

INTOCALCE SANA



BIO- BASE COAT PLASTER BASED ON NATURAL HYDRAULIC LIME NHL 3,5 OR NHL 5 FOR MACROPOROUS PLASTERS FOR DEHUMIDIFICATION AND TYPE "FR" FIBER REINFORCED AND TYPE "I" WATER REPELLENT
Compliant with UNI EN 998-1

DESCRIPTION

It is a bio plaster eco-friendly based on natural hydraulic lime NHL 3,5 or NHL 5 compliant with EN 459-1 for base coat plasters for the dehumidification, with an high breathability, for interiors and exteriors with an high and constant quality level, produced with an automated system, to apply with a plaster sprayer or by hand. The features of the natural hydraulic lime can ensure a hydraulic hardening very slow and constant that allows to obtain plasters with an high durability and breathability. The macroporous structure allows a further improvement of the features of breathability, containing salts; therefore allows an excellent dehumidification. Ideal for the restoration of old and new masonries subject to the phenomenon of rising water even in the presence of salts, creating infact a porous structure that allows the crystallization of the salts promoting at the same time the evaporation of rising damp; therefore avoiding the conditions of wet walls with the consequent formation of mold and mildew, eliminates the disintegration of the plasters and the consequent detachment caused by the action of the salts from the ground or contained in the masonry. Doesn't form vapor barriers and contains no solvents. Recyclable as inert at end of life. Specific for conservative historical restorations, thanks to the natural origin of

its components that respect the nature of the originating materials in the structures of historical interest. Available fiber reinforced with a special composition of polypropylene fibers type "FR", water repellent type "I".

COMPOSITION

Natural hydraulic lime NHL 3,5 or NHL 5 compliant with EN 459-1 obtained by burning marly limestone at 950°C, natural lime, selected siliceous and carbonated sands with grading from 0 to 1,3 mm, natural additives tested for the specific use which give to the product a very high adhesion and workability. For "FR" a special composition of polypropylene fibers, for type "I" water repellent agent.

AVIABILITY BINDER:

Natural hydraulic lime NHL 3,5
Natural hydraulic lime NHL 5

PRODUCT:

INTOCALCE SANA:

INTOCALCE SANA FR:

INTOCALCE SANA I:

INTOCALCE SANA I FR:

Dehumidifying;

Dehumidifying Fiber reinforced;

Dehumidifying water repellent;

Dehumidifying water repellent Fiber reinforced;

FEATURES

An accurate and selective choice of the main materials made with a perfect grading curve tank to the use of our own crush system, produce just adding water a mortar very plastic and easily workable. Used as a plaster, can be applied directly on every kind of surface. No cracks, no detachment is very permeable to vapor thanks to the presence of micro bubbles of air, not closed, present in the structure itself. It is the perfect base for every kind of superficial coating naturally breathable (see finishes). For "FR" fibers give to the hardened mortar more ductility and resistance to the aggressive agents and to the thermal excursions, improve the distribution of the stresses and reduce micro cracks produced by external stresses thanks to the the formation of a structural internal grid, give more resistance to the vibrations so it is perfect for masonry buildings subjected to stresses.

USE

INTOCALCE SANA is a macroporous breathable bio base coat plaster plaster eco-friendly to apply directly to any internal and external surface of old and new buildings as brick, concrete and masonry, old masonry, concrete, reinforced concrete, etc., to apply by hand or mechanically. Ideal for the reparation and restoration of old and new walls, internal and external, subject to rising damp and in the presence of efflorescence of salts, of underground environments not subject to infiltration of water, of buildings of historical interest, churches and in any case you need a definitive and natural remedial dehumidifying treatment.



