

## Fibre-reinforced adhesive for thermo-insulation boards

### Description

ISOMAT AK-T55 is a fibre-reinforced cement-based adhesive, enriched with polymers (resins). It provides high initial and final adhesive strength, elasticity and resistance to moisture.

It is classified as a GP CS IV W2 rendering mortar according to EN 998-1 and as a C2 adhesive according to EN 12004.

### Fields of application

ISOMAT AK-T55 is used in combination with MARMOCRET PLUS and MARMOCRYL renders as a system for creating external thermo-insulated facades.

It is suitable for fixing thermo-insulation boards of extruded or expanded polystyrene, mineral wool, polyurethane, cork, etc. on facades made of concrete, render, or masonry.

Moreover, when reinforced with fibreglass mesh and applied on the exterior side of fixed thermo-insulation boards, it constitutes the ideal substrate for the subsequent render layer.

### Technical data

Form:	cementitious mortar
Color:	white
Water demand:	5,50 l/25 kg bag
Bulk density of dry mortar:	1,50 ± 0,10 kg/l
Bulk density of fresh mortar:	1,60 ± 0,10 kg/l
Application temperature:	from +5°C to +35°C
Pot life:	at least 4 h
Compressive strength:	12,00 ± 1,00 N/mm <sup>2</sup>
Flexural strength:	5,50 ± 0,50 N/mm <sup>2</sup>

Adhesion on concrete (28 days):	≥ 1,30 N/mm <sup>2</sup>
Adhesion on XPS (28 days):	≥ 0,15 N/mm <sup>2</sup>
Adhesion on EPS (28 days):	≥ 0,10 N/mm <sup>2</sup> (EPS failure)
Capillary water absorption:	≤ 0,2 kg/m <sup>2</sup> min <sup>0,5</sup>
Thermal conductivity (λ <sub>10,dry</sub> ):	0,45 W/mK
Water vapour permeability coefficient (μ):	5/20

### Directions for use

#### 1. Substrate

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

#### 2. Application

##### As adhesive:

ISOMAT AK-T55 is gradually added into water under continuous stirring until a homogeneous paste is formed. A low revolution mixer is recommended for mixing. The mixture should be left for about 10 minutes to rest and then should be re-stirred a bit.

On smooth substrates the adhesive is spread on the surface and combed using a notched trowel in order to be uniformly applied on the whole of the surface.

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

Next, the thermo-insulation boards are fixed by pressing them on the desired position.

# ISOMAT AK-T55



## As reinforced mortar:

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

### Consumption

As adhesive: 3,0-4,0 kg/m<sup>2</sup>, depending on the trowel's notch size and the nature of the substrate.

As reinforced mortar: approx. 1,5 kg/m<sup>2</sup>/mm.

### Packaging

ISOMAT AK-T55 is supplied in paper bags of 25 kg.

### Shelf-life - Storage

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

### Remarks

- ISOMAT AK-T55 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 the acrylic primer UNI-PRIMER.
- Consult usage risks and safety advice written on the bag.



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### EN 998-1

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

**Reaction to fire:** Class A1

**Adhesion:** 1,3 N/mm<sup>2</sup> – FP: A

**Water absorption:** W2

**Water vapour diffusion coeff.:**  $\mu$  5/20


**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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<b>EN 12004</b>  Improved, cementitious adhesive for tiling

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