

LIGHT-WEIGHT MINERAL

KOMBI MTL

Light-weight mineral render



MAIN ADVANTAGES

- High adhesion to substrates with high water absorption and to porous substrates
- Easy to process
- Reduced substrate surface absorption
- Extended processing time
- Reinforced with microfibres
- Very good plasticity and processability

AREAS OF APPLICATION

Light-weight mineral render based on hydraulic binders and selected aggregates (including light aggregates), intended for manual or machine application of render base coats outside and inside buildings. It is especially recommended for applying on walls made of porous materials (such as aerated concrete) and absorbent ones (such as silicate brick) and intended for EWI systems, under thin-coat renders or paint coatings. It can be applied on all typical mineral substrates, such as, e.g., concrete, aerated concrete, expanded clay aggregate, ceramic brick and silicate brick, as well as porous ceramics. It features very good plasticity and processability, which makes it easy to shape.

TECHNICAL DATA

Base binder: hydraulic binders and modifying agents, includes cellulose fibres;

Grain size: up to 0.8 mm;

Colour: natural white;

Mixing ratio: 5.0-5.5 litres of water per 25 kg of mortar;

Usage: after adding an appropriate amount of water, it is possible to obtain around 19 litres of ready-to-use mortar from one packaging of the product;

After adding water, the product must be used within: not more than 2 hours;

Coverage: approx. 15 kg/m² per each 10 mm of the layer thickness;

Temperature of application (air and substrate): from +5°C to +25°C;

Render/plaster type according to PN-EN 998-1: LW (light);

Gross bulk dry density: ≤ 1300 kg/m³;

Compressive strength range: cat. CS II;

Water absorption due to capillary action: cat. W0;

Adhesion: ≥ 0.5 N/mm²;

Water vapour permeability coefficient: μ ≤ 11;

Thermal conductivity coefficient:

• λ_{dry,10} = 0.33 (W/m*K) for P=50%;

• λ_{dry,10} = 0.49 (W/m*K) for P=90%;

Reaction to fire: class A1;

Packaging: Disposable paper packaging containing 25 kg of product.

Storage: The product should be stored in original sealed packaging on pallets, in a dry room, and 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, while observing the storage rules.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be sound/stable (without scratches and cracks), not exposed to freezing, 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 in the building basement zone should be protected against the capillary action or against moisture permeating from the outside of the building. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be carefully removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. Any loose layers, not bound to the substrate (e.g., dust, loose render or flaked coatings), should be removed. If necessary (for example, on smooth, non-absorbent substrates), apply a cement key coat. Substrates with high absorbency should be abundantly sprayed with water before applying the mortar. In works related to the proper preparation of the substrate, the construction best practices apply.

PRIMING: Substrates with high absorbency should be primed with **BUDOGRUNT ZG/WG** or abundantly sprayed with water. Setting time for the primer applied on a substrate is about 3 hours under optimum weather conditions (temperature +20°C and relative humidity of 55%).

PRODUCT PREPARATION: Pour the entire contents of the package into a container with a measured amount of clean, cool water (5.0-5.5 l per 25 kg of product) and mix thoroughly with a low-speed mixer/drill with a stirrer until a homogeneous, lump-free mixture is obtained. Then leave the prepared render/plaster for about 5 minutes to mature. Mix the render/plaster thoroughly immediately before use. Depending on the temperature and air humidity, the ready-to-use product can be applied for about 2 hours.

APPLICATION: When applying manually, it is necessary to put mortar onto the wall with a steel trowel and smooth it with a darby. After initial setting, the applied product should be rubbed with a trowel padded with a sponge or felt. If large areas are concerned, it is recommended to use a plastering/rendering machine. The recommended thickness for applying a layer for ceilings – min. 10 mm, for walls – min. 8 mm, outside the building – min. 15 mm (12 mm – if thin-coat render is the finish coat). In the case of large surfaces, a layer exceeding 20 mm should be applied in two layers using the "wet on wet" method after the first layer has initially set. In places, where walls connect with other construction materials, and in places, in which installation cavities are present, it is necessary to embed a reinforcing fibreglass mesh with the basis weight of 145-175 g/m² into the render. **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.

DRYING: Rendering/plastering mortar applied on the substrate (drying in +20°C, 65% RH) may be subject to further processing, assuming one day of drying per each 1 mm of the layer thickness. **Note:** Drying time may be longer due to low temperatures and high humidity. The newly applied render should be protected against precipitation and condensation until it is fully hardened.

USEFUL HINTS: In order to prepare the render, it is not allowed to add any foreign admixtures, and only clean water can be used for mixing. During the application and drying of the render, rainless weather should prevail, with an air temperature between +5°C and +25°C and the temperature of the substrate above +5°C. Drying time may be longer due to low temperatures and high humidity. Tools should be cleaned with water immediately after work is completed. Avoid applying the product on surfaces directly exposed to sunlight or during strong wind. In order to protect the undried render layer against severe weather conditions, it is recommended to use appropriate protective meshes on scaffolds. The set render cannot be mixed again after adding water or fresh render.