

EPS-BASED

KABE THERM ELASTO



External wall insulation (EWI) system for buildings with increased impact resistance with silicone and acrylic external render and attractive decorative effects

MAIN ADVANTAGES

- Reduction of building heating costs
- Improved microclimate inside the building
- Increased impact resistance (class I)
- 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

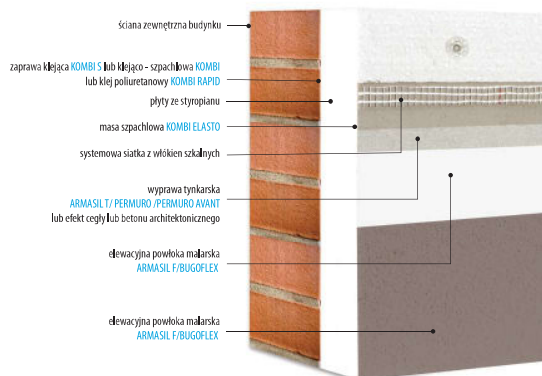
TECHNICAL DATA

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: uniform white and colours according to KABE and NCS colour charts or a sample provided (for ARMASIL T render only in colours that can be obtained using inorganic pigments);
Textures: solid / scraped / mixed (for PERMURO AVANT and ARMASIL T renders only solid texture);
Grain size: 1.5 mm; 2.0 mm; 2.5 mm; 3.0 mm (PERMURO AVANT render available only with 1.5 mm and 2.0 mm grains);

AREAS OF APPLICATION

The **KABE THERM ELASTO** is an EPS-based system of external wall thermal insulation for buildings with high resistance to mechanical damage (impact resistance). 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). Especially recommended in places requiring increased impact resistance and attractive decorative effects. The system can be used on walls made of masonry components (bricks, blocks, stone, etc.) or concrete (poured on site or in the form of prefabricated slabs). 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 **ARMASIL T** structural silicone render or **PERMURO, PERMURO AVANT** acrylic renders, available in a wide range of colours and textures. In addition, in this system, it's possible to perform decorative effects of brick and architectural concrete.

SYSTEM CONSTRUCTION



- Adhesion:**
- to concrete ≥ 0.25 MPa;
 - to EPS ≥ 0.08 MPa;
- Adhesion after ageing, surface layer:** ≥ 0.08 MPa;
- Water absorption (after 24 hours):** < 0.5 kg/m²;
- Impact resistance for the system with silicone and acrylic render:**
- single layer of KABE 165 or KABE 175 mesh (except for the PERMURO AVANT system) cat. I
 - double mesh layer (except for the PERMURO system) cat. I
 - single layer of PERMURO DECOR and ARMASIL T DECOR mesh cat. I
 - single layer of KABE 145 mesh cat. II

Layer type	Name and description of the product	Average coverage
ADHESIVE LAYER	KOMBI 5 adhesive or KOMBI adhesive/base coat or KOMBI RAPID polyurethane adhesive	approx. 4.0 kg/m ² or 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	Dispersion, cementless KOMBI ELASTO base coat – for applying reinforcing layer	approx. 4.0 kg/m ²
	System fibreglass mesh: KABE 145, KABE 150, KABE 160, KABE 165 – anti-alkali impregnated mesh, with the whole surface embedded in the KOMBI ELASTO coat	1.10 m ² /m ² of thermal insulation
FINISH COAT (RENDER OR DECORATIVE EFFECT)	External coat of render: ARMASIL T, PERMURO, PERMURO AVANT – protective and decorative layer protecting against adverse weather conditions and mechanical damage; render texture and colour to choose	grain size 1.5 mm – 2.3-2.4* 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
	Façade paint coating (optional): ARMASIL F, BUGOFLEX – protective and decorative layer protecting against adverse weather conditions and giving an attractive colour	from 0.36 l/m ² (when applied twice)
	Brick effect: ARMASIL T-DECOR BRICK or PERMURO-DECOR BRICK – ARMASIL T or PERMURO modelled render – LAZUR Z/W lazure paint (optional ageing effect)	approx. 2.0 kg/m ² approx. 0.10 l/m ²
	Architectural concrete effect: ARMASIL T-DECOR ARCHITECTURAL CONCRETE or PERMURO-DECOR ARCHITECTURAL CONCRETE – ARMASIL T or PERMURO modelled render – ARMASIL F or AKRYLATEX undercoat – LAZUR Z/W lazure paint	approx. 2.0 kg/m ² approx. 0.13 l/m ² approx. 0.10 l/m ²

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".

Note: If mechanical fixings with discs embedded in EPS are used, all EPS caps should be installed in the hole (glued) using KOMBI RAPID polyurethane adhesive. Failure to follow this recommendation may result in local bulging in the places, where fixings and the unglued EPS caps are used.

* Depending on the render type and texture