

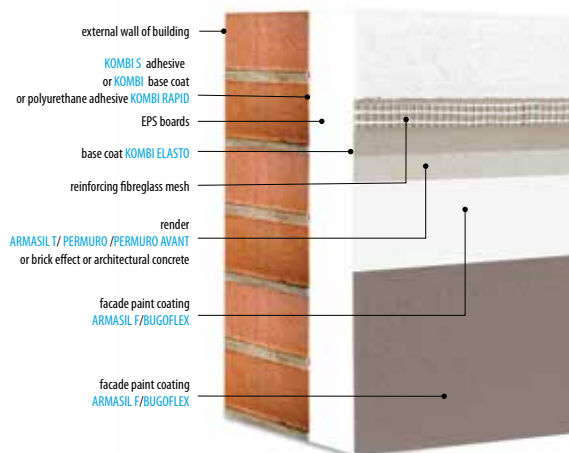
### EPS BASED

# KABE THERM ELASTO



EWI system for buildings with increased impact strength with silicone and acrylic external render and attractive decorative effects

### SYSTEM CONSTRUCTION



### MAIN ADVANTAGES

- Reduction of heating costs
- Interior micro-climate improvement
- Increased impact resistance (class I)
- Attractive decorative effects and high aesthetics of the facade
- Protection of walls against the impact of adverse atmospheric conditions
- Anti-fungal and algae protection
- Option to use facade paints available in a wide range of colours

### TECHNICAL SPECIFICATION

**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:** bonding or bonding and mechanical fixing;

**Use of mechanical fixings:** optional (as specified in technical design and technical approval);

**Reinforcing mesh:** reinforcing fibreglass mesh;

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

**Colours:** natural white and colours according to KABE chart, NCS or a sample provided (for ARMASIL T render only in colours that can be obtained by using non-organic pigments);

**Textures:** solid/ scraped/mixed texture (PERMURO AVANT and ARMASIL T renders only solid/grained texture);

**Grain size:** 1.5 mm; 2.0 mm; 2.5 mm; 3.0 mm (for PERMURO AVANT render only grain size of 1.5 mm and 2.0 mm);

#### Adhesion:

• to concrete  $\geq 0.25$  MPa;

• to EPS  $\geq 0.08$  MPa;

#### Adhesion after ageing, top layer

$\geq 0.08$  MPa;

#### Water absorption (after 24 hours):

$< 0.5$  kg/m<sup>2</sup>;

#### Impact resistance for the system with silicone and acrylic renders:

- single layer of KABE 165 or KABE 175 mesh (except for the system with PERMURO AVANT) cat. I
- double mesh layer (except for the PERMURO system) cat. I
- single layer of mesh PERMURO DECOR and ARMASIL T DECOR cat. I
- single layer of KABE 145 mesh cat. II

### AREAS OF APPLICATIONS

KABE THERM ELASTO EWI system is a system of insulating external walls of buildings based on EPS with high resistance to mechanical damage (impact resistance). It is applied in single- and multi-family housing construction industry, public utility and industrial buildings, both in new build and existing (retrofit) building walls to the height of up to 25 m (for the buildings erected before 1 April 1995 to the height of eleventh story inclusively). Especially recommended in places requiring increased impact resistance and attractive decorative effects. The system can be applied on walls made of masonry elements (such as e.g.: bricks, blocks, stone etc.) or from concrete (poured on site or in the form of prefabricated panels). 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 by using structural ARMASIL T 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.

Layer type	Name and description of the product	Average coverage
ADHESIVE LAYER	KOMBI S adhesive, KOMBI base coat or KOMBI RAPID polyurethane adhesive	ca. 4.0 kg/m <sup>2</sup> or ca. 1/6 pack/m <sup>2</sup>
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 <sup>2</sup> /m <sup>2</sup>
	Mechanical fixings (optionally) – pins for fixing thermal insulation to the substrate	Type, quantity and layout as per technical plan
REINFORCING COAT	Dispersion, cementless base coat KOMBI ELASTO – for applying reinforcing layer	ca. 4.0 kg/m <sup>2</sup>
	Reinforcing fibreglass mesh: KABE 145, KABE 150, KABE 160, KABE 165 – anti-alkali impregnated mesh, the whole surface embedded in the KOMBI ELASTO mass	1.10 m <sup>2</sup> /m <sup>2</sup> of thermal insulation
FINISH COAT (RENDER OR DECORATIVE EFFECT)	External coat of render: ARMASIL T, PERMURO, PERMURO AVANT – protective and decorative layer that protects the system against adverse weather conditions and mechanical damage; texture and colour of the render to be chosen	grain size 1.5 mm – 2.3–2.4kg/m <sup>2</sup> * grain size 2.0 mm – 3.0 kg/m <sup>2</sup> grain size 2.5 mm – 3.7 kg/m <sup>2</sup> grain size 3.0 mm – 4.5 kg/m <sup>2</sup>
	ARMASIL F, BUGOFLEX facade paint coating (optional) – protective and decorative layer protecting against adverse weather conditions and giving an attractive colour	from 0.36 l/m <sup>2</sup> (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)	ca. 2.0 kg/m <sup>2</sup> ca. 0.10 l/m <sup>2</sup>
	The effect of architectural concrete: ARMASIL T - DECOR ARCHITECTURAL CONCRETE or PERMURO - DECOR ARCHITECTURAL CONCRETE – ARMASIL T or PERMURO modelled render – ARMASIL F or AKRYLATEX undercoat paint – LAZUR Z / W lazure paint	ca. 2.0 kg/m <sup>2</sup> ca. 0.13 l/m <sup>2</sup> ca. 0.10 l/m <sup>2</sup>

\* Depending on the render type

Note: Due to the excessive heating of dark-coloured facades, it is not recommended to use colours featuring a low light reflection coefficient (Y<20%).

The manufacturer provides a guarantee only when used with a complete EWI system (all components) in accordance with the "Guarantee card for EWI systems".