

### INTOCALCE R



# ECO-FRIENDLY BIO RENDERING MORTAR BASED ON NATURAL HYDRAULIC LIME NHL 3,5 OR NHL 5 (BROWNCOAT) Compliant withUNI EN 998-1

#### **DESCRIPTION**

It is an eco-friendly bi rendering mortar based on natural hydraulic lime NHL 3,5 or NHL 5 compliant with EN 459-1, with an high breathability, for interiors and exteriors with an high and constant quality level, produced with an automated system, to apply by hand or by mechanical projection. Helps the adhesion of plasters on old masonries not homogeneous. The natural hydraulic lime NHL ensures an hydraulic hardening very slow and constant that allows 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 conservative historical 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".





### **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,

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

#### **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 rendering mortar very plastic and easily workable. To apply directly on every kind of surface, no cracks, no detachment it's transpiring and impact resistant. It is the perfect base for every kind of interiors and exteriors.

#### **USE**

For the preparation of internal and external walls to plaster, through application by hand or mechanically, as old masonries not homogeneous or in mixed masonry, solid bricks, natural stone (tuff, sandstones, etc.), concrete prefabricate or thrown in opera (if not absorbent treat with INTOAGGRAPPO or ANCOMUR).

#### AVIABILITY

BINDER:

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

#### **APPLICATION**

- Preparation of walls and ceilings to remove foreign bodies such as dust, mud, tar, oil stains, etc.
- The walls on which must be placed INTOCALCE R must be previously washed with a water jet at strong pressure to remove all the deteriorated parts and the impurities.
- To wet, in advance, not 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.
- Apply INTOCALCE R to cover the 70-80% at least of the surface.
- The surface obtained doesn't have to be smoothed.
- Wait for 24 hours before applying a base coat plaster based on hydraulic lime.
- Don't apply on frozen substrates, with frost or possible frost in 24 hours.
- Don't apply on gypsum substrates or painted substrates, dusty concrete or with traces of form release agents.
- 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 add any other material to the product.
- We suggest to apply INTOCALCE R with a temperature between + 5  $^{\circ}$  C and + 30  $^{\circ}$  C.

## **INTOCALCE** R



#### **PACKAGING**

Loose in silo (gravity feed).

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

7/8 kg/mg as undercoat.

#### TECHNICAL SPECIFICATIONS COMPLIANT WITH UNI EN 998-1

Water content of the mix

Grading EN 1015-1 Specific Weight EN 1015-10

Plastic shrinkage in cond. Termoigr. Standard

Workability time EN 1015-9

Compressive strength after 28 days EN 1015-11

Flexural strength after 28 days EN 1015-11

Adhesion on brick EN 1015-12

Water vapor diffusion resistance factor EN 1015-19

Water absorption coeff. due to capillary action EN 1015-18

Reaction to fire EN 998-1

Thermal conductivity coefficient EN 1745 p.A.12

**Durability** 

Toxicity - Regulation CE 1272/08

Classification UNI EN 998-1:2010

~20-30%

≤ 1,3 mm

 $1.500 \, \text{kg/m3} \pm 10\%$ 

Absent 2 hours

 $\geq$  6 N/mm $^2$  (category CS IV)

 $\geq$  1,4 N/mm<sup>2</sup> 0,7 N/mm<sup>2</sup>  $\mu \leq 8$ 

Class "W0" Class "A1"

 $\lambda_{10,dry,mat} = 0.47 \text{ W/mK}$ 

NPD Danger

GP-ČSIV-WO/DOP nr. 98

#### **SUMMARY**

To improve the adhesion of plasters based on hydraulic lime on not homogeneous masonries or concretes inside and outside, will be done a rendering with bio-mortar eco-friendly based on natural hydraulic lime NHL 3,5 or NHL 5 compliant with EN 459-1, type "INTOCALCE R" or fiber reinforced type "FR" by MALVIN S.r.l., to apply by hand or mechanically and to mix just adding water, with a consumption of 7/8 kg/mq, with a compressive strength after 28 days  $\ge 6$  N/mm<sup>2</sup> (category CS IV).

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.

















