

# KABE THERM EPS

A complete building insulation system based on polystyrene with external silicone render **ARMASIL T** ♦

## Main advantages:

- A complete systematic solution with European Technical Approval (ETA);
- High protection of outside walls against the unfavourable effects of atmospheric conditions and against the sprouting of algae and fungi;
- High resistance of the facade to staining with the “self-cleaning” effect of the facade;
- Ensures the appropriate thermal insulating power of walls;
- Improves the microclimate inside of the building;
- Limits the costs of heating the building.
- Easy to install.

## Purpose:

A complete set of products for the insulation of buildings based on EPS class perforated polystyrene panels and the Armasil T render. Meant for the insulation of outside walls of residences for one or more families and public and industrial buildings up to a height of 25 m (for buildings erected before April 1995, up to a height of the eleventh story inclusively). Used for insulation of buildings that are under construction as well as for the thermo-renovation of existing buildings. It is especially recommended for use on surfaces requiring a high resistance to dirt and to the effects of atmospheric conditions. The surface layer of the system is the **ARMASIL T** silicone render, available in a wide range of colours and grain sizes. After wetting the render on its surface, the effect of repulsion of water molecules is created by the silicone resin. This effect effectively protects the facade against the influence of atmospheric precipitation and reduces the deposition of pollutants. The system can be used on all typical mineral surfaces (such as concrete, cement or cement-calceiferous render, sandstone, as well as on unfinished walls made from bricks, blocks, hollow bricks, and other such ceramic or sand-calceiferous materials) as well as on surfaces coated with an adherent coat of facade paint or a thin-coat render.

## Technical data:

**Type of thermal insulation layer:** Austrotherm EPS 042 FASSADA, Austrotherm EPS 040 FASSADA, Austrotherm EPS 038 FASSADA SUPER, Austrotherm EPS 038 FASSADA PREMIUM polystyrene sheets;

**Thickness of thermal insulation layer:** from 50 mm to 200 mm inclusively;

**Method of affixation of thermal insulation:** fixing or fixing with mechanical fixation;

**Application of mechanical fasteners:** optional (specified in the technical design);

**Reinforcing material:** a glass fibre mesh with a basis weight of 145 or 160 g/m<sup>2</sup>;

**Fire safety class:** system not propagating flames (NPF);

**Colours:** natural white or colours according to the KABE or NCS templates, or according to a supplied template (possible to obtain using non-organic pigments);

**Textures:** full;

**Grain sizes:** 1.5 mm; 2.0 mm; 2.5 mm; 3.0 mm;

**Adhesion:**

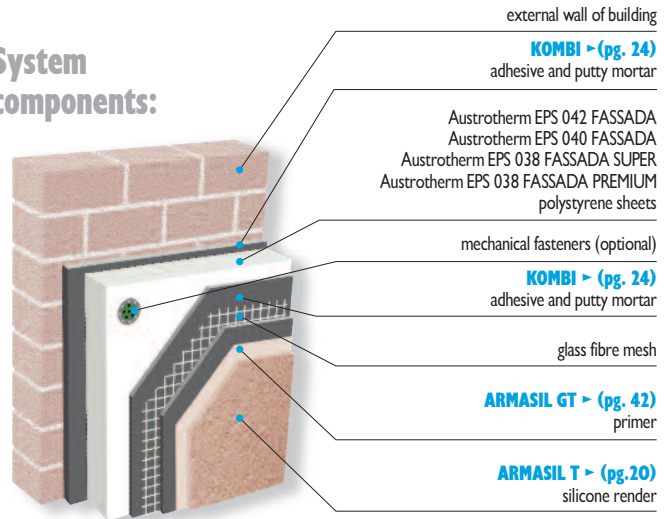
- to concrete  $\geq 0.25$  MPa;
- to polystyrene  $\geq 0.08$  MPa;

**Adhesion of the external layer:**  $\geq 0.08$  MPa;

**Coefficient of absorbability of the surface of the external layer:**  $< 0.5$  kg/m<sup>2</sup>;

**Relative diffusive resistance of the external layer:**  $< 2.0$  m;

## System components:



Layers	Product name and description	Average consumption
Adhesive layer	<b>KOMBI</b> > (pg. 24) adhesive and putty mortar - for fixing of polystyrene insulating panels to the base	about 4.0 kg/m <sup>2</sup>
Thermal insulation layer	Austrotherm <b>EPS 042 FASSADA</b> Austrotherm <b>EPS 040 FASSADA</b> Austrotherm <b>EPS 038 FASSADA SUPER</b> Austrotherm <b>EPS 038 FASSADA PREMIUM</b> polystyrene sheets	1.0÷1.10 m <sup>2</sup> /m <sup>2</sup> of insulation
	<b>Mechanical fasteners (optional)</b> - pins for affixing the thermal insulation layer to the base	type, amount, and placement according to the technical design
Reinforced layer	<b>KOMBI</b> > (pg. 24) adhesive and putty mortar - for the application of the reinforced layer of insulation	about 4.0 kg/m <sup>2</sup>
	<b>glass fibre mesh</b> - anti-alkaline impregnated mesh, with its entire surface immersed in the mortar	1.10 m <sup>2</sup> /m <sup>2</sup> of insulation
Finishing layer	<b>ARMASIL GT</b> > (pg. 42) primer under the silicone render - preparation improving adhesion and limiting base absorbability	0.2 kg/m <sup>2</sup>
	<b>Silicone render made from the ARMASIL T</b> > (pg. 20) render - protective and decorative layer, protecting the system against the unfavourable effects of atmospheric conditions and physical damage;	grain size 1.5 mm — 2.3 kg/m <sup>2</sup> grain size 2.0 mm — 3.0 kg/m <sup>2</sup> grain size 2.5 mm — 3.7 kg/m <sup>2</sup> grain size 3.0 mm — 4.5 kg/m <sup>2</sup>

**Note:** Due to excessive facade heating for dark colours, we do not recommend using colours with a low coefficient of light reflection ( $Y < 20\%$ ).

♦ The manufacturer grants a guarantee only in the case of application of the complete system in accordance with the “Guarantee card for insulation systems”



ETA 09/0042

European Technical Approval

