



**CALCEPURA**  
La tradizione della calce.

**RESTAURA**

NHL 5.0 natural hydraulic lime line

CALCEPURA RESTAURA is a class M15 fibre-reinforced structural mortar based on natural hydraulic lime NHL 5.0, selected limestone aggregates with controlled grain size, fibers and specific additives that improve its workability.

THE PRODUCT IS PREPARED WITH CERTIFIED NHL NATURAL HYDRAULIC LIME AND COMPLIANT WITH THE EN 459-1 STANDARD.

COMPLIANT WITH THE UNI EN 998-1 STANDARD.

#### CHARACTERISTICS

Thanks to the quality and value of CALCEPURA LEGANTE, the product is ideal for the construction of historic walls or in the green building sector. CALCEPURA MURATURA has a high permeability to water vapor and a limited reactivity to the salts contained in the walls, contributing to better living comfort. It is therefore a suitable plastering product for the restoration of ancient wall structures.

#### ADVANTAGES

- Compatible with materials and techniques of ancient tradition
- Eliminates and prevents fungi and mold
- Highly permeable to water vapor
- High mechanical performance

#### WARNINGS

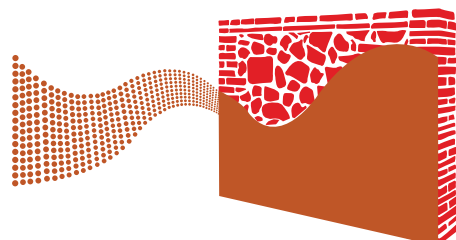
Protect the product from rain, washing away, frost, rapid drying or strong ventilation for at least 48 hours after application. Wait at least 72 hours after smoothing the plaster before applying the smoothing compound (FINE MORTAR or PRE-PACKAGED MORTAR).

#### TECHNICAL DATA

UNI-EN 998/2 class	M15
Class UNI-EN 998/1	GP-CS II-W1
Color	hazelnut
Granulometry	< 3 mm
Powder density	1675 kg/m <sup>3</sup>
Dough volumetric mass	2000 kg/m <sup>3</sup>
Hardened volumetric mass	1850 kg/m <sup>3</sup>
Compressive strength at 28 days (UNI EN 1015-11)	> 15 N/mm <sup>2</sup>
Flexural strength (UNI EN 1015-11)	≥ 0.5 h N/mm <sup>2</sup>
Reaction to fire	EUROCLASS A1
Thermal conductivity (vt P=50%)	λ 0.83 W/mK
Initial shear strength	0.15 N/mm <sup>2</sup>
Vapor permeability coefficient	μ 15/35
Conservation	In the original packaging and protected from atmospheric agents, the product retains its original characteristics for approximately 12 weeks.

#### INSTALLATION FEATURES

Mixing water	19 (±2)%
Application temperature	+ 5°C ÷ +35°C
Pot life / application time	about 40 min at a temperature of 20°/25°C
Pot life of the dough	about 1 hour at a temperature of 20°/25°C
Mixing time in the plastering machine	30 sec / 1 min
Plastering machine downtime	< 20 min
Water absorption	< 0.4 kg/(m <sup>2</sup> .min0.5)
Mixing times laboratory tests (UNI EN 1015-2:2007 * 2)	45 Seconds Speed 1 Including water insertion
Supply	25 kg bag / 64 bags per pallet



## PREPARATION OF SUPPORTS

Before use, make sure that the supports are monolithic and of excellent consistency according to good construction rules. The supports must be solid and free from: dust, grout laitance, inconsistent parts, oil stains, grease, paint, lime, plaster, rust, etc.. Eliminate any crumbly and inconsistent parts of the masonry. Thoroughly wet particularly absorbent bricks, stones or bricks. In the presence of strong salinity, it is recommended to wash the entire wall with a pressure washer and then treat with ESICEM ANTISALE (see technical data sheet). Pre-treat smooth or slightly absorbent supports with a coat of fluid or semi-fluid liquid grout made in the following way:

1 part water

1 part of ESICAL LATTICE 2/3 parts  
of CALCEPURA LEGANTE

Arrange the connection of the structural elements by applying a suitable plaster support mesh.

## PRODUCT PREPARATION

To prepare the mixes, a normal inclined-axis concrete mixer or planetary mixer or drill mixer or plastering machine can be used.

Moisten the inside of the mixer, taking care not to leave any water deposited inside. Add water in the appropriate amount to obtain a homogeneous mixture, approximately 4.5 liters per bag.

**INSTALLATION:** Use CALCEPURA RESTAURA as a normal plaster mortar, taking care to apply a minimum thickness of 2.5 cm per application coat. Apply a first low-thickness coat ("rinzaffata") and then proceed after a few hours (about 4 depending on the application temperatures) with the first application coat. Wait at least 24 hours before applying subsequent coats. Finish the job with a final coat of CALCEPURA INTONACO with a minimum thickness of 10 mm.

### PRACTICAL NOTES

Protect the product from rain, washing away, frost, rapid drying or strong ventilation for at least 48 hours after application. Do not apply on gypsum, scagliola, painted surfaces, wooden, metal or plastic elements.

Wait at least 72 hours after plastering before applying the skim coat (FINE MORTAR or PRE-PACKAGED MORTAR).

## SAFETY

The data and information contained in this sheet are the result of the knowledge available at the date of publication.

Esincalce srl assumes no responsibility for damage to persons or things that may arise from a use of the product other than that for which it was intended. The sheet does not replace but integrates texts or standards that regulate the activity of use. The user has full responsibility for the precautions that are necessary for the use that will be made of the preparation. For anything not reported, please refer to the safety sheet of the product online [esincalce.com](http://esincalce.com) or by writing to [info@esincalce.com](mailto:info@esincalce.com)