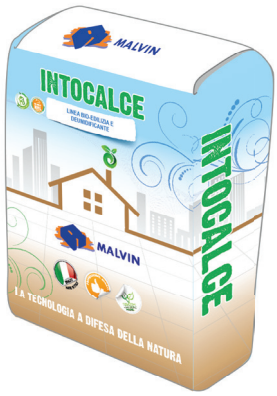
INTOCALCE



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

DESCRIPTION

It is a bio-mortar eco-friendly based on natural hydraulic lime NHL compliant with EN 459-1 with an high breathability, for base coat plasters internal and external with an high and constant quality level, produced with an automated system, to apply by hand or with a plaster sprayer. The features of the natural hydraulic lime NHL ensure an hydraulic hardening very slow and constant that allows to obtain plasters with an high durability and breathability. Form no vapor barriers and contains no solvents. Recyclable as inert at the end of life. Specific for the historical conservative restoration, thanks to the natural origin of its components that respect the nature of the original materials of the structures of historical interest. Available fiber reinforced with a special composition of polypropylene fibers tested for the specific use type "FR" and water repellent type "I".

COMPOSITION

Natural hydraulic lime NHL 3,5 or NHL 5 compliant with EN 459-1 obtained by burning marbly limestones at 950°C, natural lime, selected carbonated and siliceous 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" polypropylene fibers. For type "I" water repellent agent.

AVIABILITY

BINDER:
Natural hydraulic lime NHL 3,5
Natural hydraulic lime NHL 5

PRODUCT:
INTOCALCE: Normal;
FR: Fiber reinforced;
I: Water repellent;
I FR: Fiber reinforced water repellent;

FEATURES

An accurate and selective choice of the main materials made with a perfect grading curve thanks 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 transpiring and impact resistant. It is the perfect base for every kind of superficial coating naturally transpiring (see finishes). For the type "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 the micro cracks induced by external stresses thanks to formation of an internal structural grid, give more resistance to the vibrations so is particularly suitable for masonry buildings subjected to stresses. For the type "I" the addition of the water-repellent agent makes it particularly suitable to walls exposed to driving rain.

USE

INTOCALCE is an eco-friendly bio base plaster breathable to apply directly on every kind of interior and exterior of old and new buildings as brick, core concrete, old masonries, concrete, reinforced concrete, slabs in reinforced brick, etc., to apply by hand or mechanically.

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APPLICATION

- Preparation of the substrates by removing all the crumbling and inconsistent parts; eliminating foreign bodies as dust, mud, bitumen, oil stains, etc.
- Is necessary to wet, in advance, particularly absorbent or dry or exposed to hot climates walls.
- To mix by hand, in a cement mixer or with a mixer at low speed, until when the mixture isn't homogeneous; with a plaster sprayer regulating the flow-meter until when the density isn't perfect.
- INTOCALCE must be applied by hand or mechanically; it can be applied at different thicknesses, is recommended for just one application not to exceed 1÷1,5 cm. In case of more applications let the substrate rest for two hours at least before applying the following layer.
- Within 6-8 hours from the application, the plaster has to 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 the lime.
- The minimum thickness of the finished product should not be less than 1 cm.
- With high temperatures, wind and low humidity, is recommended to protect from the quick drying moistening the substrates.
- For irregularities over 2 cm to fill with INTOCALCE to let mature 48 hours at least taking care not to mix with too much water in order to avoid a decrease in the mechanical strength.
- In corrispondence of bodies and\or different structures you need to apply stripes of network port plaster with an appropriate dimension (30-35cm), immersed on the plaster.
- Don't apply on frozen substrates, with frost or possible frost in 24 hours.
- Don't apply on gypsum substrates, synthetic coatings, paintings.
- 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 friable 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 tuff substrates, stones, mixed masonries, previously treated with the undercoat "INTOCALCE R" maturated 3/4 days at least.
- On foamed concrete blocks preparated with the bonding mortar "INTOAGGRAPPO" diluted 1:2 with water.
- We suggest to apply INTOCALCE with a temperature between + 5 ° C and + 30 ° C.

FINISHES

For the finishing of the surfaces plastered with INTOCALCE we do not recommend the use of non-breathable materials that would impair its functions and features. The right finish on the plaster INTOCALCE is represented by breathable finishes as FINCALCE, FINCALCE I, FINCALCE PLUS, FINCALCE FLEX, RASCALCE to be applied on the substrate matured for 2/4 days at least or mineral breathable colored coating type INTOFIN COL or FINCALCE COL applied on a matured substrate for 15-20 days at least.

INTOCALCE

YIELD
14 kg/mq for each cm of thickness.

PACKAGING
Loose in silo (gravity feed).
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 ± 5%
Workability time EN 1015-9	2 hours
Plastic shrinkage in cond. Termoigr. Standard	Absent
Compressive strength after 28 days EN 1015-11	2,5 N/mm^2(category CS II)
Flexural strength after 28 days EN 1015-11	1,2 N/mm^2
Adhesion on brick EN 1015-12	0,5 N/mm^2
Water vapor diffusion resistance factor EN 1015-19	μ ≤ 5
Water absorption coeff. due to capillary action EN 1015-18	Class "W0"
Water absorption coeff. due to capillary action EN 1015-18	Class "W1"
Fire reaction EN 998-1	Class "A1"
Thermal conductivity coefficient EN 1745 p.A.12	$\lambda_{10,dry,mat}$ = 0,40 W/mK
Durability	NPD
Toxicity - Regulation CE 1272/08	Danger
Classification UNI EN 998-1:2010	GP-CSII-W0/DOP nr. 96
Classification UNI EN 998-1:2010 TYPE "I"	GP-CSII-W1/DOP nr. 97

SUMMARY
Internal and external walls will be plastered with an eco-friendly bio-plaster based on natural hydraulic lime NHL 3,5 or NHL 5 compliant with EN 459-1 obtained by burning marbly limestones at 950°C, selected carbonated and siliceous sands with grading from 0 to 1,3 mm, natural additives tested for the specific use type "INTOCALCE" or fiber reinforced with a special composition of polypropylene fibers tested for the specific use 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 14 kg/mq for each cm of thickness, with a compressive strength after 28 days of 2,5 N/mm^2(category CS II).

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.

MALVIN
SEDE LEGALE E STABILIMENTO • Zona ASI - SS 7 Bis Km 15,400 - 81030 Gricignano di Aversa (CE)
TEL. + 39 081 8132780 - 5029713 Numero Verde 800 - 142 999 • FAX + 39 081 5029748 • commerciale@malvinsrl.com - www.malvinsrl.com