

# INTOCALCE MUR



## ECO-FRIENDLY MASONRY BIO-MORTAR BASED ON NATURAL HYDRAULIC LIME NHL 3,5 OR NHL 5 Compliant with UNI EN 998-2

### DESCRIPTION

It is an eco-friendly bio-mortar based on natural hydraulic lime NHL compliant with EN 459-1 for the construction of internal and external walls, with an high and constant quality level produced with an automated system, to apply by hand or mechanically. Available with natural hydraulic lime NHL 3,5 or NHL 5 and classification M2,5, M5, depending on the type of construction, on the seismicity of the areas of use and on the grade of the compressive strength required. The natural hydraulic lime NHL ensure an hydraulic hardening very slow and constant that allow to obtain mortars 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.

### COMPOSITION

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, additives of natural origin tested for the specific use which give to the product a very high adhesion and workability.

### FEATURES

An accurate and selective choice of the main material 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. Particularly suitable for restorations.

### USE

Binder for masonry elements internal – external as solid/hollow bricks, cement blocks, facing solid/hollow bricks, etc. The type M5 can be used as rustic plaster for application by hand or as mechanical undercoat to reinforce masonry bricks, previously humidified. Don't use on foamed concrete blocks and on gypsum panels.

### AVIABILITY

#### BINDERS:

Natural hydraulic lime NHL 3,5

Natural hydraulic lime NHL 5

#### CLASS RESISTANCE:

M 2,5

M 5

### APPLICATION

- Remove from the substrate all the crumbling and the inconsistent parts; eliminating dusts, mud, bitumen, oil stains, etc.
- Don't apply on frozen substrates, with frost or possible frost in 24 hours.
- Be sure that the brick or the blocks are free of dust, mud, oil stains, etc.
- To mix by hand, in a cement mixer or with a mixer at low speed, until when the mixture isn't homogeneous; with a continuous mixer regulating the flow-meter until when the density isn't perfect.
- With high temperatures, wind and low humidity, is recommended to protect from the quick drying drowning the substrates.
- It can be applied at different thicknesses but never lower to mm 5 or higher than mm 20.
- Don't apply with strong wind or in very sunny days.
- Don't apply with driving rain.
- Don't add any other material to the product.
- We suggest to apply INTOCALCE MUR with a temperature between + 5 ° C and + 30 ° C.

# INTOCALCE MUR



## • YIELD

- 15/16 kg/mq of masonry with cm 8 bricks.

•

## • 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 998-2

	M2,5	M5
Water content of the mix	~20-25%	~20-25%
Max grading EN 1015-1	<1,3mm	<1,3mm
Specific weight $\pm 5\%$ EN 1015-10	1.400 Kg/m <sup>3</sup>	1.400 Kg/m <sup>3</sup>
Pot life EN 1015-9	2 hours	2 hours
Chlorides content EN 1015-17	< 0,1% p/p	< 0,1% p/p
Compres. Strength after 28days EN 1015-11	> 2,5 N/mm <sup>2</sup> (M2,5)	> 5 N/mm <sup>2</sup> (M5)
Initial shear adhesion (primitour) EN 998-2	0,15 N/mm <sup>2</sup>	0,15 N/mm <sup>2</sup>
Water absorption coeff. dueto capillary action EN 1015-18	0,55 Kg/ (m <sup>2</sup> •min <sup>0,5</sup> )	0,55 Kg/ (m <sup>2</sup> •min <sup>0,5</sup> )
Water vapor diff. resistance factor EN 1015-19	5 < $\mu$ < 20	5 < $\mu$ < 20
Fire reaction EN 998-2	Class "A1"	Class "A1"
Durability	NDP	NDP
Thermal conductivity EN 1745 p.A.12	$\lambda_{10,dry,mat} = 0,43$ W/mK	$\lambda_{10,dry,mat} = 0,43$ W/mK
Classification UNI EN 998-2:2010*	G - M2,5 DoP nr. 35	G - M5 DoP nr. 36

\* at guaranteed performance (2+)

## SUMMARY

Internal and external masonries will be realized with eco-friendly bio-mortar for premixed masonry based on natural hydraulic lime NHL 3,5 or NHL 5 compliant with EN 459-1 obtained by burning marbly limestones at 950°C type "INTOCALCE MUR" by MALVIN S.r.l., to apply by hand or mechanically and to mix just adding water, class M2,5 (M5).

*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 • FAX + 39 081 5029748 • commerciale@malvinsrl.com - www.malvinsrl.com