FOR EPS

KOMBI WHITE

White mineral
adhesive/base coat

MAIN ADVANTAGES

- Plastic, easy-to-process white cement-based adhesive
- High resistance to shrinking cracks
- Optimum impact resistance
- No run-off from a vertical surface
- High adhesion to substrate and thermal insulation materials (mineral wool, EPS)
- Universal use (for fixing and making a mesh-reinforced layer)
- Contains microfibres and polypropylene fibres
- For use with white and grey EPS**

AREAS OF APPLICATION

White mineral adhesive intended for bonding EPS and mineral wool boards to the substrate and creating a layer reinforced with fibreglass mesh in **KABE THERM WHITE** EWI systems. It 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). The **KOMBI WHITE** adhesive/base coat can be used in the technology of external thermal insulation composite system – ETICS. Note: Before applying the render, the reinforced layer must be primed with an appropriate primer (for the specific render).

TECHNICAL DATA

Base binder: hydraulic binders with polymer and mineral modifiers added;
Bulk density: approx. 1.5 to 1.6 g/cm^3;
Mixing ratio: approx. 5.0 l of water per 25 kg of mortar;
After adding water, the product must be used within: approx. 2 hours;
Open drying time: ≥ 20 min.
Colour: white;
Consumption:

- as adhesive for EPS boards — approx. 4,0 kg/m^2;
- as adhesive for façade and dual-density mineral wool boards — approx. 5.0 kg/m^2;
- as adhesive for lamella mineral wool boards — approx. 5.5 kg/m^2;
- for making a reinforced coat on EPS boards — approx. 4.0 kg/m^2;
- for making a reinforced coat on mineral wool boards — approx. 5.0 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: Product should be stored in original sealed packaging, in a dry room, protected from moisture and frost.
Note: The product must be kept out of the reach of children.
Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate for fixing thermal insulation boards should be sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination or chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. The substrate must be protected against capillary moisture intake and precipitation water. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. If any substrate unevenness exceeds 1 cm, first use a levelling compound. Absorbent substrates should be primed with **BUDOGRUNT ZG** before applying a levelling compound. Drying time for the product applied on the substrate in optimum weather conditions is approx. 3 hours (at +20°C and at a relative air humidity of 55%). Before fixing thermal insulation boards on unstable substrates, an adhesion test should be performed. The test involves fixing a few (8-10) EPS board samples (with 10 x 10 cm dimensions) in various places of the façade and then tearing them off after 3 days. The substrate load-bearing capacity is sufficient when tearing happens within 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 is dry, repeat the adhesion test. If the repeated test also gives a negative result it is necessary to consider additional mechanical fixing or a special substrate preparation. Note: Before applying a thin layer of **KOMBI WHITE** render, prime the mineral substrate with **BUDOGRUNT ZG** diluted 1:1 with water and protect with meshes to prevent excessively rapid vaporizing of make-up water and burning the render.
PRODUCT PREPARATION: Gradually pour the entire packaging contents into a container with a pre-measured amount of cool water (approx. 5.0 litres), stirring constantly (with a low-speed mixer/drill with a stirrer), until a homogeneous, lump-free mixture is obtained. After leaving it for 5 minutes and remixing, the mortar is ready to use. After adding water, mortar must be used up within approx. 2 hours (at an ambient temperature of +20°C).
FIXING THERMAL INSULATION BOARDS: On even surfaces, thermal insulation boards can be fixed using the layer-to-layer gluing method. If mineral wool boards are used, the boards should be first smoothed out with **KOMBI WHITE** adhesive/base coat in the places of applying adhesive. To do this, apply some adhesive/base coat onto a board with a trowel and, using the edge, spread it evenly all over to apply a thin coat. During this operation, the mortar should be pressed against the board surface with a trowel. Then apply an additional portion of mortar onto the board and spread it with a notched trowel edge (with a minimum tooth dimension of 10 x 10 mm). Once the mortar is applied, put the board immediately onto the wall in the target position and press firmly to flush it with neighbouring boards. Boards must be tightly fitted next to each other using the staggered method. Remove the excess of squeezed mortar, so as not to leave any remains on board edges. Properly applied mortar should cover the whole board surface, and its thickness after fixing should not exceed 1 cm. After allowing a sufficient time to set (at least 48 hours), the boards can be fixed by means of adequate mechanical fixings, as intended by the thermal insulation system design. In order to obtain an even surface of all the boards installed, the whole front surface of the EPS board should be sanded using a trowel covered with suitable coarse sandpaper.
