

# KABE THERM EPS

Building insulation system based on polystyrene with external acrylic render **PERMURO AVANT** ♦

## Main advantages:

- Reduces building heating costs;
- Improves the interior microclimate;
- Attractive façade finish;
- Protects the walls from the effects of unfavourable atmospheric conditions;
- Prevents the growth of algae and fungi;
- High resistance of the outer coat to micro-cracks and mechanical damages;
- Broad range of colours and acrylic render textures.

## Purpose:

The **KABE THERM EPS** with external acrylic render **PERMURO AVANT** insulation system is the most popular system for the insulation of exterior walls of buildings. It is used in residential constructions 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). Due to the easy technology of installation and low costs of realisation, it is used most often during the thermo-modernisation of buildings made using out-dated energy consuming technologies (not fulfilling the valid requirements for thermal insulating power). The system can be used on all typical mineral surfaces (such as: concrete, cement or cement-lime render, sandstone, as well as on raw surfaces made of bricks, blocks, hollow bricks, and other ceramic or lime-sandstone materials of this type) as well as on bases coated with an adherent coat of facade paint or thin-coat render. The finishing layer for the system is the **PERMURO AVANT** > (pg. 15) acrylic render, available in a wide range of colours and textures.

## 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 to 300 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 165g/m<sup>2</sup>;

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

**Colours:** natural white and colours according to the KABE, NCS templates or a supplied template;

**Textures:** full;

**Grain sizes:** 1,5 mm; 2,0 mm – PERMURO AVANT;

**Adhesion:**

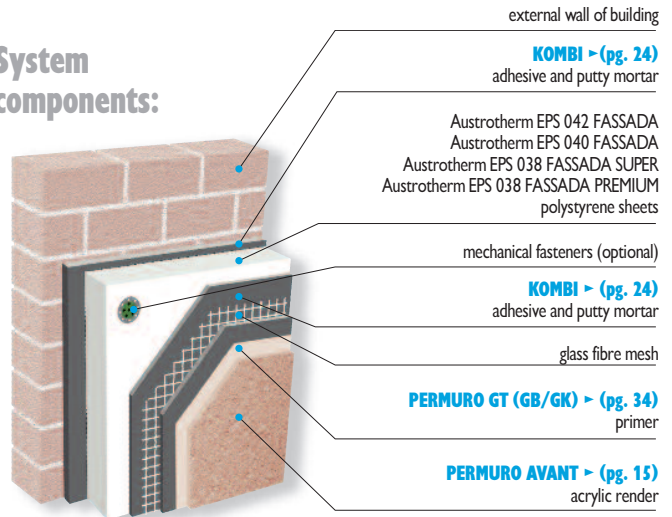
- to concrete ≥ 0.3 MPa;
- to polystyrene ≥ 0.1 MPa;

**Interlayer adhesion:** ≥ 0.1 MPa;

**Water absorbability (after 24h):** ≤ 1000 g/m<sup>2</sup>;

**Resistance to impact:** ≥ 3 J.

## System components:



Type of layer	Product name and description	Average consumption
Adhesive layer	<b>KOMBI &gt; (pg. 24) adhesive and putty mortar</b> - for the fixing polystyrene	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 &gt; (pg. 24) adhesive and putty mortar</b> - for the application of the reinforced layer	about 4.0 kg/m <sup>2</sup>
	<b>Glass fibre mesh</b> - anti-alkaline impregnated mesh, with its entire surface embedded in the <b>KOMBI &gt; (pg. 24) mortar</b>	1.10 m <sup>2</sup> /m <sup>2</sup> of insulation
Finishing layer	<b>Primer PERMURO GT (GB/GK) &gt; (pg. 34) primer</b> - preparation improving adhesion and limiting surface absorbability	about 0.20 l/m <sup>2</sup>
	<b>Acrylic render finish PERMURO AVANT &gt; (pg. 15)</b> - protective and decorative layer, protecting the system against the unfavourable effects of atmospheric conditions and physical damage; render colour and texture to be selected	grain size 1.5 mm — 2.4 kg/m <sup>2</sup> - full grain size 2.0 mm — 3.0 kg/m <sup>2</sup> - full

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

♦ 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

