Technical Datasheet

ISOMAT AK-LIGHT

Light-weight, flexible tile adhesive

Description

ISOMAT AK-LIGHT is a high quality, light weight polymer-modified, cement-based tile adhesive. Due to its light weight, the tile fixing is much more easy and the required quantity is reduced compared to an adhesive with regular aggregates. It provides high initial and final adhesive strength, resistance to moisture and elasticity. It is qualified as absolutely non-slip (zero slipping of the tile) and possesses increased 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.
It is classified as type C2 TE S1 adhesive according to EN 12004.

Fields of application

ISOMAT AK-LIGHT is suitable for fixing absorptive or non-absorptive tiles (e.g. “gres porcelanato”), natural stone, decorative bricks, large tiles, glass mosaic tiles etc. on walls or floors on various substrates, especially where particularly high adhesion, elasticity and moisture resistance are required (e.g. old tile layers, floors with in-floor heating, metallic surfaces, swimming pools, gypsum boards etc.). Suitable for indoor or outdoor use.

Technical data

Form:	cementitious mortar
Color:	white
Water demand:	8,10 l/18 kg bag
Application temperature:	from +5^{0}C to +35^{0}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
Pointing on walls:	after 3-8 h
Pointing on floors:	after 24 h

Adhesive strength after:	
• 28 days:	≥ 1,90 N/mm^2
• heating in +70ºC:	≥ 1,90 N/mm^2
• immersion in water:	≥ 1,30 N/mm^2
• 25 freeze-thaw cycles:	≥ 1,40 N/mm^2
Temperature resistance:	from -30^{0}C to +90^{0}C
Deformation ability according to EN 12002:	> 2,5 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
ISOMAT AK-LIGHT 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 5 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.

Consumption

1,0-3,0 kg/m^2, depending on the trowel’s notch size and the nature of the substrate.

Packaging

ISOMAT AK-LIGHT is supplied in paper bags of 18 kg.

Shelf-life - Storage

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

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Remarks

- ISOMAT AK-LIGHT 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.

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EN 12004:2007+A1:2012
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NB: 2032

Improved deformable cementitious adhesive with reduced slip and 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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