

VERTICAL INSULATION

KOMBI HYDRO STOP

Mineral levelling/base coat with waterproofing properties



MAIN ADVANTAGES

- Efficient protection from rainfalls and ground water
- Efficient protection from moisture present in the rooms with increased humidity
- Makes up a waterproof layer of light, medium or heavy type
- Protects from moisture penetration and capillary action
- High resistance to shrinking cracks
- High vapour permeability
- Optimum impact resistance
- High adhesion to the substrate and EPS
- Simple application and surface levelling out
- To be applied outside and inside buildings
- Contains microfibres

AREAS OF APPLICATIONS

Mortar intended for sealing construction substrates to be found outside and inside buildings. It is applied for protection from rising damp of external walls, foundation walls, pedestals and walls in rooms of increased humidity such as basements, bathrooms and shower rooms. Makes up a waterproof layer of light, medium or heavy type. It is especially recommended for performing a base coat (reinforcing coat) before applying thin coat renders, finishing paint coatings and ceramic and stone linings. To be applied on all typical mineral substrates (such as: concrete, cement floor topping, cement render, cement-lime render, gypsum plaster and other raw surfaces made of bricks, blocks, concrete blocks and other ceramic or silicate materials of that type) as well as on substrates covered by extruded or expanded EPS boards (the one with reduced absorptivity is recommended).

TECHNICAL SPECIFICATION

Base binder: modified hydraulic binders and polymer binders with modifiers added;

Bulk dry density: 1.5 kg/dm³;

Mixing ratio: ca. 6.0-6.5 l of water per 25 kg of dry mortar;

Usable time after adding water: from 1.0-1.5 h;

Open time: ca. 20 minutes;

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

Average coverage: ca. 1.5 kg/m² per each 1 mm of the layer thickness;

Adhesion to concrete: min. 0.3 MPa;

Watertightness: 150 kPa within 7 days.

Water vapour permeability: cat. V2

Water absorption: cat. W3

Adhesion to EPS:

• in dry condition ≥ 0.08 MPa,

• 2 days of immersion in water and 2 days of drying

• 2 days of immersion in water and 7 days of drying

≥ 0.03 MPa,

≥ 0.08 MPa.

Resistance to temperature after setting: from -20°C to +60°C.

Packaging: Disposable paper packaging containing 25 kg of the product.

Storage: The product should be stored in its original sealed packaging, in a dry and well ventilated room. Protect from moisture and frost!

Note: The product must be kept out of the reach of children.

Shelf life: Unopened products have a 12-month shelf life from date of production.

APPLICATION METHOD

SUBSTRATE PREPARATION: Apply to a sound/stable and clean substrate, degreased, dry, and biological or chemical efflorescence free. The substrate should be free of algae/fungi growth. In case of microbial contamination, the substrate should be cleaned mechanically and then rinse 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. dust, dirt, loose renders and flaked coatings) should be removed. Old and/or dirty substrates should be washed off and degreased with water and **CLEANFORCE** cleaning agent. If the substrate unevenness has up to 5 mm, the wall should be initially levelled out with the base coat, if unevenness is higher, levelling compound should be used. Fresh mineral substrates (such as concrete, cement render and cement-lime render) to be cured for min. 4 weeks. Absorbent and chalk substrates should be primed with **BUDOGRUNT ZG/WG** before the mortar application.

PRODUCT PREPARATION: Gradually pour the contents of the packaging into a container with a measured amount of clean water (approx. 6.0-6.5 liters) while continuously mixing the compound (with a low-speed mixer fitted with a basket stirrer) until homogeneous mixture is obtained. Such compound should be left for ca. 10 minutes and remixed thoroughly. During work, it is recommended to mix mortar every 30 minutes. Depending on the temperature and air relative humidity, the compound prepared in such a way can be used for ca. 1 hour. **Note:** Both too long and too intensive mixing may lead to excessive air entrainment of the mortar and, consequently, to a reduction in its strength parameters.

APPLICATION: Distribute a thin, uniform layer of levelling mortar/base coat on the substrate with a thickness ranging from 3 mm to 5 mm, using a stainless steel trowel. It is recommended to immerse the glass fibre mesh for thermal insulation systems into the layer applied in such a way. The reinforcing mesh should be evenly stretched and completely immersed in the base coat. If necessary, in order to make the surface more even, an additional thin layer of mortar can be applied. Another layer may be applied when the previous one is still wet. The neighbouring mesh stripes must overlap not less than 10 cm. Any trowel marks should be sanded down with a sandpaper. In the places where connections with vertical elements are present, the sealing tape has to be immersed. The thickness of a single layer should be min. 1.5 mm, while the total thickness of the whole layer cannot exceed 5 mm.

DRYING: The drying time for the hydro-insulation coat is min. 5 days while drying at the temperature from +5°C to +25°C and air relative humidity of 60-75%. After this period of time, one can attempt to apply a finish coat. If the layer dries too quickly, it should be wetted with water.

USEFUL HINTS: Drying time may be longer due to low temperatures and high relative humidity. In order to assure an applicable tightness, a single batch product should be used on a single application / architectural element. Base coat application and drying requires rainless weather at the air temperatures between 5°C-25°C. All tools to be cleaned with water after finishing work. Application on surfaces exposed to direct sunlight, in strong winds or high air humidity is not recommended. To protect a still wet reinforcing coat (base coat + reinforcing mesh) against inclement weather conditions, scaffolding should be covered with some protective netting. **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.