



LIME NHL

NATURAL HYDRAULIC LIME NHL 3,5 AND NHL 5

CALCE NHL 3,5 is a natural hydraulic lime NHL3,5 it complies with the current regulations UNI EN 459-1/2010 it is obtained by heating layers of calcareous marl in traditional furnaces at 1100°C. Calce NHL3,5, has in its chemical composition silica dicalcium and calcium Hydroxide typical of the natural hydraulic limes while compounds of clinker and soluble salts are absent.

CALCE NHL 5 is a natural hydraulic lime NHL 5 it complies with the current regulations UNI EN 459-1/2010, it has a low content of soluble salts it is obtained by heating marl in vertical furnaces at temperatures that do not exceed 1250°C. Calce NHL5 has in its chemical composition silica dicalcium, aluminates and calcium Hydroxide typical of the natural hydraulic limes while compounds of clinker and soluble salts are absent.

The particular chemical nature of both the Limes gives: excellent resistance against sulphates, a slow and constant set, steadily increasing its mechanical resistance in the subsequent months from when it is laid, it also forms a highly traspirable crystal mesh. The mineral nature is suitable for making mortars from the chemical and physical point of view, compatible with the traditional buildings, bio-construction, structural consolidation and historical restorations.



Data sheet

Use:

CALCE 3,5 and 5 can be mixed with inert as long as it is deprived of organic content and respects the granulometry curve, for the production of very porous mortars and with a low content of soluble salts, such as:

NHL 3,5

- Mortars for fillings
- Mortars for pointing stone or brick surfaces
- Underlayment plasters
- Humidity absorbent plasters
- Highly workable and transpirable finishes that allow for the control of humidity, limiting the risk of condensation and mold.

NHL 5

- Mortars used for laying walls of hollow bricks, stone and bricks
- Flooring underlayment•Flooring in broken pieces of bricks and terracotta
- Underlayment plasters
- Humidity absorbent plasters
- Structural plasters
- Consolidation mortars
- Mortar for Structural reinforcement
- Highly workable and transpirable finishes that allow for the control of humidity, limiting the risk of condensation and mold.

NHL 3,5	
Colour	light brown
Apparent density g/cm ³	0,65 ÷ 0,75 EN 459-1
Specific weight g/cm ³	2,5 ÷ 2,7 EN 459-1
Compressive strength	28 days > 3,5 MPa EN 459-1
Compressive strength	56 days > 4,5 MPa EN 459-1
Setting time (h)	5 EN 459-1
SO ₃	< 0,5 %
Dicalcium	> 25%
Residue 200 µmm	< 0.2 %
Residue 90 µm	< 7 %

NHL 5	
Colour	Beige
Apparent density g/cm ³	0,65 ± 0, 05 EN 459-1
Specific weight g/cm ³	2,7 EN 459-1
Fineness%	90 µm ≤ 15,0 200 µm ≤ 5,0 EN 459-1
Blaine (cm ² /g)	9400
Expandability alternative method (mm)	≤ 20 EN 459-1
Water content (%)	≤ 2,0 EN 459-1
Air content (%)	≤ 5 EN 459-1
Penetration (mm)	>10 e < 50 EN 459-1
Setting time (h)	start > 1,0 final ≤ 15,0
Compressive strength	7 days (MPa) ≥ 2,0 EN 459-1
Compressive strength	28 days (MPa) ≥ 5,0 e ≤ 15 EN 459-1
Sulphates (SO) (%)	≤ 2,00 EN 459-1
Dicalcium Ca(OH) (%)	≥ 15,0 0 EN 459-1

Application:

CALCE NHL 3,5 and 5 is to be mixed with selected aggregates and deprived of organic content, with clean water respecting the appropriate dose for the type of mortar. It can be mixed manually or with a cement mixer. The water must be dosed based on the consistency and workability desired, considering that the mortar improves its workability if left to rest for 30 mins. before use.



PRODOTTO IDEALE PER RISANAMENTO



Warnings:

- Application temperature range between +5° and +30° with no wind, to avoid crumbling caused by frost or cracks caused by the fast evaporation of water.
- The aggregates must be selected and pure. The use of non-suitable or too fine aggregate will result in non-workable mixtures (rough, smooth), or have low durability and resistance.
- Do not apply the mortar on surfaces impregnated with water or if there is the possibility that water could come into contact with the mortar during the first week.
- The mechanical resistance depends on environmental factors (temperature, humidity and hardening time) and on how the mixture is prepared (dose of binder, quantity of water and type of inert)