When fixing thermal insulation boards on uneven substrates, the adhesive/base coat should be applied on boards using the ribbon and dab method. If mineral wool boards are used, the boards should be first smoothed out with **KOMBI WHITE** adhesive/base coat in the places of applying adhesive. To properly fix the boards, the ribbon should be 3-6 cm wide, and should be applied onto the board perimeter. In addition, 3 to 6 dabs of mortar (approx. 10-15 cm in diameter) should be evenly placed on the remaining surface of the board. The ribbons applied on the board perimeter must be formed in a prism shape. To do so, spread it with a trowel positioned at a 45° angle towards the board surface. Once the mortar is applied, put the board immediately onto the wall in the target position and press firmly to flush it with neighbouring boards. Fit the boards tightly next to each other using the staggered method. Remove the excess of squeezed mortar, so as not to leave any remains on the board perimeter. Correctly applied mortar should cover min. 40% of board surface area, while the mortar thickness after fixing should not exceed 1 cm. After allowing a sufficient time to set (at least 48 hours), the boards can be fixed by means of adequate mechanical fixings, as intended by the thermal insulation system design. In order to obtain an even surface of all the boards installed, the whole front surface of the EPS board should be sanded using a trowel covered with suitable coarse sandpaper.
APPLYING THE REINFORCED LAYER: If mineral wool boards are used, the entire outer surface of the thermal insulation layer should be smoothed out with **KOMBI WHITE** adhesive/base coat before applying the reinforced layer. First, the edges of window and door openings should be reinforced by fixing to their corners diagonally (i.e., at a 45° angle) fibreglass mesh (with the dimensions 25 x 30 cm) using the **KOMBI WHITE** adhesive/base coat. The reinforced layer can be applied on even, cleaned (previously sanded) surfaces of EPS boards, not earlier than 3 days from the date of board installation. Apply a continuous and even layer of the adhesive/base coat onto the substrate (with the thickness of approx. 3-4 mm), covering the whole width of the reinforcing mesh. Spread the coat layer with a notched trowel and immediately embed the fibreglass reinforcing mesh into it. The reinforcing mesh should be evenly stretched and completely immersed in the coat. After embedding the mesh, the entire layer surface should be carefully smoothed by trowelling / felt trowelling, using an additional portion of render, if necessary. The neighbouring mesh stripes must be glued with an overlap of at least 10 cm. The thickness of the reinforced layer with one layer of mesh on EPS boards should be from 3 to 5 mm, and on mineral wool boards from 4 to 5 mm.
DRYING: The drying time for the reinforced layer is min. 3 days (drying at +20°C and at a relative air humidity of 65%). After this period, you can apply a primer and once its curing is completed, a render. Note: At low temperatures and high air humidity, the render drying time may be longer.
USEFUL HINTS: In order to avoid cracks and unevenness, it is necessary to complete a single application to any architectural element in one working cycle. The adhesive/base coat should be applied and dried on dry days at temperatures between +5°C and +25°C. Wash tools with water immediately after finishing work. Avoid working on surfaces directly exposed to sunlight, as well as in strong winds and at high air humidity. In order to protect the undried reinforced layer against severe weather conditions, it is recommended to use appropriate protective meshes or tarpaulins on scaffolds. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.

* if the product is used in an EWI system, the manufacturer provides a warranty only when all components of **KABE THERM WHITE** system are used.
** EPS boards used in the EWI system should meet the technical requirements specified in the European Technical Assessment No. ETA-20/0027.