

ISOMAT AK-T35

Fiber-reinforced adhesive for thermal insulation boards

Description

ISOMAT AK-T35 is a fiber-reinforced, cement-based adhesive, enriched with polymers (resins), with extended open time and no vertical slip. Provides high initial and final adhesive strength, flexibility and resistance to moisture.

Fields of application

ISOMAT AK-T35 is used in combination with MARMOCRET PLUS and MARMOCRYL renders as a building external thermal insulation system.

Suitable for fixing thermal insulation boards of extruded or expanded polystyrene, mineral wool, polyurethane, etc., on building facades made of concrete, render, or masonry. Moreover, when reinforced with fiberglass mesh and applied on the exterior side of fixed polystyrene thermal insulation boards, it constitutes the ideal substrate for the subsequent render layer.

Technical data

Form:	cementitious mortar
Color:	white, grey
Water demand:	6.00 l/25 kg bag
Bulk density of dry mortar:	1.50 ± 0.10 kg/l
Bulk density of fresh mortar:	1.65 ± 0.10 kg/l
Application temperature:	from +5°C to +35°C
Pot life:	at least 6 h

ISOMAT AK-T35 (white)

Adhesive strength to concrete:	≥ 1.00 N/mm ²
Adhesive strength to expanded polystyrene:	≥ 0.08 N/mm ²
Compressive strength:	≥ 10.00 N/mm ²

Flexural strength:	≥ 3.50 N/mm ²
Capillary water absorption:	≤ 0.2 kg/m ² min ^{0.5}
Thermal conductivity (λ _{10, dry}):	0.45 W/mK
Water vapor permeability coefficient (μ):	15

ISOMAT AK-T35 (grey)

Adhesive strength to concrete:	≥ 1.00 N/mm ²
Adhesive strength to expanded polystyrene:	≥ 0.08 N/mm ²
Compressive strength:	≥ 10.00 N/mm ²
Flexural strength:	≥ 3.50 N/mm ²
Capillary water absorption:	≤ 0.2 kg/m ² min ^{0.5}
Thermal conductivity (λ _{10, dry}):	0.45 W/mK
Water vapor permeability coefficient (μ):	15

Directions for use

1. Substrate preparation

The surface to be covered with boards should be free of dust, grease, loose particles, paints, etc. It is recommended to dampen it before application.

2. Application

As an adhesive:

ISOMAT AK-T35 is gradually 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 to settle for about 5 minutes before it is slightly stirred again.

On smooth substrates, the adhesive is spread on the thermal insulation board and combed with a notched trowel in order to be uniformly applied on the whole surface.

ISOMAT AK-T35



On uneven substrates, the adhesive is applied with a trowel around the perimeter of the thermal insulation board and to selected spots in the center.

Then, the thermal insulation boards are fixed by pressing to the desired position.

As a reinforced mortar:

Initially, the material is applied with a notched trowel at a maximum thickness of 3 mm. The fiberglass mesh is placed on the still fresh layer and pressed with a smooth trowel to get fully embedded in the adhesive. Finally, the surface is smoothed out and the excess adhesive is removed.

Consumption

As an adhesive: 3.0-4.0 kg/m², depending on the trowel notch size and the nature of the substrate.

As a reinforced mortar: approx. 1.5 kg/m²/mm.

Packaging

ISOMAT AK-T35 is supplied in 25 kg paper bags.

Storage

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

Remarks

- Due to cement content, ISOMAT AK-T35 reacts with water 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 safety instructions written on the packaging before use.



ISOMAT S.A.

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EN 998-1

**General purpose rendering mortar (GP)
for external use**

DoP No.: ISOMAT AK-T35 GREY/ 1243-04

Reaction to fire: Class A1

Adhesion: 1.0 N/mm² – **FP:** A

Water absorption: W2

Water vapor diffusion coeff.: μ 15

Thermal conductivity: ($\lambda_{10, dry}$) 0.45 W/mK

Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar

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.



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**General purpose rendering mortar (GP)
for external use**

DoP No.: ISOMAT AK-T35 WHITE/ 1244-03

Reaction to fire: Class A1

Adhesion: 1.0 N/mm² – **FP:** A

Water absorption: W2

Water vapor diffusion coeff.: μ 15

Thermal conductivity: ($\lambda_{10,dry}$) 0.45 W/mK

Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar

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BUILDING CHEMICALS AND MORTARS

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