Technical Datasheet

ISOMAT AK-ELASTIC

High-performance, two-component elastic tile adhesive

Description

ISOMAT AK-ELASTIC is a two-component elastic tile adhesive. It consists of a cement-based powder mortar (component A) and a resin emulsion (component B). It provides high initial and final adhesive strength, exceptional elasticity, moisture resistance and extended open time. Formulated with specially selected aggregates and additives, it ensures outstanding workability and ease of application. Furthermore, its advanced formulation allows for thicker adhesive beds that remain stable during tile installation, making it ideal when dealing with uneven substrates.
Certified according to EN 12004 and classified as type C2 E S2 adhesive. CE marked.

Fields of application

ISOMAT AK-ELASTIC is suitable for fixing ceramic or natural stone tiles on walls or floors, on vibrating or dimensionally unstable substrates like gypsum board, chipboard, floors with underfloor heating, flat roofs, terraces, balconies, swimming pools, etc. It is also suitable for fixing large-format tiles and new tiles over old tile layers.
Combined with the two-component brushable waterproofing slurries AQUAMAT-FLEX and AQUAMAT-ELASTIC, a perfect waterproofing-tiling system ideal for highly demanding applications is obtained.
Suitable for indoor or outdoor use.

Technical data

	Component A	Component B
Base:	cementitious powder	water dispersion of acrylic polymer
Color:	white	white
Mixing ratio:	2.5 parts by weight	1 part by weight

Combined product

Application temperature:	from +5ºC to +35ºC
Application thickness:	up to 10 mm
Pot life:	at least 8 h
Open time:	at least 30 min
Minor adjustments open time:	at least 30 min
Grouting on walls:	after 6-12 h
Grouting on floors:	after 24-48 h
Adhesive strength after:	
• 28 days:	≥ 3.00 N/mm^2
• heating in +70ºC:	≥ 3.00 N/mm^2
• immersion in water:	≥ 1.50 N/mm^2
• 25 freeze-thaw cycles:	≥ 1.70 N/mm^2
Temperature resistance:	from -30ºC to +90ºC
Deformation ability according to EN 12002:	> 5 mm

All measurements were conducted according to EN 12004-2.

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
The 25 kg bag (component A) is added to the 10 kg of liquid (component B) under continuous stirring until a homogenous paste is formed. A low-speed mixer is recommended for mixing.
The mixture should be left to stand for about 10 min and then stirred again for a bit.
The tile adhesive should be spread and “combed” uniformly over the entire surface using a notched trowel. Tiles should be then firmly pressed to the desired position.
The spread mixture should be covered with tiles within 30 min to avoid skin formation, i.e. before the adhesive film starts setting.

Consumption

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

Packaging

Combined 35 kg packaging:
(25 kg cement-based powder mortar bag + 10 kg emulsion resin plastic container).

ISOMAT AK-ELASTIC

Storage

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

Component B:
12 months from production date if stored in original, unopened packaging, in temperature between +5ºC and +35ºC. Protect from direct sunlight and frost.

Remarks

- Component A of ISOMAT AK-ELASTIC 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.
- In case ISOMAT AK-ELASTIC is used for the adhesion of non-absorbent tiles on non-absorbent substrates, the setting time of the adhesive might be prolonged.
- Please consult the safety instructions written on the packaging before use.

CE

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Improved highly deformable cementitious adhesive with extended open time, for internal and external tiling.

Reaction to fire	Class E
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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