

# INTOCALCE FIN



**ECO-FRIENDLY BIO-FINISH BASED ON NATURAL HYDRAULIC LIME NHL 3,5 OR NHL 5 FOR INTERIORS AND EXTERIORS AND TYPE "FR" FIBER REINFORCED**  
**Compliant with UNI EN 998-1**

## DESCRIPTION

Eco-friendly bio-finish based on natural hydraulic lime NHL 3,5 or NHL 5 compliant with EN 459-1 with an high breathability, suitable for the finish of interiors and exteriors of old and new buildings with an high and constant quality level, produced with an automated system, to apply by hand. The characteristics of the natural hydraulic lime NHL ensure an hydraulic hardening very slow and constant that allows to obtain finishes 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 also fiber reinforced type "FR".

## 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, natural additives tested for the specific use which give to the product a very high adhesion and workability. For type "FR" polypropylene fibers.

## AVIABILITY BINDER:

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

## PRODUCT:

**INTOCALCE FIN:** Normal;  
**INTOCALCE FIN FR:** Fiber reinforced;

## FEATURES

An accurate and selected 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 finish can be applied on every kind of interior and exterior to finish. No cracks, no detachment it's breathable and impact resistant. It is the perfect base for coatings and breathable water paints to exalt the breathability of INTOCALCE FIN.

## USE

For the finish of interiors and exteriors of old and new buildings obtaining a sponged or large, medium or fine float finish. To apply directly on a plaster based on hydraulic lime type INTOCALCE and on all the lime/cement plasters, traditional and premixed, old and new, on restoration plasters and historical conservative restoration.

## APPLICATION

- Prepare the walls and ceilings, removing all the crumbling and inconsistent parts as dust, mud, tar, oil stains, etc.
- To wet, in advance, particularly absorbent or dry or exposed to hot climates walls.
- To mix by hand or with a mixer at low speed, until when the mixture isn't homogeneous.
- To apply with the american big trowel with two or more application in the same day crossing the direction of application. For just one application is recommended not to exceed the thickness of mm 2. In case of more applications let the substrate rest for one hour at least before applying the following layer.
- The maximum thickness of the finished product doesn't have to exceed mm 5.
- With high temperatures, wind and low humidity, is recommended to protect from the quick dry moistening the substrates.
- Don't apply on frozen substrates, with frost or possible frost in 24 hours.
- Don't apply on lime/gypsum substrates.
- Don't apply on not absorbent or painted substrates.
- 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 with driving rain.



- Don't apply on dehumidifying plasters with a thickness higher to mm 3.
- Don't apply on inconsistent and friable substrates.
- Don't add any other material to the product.
- To apply on reinforced concrete substrates, foamed concrete blocks and old plasters previously treated with the bonding mortar "INTOAGGRAPPO".
- To apply on very smooth reinforced concrete substrates previously treated with the adhesion promoter "ANCOMUR".
- On premixed new plasters let the substrate rest for 3/4 days at least.
- INTOCALCE FIN must rest for 20/22 days at least before the decoration.
- We suggest to apply INTOCALCE FIN with a temperature between + 5 ° C and + 30 ° C.

## PACKAGING

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

## TYPES OF FINISH

- B:** Skim coat.  
**F:** Decorative plaster for fine smooth or sponged finish.  
**M:** Decorative plaster for medium sponged finish.  
**SF:** Decorative plaster for large sponged finish.

## TECHNICAL SPECIFICATIONS COMPLIANT WITH UNI EN 998-1

	B	F	M	SF
Water content of the mix	~35-40%	~35-40%	~35-40%	~35-40%
Max grading EN 1015-1	< 0,6 mm	< 0,6 mm	< 1,3 mm	< 1,3 mm
Specific weight $\pm$ 5% EN 1515-10	1.200 Kg/m <sup>3</sup>	1.200 Kg/m <sup>3</sup>	1.300 Kg/m <sup>3</sup>	1.300 Kg/m <sup>3</sup>
Pot life EN 1015-9	2 hours	2 hours	2 hours	2 hours
Plastic shrinkage in cond. Termoigr. Standard	absent	absent	absent	absent
Compres. Strength after 28days EN 1015-11	2 N/mm <sup>2</sup> (CSI)	2 N/mm <sup>2</sup> (CSI)	2,2 N/mm <sup>2</sup> (CSI)	2,2 N/mm <sup>2</sup> (CSI)
Adhesion on brick EN 1015-12	0,6 N/mm <sup>2</sup> FP:A	0,6 N/mm <sup>2</sup> FP:A	0,7 N/mm <sup>2</sup> FP:A	0,7 N/mm <sup>2</sup> FP:A
Water vapor diffusion resistance factor EN 1015-19	$\mu < 6$	$\mu < 6$	$\mu < 7$	$\mu < 7$
Water absorption coeff. dueto capillary action EN 1015-18	Class W0	Class W0	Class W0	Class W0
Fire reaction EN 998-2	Class "A1"	Class "A1"	Class "A1"	Class "A1"
Thermal conductivity EN 1745 p.A.12	$\lambda_{10,dry,mat} = 0,35$ W/mK	$\lambda_{10,dry,mat} = 0,35$ W/mK	$\lambda_{10,dry,mat} = 0,39$ W/mK	$\lambda_{10,dry,mat} = 0,39$ W/mK
Durability	NDP	NDP	NDP	NDP
Theoretical yield in Kg/mq for 2 application	1,5-2	1,5-2,5	2-3,2	2-3,2
Toxicity - Regulation CE 1272/08	Danger	Danger	Danger	Denger
Classification UNI EN 998-2:2010*	GP-CSI-W0 DoP nr. 100	GP-CSI-W0 DoP nr. 100	GP-CSI-W0 DoP nr. 102	GP-CSI-W0 DoP nr. 102

## SUMMARY

Internal and eternal walls will be finished with eco-friendly bio-finish based on natural hydraulic lime NHL 3,5 or NHL 5 compliant with EN 459-1 with an high breathability, type "INTOCALCE FIN" or fiber reinforced type "INTOCALCE FIN FR" by MALVIN S.r.l., to apply by hand and to mix just adding water, with smooth or sponged fine, medium or large finish.

*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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