

KABE THERM EPS with KLIMA perforated polystyrene

Building insulation system based on perforated polystyrene with external polysilicate render **NOVALIT T**♦

Main advantages:

- Allows moisture to escape freely;
- Prevents condensation of water vapour inside the partition;
- Guarantees a cosy and healthy climate inside the residence;
- Allows for the accelerated drying of walls;
- Contains low-alkaline polysilicate render;
- Ensures the appropriate thermal insulating power of walls;
- Limits the costs of heating the building;
- Includes perfectly matched system elements.

Purpose:

The **KABE THERM EPS** with polysilicate external render **NOVALIT T** system serves to insulate the outside walls of buildings with KLIMA perforated polystyrene 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 polysilicate external render **NOVALIT T** system with KLIMA perforated Styrofoam panels and the **NOVALIT T** polysilicate 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 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 its simple installation technology and long-term durability, it creates aesthetic facades with a high resistance to the effects of unfavourable atmospheric conditions. The finishing layer for the system is the low-alkaline polysilicate **NOVALIT T** (pg. 19) render, available in a wide range of colours and textures.

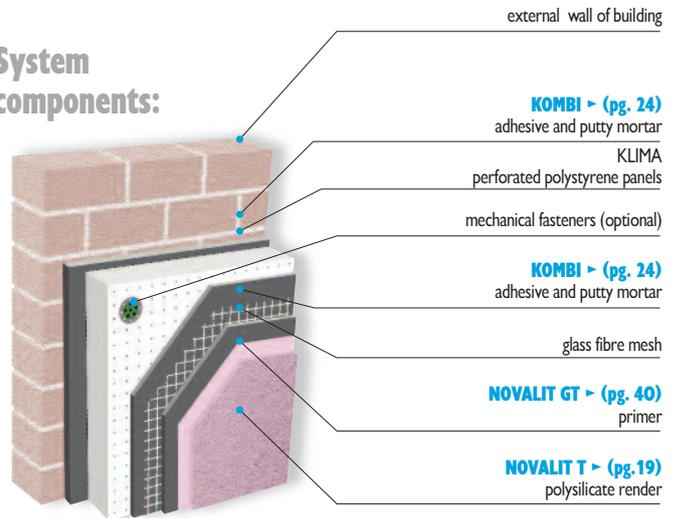
Technical data:

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 165 g/m²;
Fire safety class: system not propagating flames (NPF);
Colours: natural white or colours from the KABE template as well as selected colours from the NSC template or according to a supplied template (possible to obtain using non-organic pigments);
Textures: full, brushed/mixed;
Grain sizes: 1.5 mm; 2.0 mm; 2.5 mm; 3.0 mm;
Adhesion:

- to concrete ≥ 0.3 MPa;
- to polystyrene ≥ 0.1 MPa;

Interlayer adhesion: ≥ 0.1 MPa;
Water absorbability (after 24h): ≤ 1000 g/m²;
Resistance to impact: ≥ 1 J.

System components:



Type of layer	Product name and description	Average consumption
Adhesive layer	KOMBI > (pg. 24) adhesive and putty mortar - for the 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 the application of the reinforced layer	about 4.0 kg/m ²
	glass fibre mesh - anti-alkaline impregnated mesh, with its entire surface immersed in the KOMBI > (pg. 24) mortar	1.10 m ² /m ² of insulation
Finishing layer	NOVALIT GT > (pg. 40) primer - preparation improving adhesion and limiting base absorbability	about 0.20 l/m ²
	NOVALIT T > (pg. 19) polysilicate render - protective and decorative layer, protecting the system against the unfavourable effects of atmospheric conditions and physical damage; texture and colour to be selected	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