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APPLICATION

- The surface being plastered must be free of dust and dirt. Any traces of oil, grease, wax etc. must be removed in advance.
- To apply then impregnating agent anti-salt type INTOSANA PRIMER diluted in the ratio 1:1 with water if the conditions and the salt concentration of the walls make it necessary.
- To apply then the treated surface with INTOSANA PRIMER as soon as it has dried but not more than 12 hours INTOCALCE SANA taking care to cover the surface completely.
- For irregularities over 2 cm to fill with INTOCALCE SANA to let rest at for 48 hours at least taking care not to mix with too much water to avoid a decrease of the mechanical strength.
- The overall thickness of the finished product should not be lower than 2 cm.
- To mix by hand, in a cement mixer or with a mixer on low speed, until when the mixture isn't homogeneous but for never less than 6 minutes; with a plaster sprayer regulating the flow-meter until when the density isn't perfect.
- To apply INTOCALCE SANA by hand or mechanically; can be applied at different thicknesses, for just one application don't exceed 11,5 cm. In the case of more applications let the product rest for two hours at least
- In case of application by hand to apply INTOCALCE SANA within 15/20 minutes since the dough to prevent a reduction of the anti-salt features
- Within 6-8 hours after the application, the plaster must be wet and worked with a sponge float to compact the plaster, thus avoiding the rapid evaporation ensuring on this way a better hydration of lime.
- In case of high thickness is recommended to use the network in glass fiber mesh 5x5mm on the finish used.
- Take care to apply the "INTOCALCE SANA" up to a meter over the area of clear moisture.
- In correspondence of bodies and/or different structures must be applied directly strips of network of an appropriate size (30-35cm), immersed in the plaster.
- With high temperatures, wind and low humidity, we advice you to protect from the quick desiccation damping the substrates.
- Don't apply on frozen substrates, with frost or possible frost in 24 hours.
- Don't apply on gypsum substrates, synthetic coatings, paints.
- Don't apply with strong wind or in very sunny days.
- Don't apply until when the substrate isn't completely dried.
- Don't apply on inconsistent and fragile substrates.
- Don't apply with driving rain.
- Don't add any other material to the product.
- To apply on reinforced concrete substrates previously treated with the bonding mortar "INTOAGGRAPPO" diluted 1:2 with water.
- To apply on very smooth reinforced concrete substrates previously treated with the adhesion promoter "ANCOMUR".
- To apply on substrates on tuff, stones, mixed masonries, previously treated with the rendering "INTOCALCE SANA R" matured for 3/4 days.
- On foamed concrete blocks to apply in advance the bonding mortar "INTOAGGRAPPO" diluted 1:2 with water.
- We suggest to apply INTOCALCE SANA with a temperature between + 5 ° C and + 30 ° C.

FINISHES

For the finishing of the plastered surfaces with INTOCALCE SANA we do not recommend the use of non-breathable materials such as to impair its functions and features. The right finish on the plaster INTOCALCE SANA is represented by breathable finishes type INTOCALCE SANA FIN, INTOCALCE SANA RAS to apply on background matured by at least 7/8 days or mineral coating breathable colored type INTOCALCE COL applied on a matured ground for at least 15-20 days.

YIELD

12/13 kg/mq for each cm of thickness.





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PACKAGING

Loose in silo.

Multi-ply paper sacks with protection of kg 25 on wood pallets of 17,50 ql. (70 sacks).

TECHNICAL SPECIFICATIONS COMPLIANT WITH UNI EN 998-1

Water content of the mix	~20-25%
Grading EN 1015-1	≤ 1,3 mm
Specific Weight EN 1015-10	1.400 kg/m ³ ± 10%
Pot Life EN 1015-9	2 hours
Plastic shrinkage in cond. Termoigr. Standard	Absent
Compressive strength after 28 days EN 1015-11	2,0 N/mm ² (category CS I)
Flexural strength after 28 days EN 1015-11	1,0 N/mm ²
Adhesion on brick	0,4 N/mm ²
Water vapor diffusion resistance factor EN 1015-19	μ ≤ 5
Entrained air	>40%
Water absorption coefficient due to capillary action EN 1015-18	≥0,3 kg/m ² after 24 h (R)
Fire reaction EN 998-2	Class "A1"
Thermal conductivity Coefficient EN 1745	λ _{10,dry,mat} = 0,42 W/mK
Toxicity- Regulation CE 1272/08	Dangerous
Durability	NPD
Classification UNI EN 998-1:2010	R- CSI/ DOP nr. 150

SUMMARY

The rehabilitation and recovery of old and new masonries internal and external subject to rising damp and in the presence of efflorescence of salts will be realized with bio plaster eco-friendly macroporous dehumidifying based on natural hydraulic lime NHL 3,5 or NHL 5 compliant with EN 459-1 obtained burning marbly limestones at 950°C, selected siliceous and carbonated sands with grading from 0 to 1,3 mm, natural additives tested for the specific use type "INTOCALCE SANA" or fiber reinforced with a special composition of polypropylene fibers type "FR" or water repellent type "I", by MALVIN S.r.l., applied by hand or mechanically and to mix just adding water, with a consumption of 12/13 kg/mq for each cm of thickness, with a compressive strength after 28 days of 2,0 N/mm²(category CS I).

The performance characteristics refer to laboratory tests, values depend on the weather conditions and on the methods of implementations. The operator must verify the suitability of the product depending on the use planned.



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