

ISOMAT AK-18

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

Description

ISOMAT AK-18 is a high-performance, cement-based tile adhesive, enhanced with polymers (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 adhesive. CE marked.

ISOMAT AK-18 has received an Environmental Product Declaration (EPD) following an assessment of its life-cycle environmental impacts. Registration No: S-P-06170, The International EPD® System.

Fields of application

ISOMAT AK-18 is suitable for fixing both absorbent and non-absorbent wall or floor tiles on a variety of 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:	7.25-7.75 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
Wall grouting:	after 3-8 h
Floor grouting:	after 24 h
Adhesion strength after:	
• 28 days:	≥ 1.40 N/mm ²
• heating at +70°C:	≥ 1.00 N/mm ²
• immersion in water:	≥ 1.00 N/mm ²
• 25 freeze-thaw cycles:	≥ 1.00 N/mm ²
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 to stand for about 5 minutes and then stirred again. The tile adhesive should be uniformly applied ("combed") over the entire surface using a notched trowel. The tiles should be firmly pressed to the desired position. The applied mixture must be covered with tiles within 30 minutes to avoid "skin" formation, i.e. before the adhesive film starts to set.

Elastification

When tiling on unstable substrates, such as gypsum boards, chipboards, heated floors, flat roofs, terraces, balconies, etc., where high flexibility or adhesion is required to accommodate movement caused by vibration or expansion and contraction, it is necessary to add up to 3.75 kg of ADIFLEX-B to 25 kg of ISOMAT AK-18, plus a certain amount of water depending on the desired workability.

Consumption

1.5-4.0kg/m², depending on the trowel notch size and the nature of the substrate.

Packaging

25 kg paper bags.

Shelf life – Storage

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




ISOMAT AK-18


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 directions for safe use and precautions written on the packaging before use.

ISOMAT AK-18 GREY

	
ISOMAT S.A. 17 th km Thessaloniki – Ag. Athanasios P.O. BOX 1043, 570 03 Ag Athanasios, Greece 19	
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.	
Reaction to fire	Class A1
Release of dangerous substances	See MSDS
Bond strength, as:	
- initial tensile adhesion strength	≥ 1 N/mm ²
Durability, for	
- tensile adhesion strength after heat ageing	≥ 1 N/mm ²
- tensile adhesion strength after water immersion	≥ 1 N/mm ²
- tensile adhesion strength after freeze thaw cycles	≥ 1 N/mm ²

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

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