

KABE THERM EPS with KLIMA perforated polystyrene

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

Main advantages:

- A complete system solution based on polystyrene;
- Effectively protects against the effects of unfavourable atmospheric conditions;
- High resistance of the facade to staining with a "self-cleaning" effect of the facade;
- Ensures accelerated drying of walls and prevents harmful condensation of moisture inside the partition;
- Improves the microclimate inside of the building;
- Ensures the appropriate thermal insulating power of walls;
- Limits the costs of heating the building;
- Is easy to install.

Purpose:

The **KABE THERM EPS** with silicone external render **ARMASIL T** system serves to insulate the outside walls of buildings with **KLIMA** perforated polystyrene panels using the technology of the jointless insulating system (JIS). It is used in residences for one or more families, and public and industrial buildings, in existing structures as well as in those under construction up to a height of 25 m (for buildings constructed before April 1995, up to a height of the eleventh story inclusively). The **KABE THERM EPS** with silicone external render **ARMASIL T** system with **KLIMA** perforated polystyrene panels and the **ARMASIL T** silicone render, besides the appropriate thermal insulating power, also ensures unique diffusive properties. The lowered diffusive resistance coefficient of the perforated panel ($\mu = 10!$) makes it possible for a wall to dry uniformly over its entire cross-section. This allows for a significant shortening of the drying period of the walls (this period is comparable to when mineral wool is used) and quicker commissioning of the building for use. There is also a possibility for the thermal renovation of moist walls (without salt efflorescence) and insulation of walls made from materials with a low diffusive resistance (that is, cellular concrete, porous ceramics, or slag concrete). Thanks to the use of silicone render with a "self-cleaning" effect, this system works excellently on facades requiring a high resistance to staining.

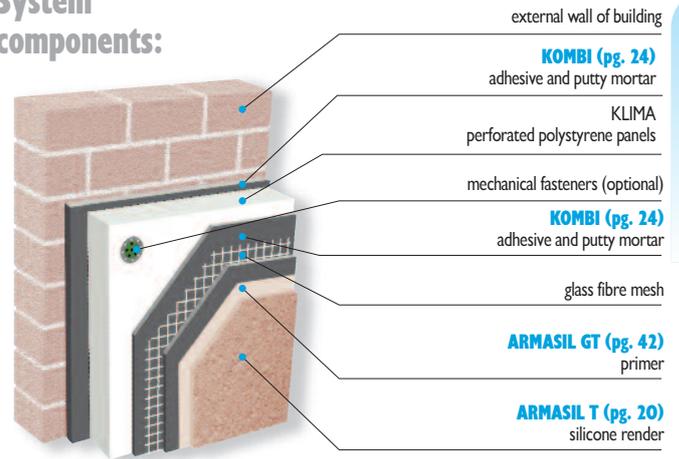
Technical data:

Type of thermal insulation layer: KLIMA perforated polystyrene panels
Thickness of thermal insulation layer: 60, 80, 100, 120, 140 mm;
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/m²;
Fire safety class: system not propagating flames (NPF);
Colours: natural white or colours according to the the KABE or NCS template, 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 ≥ 0.25 MPa;
- to polystyrene ≥ 0.08 MPa;

Adhesion of the external layer: ≥ 0.08 MPa;
Coefficient of absorbability of the surface of the external layer: < 0.5 kg/m²;
Relative diffusive resistance of the external layer: < 2.0 m.

System components:



Type of layer	Product name and description	Average consumption
Adhesive layer	KOMBI (pg. 24) adhesive and putty mortar - for fixing of polystyrene insulating panels to the base	about 4.0 kg/m ²
Thermal insulation layer	KLIMA perforated polystyrene panels - thermal insulation panels made from seasoned polystyrene	1.0 ÷ 1.10 m ² /m ² of insulation
	Mechanical fasteners (optional) - pins for affixing the thermal insulation layer to the base	type, amount and placement according to the technical design
Reinforced layer	KOMBI (pg. 24) adhesive and putty mortar - for application of the reinforced layer of insulation	about 4.0 kg/m ²
	Glass fibre mesh - anti-alkaline impregnated mesh, with its entire surface immersed in the mortar	1.10 m ² /m ² of insulation
Finishing layer	ARMASIL GT (pg. 42) primer under the silicone render - preparation improving adhesion and limiting base absorbability	0.2 kg/m ²
	Silicone render made from ARMASIL T (pg. 20) - 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 ² grain size 2.0 mm — 3.0 kg/m ² grain size 2.5 mm — 3.7 kg/m ² grain size 3.0 mm — 4.5 kg/m ²

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"



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European Technical Approval

