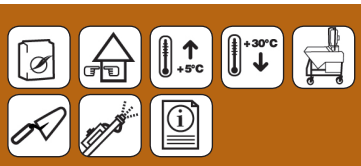
CONFORME ALLA NORMA EUROPEA
EN 998-1
GP-CSIII-W1
Grigolin
ENTSPRICHT DER EURONORM

PALLADIO®
CALCESAN



Single layer product with dehumidifying action to be used as a rendering, plaster and finish based on NHL natural hydraulic lime.

Product description

CALCESAN is a dry premix based on micronized geo-pozzolan, NHL natural hydraulic lime in compliance with Standard EN 459-1, pure calcined kaolin and unground alluvial sands free from silt.

Supply and storage

CALCESAN is supplied in 25 kg bags on stretch pallets. Store in a cool, dry and non-ventilated place. Keep packaging intact.

Numero Verde 800 350907
www.fornacigrigolin.it
info@fornacigrigolin.it

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Substrate preparation and application methods

Before applying CALCESAN, clean and saturate the substrate by low-pressure washing. Remove any efflorescence and saline concretions by washing or with mechanical systems (brushing, sandblasting, hydro-sandblasting) and remove any salt residues removed from the base of the masonry.

To use CALCESAN as a rendering, mix a 25 kg sack of dry product with approx. 5.5 l of water (22%) in a concrete mixer (for 4 min.), with a whip drill or plastering machine, until a homogeneous, lump-free mixture of plastic consistency is obtained.
Apply CALCESAN by hand or by spray with a plastering machine.
In case of sufficiently cohesive substrates, it is advisable to make an “open” rendering applied by hand to facilitate the transpiration of moisture.
In case of poor masonry, it is advisable to use a “covering” undercoat as an anti-efflorescence adhesion base, with a thickness of at least 10 mm.
After application, the product must not be smoothed and must be left to rest for 48 hours.

To use CALCESAN as a renovation plaster, moisten the previously prepared rendering with water at low pressure.
Mix one 25 kg sack of dry product with approx. 6 l of water (24%) in a concrete mixer (for approx. 7/8 min.), with a drill mixer (for approx. 5 min.) or with a plastering machine, until a homogeneous, lump-free mixture of plastic consistency is obtained.
Apply CALCESAN by hand or by spray with a plastering machine.
For the plastering machine it is recommended to use the full paddle mixer with the help of “turbo”, “rotorquill” or similar; it is imperative to use a lung type D8/1,5.
The plaster will be applied with a minimum thickness of 20 mm in two passages 24 hours apart. For higher thicknesses, depending on the amount of salts present in the masonry (higher content of salts = higher thickness), apply several coats of maximum 15 mm, waiting for the previous layer to be sufficiently matured.
After a few minutes from the application of the last coat, proceed with the levelling with aluminum straight edge. Once hardened, the product can be prepared, using the “rabottatura” technique, for the following finishing phase.

To use CALCESAN as a breathable finish, thoroughly wet the mature plaster and wait for the surface water to evaporate, but keep the substrate damp.
Mix one 25 kg sack of dry product with approx. 6.3 l of water (25%) in a concrete mixer (for approx. 4 min.), using a drill mixer to obtain a homogeneous, lump-free mixture with a plastic consistency.
The application will be made with metal trowel in two or more passes crossing the direction of application. The eventual floatation of the second coat, applied when the first one is perfectly firmed up, about 24 hours later, must be performed in plastic phase making the surface of the applied material moistening it and then operating with the sponge float until obtaining a “fine civil” type finish.
Wait at least 5 days before applying the finish (wall coating arteMURI line).

CALCESAN

Fields of application

CALCESAN is a multi-purpose fiber-reinforced mortar that can perform different tasks by simply changing the mixing water and mixing time.
CALCESAN, being based on natural NHL hydraulic lime, is particularly suitable for restoration and renovation of plasters in buildings of historical and monumental interest where the use of cement-free systems is required and the presence of aggressive sulphate salts is frequent.
It can be applied to internal or external brick, stone, pebble or tuff walls subject to capillary rising damp and salts, including those of a sulfatic nature.
Thanks to its specific formulation covers the entire cycle of restoration, can be used as a covering coat, dehumidifying plaster and breathable finish.
Used as a rendering, it guarantees the adhesion of the subsequent layers of the restoration cycle to the substrate and, at the same time, it ensures excellent transpiration of the humidity contained in the masonry.
Used as dehumidifying plaster, thanks to its highly porous structure allows to capture the moisture in the masonry and promotes its rapid evaporation.
It also acts as a deposit for any salts carried by rising water, preventing the formation of efflorescence on the surface.
Used as a breathable finish, thanks to its strong water repellency, prevents the passage of water in liquid form but ensures the disposal of the same in the form of steam.

Warnings

Do not mix CALCESAN with other substances. Avoid strong thermal shocks during the setting phase; the product must be protected from frost and rapid drying. Do not use CALCESAN with temperatures lower than +5°C and higher than +30°C.

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TECHNICAL DATA according to standard UNI EN 998-1	PERFORMANCE
Classification according to EN 998-1	GP-CSII-W1 R-CSII
Specific weight	ca. 1400 kg/m^3 free fall deter.
Maximum inert diameter	0,6 mm
Thickness of application rendering	ca. 10 mm
Thickness of plaster application	20 mm two coats (for greater thicknesses maximum 15 mm per coat)
Thickness of finishing application	2-4 mm
Mixing water	22-25%
Compressive strength at 28 days (cat CS II)	3,0 N/mm^2
Porosity of fresh mortar	>30%
Theoretical consumption	12–13 kg/m^2 for cm thickness
Water vapor permeability μ	<12
Type of fracture	B
Adhesion on brick	0,2 N/mm^2
Reaction to fire	Class A1
Thermal conductivity λ	0,35 W/mK (tabulated value)

v. 09/2021