

Mortar based on natural hydraulic lime NHL 3.5 certified EN 459-1

Sistema calcestruttura. Mortar based on natural hydraulic lime certified NHL 3.5 according to EN 459-1. Particularly suitable for the sectors of green building and historical restoration. Thanks to its workability and its physical and mechanical properties, it is recommended for all general repair or restoration work on traditional, brick or mixed masonry. Classified M10 according to UNI EN 998-2. CE mark.

SUBSTRATE PREPARATION

The substrate must be clean, healthy and compact. The substrate must be free from dust, grease and all sediments that could damage the adhesion of the mortar. In the case of repair, it is essential to carefully stripping the mortar joints and removing all friable and mechanically weak materials. Before application, the substrate must be humidified until refusal.

APPLICATION

CALCESTRUTTURA MM10 is prepared by mixing the powder with approximately 14-16% of drinking water. It is recommended to pour the water first, then add the entire powder of the product. Mix thoroughly and continuously until a homogeneous mixture is obtained, free of lumps and with a plastic-thixotropic consistency. **CALCESTRUTTURA MM10** can be mixed with a cement mixer, bucket and mixer. Mix for no more than 5 minutes. No other binder or inert material should be added to the product so as not to alter its mechanical and physical characteristics. Apply with normal manual or mechanical equipment. Do not mix the product by adding water once it has started to set. **CALCESTRUTTURA MM10** is applied with a trowel like a traditional mortar. If used as a bedding mortar, first create the bedding bed and then proceed with laying the building elements, taking care to apply light pressure to ensure correct positioning. In case of repairs of masonry subject to reinforcement interventions using structural reinforced plasters, proceed with the regularization by filling/leveling the gaps/cavities/depressions of the support. Finally, in case of re-joining interventions, proceed with the unstitching of the masonry and the insertion of new construction elements using mortar and without interrupting the static function of the masonry.

WARNINGS

Product intended for professional use. Check the integrity of the packaging before use and do not use the product if there are lumps. Do not mix the product by adding water once it has started to set. Any small chromatic variations do not in any way damage the final technical performance of the product. The characteristics of the product listed above respond to standard environmental conditions (20-23°C and 65% R.H.). The customer is required to verify that the product is suitable for the intended use and to ensure that this technical document is valid and not superseded by subsequent updates. The updated technical documents can be found on the website www.premierpremiscelati.it.



**Complies with European standards
EN 998-2
NHL 3.5 EN 459-1**

ADVANTAGES

High breathability.
Eco-friendly product, low environmental impact.
Low content of water-soluble salts.
Chemical compatibility with historical mortars. Easy application, plastic-thixotropic rheology and low shear stress.
Reduced plastic/hydraulic shrinkage.
High mechanical resistance.
In the case of restoration, it offers excellent physical-mechanical compatibility with the existing structure.
Product at Km 0.

USES

Bedding mortar.
Small repairs.
Repairing or unstitching/stitching operations.

STORAGE

Store in a dry place for no more than 12 months.

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CHARACTERISTIC DATA

Appearance	Hazelnut colored powder
Application temperature, °C	+5 a +35 °C
pH in aqueous solution	12
Grain size range, EN 1015-1	< 3 mm
Apparent density of the powder	1450 Kg/m ³
Apparent density of the fresh mortar, EN 1015-6	2000 Kg/m ³
Mixing water	14 – 16%
Consistency of the fresh mortar, EN 1015-3	175 mm
Minimum thickness per layer	5 mm
Maximum thickness per layer	25 mm
Coverage	1,8 Kg/dm ³

**PERFORMANCE DATA EN 998-2:
SPECIFICATIONS FOR MORTARS FOR MASONRY WORKS – MASONRY
MORTARS**

Compressive strength, EN 1015-11	Class M10
Initial shear strength in combination with masonry elements in accordance with EN 771	0,15 Mpa (v.t.)
Chloride content, EN 1015-17	≤ 0,1%
Water vapour permeability, EN 1745	15-35 (v.t.)
Thermal conductivity, EN 1745	0,83 W/mK (v.t.)
Capillary action water absorption, EN 1015-18	≤1 Kg/m ² *min ^{0,5}
Reaction to fire, EN 13501-1	A1