

# ISOMAT AK-23 XXL

**High-performance, quick-setting, extra-flexible, polymer-modified cement-based adhesive for all tile types.**  
**Ideal for large-format tiles**

## Description

ISOMAT AK-23 XXL is a high-performance, quick-setting, extra-flexible, cement-based tile adhesive, enhanced with resins, with no vertical slip and extended open time. Provides high initial and final adhesion strength and resistance to moisture. Certified according to EN 12004 and classified as C2 TE S1 adhesive. CE marked.

## Fields of application

ISOMAT AK-23 XXL is suitable for fixing all types of wall and floor ceramic tiles, including absorbent and non-absorbent tiles, to a variety of substrates. Particularly well-suited for large-format tiles and natural stone tiles (marble, granite). Ideal where fast-track application, high adhesion, extra flexibility and moisture resistance are required (e.g. existing tile layers, heated floors, etc.). For indoor and outdoor use.

## Technical data

Form:	cementitious powder
Color:	white, grey
Water demand:	7.00-7.50 l/25 kg bag
Application temperature:	from +5°C to +35°C
Application thickness:	up to 15 mm
Pot life:	at least 2 - 3 h
Open time:	at least 30 min
Minor adjustments open time:	at least 30 min
Slip: (EN 12004-2: 8.2)	≤ 0.50 mm
Grouting in walls:	after 3 - 8 h
Grouting in floors:	after 6 - 10 h
Bond strength after:	
• 24 hours:	≥ 0.50 N/mm <sup>2</sup>
• 28 days:	≥ 2.00 N/mm <sup>2</sup>
• heating at +70°C:	≥ 2.00 N/mm <sup>2</sup>
• immersion in water:	≥ 1.30 N/mm <sup>2</sup>
• 25 freeze-thaw cycles:	≥ 1.40 N/mm <sup>2</sup>

Deformability: > 2.50 mm  
(EN 12004-2: 8.6)

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

All measurements were conducted according to EN 12004-2.

## Directions for use

### 1. Substrate preparation

The substrate to be overlaid must be clean, free of dust, grease, paint, loose material, etc. It is recommended to dampen the substrate before application.

### 2. Application

ISOMAT AK-23 XXL is slowly added to water under continuous stirring, until a homogeneous paste is formed. A low-speed mixer is recommended for mixing.

The mixture should be left for about 5 minutes to stand and then slightly stirred again. The tile adhesive should be spread ("combed") on the substrate with a notched trowel, in order to be uniformly applied over the entire surface. Tiles or stones should be firmly pressed to the desired position. When fixing large-format tiles, the adhesive should be applied both to the substrate and to the back of each tile ("back-buttering technique").

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

## Consumption

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

A consumption of up to 8 kg/m<sup>2</sup> is possible when fixing large-format tiles.

## Packaging

ISOMAT AK-23 XXL is supplied in 25 kg paper bags.

# ISOMAT AK-23 XXL

---

## Shelf life – Storage


12 months from production date in original, unopened packaging, in dry and frost-free conditions.

## Remarks


- Due to cement content, ISOMAT AK-23 XXL reacts with moisture forming alkaline solutions, thus is classified as irritant.
- Very porous surfaces, such as aerated concrete, gypsum boards, chipboards, etc. must be previously primed with UNI-PRIMER acrylic primer.
- Please consult the directions for safe use and precautions written on the packaging before use.

# ISOMAT AK-23 XXL

## ISOMAT AK-23 XXL WHITE

	
<b>ISOMAT S.A.</b> 17 <sup>th</sup> km Thessaloniki – Ag. Athanasios P.O. BOX 1043, 570 03 Ag Athanasios, Greece 19	
<b>EN 12004:2007+A1:2012</b> <b>DoP No.: ISOMAT AK-23 WHITE/1100-01</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>

## ISOMAT AK-23 XXL GREY

	
<b>ISOMAT S.A.</b> 17 <sup>th</sup> km Thessaloniki – Ag. Athanasios P.O. BOX 1043, 570 03 Ag Athanasios, Greece 19	
<b>EN 12004:2007+A1:2012</b> <b>DoP No.: ISOMAT AK-23 GREY/1099-01</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>

**ISOMAT S.A.**  
 BUILDING CHEMICALS AND MORTARS  
**MAIN OFFICES - FACTORY:**  
 17<sup>th</sup> km Thessaloniki - Ag. Athanasios Road,  
 P.O. BOX 1043, 570 03 Ag. Athanasios, Greece,  
 Tel.: +30 2310 576 000, Fax: 22620 31 644  
[www.isomat.eu](http://www.isomat.eu) e-mail: [support@isomat.eu](mailto:support@isomat.eu)