



Fiber plaster based on natural hydraulic lime NHL 5 certified UNI EN 459-1 and Bio Pozzolana Cement-free product

Technical Data Sheet (T.D.S.)

Mortar based on natural hydraulic lime certified NHL 5 according to UNI EN 459-1, suitable for use as GP-type plaster for interiors and exteriors. Compliant and **CE marked according to UNI EN 998-1 class CSIV**, **and UNI EN 998-2 class M10**. Particularly suitable for the creation of highly breathable reinforced plasters in the green building and historical conservative restoration sectors in structural reinforcement interventions. It can be used either by hand or by machine, although it is recommended to use it mainly by machine to optimize the yield and guarantee the homogeneity and regularity of the application. Product suitable for restoration work on artefacts and works, historical-artistic-architectural interest. Ideal product for restoration operations under the protection of the Superintendencies for Architectural and Environmental Heritage.

SUBSTRATE PREPARATION

The surface must be mechanically resistant, homogeneous, rough, flat and clean. In case of lack of flatness it must be previously regularized with the same material. The base must be free from dust, grease and all sediment that could damage the adhesion of the plaster. In the frequent case of carrying out restorations, a thorough inspection must be carried out beforehand skiving of the mortar joints to eliminate all crumbly and mechanically weak materials. Compliant with European standards. Before application, the substrate must be humidified UNI EN 998-1 Class CSIV until it refuses by wetting with saturated water.

MACHINE APPLICATION: PLASTER ADVANTAGES

Product designed for applications with plastering machine with screw and lung. Product formulated with historic low D6-3 binders. To plaster, pour the contents of OPUSTORICA IM10 the hopper of a continuous cycle plastering machine, adjust the flow meter up to obtain a plastic-thixotropic consistency. Spray the product from approximately 20-25 cm. In the case of reinforced plaster systems (CRM, TRM), follow the instructions. To create a plaster reinforced with a mesh proceed first with the application of a coat of the sliding tension render OPUSTORICA RINZAFFO (or the same OPUSTORICA IM10) of a 5mm thickness and then install the selected mesh and wait for the product to harden before continue with the next steps. In case connectors must be applied please proceed immediately after the installation of the mesh. The total thickness will be estimated by the requirements of the System and usually is 10-30mm.

MANUAL APPLICATION: PLASTER/MORTAR

The OPUSTORICA IM10 is prepared by mixing the powder with approximately 23% of water (approx. 5.8L per 25Kg bag). It is advisable to first pour the water and gradually add all the product powder. Continue mixing until a plastic consistency is obtained and carrying out recoating or thixotropic interventions. Mix in a concrete mixer for no more than 5 minutes. Do not add other binders or aggregates produced so as not to modify its resistance.





Fiber plaster based on natural hydraulic lime NHL 5 certified UNI EN 459-1 and Bio Pozzolana Cement-free product



Complies with European standard UNI EN 998-1. Class CSIV EN 998-2 M10 class.

ADVANTAGES

Product formulated with historic binders with low environmental impact and formulated in accordance with green building criteria.

Cement-free product.

Low content of water-soluble salts. Plastic - thixotropic consistency with low creep tension. Product formulated with fibers that allow greater ductility with the underlying structure. High transitability. High chemical and physical-mechanical compatibility with the materials used in ancient times.

EMPLOYMENTS

Creation of breathable structural reinforced plasters for interiors and exteriors by hand or by machine which can be reinforced with resistant alkaline fiber meshes with low zirconium content from the STRUCTURAL series fixed to the masonry with suitable connectors. Carrying out tucking or stitching operations. Creation of structural reinforcements on architectural elements (arches, vaults, pillars).

STORAGE

Packaged in 25 kg bags with anti-humidity film. Store in a dry place for no longer than 6 months.



OPUSTORICA IM10

TECHNICAL CHARACTERISTICS

Appearance :	Hazelnut colored powder
Application temperature, °C:	+5a to +35 °C
pH in aqueous solution:	12
Grain size range, EN 1015-1 :	0 – 3 mm
Apparent density of the dust :	1400 Kg/m3
Apparent density of fresh mortar, EN 1015-19:	1950 Kg/m3
Apparent density of the mortar hardened, EN 1015-19:	1600 Kg/m3
Mixing water :	23% ca
Minimum thickness per layer :	1.5 cm
Maximum thickness per layer :	2.5 cm
Yield :	15.5Kg/m2 per cm of thickness
Elastic modulus :	Approx. 9500 MPa
PERFORMANCE DATA EN 998-1: MORTARS FOR II	NTERNAL AND EXTERNAL PLASTERING
Compressive strength, EN 1015-11:	Class CS IV
Adhesion, EN 1015-12 :	≥ 0.5 MPa
Water absorption by capillarity, EN 1015-18:	Class Wc0
Water vapor permeability coefficient, EN1745 :	<u>≤</u> 35
Thermal conductivity, EN 1745 :	0.67 W/mK (v.t.)
Reaction to fire, EN 13501-1 :	A1
Durability:	NPD





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 compliance with EN 771 :	0.15 Mpa (v.t.)
Chloride content, EN 1015-17 :	≤ 0.1%
Water vapor permeability, EN 1745 :	15-35 (v.t.)
Thermal conductivity, EN 1745 :	0.67 W/mK (v.t.)
Water absorption by capillarity, EN 1015-18:	≤1.5 kg/m^2*min^0.5)
Reaction to fire, EN 13501-1:	A1

WARNINGS

Product intended for professional use. Check the integrity of the package before use and do not use the product with lumps present. Do not remix the product by adding water once it has started to set. Any small chromatic variations do not damage the final technical performance of the product in any way. In case of application on recently created plasters, wait at least 3 weeks before applying the product. The product characteristics listed above respond to standard laboratory environmental conditions and have been verified according to the reference standards (20-23°C and 65% R.H.) and in compliance with the water:product ratio reported above. 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.

