



I dati riportati si riferiscono alle prove di Controllo Qualità in condizioni ambientali normalizzate. Applicazioni pratiche di cantiere a seconda delle condizioni di esercizio possono rilevare dati sensibilmente modificati, pertanto le informazioni presenti nella Scheda hanno valore puramente indicativo in quanto l'utilizzatore deve sempre verificarne l'idoneità nell'impiego del prodotto assumendosi la responsabilità derivante dall'uso. Fornaci Calce Grigolin S.p.A. si riserva di apportare modifiche tecniche di qualsiasi genere senza alcun preavviso.



PALLADIO® RINFORZA NHL M15

Ready-to-use mortar, rheoplastic, fibre-reinforced, high mechanical strength, based on natural hydraulic lime NHL 5, and selected aggregates.



Product description

PALLADIO RINFORZA NHL M15 is a ready-to-use mortar, rheoplastic, fibre-reinforced, with high mechanical strength, based on natural hydraulic lime NHL 5, and selected aggregates, ideal for structural reinforcement, improvement and seismic adaptation of historic buildings.

The main characteristics of PALLADIO RINFORZA NHL M15 are:

- compatible with masonry of confined buildings;
- mechanical compressive strength after maturation greater than 15 N/mm²;
- does not cause water-soluble salts to the masonry, contributes to the restoration of historic masonry);
- not reactive in the presence of sulphates contained in the masonry, compatible with the typical supports of historical masonry
- high breathability, prevents the formation of moulds and condensation and keeps healthy environments;
- very workable, versatile and easily applicable.

Fields of use

PALLADIO RINFORZA NHL M15 is a product suitable for :

- construction of structural reinforcement on walls made of stone or brick;
- structural reconstruction of stone or brick walls;
- armed seams with interposition of stainless steel bars aisi 304 with improved adhesion (PALLADIO HELICAL BAR 6-8-10) on joints of lodging of stone walls or solid brick;
- structural consolidation of vaults in masonry or mixed stone.

RINFORZA NHL M15

Supply and storage

PALLADIO CALCECOLOR INTONACO is supplied in bulk or in 25 kg bags on stretch pallets. Store in a cool, dry and non ventilated place. Keep packaging intact. It is advised to use the product within 12 months from packaging.

Surface preparation and application method

Example n.1 (PALLADIO SYSTEM GRG)

Structural reinforcement of mixed stony masonry or solid bricks carried out in the following intervention method:

- clean and saturate the support by low pressure washing;
- remove any saline efflorescence and concretion by washing or mechanical systems (brushing, sandblasting, watering) and remove the removed salt residues from the masonry base;
- manual application (with trowel or stainless steel spatula) or mechanical application (with plastering machine) and its modelling in a uniform way with toothed spatula in stainless steel, of a rough cast/absorbing adjuster for an average thickness of at least 1,00 cm to complete covering of the wall facing.
- At the end of this operation the surface shall be sufficiently rough to allow adhesion of the next layer;
- production of 6,00 mm diameter hole with electric drill;
- subsequent insertion with percussion drill inside the hole as connector/anchor/diatone, PALLADIO HELICAL BAR 6, helical bar made of steel inoxidabile in class A2 cold drawn;
- installation of bi-directional mesh made of durable alkali resistant fibreglass AR, type PALLADIO GLASS;
- opening in the outer part of the masonry on both sides of the connector/anchoring/diatone PALLADIO HELICAL BAR 6 by manual bending in the form of "L";
- manual application (with trowel or stainless steel spatula) or mechanical application (by plastering machine) of PALLADIO RINFORZA NHL M15, 10 mm thick till total covering of the reinforcing mesh.

Example n. 2

Execution of "like-for-like replacement" on brick or mixed stone masonry according to the following method of intervention:

- the removal of highly degraded or disrupted external elements by palm-to-palm verification of the stability of the individual stone and brick ashlar, both on the face, around the missing parts, and on the uncovered core, removal of inconsistent lodging joints;
- subsequent cleaning of surfaces with water jets and/or washing with water;
- application of consolidating pre-treatment of the surfaces in case of shavings of the support to be treated with arteMURI F4 SIL product, based on potassium silicate spray or brush;
- Replacement of disused elements by recovery pieces of original rustic stone (limestone, fossils, sandstone) and possible reconstruction of reclaimed or new brickwork replacements, using the "like-for-like replacement" technique".
- Placing of these with PALLADIO RINFORZA NHL M15. Care shall be taken to maintain the mortars of lodging of the stones and bricks lowered of about 2-3 cm from the plane of the finished visible facing, so as to carry out in successive stages the final drawing of the joints.

Warnings

Apply PALLADIO RINFORZA NHL M15 at a temperature between +5°C and +30°C; in case of low temperatures (5°C÷10°C) it is advised to mix the product with warm water (30°C÷40°C).

We always recommend the application of a reinforced skim plastering after a maturation of at least n. 28 days, using PALLADIO AB 09.

RINFORZA NHL M15

TECHNICAL DATA	RESULTS
Specific weight	1550 kg/m ³ deter.in free fall
Maximum diameter	3 mm
Water in the mix	approx. 18%
Mechanical resistance to flexion at 28 days	4,0 N/mm ²
Mechanical resistance to compression at 28 days	> 15,00 N/mm ²
Theoretical consumption	approx. 16 kg/m ² per 1 cm thickness
Permeability to water vapour μ	15
Reaction to fire	class A1
Adhesion to brick	> 0,8 N/mm ²
Fracture type	A
Water absorption	W2
Thermal conductivity	0,98 W/mK (tabulated value)

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