

## High performance, polymer-modified tile adhesive

### Description

ISOMAT AK 12 is a high quality, polymer-modified, cement-based tile adhesive. It provides high initial and final adhesive strength and resistance to moisture. It is qualified as absolutely non-slip (zero slipping of the tile) and possesses increased open time. It is classified as type C2 TE adhesive according to EN 12004.

### Fields of application

ISOMAT AK 12 is suitable for fixing granite tiles and generally absorptive or non-absorptive 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:	at least 6 h
Open time:	at least 30 min
Minor adjustments open time:	at least 30 min
Slip:	≤ 0,5 mm
Pointing on walls:	after 3-8 h
Pointing on floors:	after 24 h
Adhesive strength after:	
• 28 days:	≥ 1,40 N/mm <sup>2</sup>
• heating in +70°C:	≥ 1,00 N/mm <sup>2</sup>
• immersion in water:	≥ 1,00 N/mm <sup>2</sup>
• 25 freeze-thaw cycles:	≥ 1,00 N/mm <sup>2</sup>

Temperature resistance: 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 material etc. Dampening of the substrate before application is recommended.

#### 2. Application

ISOMAT AK 12 is gradually added into water under continuous stirring, until a uniform paste is formed. A low revolution mixer is recommended for mixing.

The mixture should be left about 10 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 in 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.

### Elastification

For tiling on unstable substrates subject to vibrations or contraction-expansion effects, such as gypsum boards, chipboards, in-floor heating floors, terraces, balconies etc. it is necessary that the tile adhesive be elastified with the addition of 5-10 kg of ADIFLEX-B to 25 kg of ISOMAT AK 12 plus a quantity of water depending on the desired workability.

# ISOMAT AK 12



## Consumption

1,5-4,0 kg/m<sup>2</sup>, depending on the trowel's notch size and the nature of the substrate.

## Packaging

ISOMAT AK 12 is supplied in paper bags of 25 kg.

## Shelf-life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

## Remarks

- ISOMAT AK 12 contains cement and reacts as alkaline with moisture, so it is classified as irritant.
- Very porous surfaces such as aerated concrete, gypsum boards, chipboards etc. must be primed first with UNI-PRIMER acrylic primer.
- Consult usage risks and safety advice written on the bag.

## ISOMAT AK-12 GREY



### ISOMAT S.A.

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### EN 12004:2007+A1:2012

**DoP No.: ISOMAT AK-12 GREY/1001-01**  
**NB: 2032**

Improved 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 Department of Research and Development 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 12



## ISOMAT AK-12 WHITE

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<b>EN 12004:2007+A1:2012</b> <b>DoP No.: ISOMAT AK-12 WHITE/1002-01</b> <b>NB: 2032</b>  Improved cementitious adhesive with reduced slip and extended open time, for internal and external tiling.	
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