



BRIGLIADORI
FORNACE CALCE



EDILIZIA, RESTAURO & COSTRUZIONI

CE 16
EN 459-1

Product code 7

NATURAL HYDRAULIC LIME NHL5

DESCRIPTION AND USES

Natural hydraulic lime NHL 5 classified according to EN 459-1:2010 is obtained by the calcination of marly limestones that are highly silica and alumina-rich marly in vertical layered furnaces in a slow process at temperatures around 1000°C.

The fired limestone is partly hydrated and then ground without the addition of any material that changes the natural composition of the marl. It is an ideal lime in screed mortars and plasters, in building construction for historical and monumental restoration, in green building and construction in general.

CE marked product with certification no. 0925 CPR Ce b no. 22/2016

TECHNICAL PROPERTIES

| Properties | Natural Hydraulic Lime NHL5 | Requirements UNI EN 459-1:2010 |
|----------------------------------|---|--|
| Colour | Light brown-pink | |
| Compressive strength | at 7 days > 2 MPa at 28 days > 5 MPa | at 7 days > 2 MPa at 28 days ≥ 5 and ≤ 15 MPa |
| Start working time | > 1 h | > 1 h |
| End working time | ≤ 11 h | ≤ 15 h |
| Residual at 0,09 mm | < 10% | ≤ 15% |
| Residual at 0,2 mm | < 0,5% | ≤ 2% |
| Volumetric stability | ≤ 0,5 mm | ≤ 2 mm |
| Sulphate content SO ₃ | < 1% | ≤ 2% |
| Available lime | > 15% | ≥ 15% |
| Bulk density | 0,7 g/cm ³ | |
| Air content | ≤ 5% | ≤ 5% |
| Packaging | 25 kg bag | |

APPLICATION

For interventions on old structures clean and wet the supports thoroughly, as well as if reusing old bricks or stones.

Prepare the support by removing dust, efflorescence, loose parts, release agents, etc... Always consult us when plastering heavily deteriorated walls with a high salt content.

In cold periods with temperatures below +6°C or in the case of night frosts, take the necessary precautions or avoid working, as well as in excessively hot and windy periods to avoid excessively rapid drying.

Do not apply on walls soaked with water or where there is a possibility of coming into contact with running or stagnant water, especially within the first few days of application.

Do not apply on gypsum or painted substrates. Do not apply on concrete without suitable preparation.

Mixed tuff stone brick substrates must have suitable preliminary preparation (rough layer, mesh, etc.).

It is always a good rule when building plasters to apply a first rough layer and let it dry.

Then proceed for thicknesses of 1.5 cm per layer.

Mix NHL 5 Natural Hydraulic Lime in a concrete mixer with local silt-free sand with a well-distributed grain size in a ratio of 1:3 and add the necessary water to obtain a mix with the right fluidity without grains (depending on the type of sand, conduct preliminary tests).

Let the mixture rest for a few minutes, add a bit of water and mix again for a couple of minutes. Since NHL 5 Natural Hydraulic Lime hardens fairly quickly, it should be applied within 45 minutes if possible.

In applications where it is used as a bonding material for mortars or finishes left exposed, it is recommended to use Natural Hydraulic Lime NHL 5 from a single production batch in order to avoid colour differences.

As a natural product, Natural Hydraulic Lime NHL 5 may be subject to colour variations. Plasters made with NHL 5 Natural Hydraulic Lime are extremely porous and must be finished with highly breathable finishes and paints.

CONDITIONS FOR A SAFE STORAGE

Keep covered and dry. Protect against moisture. Dispose of according to local regulations. Storage: 12 months in unopened original packaging in a covered and dry place. Product complies with Annex II of REACH - Regulation 2015/830.

Refer to Safety Data Sheet (SDS) for information on possible hazards. Product for professional use. The use of the product must be based on the applicator's own research and evaluation.

The data provided are obtained from laboratory tests conducted during normal production control procedures under standard conditions; they may therefore be subject to variation depending on the application conditions and are to be considered as indicative.

The application process takes place on site outside of our control and the company Brigliadori Fornace Calce SRL assumes no responsibility for the outcome of the application. The company assumes only product responsibility, while application, use and processing are the exclusive responsibility of the customer. The company reserves the right to modify the composition over time while naturally maintaining the characteristics unaltered. This technical data sheet cancels and replaces the previous ones

Date review September 2024

BRIGLIADORI FORNACE CALCE s.r.l.

Via Celletta dell'Olio 1731 - 47822 Santarcangelo di Romagna (RN) telefono +39 0541 626144 - 626066 - C.F. e P.IVA 04241400409

www.fornacebrigliadori.it