FOR EPS

KOMBI S

EPS adhesive

MAIN ADVANTAGES

- High resistance to shrinking cracks
- Optimal impact resistance
- Very good vapour permeability
- High adhesion to the substrate and EPS
- Easy to apply
- Economical application
- Contains microfibres and polypropylene fibres

AREAS OF APPLICATIONS

Mineral adhesive intended for fixing insulation expanded EPS boards to the substrate in **KABE THERM RENO***, **KABE THERM SM** and **KABE THERM SM RENO**, **KABE THERM ELASTO**, **KABE THERM AVANT**, **KABE THERM MARMURIT**/**MOZAIKER**, **KABE THERM MARMURIT COLORATO** / **MOZAIKER COLORATO**, **KABE THERM CK*** EWI systems. To be applied on all typical mineral substrates (such as concrete, cellular concrete, cement render, cement-lime render, sandstone and other raw surfaces made of bricks, blocks, concrete blocks and other types of ceramic or silicate materials) as well as on substrates covered with well-adhering coating of facade paint or thin-coat render. (after prior inspection of cured product adhesion to the substrate) **KOMBI S** adhesive may be used as part of the external thermal insulation composite system (ETICS). Note: Reinforcing coat made of fibreglass to be performed by using **KOMBI** base coat. If **KABE THERM RENO** or **KABE THERM SM** and **KABE THERM SM RENO** system is installed on the wall with an existing EWI system, we recommend using **KOMBI** base coat to fix EPS boards.

TECHNICAL SPECIFICATION

Base binder: hydraulic and polymer binders with the addition of modifiers;
Bulk density: ca. 1.3÷1.5 g/cm^3;
Mixing ratio: ca. 6.0 l of water per 25 kg of adhesive;
After adding water the product must be used within: approx. 2 hours;
Open drying time: ≥30 minutes;
Colour: light grey;
Consumption: ca. 4.0 kg/m^2;

Temperature of application (air and substrate): from +5°C to +25°C;
Packaging: Disposable paper packaging containing 25 kg of product.
Storage: The product should be stored in its original sealed packaging, in a dry frost-protected room.
Note: The product must be kept out of the reach of children.
Shelf life: Originally sealed products have a 12-month shelf life from the date of production (this is printed on the side of the packaging).

APPLICATION METHOD

SUBSTRATE PREPARATION: Apply to a sound/stable and clean substrate (without cracks and delaminations), degreased, even and dry, and free of biological contamination or chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then wash with water and disinfect with **ALGIZID**. The substrate must be protected against capillary action, moisture intake and precipitation. Any loose layers not bound to the substrate (i.e. loose render or flaked coatings) should be removed. Old and/or dirty substrates should be washed off and degreased with water and **CLEANFORCE** cleaning agent. If any substrate unevenness exceeds 1 cm, use a levelling compound first. Absorbent substrates should be primed with **BUDOGRUNT ZG** before levelling compound application. Before fixing EPS boards to uncertain substrates, it is necessary to perform an adhesion test. The test involves fixing a few (8-10) EPS samples of 10 x 10 cm dimensions in various places of the facade and then tearing them off after 3 days. The substrate load-bearing capacity is sufficient when the tearing happens in the EPS layer. If the whole sample including adhesive and substrate layer is torn off, then it is necessary to remove the poorly bound layer from the substrate and prime it with **BUDOGRUNT ZG**. When the primer dries, the adhesion test must be performed again. If the test gives a negative result, it is necessary to consider additional mechanical fixing or special substrate preparation.
PRODUCT PREPARATION: Gradually pour the contents of the packaging into a container with a measured amount of clean and cold water (approx. 6 liters) while continuously mixing the mass (with a low-speed mixer fitted with a basket stirrer) until homogeneous mixture is obtained. After waiting for 5 minutes and remixing, the adhesive is ready for use. After adding water, the adhesive must be used up within approx. 2 hours (at an ambient temperature of +20°C).
FIXING OF EPS BOARDS: Notch trowel method may be used to fix EPS to even substrates. Put some adhesive on the slab with trowel and using the edge of it, rub evenly all over to create a thin coat. While being rub, the adhesive should be pressed to the surface of the slab. Subsequently, an additional amount of adhesive should be rub on the slab by using a notched trowel (minimum notch size: 10 x 10 mm). Once the adhesive is applied, the slab must be immediately put onto the wall in its appropriate place and pressed to flush it with the neighbouring boards. Boards must be tightly fitted next to each other using staggered method. Excess adhesive coming out from EPS board joints must be removed so that no adhesive is left on the slab edges. Properly applied adhesive should cover the whole slab surface, and its thickness after attaching the slab should not exceed 1 cm. After allowing sufficient time to cure (at least 48 hours), the boards should be fixed by means of applicable mechanical fixings pursuant to the thermal insulation project. In order to get an even surface of all the fitted boards, the whole surface of the EPS board should be sanded with a suitable thick gauge of sandpaper. When fixing EPS boards on uneven substrates, the adhesive should be applied on boards by means of the ribbon and dab method. The ribbon should be 3÷6 cm wide, and should be applied onto the perimeter of the slab. In addition, 6 to 8 dabs of adhesive (approx. 10÷12 cm diameter) should be evenly placed on the remaining part of the slab. The ribbon must be formed in a prism shape. To do so, rub it with a trowel set at an angle of 45° towards the slab surface. Once the adhesive is applied, the slab must be immediately put onto the wall in its appropriate place and pressed to flush it with the neighbouring boards. Boards must be tightly fitted next to each other using staggered method. Excess adhesive coming out from EPS board joints must be removed so that no adhesive is left along the slab edges. Properly applied adhesive must cover not less than 40% of the slab surface, and the adhesive layer thickness should not exceed 1 cm. After sufficient curing time (at least 48 hours), the boards should be fixed by means of applicable mechanical fixings pursuant to the thermal insulation project. In order to get an even surface of all the fitted boards, the whole surface of the EPS board should be sanded with a suitable thick gauge of sandpaper.
DRYING: It is assumed that the adhesive initial setting period is min. 3 days (typical drying conditions 20°C, 65% RH). Note: Low temperature and high relative humidity essentially prolong adhesive drying time. For the purposes of performing reinforcing coat it is necessary to apply **KOMBI** base coat.
USEFUL HINTS: To be applied on dry days at temperatures between 5-25°C. Avoid working on surfaces directly exposed to sun and in strong winds. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing (PPE) must be worn while carrying out any installation work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.

* if a product of EWI system is used, the manufacturer provides a guarantee only when all **KABE THERM RENO, KABE THERM SM AND KABE THERM SM RENO, KABE THERM ELASTO, KABE THERM AVANT, KABE THERM MARMURIT/MOZAIKER, KABE THERM MARMURIT COLORATO / MOZAIKER COLORATO, KABE THERM CK** system components are applied.

National Technical Assessment: AT-15-8732/2016
European Technical Assessment: ETA 17/0203 and ETA 17/0204, ETA 18/0211
National Technical Assessment: ICiMB-KOT-2018/0051 edition 1, ICiMB-KOT-2018/0039 edition 1, ICiMB-KOT-2018/0050 edition1,