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 for internal and external walls with high thermal insulation based on **Natural Hydraulic Lime NHL5** (of our own production certified according to standard EN 459-1) and foam glass granulates.
Thermal Insulating Lime Mortar allows the reduction of heat loss from masonry and thermal bridges, guaranteeing the breathability of the environment.
Ideal for applications in new buildings, buildings of historical interest, churches, old villas, farmhouses, etc.
Can be applied manually or with plastering machines.

TECHNICAL PROPERTIES

Colour	: light brown	
Grain size range	: 0-1 mm	
Mixing water	: approx. 40-42%	6-6,5 lt per 15 kg bag
Theoretical yield	: 5 kg/m²/cm	
pH	: > 12	
Thermal conductivity (λ)	: 0,09 W/m·K (T1 Class)	
Bulk density	: 0,5 kg/dm^3	
Hardened bulk density	: 0,6 kg/dm^3	
Water vapour diffusion coefficient (μ)	: >5 < 20	
Compressive strength (class)	: CS I	
Brick adhesion (N/mm2)	: ≥ 0,15 FP:B	
Capillary absorption (class)	: W1	
Fire reaction (class)	: A1	
Packaging	: 15 kg bag	

APPLICATION

Thermal Insulating Lime Mortar can be applied to brick and thermolaterial blocks, cement or tuff blocks, mixed masonry or stone walls.
If the masonry shows deterioration due to salts and humidity, especially in the lower part, an appropriate cycle must be applied treatment (Anti-salt Consolidating Mortar and Restoration Mortar/F)
The substrate must be clean and consistent, free of oil, crumbling parts, mould, salt efflorescence and old paintwork. Moisten the substrates thoroughly before applying the product, wait for surface water to run off and apply the first layer. On dry and windy days, repeat this operation the previous evening and the following morning before application. If the surface is compact or not very absorbent, the application must be preceded by a rendering coat as an adhesion layer.
Use **Thermal Insulating Lime Mortar** if making strips.
Moisten the undercoat just before applying **Thermal Insulating Lime Mortar**.

Mix **Thermal Insulating Lime Mortar** in the concrete mixer as follows: put approx. 80% water in the mixer, then the product and complete by adding the remaining water.
Mix for 5 minutes, pause for 2 minutes, then mix for a further 2 minutes.
Apply a first layer about 1,5 cm thick by trowel from the bottom upwards and the next coat (minimum thickness 2 cm) when the previous one has started to set. (1-3 hours depending on ambient temperature).
For mechanical application, use continuous plastering machines equipped with a full-blade mixer, D 6-3 or better D 8 (Twister) rotor, 25x37 mm material-carrying hose, length 15/20 m and spray lance, in order to avoid altering the characteristics of the product (air development, mechanical resistance, etc.).

Tape the surfaces without compressing the product.
Wait at least 15 days in summer and 20-25 days in winter before applying **FINAL FINISHING BM4**.
It is recommended to wait at least 25 days before applying coloured finishes. Always insert fibreglass netting between coats, as lightened plasters are more affected by building settlements, vibrations, etc..
These times may vary depending on temperatures and application conditions.
Thermal Insulating Lime Mortar is an over-coat insulation product and as such, direct contact with sources of humidity must be avoided by detaching it from any horizontal surface using starting profiles or suitable detaching elements.

Plasters made with **Thermal Insulating Lime Mortar** must be separated from walking surfaces (pavements, roads, terraces), from areas where water can accumulate and from contact with the ground (lawns, flowerbeds, substrates made of sand or gravel for self-locking cement or natural stone screeds) in order to prevent the phenomenon of capillary rising in the body of the plaster, which would cause the formation of surface halos and the consequent early deterioration of the finishes applied.
Separation from the walking surfaces must be carried out with approximately 10 cm of ready-mixed mortar BM14.
The fresh plaster must be protected from frost and rapid drying.
As the hardening of the plaster is based on the hydraulic setting of the lime, a temperature of + 5°C is considered the minimum value for application and for good hardening of the mortar.
During the summer season, on surfaces exposed to the sun, we recommend wetting the plaster for a few days after application.

Avoid application at temperatures below + 5°C and above + 35°C

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.

Date review September 2024