

RĒNOVO

RESTORATION AND ARCHITECTURAL
RENOVATION SYSTEMS



BUILD THE FUTURE
KEEPING THE PAST ALIVE.

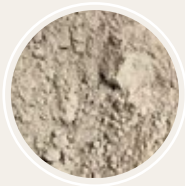
CHIRAEMA
Sistemi per l'edilizia

WE ARE CAREFUL TO USE RAW MATERIALS AT 0 KM: BY SHORTENING THE PRODUCTION CHAIN, WE LIMIT THE CO₂ EMISSIONS



Calcium carbonate

Natural product, free of dangerous chemical agents, it does not entail health risks. It is a raw material with a low content of water-soluble salts. The aggregates are chosen according to rigorous controls. Calcium carbonate is extracted in local quarries. There are two main reasons for this choice: the excellent quality and the possibility of respecting the sustainability and durability principles, thanks to the supply of traditional raw materials at zero km.



Natural Hydraulic Lime NHL 3.5 and NHL 5.0

The production of Renovo Line starts from Natural Hydraulic Lime NHL 3.5 and NHL 5.0. UNI EN 459-1 certified. NHL is obtained by burning, in traditional kiln, selected natural marls. NHL 3.5 or NHL 5.0 based mortars are characterized by high breathability, low content of water-soluble salts and have chemical-physical characteristics that ensure compatibility with traditional building materials such as stone, terracotta or unbaked clay. Highly permeable to water vapour, Natural Hydraulic Lime prevents the growth of algae and mould, so that plasters and finishes are healthy, durable and qualitatively performing.



Slaked lime

CL90-S certified, according to UNI EN 459-1, it is an air binder in powder form; obtained from the burning of selected limestone and subsequent slaking of the quicklime by adding stoichiometrically necessary water to complete the chemical hydration reaction. The combination of hydrated lime and pozzolanic materials allows to obtain a hydraulic reaction which permits to produce resistant mortars.



Cocciopesto

Cocciopesto is a sand coming from the crushing and grinding of bricks fired at low temperatures that maximize the hydraulic properties of the product. The secret of Cocciopesto is the pozzolanic reaction that allows the transformation of free, soluble and unstable lime into silicates and hydrated calcium aluminates. It is suitable for the production of high quality finishes.



Pozzolana

Pozzolana is a natural material of volcanic origin, containing siliceous components that, reacting with hydrated lime, form stable, impermeable, resistant and durable compounds.



Expanded perlite

It is a sound-absorbing mineral and an excellent thermal insulator that does not change over the years, does not burn and does not develop gases or vapours.

A wide range of products **with pozzolanic action**, suitable for the **restoration and renovation of historic buildings protected by the Superintendence of Cultural Heritage**. Renovo products allow to reproduce the properties of the original mortars used in heritage buildings from the physical, chemical and mineralogical point of view.



Renovo Line Products, with pozzolanic action, are based on Natural Hydraulic Lime **NHL 3.5** and **NHL 5.0** certified according to the **UNI EN 459-1** standard.

PHASES OF RESTORATION PROCESS

✓ Identification of the building

Description of the actual status; identification of the causes and effects of deterioration.

✓ Diagnosis

It aims to establish the conditions of:

