

# COCCIOPESTO

OPUS SIGNINUM is a biocompatible mortar, to be prepared on site, free of cement or compounds belonging to the clinker group, consisting of opus signinum obtained from the crushing of low temperature cooked clay (solid bricks, tiles) with continuous grain size curve from 0 to 4 mm OPUS SIGNINUM 0-4 TCS and ST-ASTIER Pure Natural Hydraulic Lime of NHL 3.5 according to the standard UNI EN 459-1 white, produced by baking at temperatures below 1250°C of siliceous limestone and reduced in powder by the calcium oxide only, without the addition of pozzolanic materials or hydraulic binders any kind.

DehumidifyingEnvironment Friendly

Chromium-FreeNhl 3.5

RestorationBreathable

Resistant

Cement FreeVersatile

Recyclable

Healthy

Antibacterial

Anti-Condensing

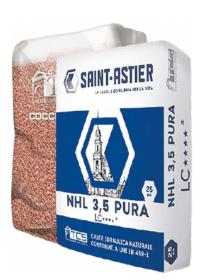
Quick

Reversible

Easy

Green Building

· Pollution Resistant



#### **Features**

OPUS SIGNINUM It is a Dehumidifying plaster, to be prepared on site, biocompatible, free of salts, chemicals and volatile organic compounds (VOC). These features, combined with the total mineral nature of the components, guarantee the purity, non-toxicity, non-harmfulness and the total recyclability of the product in full respect for man and the environment. Selected aggregates and pure hydraulic lime NHL 3.5, have a natural porous structure. This structure gives the material a strong capability of dehumidification and breathability, facilitating the necessary exchange of vapour between the inner and outer surface. The OPUS SIGNINUM features allow, with the laying of a single product, to fulfil the classic protective plaster functions as well as aesthetic finishes.

### Fields Of Application

OPUS SIGNINUM is specially designed for dehumidifying plasters on masonry of new and old buildings, for low thicknesses up to 4 cm, for the repointing of mortar joints and as the bed mortar in "raso pietra" or "sagramatura". Easy to work with the techniques used traditionally in the lime plaster application OPUS SIGNINUM can be applied directly on vertical and horizontal surfaces consisting of solid bricks, hollow blocks, lightweight hollow blocks, mixed brick, stones and tuff. For all those compact or poorly absorbent surfaces (solid blocks or concrete cables and expanded clay pebbles, concrete block cells, lime or cement bases, reinforced concrete structures, magnesium wood) the use of OPUS SIGNINUM will be preceded by the application of SPRIZZO PONTE DI ADESIONE



## **Application**

The laying of OPUS SIGNINUM must be preceded by the preparation of the substrate: if the surface is compact or poorly absorbent, the application must be preceded by SPRIZZO PONTE DI ADESIONE; for masonry with rising damp it is recommended to use SPRIZZO ANTISALE.

If the support is dry, it should be suitably wet except for the surfaces already treated with plastering mortar SPRIZZO ANTISALE.OPUS SIGNINUM float and trowel or with the bucket plastering machine, or mechanically using a traditional peristaltic pump. In the case of application with a plastering machine the pipe length must not exceed 20 m and the prevalence must not exceed 6 m. OPUS SIGNINUM is to be packed on site in relation to a bag of Pure Natural Hydraulic Lime NHL 3.5 and 5 bags of OPUS SIGNINUM, it should be mixed only with water for about 5-7 l per bag of Natural Hydraulic Lime NHL 3.5 depending on the desired consistency.

The application thickness should not exceed 1-2 cm per coat. When applying multiple layers, wait until the previous one has lost a good deal of the mixing water and the surface is not compact. To make planar surfaces, proceed to the leveling with an aluminum straight edge and finish them by float finish with plastic/wood trowel or scraping by planing. If the layer of OPUS SIGNINUM previously applied is already dry, you will proceed with adequate wetting of the support before applying the next layer. This operation will allow to keep the new layer workable and will ensure perfect adhesion to the underlying layer. In order to contain any cracking which may occur in the zones of geometrical discontinuity or the nature of the support it is recommended to place an alkali resistant fibreglass mesh TCS GLASS CK 100. The mesh will be laid in the last cm of plaster.

The plasters obtained with OPUS SIGNINUM must be separated from the walkway surfaces (sidewalks, roads, terraces), from areas where water stagnation and contact with the ground may occur (meadows, flower beds, sand or gravel substrates for cement or natural stone interlocking pavement blocks) in order to prevent the emergence of the rising damp phenomenon in the plaster body which would result in the formation of superficial stains, and the consequent early degradation of the surface.

#### **Finishes**

The use of a product of the TCS Finishing Line constitutes the natural completion of a cycle compatible with the substrate, particularly with regard to the characteristics of breathability and permeability. The use of TCS Finishing Line, made up of grassroots Lime CL 90 or Potassium Silicate, is the obligation to fulfil the expectations of aesthetic and performance features at the basis of the TCS product choice.

In case you decide to leave the plaster OPUS SIGNINUM natural it is recommended to apply a waterproof protection type TI 10 or TI 10 PLUS of the TCS Protection Line.

## Warnings

- Product for professional use.
- · Do not modify the product.
- · Store the product in a dry place in the original sealed packages.
- $\cdot$   $\;$  Before using the product refer to the Safety Data Sheet.
- The data given correspond to the technical and application knowledge we have for proper use of the product, so it is recommended to carry out a practical test prior to in order to verify the suitability of the product for its intended use and consumption.
- · Protect the surfaces from atmospheric phenomena, sun, wind, rain and frost.
- Since our company is not the executor of the works and can not intervene directly on the construction site conditions and on the methods of work execution, the indications given are to be considered as indicative and general, and therefore not binding for the same.
- The Company reserves the right to make the changes at any time without notice when it deems necessary.
- For more information and practical product demonstrations please consult our technical service.
- · Always refer to the updated versions of the technical data sheets available at www.tcs-srl.it



# **Technical Data**

PRODUCT TYPE: Mortar for general purposes (GP) for internal and external use complying with the standard UNI EN 998-1
GRAIN SIZE CURVE (EN 1015-1) 0 - 4 mm
pH OF THE MIXTURE > 12.5
FRESH MORTAR APPARENT DENSITY (EN 1015-6) 1900 kg/m <sup>3</sup>
DRIED MORTAR APPARENT DENSITY (EN 1015-10) 1650 kg/m <sup>3</sup>
COMPRESSIVE STRENGHT (EN 1015-11) CS    category
WATER VAPOUR PERMEABILITY COEFFICIENT (EN 1015-19) µ < 12
WATER ABSORPTION THROUGH CAPILLARITY (EN 1015-18) WO
INITIAL SETTING TIME AT 20°C 65% U.R. 5 h
FINAL SETTING TIME AT 20°C 65% U.R. 26 h
THERMAL CONDUCTIVITY (EN 12667) lambdaD 0.76 W/(mK) (tabulated value)
FLAME RESISTANCE (EN 13501-1) class Al
MIXING WATER 5-7   per bag of Natural Hydraulic Lime NHL 3.5
CONSUMPTION 14 kg/m² for 1 cm thick (kg 2.35 of lime NHL 3.5+kg 11.75 of opus signinum equal to 1 sack of lime for 5 bags of opus signinum)
THICKNESS PER COAT 1-2 cm
PACKAGING 25 kg bag
PALLET 60 sacchi, 1500 kg
STORAGE keep in dry place for 18-24 months in original package
APPLICATION TEMPERATURE from +5°C to 32°C
REACH CLASSIFICATION See SDS