

EPS-BASED

KABE THERM AVANT



External wall insulation (EWI) system with silicone, silicate-silicone and acrylic external render and decorative coatings with a smooth texture

MAIN ADVANTAGES

- Reduction of building heating costs
- Improved microclimate inside the building
- Attractive decorative effects and high aesthetics of the façade
- Wall protection against adverse weather conditions
- Protection against the growth of algae and fungi
- Optional use of façade paints available in a wide range of colours

TECHNICAL DATA

Type of thermal insulation: EPS boards with the following code: EPS-EN 13163-T(1)-L(2)-W(2)-S(5)-P(5)-BS75-DS(N)2-DS(70,-)2-TR80

Thickness of thermal insulation: from 5 to 30 cm inclusively;

Thermal insulation fixing: entirely or partially adhesive-bonded system with additional mechanical fixing or mechanical fixing with additional bonding;

Use of mechanical fixings: as specified in technical design;

Reinforcing mesh: system reinforcing fibreglass mesh;

Fire classification: non-fire spreading system (NRO);

Colours: natural white and colours according to KABE and NCS colour charts or a sample provided;

Textures: solid;

Grain size: 1.5 mm; 2.0 mm;

Adhesion:

- to concrete ≥ 0.25 MPa;
- to EPS ≥ 0.08 MPa;

Adhesion after surface layer ageing:

Water absorption (after 24 hours): ≥ 0.08 MPa;

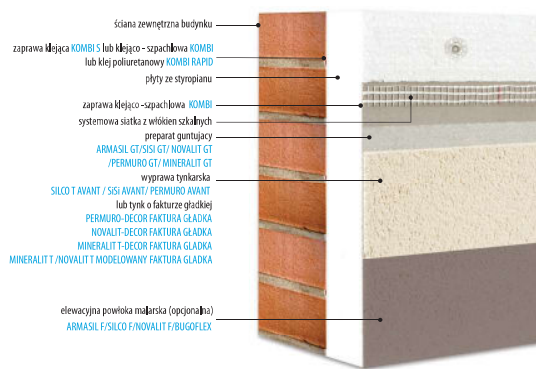
Impact resistance for the system with PERMURO AVANT acrylic render: < 0.5 kg/m²;

• other systems cat. II

cat. III

Reaction to fire: B-s1,d0

SYSTEM CONSTRUCTION



AREAS OF APPLICATION

The **KABE THERM AVANT** EWI system is an EPS-based thermal insulation system for external walls. It is applied in single- and multi-family housing construction industry, public utility and industrial buildings – in both the existing and new constructions – to the height of up to 25 m (for the buildings erected before 1 April 1995 to the height of eleventh story, inclusive). It is especially recommended for projects, where costs and a smooth decorative texture are important. The system can be used on walls made of masonry components (e.g., bricks, blocks, stone, etc.) or concrete (poured on site or in the form of prefabricated slabs). The system can be used on new walls, as well as for renovation of the existing ones. It is also possible to use it on horizontal or inclined surfaces, that are not exposed to precipitation. The external system layer can be made using **SILCO T AVANT** structural silicone render, **SISI AVANT** structural silicate-silicone render or **PERMURO AVANT** acrylic render, available in a wide range of colours. In addition, it is possible to make a top coat with a smooth texture in the system with **PERMURO-DECOR SMOOTH TEXTURE**, **NOVALIT T-DECOR SMOOTH TEXTURE**, **MINERALIT T-DECOR SMOOTH TEXTURE** and **MINERALIT T / NOVALIT T MODELLED-DECOR SMOOTH TEXTURE**.

Layer type	Name and description of the product	Average coverage
ADHESIVE LAYER	KOMBI S adhesive or KOMBI adhesive/base coat or KOMBI RAPID polyurethane adhesive	approx. 4.0 kg/m ² approx. 1/6 pack/m ²
THERMAL INSULATION	White or graphite EPS boards with the code EPS-EN 13163-T(1)-L(2)-W(2)-S(5)-P(5)-BS75-DS(N)2-DS(70,-)2-TR80 – cured EPS thermal insulation boards	1.0-1.10 m ² /m ²
	Mechanical fixings – pins for fixing thermal insulation to the substrate	Type, quantity and layout as per technical design
REINFORCING LAYER	KOMBI adhesive/base coat – for applying reinforcing layer	approx. 4.0 kg/m ²
	System fibreglass mesh: KABE 145, KABE 150 / KABE AVANT 150, KABE 160, KABE 165 / KABE AVANT 165 – anti-alkali impregnated mesh, completely immersed in KOMBI base coat	1.10 m ² /m ² of thermal insulation
FINISH COAT (RENDER OR DECORATIVE EFFECT)	Primer ARMASIL GT, SISI GT, NOVALIT GT, PERMURO GT, MINERALIT GT – a product that improves adhesion and limits the substrate water absorberency	approx. 0.20 l/m ²
	External coat of render: SILCO T AVANT, SISI AVANT, PERMURO AVANT – protective and decorative layer protecting against adverse weather conditions and mechanical damage; render colour to choose	grain size 1.5 mm – 2.4-2.5* kg/m ² grain size 2.0 mm – 3.0 kg/m ²
	External render with smooth texture: PERMURO-DECOR SMOOTH TEXTURE, NOVALIT T-DECOR SMOOTH TEXTURE, MINERALIT T-DECOR SMOOTH TEXTURE, MINERALIT T / NOVALIT T MODELLED-DECOR SMOOTH TEXTURE	from 4.3 to 4.5 kg/m ² *
	Façade paint coating (optional): ARMASIL F, SILCO F, NOVALIT F, BUGOFLEX – a protective and decorative layer protecting against adverse weather conditions and giving an attractive colour	from 0.36 l/m ² (when applied twice, depending on the thickness of the render grain)

* Depending on the render type

Note: Due to the excessive heating of dark-coloured façades, it is not recommended to use colours featuring a low light reflection coefficient (Y < 20%). The manufacturer grants a warranty only when a complete EWI system is used (all components) in accordance with the "Guarantee card for EWI systems".