21 classifies as a "normal setting cementitious adhesive with reduced slip" ARDEX X 21 is ideal for floor and wall application, can be used for commercial and residential, internal and external situation, and wet or dry areas, e.g. roof, bathroom, terrace and balcony.

TO (SUBSTRATES)

Concrete, renders, screeds and other cement based substrates. ARDEX X 21 can be used with ARDEX E 72 Adhesive Additive to apply directly on ARDEX polymer modified cement based waterproofing membrane.

ARDEX Primer is needed for highly absorbent backgrounds or very smooth, dense and impervious surfaces.

NÓTE

DO NOT use ARDEX X 21 in swimming pools or other permanently wet and chemical corrosion areas.

Please contact ARDEX technical service for further information.

SUBSTRATE PREPARATION

The backgrounds and surfaces to receive the tiles must be clean, firm and free of dust, dirt, oil, grease, curing compounds, release agents and other barriers adhesion, as well as being strong enough to support the weight of the tiles being fixed.

As concrete exhibits drying shrinkage, allow to cure for at least 6 weeks prior to tiling. Allow cement sand render and screeds at least 14 days to cure prior to tiling. The tensile strength should be greater than the adhesive strength of ARDEX X 21.

ARDEX X 21 is suitable for dry or damp substrates, e.g. screed or concrete; however, the substrates for moisture-sensitive tiles/stones must be dry, and keep dry after tiling.

ARDEX X 21 can be used with ARDEX E 72 Adhesive Additive to tiling on very smooth, dense and impervious surfaces, such as existing ceramic tiles (glazed or unglazed), glazed bricks, terrazzo, etc. or can be primed with ARDEX primer prior to tiling.

MIXING

ARDEX X 21 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 3 minutes. Restir the mortar thoroughly and the adhesive is ready for use.

A 25kg bag of ARDEX X 21 requires approximately 5 Liters water. The pot life of the mixed mortar is approximately 2 hours at 23°C

NOTE

The consistency of the adhesive can be adjusted to suit site conditions and the materials being mixed, but must always be slump-free.

Mix appropriate amount of ARDEX X 21 according to the applying area within the pot life. Pot life and adhesion strength stage may change by the temperature. Do not apply at temperatures below 10° C or over 35° C

FIXING TECHNIQUE

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. Substrate surface, type and size of the tiles will determine the selection of the trowel. As a general guide use a $3 \times 3 \times 3$ mm notch trowel for thin flat back tiles, use a $6 \times 6 \times 6$ mm notch trowel for general walls tiling, and $10 \times 10 \times 10$ mm notch trowel for floor tiling. Tiles with ribbed or keyed back profiles should also be buttered to ensure complete coverage.

ARDEX X 21 has an open time of 20 minutes and pot life 120 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. For uneven or rough surface, recommend ARDEX 21 (thickness under 5mm) or ARDEX B 60 to level the substrate, then apply tiling after dry (about 24 hours).

GROUTING

Grouting may be allowed after approximately 24 hours at 23°C . The tile joints should be grouted with the appropriate ARDEX grout. Recommend

ARDEX epoxy grout for chemical corrosion resistance and resistance to water penetration and stain.

COVERAGE

25kg of ARDEX X 21 produces 17.2 L fresh mortar, 1.45 kg powder/ m^2 with thickness 1 mm. The coverage will vary depending on substrate condition, tile type and application technique.

25 kg ARDEX X 21 is sufficient for approximately 8.2 m^2 by using a $6 \times 6 \times 6 \text{ mm}$ notched trowel.

PACKAGING

ARDEX X 21 is packed in paper sacks incorporating a polyethylene liner – net weight 25kg.

SHELF LIFE

ARDEX X 21 has a shelf life of 12 months when stored in the original unopened packaging, in a dry place, avoid ventilation.

TECHNICAL DATA

Testing condition is at 23°C and 50% RH standard laboratory.

ARDEX Quality Standard

Fresh Mortar dens	sity approx. 1.74kg/L
Open Time	approx 20 min
Port Life	approx 120 min
Tensile adhesion	strength after 28 days dry
	≥ 1.0 MPa
Water immersion	≥ 1.0 MPa
Heating	≥ 0.5 MPa
Freeze-thaw	≥ 0.5 MPa

PROPERTIES TESTED TO EN12004

Tensile Adhesion Strength: Greater than 0.5Mpa under all test conditions

SAFETY PRECAUTIONS

This product is considered non-hazardous in normal usage. The presence of Portland cement and quarts sand 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.

The information supplied in our literature or given by our employees is based upon extensive experience and, together with that supplied by our agents or distributors, is given in good faith in order to help you. Our Company policy is one of continuous Research and Development; we therefore reserve the right to update this information at any time without prior notice. We also guarantee the consistent high quality of our products; however, as we have no control over site conditions or the execution of the work, we accept no liability for any loss or damage which may arise as a result thereof. Regional specific recommendations, standards, codes of practice, building regulations or industry guidelines may affect specific installation recommendations.