

# ISOMAT AK 20

## High performance, flexible, polymer-modified adhesive for all tile types, even on critical substrates

### Description

ISOMAT AK 20 is a high performance, flexible, polymer-modified, cement-based tile adhesive with extended open time and no vertical slip. Provides high initial and final adhesive strength, moisture resistance and flexibility.

Certified according to EN 12004 and EN 12002 and classified as type C2 TE S1 adhesive. CE marked.

### Fields of application

ISOMAT AK 20 is suitable for fixing absorbent or non-absorbent tiles (e.g. "grès porcellanato"), natural stone, decorative bricks, large-format tiles, etc. on walls or floors on various substrates, especially where high adhesion, flexibility and moisture resistance are required (e.g. old tile layers, heated floors, gypsum boards, etc.). Suitable for indoor and outdoor use.

### Technical data

Form:	cementitious mortar
Colors:	grey, white
Water demand:	7.75 l/25 kg bag
Application temperature:	from +5°C to +35°C
Application thickness:	up to 15 mm
Pot life:	at least 6 h
Open time:	at least 30 min
Minor adjustments open time:	at least 30 min
Slip:	≤ 0.5 mm
Grouting on walls:	after 3-8 h
Grouting on floors:	after 24 h
Adhesive strength after:	
• 28 days:	≥ 1.75 N/mm <sup>2</sup>
• heating at +70°C:	≥ 1.50 N/mm <sup>2</sup>
• immersion in water:	≥ 1.30 N/mm <sup>2</sup>
• 25 freeze-thaw cycles:	≥ 1.50 N/mm <sup>2</sup>

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

Deformability: > 2.5 mm  
(EN 12002)

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 material, etc. Dampening of the substrate before application is recommended.

#### 2. Application

ISOMAT AK 20 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 then slightly stirred 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 pressure-fixed 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 setting.

### Consumption

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

### Packaging

ISOMAT AK 20 is supplied in paper bags of 15 kg and 25 kg and plastic bags of 5 kg.

# ISOMAT AK 20



## Shelf life – Storage

- Paper bags of 25 kg and 15 kg:  
12 months from production date.
- Plastic bags of 5 kg:  
18 months from production date.

All of the above are in effect if the product is stored in original, unopened packaging, in cool and dry conditions.

## Remarks

- Due to cement content, ISOMAT AK 20 reacts with moisture forming alkaline solutions, so 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-20 GREY

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<b>EN 12004:2007+A1:2012</b> <b>DoP No.: ISOMAT AK-20 GREY/1003-01</b> <b>NB: 2032</b>  Improved deformable cementitious adhesive with reduced slip and extended open time, for internal and external tiling.	
<b>Reaction to fire</b>	Class A1
<b>Release of dangerous substances</b>	See MSDS
<b>Bond strength, as:</b>	
- initial tensile adhesion strength	≥ 1 N/mm <sup>2</sup>
<b>Durability, for</b>	
- tensile adhesion strength after heat ageing	≥ 1 N/mm <sup>2</sup>
- tensile adhesion strength after water immersion	≥ 1 N/mm <sup>2</sup>
- tensile adhesion strength after freeze thaw cycles	≥ 1 N/mm <sup>2</sup>

The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the Research and Development Department of our company and on results from long-term applications of the product in practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore the user is responsible for confirming that the chosen product is suitable for the envisaged application. The present edition of this technical datasheet automatically cancels any previous one concerning the same product.



# ISOMAT AK 20



## ISOMAT AK-20 WHITE

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<b>EN 12004:2007+A1:2012</b> <b>DoP No.: ISOMAT AK-20 WHITE/1004-01</b> <b>NB: 2032</b>  Improved deformable cementitious adhesive with reduced slip and extended open time, for internal and external tiling.	
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