



TOP WALL ANTISISMICO

Bio-transpiring and fiber-reinforced mortar, for structural plasters, including reinforced ones and masonry, with high mechanical performance, based on NHL 3.5 natural hydraulic lime.



TECHNICAL FEATURES

TOP WALL ANTISISMICO is a special mineral mortar designed to perform structural plasters and reinforced plasters (CRM) on old structurally unstable walls. Based on natural hydraulic lime NHL 3.5 CE marked according to EN 459-1, binders with pozzolanic effect and aggregates partly from recycling, **TOP-WALL ANTISISMICO** is suitable for mechanized or traditional "hand" application on walls and ceilings, indoors and outdoors. It can also be used for the elevation of M15 class anti-seismic masonry with concrete or brick blocks.

FIELD OF APPLICATION

Realization of reinforced plasters, indoors and outdoors, on walls and ceilings that require structural reinforcement. Applicable on all normal traditional substrates: on old tuff walls, mixed masonry, bricks, concrete blocks, as well as rough concrete with rough surface. Restoration of old walls with the scuci-cuci technique. Construction of anti-seismic masonry using masonry mortar with high mechanical characteristics. Despite its high mechanical characteristics, being a mineral product based on natural hydraulic lime NHL 3.5 with very low VOC emissions, **TOP-WALL ANTISISMICO** maintains the right degree of breathability.

PREPARATION OF THE SUBSTRATE

The substrates to be plastered must be solid, stable and clean: dust, paint, dirt or release agents must be suitably treated and eliminated. Wash the surfaces abundantly with water and remove dust, saline efflorescence, algae or mold. Mechanically remove any dusty or detached parts and repair the old walls by restoring the missing parts, possibly using the unscrewing technique. On particularly smooth and compact surfaces such as poured concrete, it is necessary to prepare a substrate with adequate adhesion by previously applying a rough coat (3 ÷ 5 mm) or using **HERALAX GRIP**. To perform "reinforced" plasters (CRM), fix to the wall a galvanized steel mesh (usually with a 10 x 10 cm mesh, 3 mm diameter, but it is always advisable to follow the indications of the Works Management) or composite material, so that it remains raised from the bottom and is positioned in the center of the thickness of the reinforcing plaster.

Thoroughly wet the substrates with water (until rejection), especially if exposed to direct sunlight, about an hour before plastering so that they have time to cool down and dry on the surface. Particularly absorbent substrates and masonry with mixed or different degrees of absorption and with **HERALAX AC** must be pre-treated.

MECHANIZED APPLICATION

The product can be mixed and applied mechanically with a common plastering machine available on the market. Arrange the level strips and the edge protectors and then start "spraying" the product starting from the lower part and then going upwards. Using a straightedge, level and smooth the plaster with horizontal and vertical steps. The minimum application thickness must never be less than 2 cm or greater than 2.5 cm for a single coat of application. If plaster thicknesses exceed 2.5 cm are required, the application must be carried out in several layers taking care not to smooth the first layer and to wait the following day for the second application. After about 4 – 6 hours from application and depending on the environmental thermal conditions, prepare the plaster for the finishing treatments, making the surfaces uniform and regularizing the corners. The surface can be finished with **BIO RASANTE**, a highly breathable smoothing compound based on natural hydraulic lime and zeolite with a "civil" finish. If the surface must remain visible, to avoid any cracks, it is necessary to apply two coats of **HERARAS ONE** finishing smoothing compound, with a special fiberglass mesh (insulation type) in between. When there are no particular aesthetic requirements, a rustic finish can be obtained by directly finishing **TOP-WALL ANTISISMICO** with a plastic or wooden spatula or sponge trowel. Remember that the application of very smooth and "closed" finishes tend to block the breathability of **TOP-WALL ANTISISMICO**. The freshly mixed mortar must be used within 2 hours.

