

THE LIME



# CALCE POZZOLANICA PANTHEON PANTHEON POZZOLANIC LIME

Natural hydraulic pozzolanic lime

Hydraulic lime, achieved from the cold mixing of selected pure aerial lime, characterized by a high ratio of hydrated calcium, and micronized natural pozzolana of various specific surface and energy. Calce Pozzolanica Pantheon – Calchèra San Giorgio is the synthesis of all binders described in official records from Vitruvio to more recent literature. It is perfectly compatible with all historical structures, and is also extremely versatile, making it ideal for preparation of any kind of mortar used in restoration works and sustainable buildings.

It does not contain soluble salts, traces of clinker and free lime. It confers a great surface adhesion to the compound, remarkable flexibility (low modulus of elasticity), extremely high breathability, excellent hygrometric regulating and high resistance to alkaline aggression, mould and bacteria formation. Free from substances harmful to health and environment.

### FIELDS OF APPLICATION

To make on-site mortars, plasters, stuccoes and finishes specifically prepared for the restoration of historical structures and elements, prestigious buildings and in green building techniques.

## SUBSTRATE PREPARATION

The wall surface must be well cleaned, compact, give no sign of dusting; any inconsistent parts, dust, dirty, saline efflorescence, traces of oils, greases, waxes etc. must be removed in advance in order to allow a good adherence to the mortar. Wet the substrate properly with clean water before application.

## MIXING

To make on-site mortar use only washed aggregates, free from inappropriate materials, sifted in a proper balanced granulometry. The ratio between binder, aggregate and water should be determined on-site following appropriate tests, in reference to the type of mortar, to the work and to the typology of the aggregate. Before application let the product settle for 10-15 minutes.

### **APPLICATION**

Apply the mortar composed of Calce Pozzolanica Pantheon – Calchèra San Giorgio in a maximum thickness of 10-15 mm for each layer, after a rough layer. To achieve greater thickness, apply the material in more layers, making sure that the layer (or layers) below is completely dry, to avoid fissures or cracks. Wet the surface between applications.

Failure to comply with the prescriptions of the "Rule of Art" may lead to unwanted results.

### **APPLICATION TEMPERATURE**

Apply at room and surface temperature between  $+5^{\circ}$ C and  $+35^{\circ}$ C in still air. After laying protect for at least 48 hours from rain, run-off, frost, wind and bright sun.

## CONSUMPTION

350-450 Kg for each mc of sand, in relation to the granulometry.





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# Building Oreen Artistic and building archaeological restoration

## **TECHNICAL DATA**

Form	Powder
Colour	Amber
Fineness	40-80 μm
Powder apparent density	$\approx$ 0,5 g/cm <sup>3</sup>
Bending resistance to 28 days UNI EN 459-2	> 3 N/mm <sup>2</sup>
Compressive strength to 7 days UNI EN 459-2	> 8 N/mm <sup>2</sup>
Compressive strength to 28 days UNI EN 459-2	> 12 N/mm <sup>2</sup>
Water vapour permeability UNI EN 1015-19	μ < 8
Free lime [Ca(OH)2] to 28days UNI EN 459-2	Absent
рН	13
Flame resistance	Class A1
Definition	FL 5.0 compliant with the standard EN 459-1

## CHEMICAL DATA

CaO	40,4%
SiO <sub>2</sub>	18,2%
Al <sub>2</sub> O <sub>3</sub>	9,56%
K <sub>2</sub> O	1,91%
MgO	1,67%
Fe <sub>2</sub> O <sub>3</sub>	1,56%
SO <sub>3</sub>	0,02%
C <sub>3</sub> S	Absent

## PACKAGING

10 Kg buckets / 10 Kg bags

### STORAGE

Store the product in its intact packaging in a cool and dry place. Protect from damp, rain, frost and sources of heat. Apply within 12 months from the date of production.

### WARNINGS

Product for professional use. Do not mix with cement or any clinker derivatives. Use only clean water for all the processing phases. Due to the use of pure and natural raw materials, colour uniformity cannot be guaranteed between different supplies of the material. The information and directions reported refer to laboratory tests along with the technical and applicative knowledge we possess. It is advisable to carry out practical tests on-site. However, the user must verify the suitability of the product for its intended use and its consumption, assuming all liability arising from its application. The company reserves the right to make technical changes without prior notice. Please refer to the Safety Data Sheet prior to using the product.

