



**BRIGLIADORI**  
**FORNACE CALCE**



EDILIZIA, RESTAURO & COSTRUZIONI

## THERMAL INSULATING LIME MORTAR

**CE 11**  
**EN 998-1**

**Product code 47**

**Mortar plaster for internal and external thermal insulation (T)**

### DESCRIPTION AND USES

**Thermal Insulating Lime Mortar** is a mortar plaster for internal and external use at high thermal insulation made of **Natural Hydraulic Lime NHL5** (our production certified EN 459:1) and glass foam aggregates.

Its use improves the reduction of heat loss from the walls especially in the presence of thermal bridges ensuring the breathability of the environment.

It is specially formulated for new construction and historical buildings, churches, old villas, farms, etc ... It can be applied by hand or with plastering continuously machines with full shovel mixer and extra mixer (type Turbo or Rotoquick), in order to avoid alterations of the product characteristics (development of air, mechanical strength, etc ...).

### TECHNICAL PROPERTIES

Colour	: light brown
Aggregates size	: 0-1 mm
Mixing water	: about 40-42% 6/6,5 lt per 15 kg bag
Consumption	: about 5 kg/m <sup>2</sup> of thickness
pH	: > 12
Thermal conductivity (W/m·K)	: class T1 $\lambda = 0.090$
Powder bulk density	: 0,5 kg/dm <sup>3</sup>
Hardened product bulk density	: 0,6 kg/dm <sup>3</sup>
Water vapour diffusion coefficient ( $\mu$ )	: >5<20
Compression resistance (class)	: CS I
Adherence to brick (N/mm <sup>2</sup> )	: $\geq 0,15$ FP:B
Water absorption for capillarity (class)	: W1
Packaging	: 15 kg bag

### APPLICATION

**Thermal Insulating Lime Mortar** can be applied on brick blocks and thermal brick, concrete blocks or tuff, mixed masonry or stone.

If the wall has, especially in the lower part, a deterioration due to salts and moisture it is necessary to provide an appropriate treatment (Anti-salt Consolidating Mortar and Restoration Mortar/F)

The surface must be clean and solid, free of oil, not solid parts, mold, salts efflorescence and old paints.

Wet the surfaces to rejection before the product application, wait for the disappearance of the surface water film and during dry and windy days repeat this operation the evening before and the following morning before application.

The surfaces must be previously consolidated with Natural Hydraulic Lime NHL5 and sand 0.3 mm in 1:2 ratio.

Apply a homogeneous covering consolidating product as already described and wait 2-3 days. For the bands, in they should be performed, it is better to use **Thermal Insulating Lime Mortar**.

Moisten the consolidated masonry just before the application of **Thermal Insulating Lime Mortar**.

Mix **Thermal Insulating Lime Mortar** with a cement mixer in the following way: put about 80% of water into the mixer, then the product, and complete with the remaining water.

Mix for 5 minutes, wait 2 minutes, then mix again for 2 minutes.

Apply a first coat of about 1.5 cm with a trowel from the bottom to the upper part and the next one when the previous one has started to dry.

(1-3 hours depending on the environmental temperature).

Level the surfaces without compressing the product. Wait at least 10-12 days in summer and 20-25 days in winter before applying the finishing. It is recommended to wait at least 20-25 days before applying a colored finishing and always put a special mesh (insulation type) among the coats, as the lightened plaster suffer more the settling buildings, vibrations, etc ..

Fresh plaster should be protected from frost and rapid drying.

Since the plaster drying is based on hydraulic lime drying, a temperature of a + 5°C is the minimum value for application and good mortar drying.

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During summer, on surfaces exposed to sunlight, it is recommended to wet the plaster for a few days after the application.

It is however not recommended with temperature of +30°C.

The material, if stored in a dry place on wooden pallets, can maintain its stability for at least 12 months.

Attention: **Thermal Insulating Lime Mortar** is an insulating plaster and as so should be avoided the direct contact with sources of moisture by providing a detachment from any horizontal surface through the use of profiles or suitable separating elements.

#### **CONDITIONS FOR A SAFE STORAGE**

Store the product in a dry place and indoors. Avoid humidity. Waste treatment according to local law.

Storage: up to 12 months in its original and closed packaging in a dry place and indoors.

Product according to Annex II of REACH - Regulation 2015/830.

For further and complete information about the safe use of our product please refer to the latest version of our Material Safety Data Sheet.

Product for professional use. The product use must be based on researches and evaluation of the worker.

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