

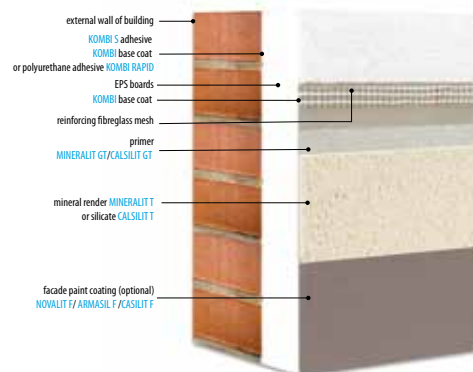
### EPS BASED

# KABE THERM SM and KABE THERM SM RENO



EWI (External Wall Insulation) system for providing thermal insulation and additional thermal insulation of buildings with mineral and silicate external render (with optional paint coating)

### SYSTEM CONSTRUCTION



### MAIN ADVANTAGES

- Reduction of heating costs
- Interior micro-climate improvement
- High aesthetics of facade
- Protection of walls against the impact of adverse atmospheric conditions
- Mineral character of the top coat
- Natural anti-fungal and algae protection
- Option to use facade paints tinted with long-life non-organic pigments

### TECHNICAL SPECIFICATION

**Type of thermal insulation:** EPS boards with the following codes: EPS-EN 13163-T1-L2-W2-SS-P5-B575-DS(N)2-DS(70,-)2-TR100;  
**Thickness of thermal insulation:** from 2 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);  
**Mineral render colours:** white or base (intended for painting);  
**Silicate render colours:** natural white and colours from KABE colour chart or selected ones from NCS chart;  
**Textures:** solid/grained, scraped;

**Grain size:** 1.5 mm; 2.0 mm; 2.5 mm; 3.0 mm; (grain size 2.5 mm only CALSILIT T render)  
**Adhesion:**  
 • to concrete  $\geq 0.25$  MPa;  
 • to EPS  $\geq 0.08$  MPa;  
**Interlayer adhesion:**  $\geq 0.08$  MPa;  
**Water absorbcency for the mineral render system (after 24 h):**  $\leq 0.5$  kg/m<sup>2</sup>;  
**Water absorbcency for the silicate render system (after 24 h):**  $\leq 0.6$  kg/m<sup>2</sup>;  
**Impact resistance with mineral render:** cat. III  
**Impact resistance with silicate render:** cat. II

### AREAS OF APPLICATIONS

KABE THERM SM and KABE THERM SM RENO system is used to provide external wall thermal insulation and additional external wall thermal insulation in existing EPS based systems for residential buildings, both single and multi-family, public utility and industrial buildings, up to the height of 25 m (for buildings erected before 1 April 1995 up to the height of 11th story inclusively). It is intended for providing thermal insulation to both newly built and existing buildings. The system is especially recommended on buildings requiring a mineral or silicate coat render. The system can be applied on all typical mineral substrates (such as e.g.: concrete, cement render, cement-lime render, sandstone and on raw walls made of bricks, blocks, concrete blocks and other ceramic or silicate materials of that type) as well as on substrates covered by well adhering facade paint or thin-coat render. The finish coat of the system is MINERALIT T mineral thin top coat or CALSILIT T silicate thin top coat that can be covered with ARMASIL F, NOVALIT F or CALSILIT F facade paint, available in a wide range of colours.

Layer type	Name and description of the product	Average coverage
ADHESIVE LAYER	<b>KOMBI S adhesive, KOMBI base coat or KOMBI RAPID polyurethane adhesive</b> – for fixing EPS insulation boards to the substrate	ca: 4.0 kg/m <sup>2</sup> ** ca: 1/6 pack/m <sup>2</sup>
THERMAL INSULATION	<b>White or graphite EPS boards with the EPS-EN 13163-T1-L2-W2-SS-P5-B575-DS(N)2-DS(70,-)2-TR100 code</b> – cured EPS thermal insulation boards	1.0÷1.10 m <sup>2</sup> /m <sup>2</sup> of thermal insulation
	<b>Mechanical fixings (optionally)</b> – pins for fixing thermal insulation to the substrate	Type, quantity and layout as per technical plan
REINFORCING COAT	<b>KOMBI base coat</b> – for applying reinforcing layer	ca. 4.0 kg/m <sup>2</sup>
	<b>KABE 145, KABE 150, KABE 160, KABE 165 reinforcing fibreglass mesh</b> – anti-alkali impregnated mesh, completely immersed in <b>KOMBI</b>	1.10 m <sup>2</sup> /m <sup>2</sup> of thermal insulation
FINISH COAT	<b>MINERALIT GT or CALSILIT GT primer</b> – a product that improves adhesion and limits the substrate water absorbcency	ca 0.20 l/m <sup>2</sup> ca 0.23 l/m <sup>2</sup>
	<b>MINERALIT T refined mineral top coat/mortar or CALSILIT T silicate render</b> – high diffusion coating which protects the system against external factors and assures an attractive texture to the facade	grain size 1.5 mm – 2.3÷2.5kg/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>
	<b>NOVALIT F / ARMASIL F / CALSILIT F facade paint coating</b> – an optional protective-decorative layer used to protect the system against inclement atmospheric factors and providing the facade with an attractive colour.	from 0.36 l/m <sup>2</sup> (when applied twice)

\* When installing an additional thermal insulation to the system of thermal insulation with the outer top coat, the total thickness of existing and newly made thermal insulation cannot exceed 30 cm.

If the mortar is removed along with the reinforcing coat, the total thickness of thermal insulation cannot exceed 25 cm.

\*\* If additional thermal insulation is added to the existing thermal insulation system, the average coverage of KOMBI base coat is 4.50 kg/m<sup>2</sup>.

\*\*\* Depending on the render type and texture.

\*\*\*\* Granulation available only for CALSILIT T render.

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".