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la scelta naturale
BIOSUGHERO®

SCHEDA TECNICA

CR 510 BIO

Insulation System

NATURAL HYDRAULIC LIME-BASED ADHESIVE-LEVELLING GROUT FOR INSULATION SYSTEM

CONFORME ALLA NORMA EUROPEA
GP
CS IV - W0
CR 510 BIO SISTEMA CAPPOTTO
MALTE PER INTONACI INTERNI/ESTERNI
EN 998-1

CE

PRODUCT
NHL 3.5 natural hydraulic lime-based grout specific for the laying and levelling of cork insulation boards with fibreglass support mesh.

CHARACTERISTICS
Very practical and chip to use, it has excellent adhesion to substrates and workability, good opening and recording times.
It can be used both as an adhesive and a levelling grout at “fine float” finishings in order to reinforce with a fiberglass mesh.

APPLICATION FIELDS
Interior - exterior insulating boards on old and new surfaces bonding and smoothing. Realization of thermal insulation systems.

SUBSTRATES
Brick masonries, thermo-bricks, mixed or of stone; concrete, old and new plaster, tuff.

CONSUMPTION
- As adhesive mortar: 3,0 - 5,0 kg/sqm;
- As levelling grout 1,4 kg/sqm per mm of thickness according to substrate.

PACKAGING
25 kg bags on pallets of 1500 kg.

STORAGE
12 months in a dry place in its original packaging.

ITEM SPECIFICATIONS
The insulating boards made of cork for the construction of thermal insulation systems, must be applied and reinforced with NHL 3.5 natural hydraulic lime-based mortar, such as CR 510 BIO Insulating System by Biosughero, to be mixed with water and presenting an adhesion to brick ≥ 0,8 N/sqmm after 28 days.

PREPARATION

- Check that the substrates are clean, resistant, rough and perfectly seasoned.
- Mix a bag of CR 510 BIO Insulation system with about 6,0 - 7,0 liters of water, either manually or with a mixer at a low numbers of turns, until obtaining a homogeneous and plastic mixture.
- Let it rest for about 10 minutes and stir it again briefly before applying the product.

APPLICATION as adhesive

- If the substrate is perfectly planar, apply with a notched trowel on the entire surface of the board.
- If the substrate is not perfectly planar and has irregularities lower than one centimeter in height, apply with a trowel in order to form some width strips of few centimeters in parallel to the board sides and at the center of thickness at points with a diameter of about 5-10 cm.
- Place the boards from bottom to top, carefully beating them for a perfect adhesion, using when necessary, a mechanical fixing with appropriate bolts after about 24 hours from the laying of boards.
- In correspondence of the edges, the boards must be alternated to absorb the tensions.

APPLICATION as levelling grout:

- After at least 48 hours after the application of the boards, realize the reinforcement layer applying a first coat of CR 510 BIO Insulation system on which drown the fiberglass mesh HT 150, crushing it with a smooth trowel on the fresh layer of the mixing taking care of overlay the mesh for 10 cm.
- At a distance of 1 hour, cover with a second coat of levelling grout.
- Realize the finishing when the smoothing grout will be well hardened and cured

RECOMMENDATIONS

Do not apply on dry, inconsistent, crumbly, dirty, or painted substrates directly on gypsum.

Do not use the product for bonding the insulating boards on metal surfaces or on substrates subject to strong movements (fibrocement, wood, etc.). Avoid the application of the product on the edges of the insulation boards, possible cause of the formation of thermal bridges.

Avoid the outdoor application in hot or very windy days, on substrates during frozen or thawing phase, with frost risk in the next 24 hours and at temperatures below of +5 °C or higher than +35 °C.

Although the details contained in this product report correspond to the best of our current experience, all the above information must be confirmed after practical applications. Anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application: in every case, the user alone is fully responsible for any consequences deriving from the use of product. The values given in the technical data derived from tests conducted in laboratory , in a

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Appearance:	Hazelnut powder	
Composition:	NHL 3.5 natural hydraulic lime, selected aggregates, additives, inorganic pigments	
Granulometry:	≤ 0,6 mm	
Application temperature:	+ 5°C / + 35°C (uncolored)	
Mixing water:	≈ 26 %	
Consistence of fresh mortar:	≈ 175 mm	(EN 1015-3)
Bulk density of fresh mortar:	≈ 1,8 Kg/l	(EN 1015-6)
Bulk density of the dried mortar:	≈ 1,6 Kg/l	(EN 1015-10)
Pot life:	≈ 2 hours	
Levelling thickness:	1 - 2 mm per coat	
Levelling grout coats number:	2 coats	
Waiting time for the second coat:	≥ 1 hour (at occurred shrinkage)	
Waiting time for painting:	≥ 7 days (after the complete hardening)	
Adhesion - FP on Concrete:	≥ 1,0 N/sqmm - B	(EN 1015-12)
Adhesion - FP on Bricks:	≥ 0,8 N/sqmm - B	(EN 1015-12)
Adhesion - FP on Cork board:	≥ 0,3 N/sqmm - C	(EN 1015-12)
Compressive strength:	≥ 7 N/sqmm	(EN 1015-11)
Flexural strength:	≥ 3 N/sqmm	(EN 1015-11)
Water absorption by capillarity:	W0	(EN 1015-18)
Permeability to water vapor μ:	15/35 (tabulated value)	(EN 1745)
Thermal Conductivity ($\lambda_{10,dry}$):	0,76 (tabulated value)	(EN 1745)
Reaction to fire:	Class A1	(EN 13501)
Contribution to smoking:	none	
Hazard classification:	none	(EC 99/45)

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