



ARDEX X 77

MICROTEC flexible adhesive

Advantages

- MICROTEC fibre reinforced
- Waterproof, frost resistant
- Flexible
- Easy to apply, high yield
- Efflorescence-free due to special additives

Description

Powder with special cements, fillers, special additives, MICROTEC fibres and flexible plastics. When mixed with water, it produces a smooth, pasty adhesive mortar with high stability. The working time is approx. 3 hours. The mortar hardens through hydration and drying.

Areas of Application

Inside and outside. Wall and floor.

For creating a flexible adhesive bed.

For attaching and laying:

- Earthenware, stoneware, and porcelain stoneware tiles
- Glass and porcelain mosaic
- Concrete slabs
- moisture-resistant natural stone slabs

For preparing

- Suitable building boards, e.g. plasterboard
- Insulation boards made of rigid foam and mineral fibres
- Tile elements (rigid foam insulation boards with mortar lamination on both sides)

For setting and laying tiles in swimming pools.

For attaching ceramic cladding to facades.



For setting and laying tiles on concrete and masonry substrates (at least 3 months old).

For plating on heated screeds.

For setting and laying tiles made of earthenware, stoneware and porcelain stoneware, concrete, and natural stone slabs indoors and outdoors.

Substrate Preparation

The dry or damp substrate must be firm, stable, warp-resistant and free from dust, dirt or separating agents.

Gypsum substrates and absorbent or sanded calcium sulphate screeds must be dry and primed with ARDEX P 51 Adhesion and Priming Dispersion, diluted 1 : 3 with water.

Metal, glass, paintwork, coatings and similar substrates must be primed indoors with ARDEX P 82 Synthetic Resin Primer.

Indoors, existing tile coverings should be primed with ARDEX P 4 READY Ready-to-use multifunctional primer or thinly levelled with ARDEX X 77.

In permanently wet areas and outdoors, ARDEX sealing compounds must be applied to tiled surfaces as a bonding bridge and sealant.

Tiles are laid with ARDEX X 77 after the primer, bonding coat or levelling compound has dried.

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Mixing

Pour clear water into a clean mixing vessel and mix in enough ARDEX X 77 powder to form a lump-free, smooth, stable mortar.

To improve the smoothness, the mortar should be stirred again before application to the substrate. Approx. 11 litres of water are required to mix 25 kg of ARDEX X 77 powder.

The mortar consistency can be varied according to the type, size and weight of the flooring to be laid.

To produce a special adhesive with high mouldability and water-repellent properties, the ARDEX X 77 powder is mixed with ARDEX E 90 synthetic resin coating diluted 1:2 with water.

The mixing ratio is approx:

- 25,0 kg ARDEX X 77 Power
- 4,5 kg ARDEX E 90
- 9,0 l Water

Application

The ARDEX X 77 mortar is applied to the substrate and combed with a notched trowel to ensure that the tiles or slabs are bonded over the entire surface. The substrate, type, size and backing of the tiles determine the choice of notched trowel. For highly stressed surfaces, it is advisable to use the buttering-floating method to achieve the fullest possible embedding. Rough and uneven substrates can be levelled with ARDEX X 77. Once the smoothing layer has hardened, the floor can be laid.

The laying areas must only be large enough to allow tiles and insulating materials to be easily laid in the pasty, moist mortar bed within the laying time.

Tiles can be corrected up to 30 minutes after laying.

When bonding insulation boards, the mortar is applied to the back of the boards in strips or slabs. If the boards to be bonded do not have open pores, the surface must be mechanically roughened beforehand.

When laying glass and porcelain mosaics that are paper-bonded on the front, the ARDEX X 77 mortar must be applied generously enough to create an installation with an ascending joint when the mosaic is pressed into place. In this case, any necessary re-grouting should also be carried out with ARDEX X 77.

In cases of doubt, test bonding should be carried out. ARDEX X 77 must be applied at temperatures above +5°C. Higher temperatures shorten, lower temperatures extend the time for processing and loading.

Consumption

As an example, when applied on a smooth surface with a 6 × 6 × 6 mm notched trowel, the consumption is approximately 1.6 kg/m².

Note

When attaching tiles to building boards, it must be ensured that they are fixed to the substructure in a torsionally rigid and dimensionally stable manner.

ARDEX sealants must be used for waterproofing measures in accordance with the current version of the applicable standards for building waterproofing and the relevant data sheets.

The products of the ARDEX natural stone system are suitable for laying marble and other natural stones indoors without discolouration.

ARDEX WA epoxy adhesive and grout should be used in spas and thermal baths.

When laying tiles on shrinking substrates, the field sizes must be limited by the arrangement of expansion joints.

Storage & Shelf Life

Unopened and stored in a cool, dry place, the product has a shelf life of 12 months.

Technical Data (ARDEX Quality Standard)

Bulk density	Approx. 1.00 kg/l
Fresh weight	Approx. 1.50 kg/l
Processing time	Approx. 3 hours
Insertion time	Approx. 60 Minutes
Correction time	15 - 30 Minutes
Can be walked on / grouting	Approx. 24 hours
Grouting on the wall	Approx. 8 hours
Water immersion	1.0 - 2.0 MPa
Heating	1.0 - 1.5 MPa
Freeze-thaw	1.0 - 1.5 MPa
According to DIN EN 12004	C2TES1
Underfloor heating	Yes
EMICODE	EC 1 PLUS
Packaging	Bags with 25 kg net

Health & Safety

ARDEX X 77 is considered non-hazardous in normal usage. However, by containing Portland cement, quartz sand and other alkaline reacted materials, skin irritation may be caused for long term contact. Avoid breathing in powder. Avoid contact of skin and eye. Wear appropriate protection gear such as face mask, gloves, and safety glasses. In case of skin and eye contact, wash thoroughly with water, also consult a doctor. For the case of powder breathing in, move to place with good ventilation, wash mouth properly, consult a doctor for any uncomfortable. This product is safe for health and environment.

For further safety & handling information, please consult the Material Safety Data Sheet (MSDS).