

# **ISOMAT AK 18**

# High performance, polymer-modified adhesive for ceramic and natural stone tiles

## Description

ISOMAT AK 18 is a high-quality, cement-based tile adhesive, enhanced with polymers (resins), with no vertical slip and extended open time. Provides high initial and final adhesive strength and resistance to moisture.

Certified according to EN 12004 and classified as C2 TE adhesive. CE marked.

## Fields of application

ISOMAT AK 18 is suitable for fixing both absorbent and non-absorbent wall or floor tiles on various substrates and especially where high adhesion and resistance to moisture are required. Suitable for indoor or outdoor use.

#### Technical data

Form: cementitious mortar

Colors: grey, white

Water demand: 7.50 l/25 kg bag

Application temperature: from +5°C to +35°C

Application thickness: up to 10 mm

Pot life: ≤ 6 h

Open time: ≤ 30 min

Minor adjustments

open time:  $\leq$  30 min Slip:  $\leq$  0.5 mm Grouting on walls: after 3-8 h Grouting on floors: after 24 h

Adhesive strength after:

28 days: ≥ 1.40 N/mm²
heating at +70°C: ≥ 1.00 N/mm²
immersion in water: ≥ 1.00 N/mm²
25 freeze-thaw cycles: ≥ 1.00 N/mm²

Service temperature: from -30°C to +90°C

All measurements were conducted according to EN 12004.

#### **Directions for use**

#### 1. Substrate

The surface to be overlaid must be clean, free of dust, grease, paint, loose materials, etc. Dampening of the substrate before application is recommended.

#### 2. Application

ISOMAT AK 18 is gradually added to water under continuous stirring, until a uniform paste is formed. A low speed mixer is recommended for mixing.

The mixture should be left for about 5 minutes to settle and should be stirred slightly again. The tile adhesive should be spread ("combed") on the substrate using a notched trowel, in order to be uniformly applied on the whole surface. The tiles should be fixed by pressing them to the desired position.

The applied mixture must be covered with tiles within 30 minutes in order to avoid "skin" formation, i.e. before the adhesive film starts to set.

#### Elastification

For tiling on unstable substrates subject to vibrations or expansions and contractions, such as gypsum boards, chipboards, heated floors, terraces, balconies, etc. it is necessary to add 3.75kg of ADIFLEX-B to 25kg of ISOMAT AK 18, plus a certain amount of water depending on the desired workability, so that the tile adhesive becomes more flexible.

#### Consumption

1.5-4.0kg/m<sup>2</sup>, depending on the trowel notch size and the nature of the substrate.

#### **Packaging**

25kg paper bags.

#### Shelf life - Storage

12 months from production date if stored in original, unopened packaging, in a frost-free and dry place.



#### Remarks

- Due to cement content, ISOMAT AK 18 reacts with moisture, forming alkaline solutions, thus is classified as irritant.
- Very porous surfaces, such as aerated concrete, gypsum boards, chipboards, etc. must be primed first with UNI-PRIMER acrylic primer.
- Please consult the safety instructions written on the packaging before use.

#### **ISOMAT AK-18 GREY**

CE

#### ISOMAT S.A.

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EN 12004:2007+A1:2012 DoP No.: ISOMAT AK 18 GREY / 1097-01 NB: 2032

Improved cementitious adhesive with reduced slip and extended open time, for internal and external tiling.

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|------------------------------------------------------|-----------------------|
| Reaction to fire                                     | Class A1              |
| Release of dangerous substances                      | See MSDS              |
| Bond strength, as:                                   |                       |
| - initial tensile adhesion strength                  | ≥ 1 N/mm <sup>2</sup> |
| Durability, for                                      |                       |
| - tensile adhesion strength after heat ageing        | ≥ 1 N/mm²             |
| - tensile adhesion strength after water immersion    | ≥ 1 N/mm <sup>2</sup> |
| - tensile adhesion strength after freeze thaw cycles | ≥ 1 N/mm²             |

#### **ISOMAT AK-18 WHITE**



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EN 12004:2007+A1:2012 DoP No.: ISOMAT AK 18 WHITE / 1098-01 NB: 2032

Improved cementitious adhesive with reduced slip and extended open time, for internal and external tilling.

| external tiling:                                     |                       |
|------------------------------------------------------|-----------------------|
| Reaction to fire                                     | Class A1              |
| Release of dangerous substances                      | See MSDS              |
| Bond strength, as:                                   |                       |
| - initial tensile adhesion strength                  | ≥ 1 N/mm <sup>2</sup> |
| Durability, for                                      |                       |
| - tensile adhesion strength after heat ageing        | ≥ 1 N/mm²             |
| - tensile adhesion strength after water immersion    | ≥ 1 N/mm²             |
| - tensile adhesion strength after freeze thaw cycles | ≥ 1 N/mm²             |

#### ISOMAT S.A.

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