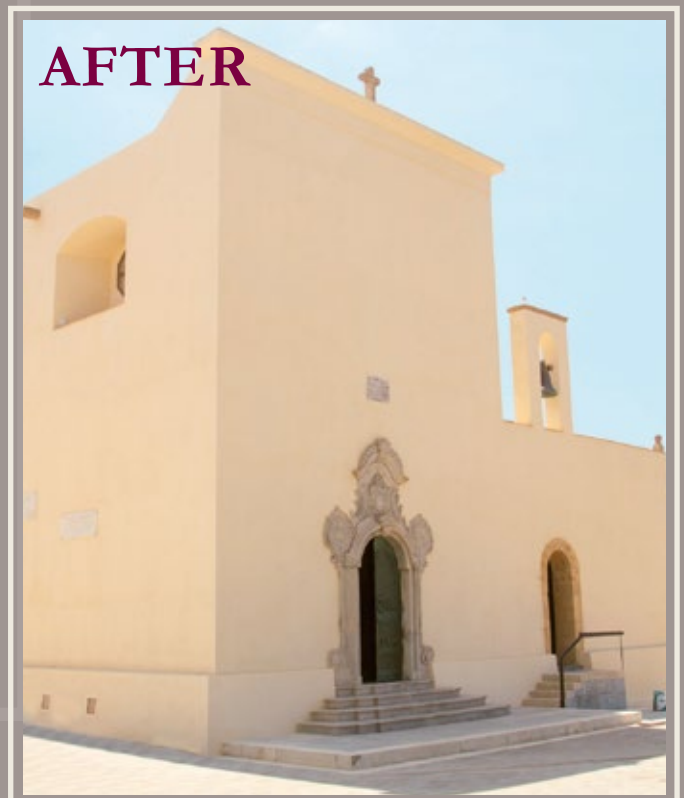
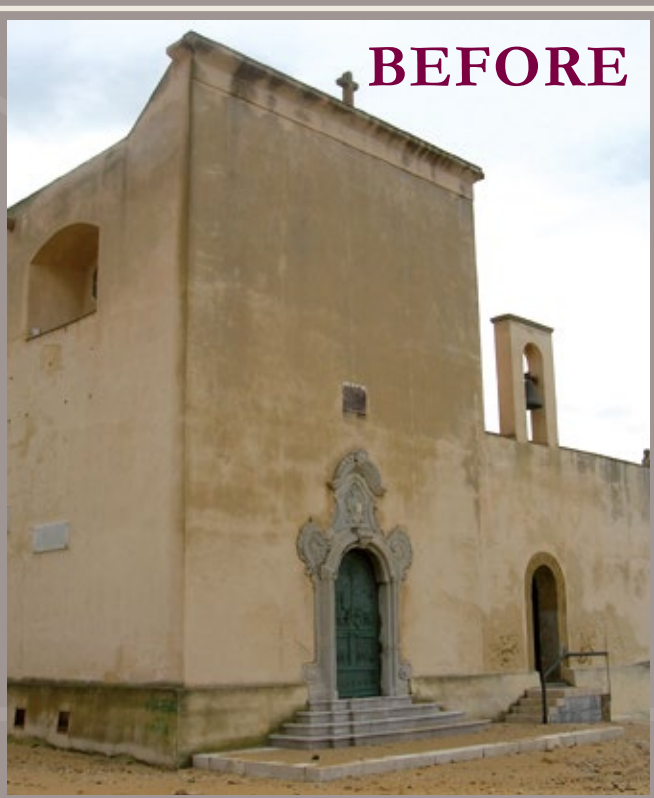
- Structural Safety
- Usability
- Hygrothermal, acoustic wellness and light
- Maintainability

✓ Intervention strategy

Intervention project to be presented to the competent Superintendence in order to obtain the authorization.

✓ Choice of Products

The materials are formulated for the specific construction site and for the intended purpose. They respond to the design requirements suggested by the preliminary diagnostic research.





Chiraema is a company that accepts innovation challenges by learning from the past. Historical roots has inspired ReNovo Line, suitable for the restoration and renovation of historic buildings protected by the Superintendence of Cultural Heritage.



MORE INFORMATION

For further technical information on our products, visit the website www.chiraema.it.

PLUS: A NEW TOOL

To know how many packs of product you need to carry out your project, check PLUS section on our website. Good work!



Quality Management System
certified by RINA in compliance
with Standard ISO 9001

RENO: Bedding mortar, grain size: < 2,0 mm

BRENTA: Lime injection mortar, grain size: < 0,1 mm

LAMBRO: Manual and mechanic scratch-coat mortar, grain size: < 2,0 mm

ORETO: Fiber-reinforced mortar, grain size: 2,5 mm

VOLTURNO: Macroporous plaster, grain size: 2,5 mm

ARNO 2.0: Natural fiber-reinforced macroporous plaster, grain size: 2,0 mm

SIMETO: Mineral smoother, grain size: 0,8 mm - 1,2 mm

PIAVE: Breathable, fine finishing plaster

MORTARS, PLASTERS AND SMOOTHERS

LOIRA: Paste mineral coating, grain size: 0,3 mm e 0,6 mm

CHIESE: Marbleized effect coating for external surfaces

BASENTO: Marbleized and striated effect coating for external surfaces

LIVENZA: Mineral finishing plaster, combed effect, grain size: ≤ 2,0 mm

MAZARO: Mineral finishing plaster, trowelled effect, grain size: < 2,0 mm

SAVIO: Mineral finishing plaster, opus signinum grain effect, grain size: < 1,5 mm

TICINO: Mineral finishing plaster, sponged/trowelled effect, grain size: < 1,2 mm

DORA: Mineral finishing plaster, trowelled/sponged effect, grain size: < 1,0 mm

TEVERE: Cocciopesto plaster, grain size: < 1,0 mm

OMBRONE: Finishing mineral plaster, trowelled effect/sponge effect, grain size: < 0,8 mm

ADDA: Lime based paint

SCIALBATURA: Lime glaze

SESIA: Silicate paint

FINISHES

SANGRO: Salt efflorescence inhibitor

METAURO: Solvent based, water repellent, siloxane protective product

SECCHIA: Water based, water repellent, siloxane protective product

SILICATO DI ETILE: Ethyl silicate-based consolidation product

SILICATO DI LITIO: Lithium silicate-based consolidation product

NERA ACIDO: Concentrated detergent for acid-resistant stones and plasters

SERIO: Acid cleaner for the removal of salt efflorescence from handmade works, rough bricks and silicate stones

NERA BASICO: Concentrated detergent for alkali-resistant stones and plasters

TIRSO: Breathable consolidation product for chalking surfaces

BIOCIDA: Product for the elimination and prevention of biodeteriogens regrowth

CLEANING AND PROTECTION PRODUCTS



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