

LIME

MINERALIT RESTAURO W12

Lime renovation mortar



MAIN ADVANTAGES

- High resistance to weather conditions
- Mild binding reaction without cracks or shrinkage
- Traditional (historical) composition
- Mineral character
- Very high vapour permeability
- Limited surface absorptivity
- Natural ability to adjust air humidity
- Protects from algae and mould growth
- For manual and machine processing
- Contains microfibres

AREAS OF APPLICATIONS

Dry, mineral mortar based on highly hydraulic lime intended for manual or machine application of traditional lime mortars outside and inside contemporary and historic buildings. Very carefully selected raw materials and recipe make the mortar look like old, traditional lime mortars meet all the requirements currently imposed on external top coats. It can be applied both as single- or multilayer coat on all typical mineral substrates (such as concrete, lime render, cement-lime render, cement render and skim coats).

TECHNICAL SPECIFICATION

Base binder: hydrated lime;

Dry density of hardened mortar: ca. 1 420 kg/m³

Grain size: up to 1.2 mm;

Mixing ratio: ca. 5.5l of water per 25 kg of mortar;

Application time after adding water: not more than 2 hours;

Open time: ca. 60 minutes (depending on substrate water absorptivity);

Colour: natural white;

Average coverage: ca. 1.7 kg/m² per each 1 mm of the layer thickness;

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

Mortar class acc. to PN-EN 998: GP (general purpose);

Adhesion: ≥ 0.1 N/mm²; FP:B;

Water absorption: cat.W₀;

Heat conductivity coefficient: λ ≤ 0.39 W/m*K for P=50%, λ ≤ 0.44 W/m*K for P=90%;

Compressive strength range: cat CS II (from 1.5 to 5.0 N/mm²);

Water vapour permeability coefficient: μ ≤ 13.

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.

APPLICATION METHOD

SUBSTRATE PREPARATION: Apply to a sound/stable substrate (without scratches and cracks), not frozen, clean and dry, and biological and chemical efflorescence free. In case of algae and/or fungal growth, the substrate should be cleaned by mechanical means, then rinsed with water and disinfected with **ALGIZID** agent. The substrate in the building basement zone should be protected against capillary action or against moisture permeating from the outside of the building. Any loose layers that are not bound to the substrate (such as 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 large unevenness is present, it is recommended to level the substrate by means of applying levelling compound. Substrates before applying **MINERALIT RESTAURO W** do not require priming. Walls made of absorbent materials in special conditions should be wetted with plenty of water before applying a mortar.

MORTAR PREPARATION: Pour the contents of the packaging into a container with a measured amount of clean and cold water (5.5 l per 25 kg of mortar) and thoroughly mix (with a low-speed mixer fitted with a basket stirrer) until homogeneous mixture is obtained. Then, leave the mortar for ca. 5 minutes to mature. Before application, the product should be thoroughly mixed. Depending on the temperature and air humidity, the ready to apply product may be used for ca. 2 hours. **Note:** Both too long and too intensive mixing may lead to excessive air entrainment of the mortar and, consequently, lowering its strength parameters.

APPLICATION: With the manual method of application, it is necessary to put mortar on the wall with a steel trowel and smooth it with a plaster patch. After initial setting, the product applied should be spread 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. 10 mm, outside the building - min. 15 mm (12 mm - if thin coat render is the finish coat). Mortar can be applied locally for a thickness of max. 30 mm in one layer. If large areas are concerned, a layer thicker than 20 mm should be applied twice by means of a 'wet on wet' method. In places where walls connect with other construction materials and where wall chases are present, it is necessary to immerse a glass fibre mesh with a grain size of 145÷175 g/m² into the coat. **Note:** The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing (PPE) 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: Mortar applied on the substrate can be subject to further processing, assuming one day of drying for each 1 mm of the layer thickness (while drying at a temperature of +20°(and air relative humidity of 65%). **Note:** The setting time can be longer by even up to a few days due to low temperatures and high relative humidity. Protect the fresh mortar against precipitation until complete setting and binding is obtained.

USEFUL HINTS: To be applied on dry days at temperatures from from +5°C to +25°C (and the substrate temperature above +5°C. Application in direct sunlight or in strong winds is not recommended. To protect mortar against inclement weather conditions, scaffolding should be covered with some protective netting. All tools should be cleaned with water after work is completed. **Note:** If paint coating is applied on a renovation top coat, it is necessary to paint its surface twice with **CALSILIT F** silicate paint or **NOVALIT F** polysilicate paint. Painting may be started only after the top coat surface sets (hardens) completely and after applicable primer is used. Special attention should be paid to provide adequate drying conditions for the top coat applied.