Technical Datasheet

ISOMAT AK-RAPID FLEX

High-performance, fast-setting, flexible, polymer-modified, cement-based tile and natural stone adhesive

Description

ISOMAT AK-RAPID FLEX is a high-performance, fast-setting, polymer-modified, cement-based tile adhesive with no vertical slip. Provides high initial and final adhesion strength, moisture resistance and flexibility.
Thanks to its high crystalline water-binding capacity, it is ideal for fixing stain-sensitive natural stone tiles, e.g. marble, granite, etc., since it prevents stain damage. 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 FT S1 adhesive. CE marked.
ISOMAT AK-RAPID FLEX has received an Environmental Product Declaration (EPD) following an assessment of its life-cycle environmental impacts. Registration No: EPD-IES-0006170, The International EPD® System.

Fields of application

ISOMAT AK-RAPID FLEX is suitable for fixing absorbent or non-absorbent wall and floor tiles to a variety of surfaces, including concrete, brickwork, plaster, etc., especially where high adhesion, flexibility and moisture resistance are required. Ideal in cases where fast return-to-service is required, e.g. in renovation projects of shops, shopping centers, etc.
Well-suited for fixing of stain-sensitive natural stone tiles, e.g. marble, granite, etc., as well as of large-format ceramic tiles to walls and floors. For interior and exterior use.

Technical data

Form:	cementitious mortar
Colors:	grey, white
Water demand:	6.75-7.25 l/25 kg bag
Application temperature:	from +5ºC to +35ºC
Application thickness:	up to 15 mm
Pot life:	at least 60 min
Open time:	at least 15 min
Minor adjustments open time:	at least 10 min
Slip:	≤ 0.5 mm
Grouting on walls:	after 1-2 h
Grouting on floors:	after 2-3 h
Adhesion strength after:	
• 6 hours:	≥ 0.60 N/mm^2
• 28 days:	≥ 1.80 N/mm^2
• heating at +70ºC:	≥ 2.00 N/mm^2
• immersion in water:	≥ 1.20 N/mm^2
• 25 freeze-thaw cycles:	≥ 1.30 N/mm^2
Deformability: (EN 12004-2)	> 2.5 mm
Temperature resistance:	from -30ºC to +90ºC.

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-RAPID FLEX is gradually added to water under continuous stirring, until a uniform paste is formed. The mixture is left to stand for about 3 minutes and is then stirred again. A low-speed mixer is recommended for mixing.
The tile adhesive is spread (“combed”) on the substrate using a notched trowel, in order to be uniformly applied over the entire surface. The tiles are then firmly pressed to the desired position.
The applied mixture must be covered with tiles within 10 minutes to avoid “skin” formation, i.e. before the adhesive film starts setting.

Consumption

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

ISOMAT AK-RAPID FLEX

Packaging

ISOMAT AK-RAPID FLEX is supplied in paper bags of 25 kg.

Shelf life – Storage

6 months from production date if the product is stored in its original, unopened packaging, in places protected from moisture and frost.

Remarks

- Due to cement content, ISOMAT AK-RAPID FLEX reacts with water forming alkaline solutions and thus is classified as irritant.
- Very porous surfaces, such as aerated concrete, gypsum boards, chipboards, etc. must be previously primed with UNI-PRIMER or FLEX-PRIMER.
- For highly absorbent and stain-sensitive marble or granite, please consult ISOMAT Technical Support Department. It is also advised that you test a small area before applying to the entire surface.
- When fixing light-colored and translucent natural stone, the use of white ISOMAT AK-RAPID FLEX is recommended. In this case, the adhesive should be applied both to the substrate and to the back of each tile ("back-buttering").
- Please consult the directions for safe use and precautions written on the packaging before use.

ISOMAT AK-RAPID FLEX GREY

CE

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EN 12004:2007+A1:2012
DoP No.: ISOMAT AK-RAPID FLEX GREY/ 1050-02
NB: 2032

Improved, deformable, fast setting, cementitious adhesive with reduced slip, for internal and external tiling.

Reaction to fire	Class E
Release of dangerous substances	See MSDS
Bond strength, as:	
- Early tensile adhesion strength	≥ 0.5 N/mm^2
- 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

The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the Research and Development Department 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. | Edition: 10.07.2026

ISOMAT AK-RAPID FLEX

ISOMAT AK-RAPID FLEX WHITE

CE
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EN 12004:2007+A1:2012 **DoP No.: ISOMAT AK-RAPID FLEX WHITE/ 1051-02** **NB: 2032** Improved, deformable, fast setting, cementitious adhesive with reduced slip, for internal and external tiling.

Reaction to fire	Class E
Release of dangerous substances	See MSDS
Bond strength, as:	
- Early tensile adhesion strength	≥ 0.5 N/mm^2
- initial tensile adhesion strength	≥ 1 N/mm^2
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- tensile adhesion strength after heat ageing	≥ 1 N/mm^2
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