MANUAL APPLICATION

In case of manual application, mix **TOP-WALL ANTISISMICO** with clean water in the ratio of about **19%** (5Lt for each 25 kg bag). Slowly add the powder to the water, mixing with a low-speed mixer fitted with a whisk, until a homogeneous, lump-free mortar is obtained; a maximum mixing time of 2 ÷ 3 minutes is recommended. Mixing with a concrete mixer is always not recommended because it can cause an anomalous incorporation of air, compromising the final mechanical performance. Apply the material with a trowel and spatula.



CLEANING

The tools used must be washed with water before the mortar begins to set; subsequently, cleaning can only take place by mechanical removal.

ITEM OF SPECIFICATIONS

Structural reinforcement of old existing walls by plastering with premixed mineral mortar with high mechanical performance based on natural hydraulic lime NHL 3.5 compliant with standard EN 459-1. The product must be CE marked as plaster mortar in compliance with the **EN 998-1 standard** as **GP-CSIV-W1** and as a masonry mortar with guaranteed performance according to the **EN 998-2 standard** such as **G-M15** as an **TOP-WALL ANTISISMICO** produced by the company **HERAKEM SRL**.

WARNINGS

- **TOP WALL ANTISISMICO** is mixed with clean water without adding other products.
- If mixed manually, do not exceed 2 ÷ 3 minutes of mixing.
- Do not mix with a muller.
- Do not apply in direct sunlight or with strong ventilation.
- Do not apply on frozen substrates or in any case at ambient temperatures below + 5 ° C, because the hardening of the product is based on the hydraulic setting of the binders which, at low temperatures, is excessively delayed with consequent anomalous hardening.
- Protect the applied plasters for at least 24 ÷ 48 hours from rain or washout and for at least 7 days from frost.
- Rapid drying of the product can lead to abnormal hydration of the hydraulic binders and the formation of cracks; in the hot season and especially in the event of wind or beating sun, avoid rapid drying of the product applied by spraying water every 4 - 6 hours.
- Subsequent finishes must be applied only after hardening and drying (minimum 28 days).

TECHNICAL DATA *(at +22±1°C and 55±5% R.H.)

Appearance	powder with a characteristic hazelnut color	Mixing water	approx. 18,5 ÷ 19,5 % by weight
Customs heading	3823 50 90	Mixing water per 25 kg bag	approx. 4,5 ÷ 4,8 liters
Aggregate size	< 2,5 mm	Application temperatures	from +5°C to +30 °C
Apparent specific weight of powder	1,45 gr/cm³	Apparent density of hardened mortar	about 1700 kg/m³ (EN 1015-10)

DATA AS PLASTER

Compressive strength	category CS IV (EN 1015-11)
Adhesion to the substrate	≥ 0,3 N/mm² (EN 1015-12)
Water absorption	W1 (EN 1015-18)
Thermal conductivity (λ10,dry) (W/m·K)	0,71 (P=50%) (tabulated value)
Permeability to water vapor	15/35 μ (EN 1745 tabulated value)
Maximum application thickness	25 mm per coat

DATA AS MASONRY MORTAR

Compressive strength	≥ 15 MPa (M15)
Flexural strength	≥ 5 MPa
Chloride content	< 0,1 % (average value 0,04%)
Moisture resistance	excellent
Resistance to aging	excellent
Durability to freeze / thaw	excellent

Consumption	approx. 15 ÷ 17 kg/m² per cm of applied thickness	Packaging	25 kg bag
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PRODUCT FOR PROFESSIONAL USE ONLY

All the data and indications given in this technical data sheet, although resulting from laboratory tests carried out and from our direct application experiences, due to the infinite number of variables linked to the construction site conditions, are to be considered, in any case, purely indicative. Therefore, before applying the product, the user is required to establish whether it is suitable for the use envisaged by him, in the specific hygrothermal and application conditions foreseen at the time of use and, in any case, he assumes all responsibility for it. We are not liable for damage to people or things deriving from improper use of the product. We reserve the right to modify the data contained therein as a result of improvements and technical progress.