



## NATURAL HYDRAULIC LIME NHL 3.5

PRODUCT SHEET

**NHL 3,5 (UNI EN 459-1:2010)**  
**Low sulfates and alkals content**  
**Excellent for green building and restoration**

**Excellent for mortars and plasters**  
**High mechanical resistance**  
**100% free from additives**  
**100 % Made in Italy**

### BRIEFLY

The natural Hydraulic Lime NHL 3.5 is used in the preparation of mortar for masonry and plaster. Mechanical characteristics, porosity and the low quantity of soluble salts, ensure a full compatibility of Natural Hydraulic Lime NHL 3.5 with traditional building materials (stone, brick, etc.). Highwater vapor permeability, capacity to prevent fungi and molds, optimal regulatory hygrometricalfunction of environments, ensure the execution of building with high living standards.

### ORIGIN

Building lime comes from natural raw materials (limestone marl) that are extracted in local quarries, still active near the kiln of Savignano sul Panaro (MO). Raw materials undergo a selection process based on precise compositional characters. The particular size of the limestone ensures a controlled burning.

### BURNING

Burned in vertical kilns at temperatures lower than 1200° C. The calcined product, once cooled, undergoes a controlled hydration process and then milled in ball mills. A separator a wind then extracts the finest part of the lime that in ready for packaging.

### SLAKING

The calcined product, once cooled, undergoes a process of controlled hydration. The lime is grounded, and only in the case of FL, mixed with natural pozzolanas. The grinding is done in ball mills. A wind separator extracts the finest part of the lime, which is transported to destination in tank or in bags.

### CERTIFICATION

CE marking: 0925 CPD Ce b n.167/2008

### USES

The Natural Hydraulic Lime- NHL 3.5is used for the realization of mortar and plaster, specific for historical buildings restoration and green building.

### STORAGE

12 months in unopened original packaging, in a covered and dry place.

### PACKING

The product is available in tank, big-bags or in bags (25 kg/each).

### DOSAGE

Natural Hydraulic Lime NHL 3.5 dosage changes from 350 to 600 kilograms per cubic metre of aggregate (sands, marble powder, earthenware, etc.) depending on the granulometry of the aggregate. The water slurry has to be determined in the building site, depending on the type of action and the type of the aggregate. In order to preserve the peculiar characteristics of Natural Hydraulic Lime NHL 3.5 i(n particular Portland Cement) it should not be added artificial hydraulic binders to mixtures.

### SAFETY INSTRUCTIONS

Irritating to eyes and skin. Do not take internally. Wear suitable gloves and eye/face protection; in case of contact with eyes rinse immediately with water and seek medical advice - keep out of the reach of children.





# NATURAL HYDRAULIC LIME NHL 3,5

PRODUCT SHEET

## CHEMICAL & PHYSICAL DATA

Physical state	Powder
Color	Hazel
Bulk density	0,7 g/cm <sup>3</sup>
Residual @0,09 mm	3,0 %
Residual @0,20 mm	0,1 %
Penetration (Plunger)	30 mm
Stability	0,5 mm
Air content	4,8 %
Setting beginning time	6 h
Setting ending time	15 h
Free water	0,9 %
Compressive strength (28 days)	4 MPa
CaO	53,6 %
MgO	0,65 %
Available lime	26,1 %
SO <sub>3</sub>	< 1 %
SiO <sub>2</sub>	17,7 %
Fe <sub>2</sub> O <sub>3</sub>	2,14 %
Al <sub>2</sub> O <sub>3</sub>	2,53 %
Na <sub>2</sub> O+K <sub>2</sub> O	< 1 %
Loss on ignition	21,4 %

The information given in this data sheet is based on our current knowledge of the product when properly stored, handled and applied. We cannot guarantee that the product will be suitable, effective or safe when used for any purpose other than its stated uses.

To the extent that it is lawful, we exclude warranties implied by law and limit our liability to the cost of replacing the product. We accept no responsibility for loss or injury caused by improper use, incompetent preparation, inexpert or negligent application, or ordinary wear and tear.

Service or advice given by our staff should not amount to responsibility for the project - since the owner, or their contractor (and not La Banca della Calce Srl), is responsible for procedures relating to the application of the product.

LAST UPDATE 10/09/2021

