



MURO ASCIUTTO 3in1

SINGLE-PRODUCT dehumidifying plaster for the restoration of damp walls.
Rinzaiffo-Antisale-Restoration with a single product.



TECHNICAL FEATURES

MURO ASCIUTTO-3in1 is a fiber-reinforced, single-component, ready-to-use, formulated, according to the quality standards of the **HERAKEM** laboratory, with high strength hydraulic binders, aggregates lightened, calcareous aggregates with selected granulometric curve and special additives which give the product, after mixing with water, marked workability characteristics.

MURO ASCIUTTO-3in1 once hardened, it has a macroporous, water-repellent, salt-resistant structure with high breathability and excellent adhesion to all substrates generally used in construction. With **MURO ASCIUTTO-3in1** it is possible, with the application of a single product, to protect the surface from beating water, to quickly evacuate the capillary rising damp present in the masonry in the form of steam and to block the salts dissolved in it, keeping thus the external surface of the plaster is always dry and warmer to the touch, eliminating the unsightly and harmful saline efflorescence and mold from condensation.

FIELD OF APPLICATION

MURO ASCIUTTO-3in1 is applied to create dehumidifying plasters both indoors and outdoors, on old and new masonry, in stone, brick, tuff and mixed, subject to capillary rising damp and where saline efflorescence is present. It can also be applied for the styling of the courses between stones, bricks and tuff of "exposed" masonry.

PREPARATION OF THE SUBSTRATE

Before proceeding with the application, the walls subject to rising damp must be adequately prepared. Remove the existing plaster up to the masonry to a height of at least one meter beyond the evident humidity line, also removing the first centimeters of existing bedding mortar from the courses between stones, bricks, etc. should it appear inconsistent or degraded. The substrates to be plastered must be stable, clean, consistent, free from weak parts, dust, bacterial proliferation, saline efflorescence, oils, greases, waxes, etc. If necessary, carry out a preventive cleaning of the substrate by staking, brushing and water washing. Fill any cavities with stones or materials having characteristics corresponding, as much as possible, to those of the original materials, and cement mortar. Then wet the substrate with water so that the masonry is saturated with water but with a dry surface.

MIX PREPARATION

MURO ASCIUTTO-3in1 can be applied both manually and by mechanical projection. In the case of mechanized application, just insert the product into the hopper of the plaster sprayer, taking care to dose the amount of mixing water by adjusting the flow meter supplied with the machine, in such a way as to obtain a consistent and plastic mortar, which allows the operations of projection of the mixture with a spray as uniform as possible. In the case of manual application, the product must be mixed in a concrete mixer with the addition of drinking water. For small quantities, a low speed electric whisk mixer will be used. Each 25 kg bag must be mixed with a quantity of water equal to about 5 – 5.5 liters. It is advisable to add 3/4 of the total water to the concrete mixer in motion, to introduce the contents of the bags to be mixed, after having had a first homogenization of the mixture, add the remaining amount of water. The mixing time is 5–7 minutes, this allows all the constituents of the product to interact in order to guarantee a homogeneous, soft, creamy and lump-free mixture (for the first layer of rendering slightly increase the water 'dough'). Do not exceed the recommended mixing time.

APPLICATION

At the time of application, the surface of the masonry must be saturated but without a film of water on the surface. Apply the mixture thus obtained on the support, making a first rough coat, making sure to perfectly cover the entire surface to be treated, leaving the rough projection of the product without leveling or compacting in order to create a perfect adhesion bridge for the next layer, making a thickness between 5 and 15 mm, depending on the salt concentration present in the masonry and the thickness of the plaster to be made. After drying, reload with the second coat, taking care that the minimum overall thickness is everywhere higher than 2 cm. In case of strong salinity, wait 24 hours between applying the rough coat and the second coat. In case of need for thicker refills, increase the thickness of the rough coat up to 1 ÷ 1.5 cm and apply **MURO ASCIUTTO-3in1** in thicknesses, per coat, up to 3 cm.

After application, wait a few minutes before leveling with an “H” straight edge or knife, to obtain a flat surface. Remove the vertical guides, if used, filling the gaps with the same product. The surface finish of the plaster can be done with a plastic, wooden or sponge trowel just a few hours after application and, in any case, depending on the temperature and environmental conditions. In any case, avoid pressing the surface of **MURO ASCIUTTO–3in1** in order not to reduce its porosity and, consequently, not to hinder the evaporation of the humidity present in the masonry. To prevent cracks or cracks, especially when the plaster must be carried out on uneven substrates or construction changes, it is advisable to interpose the alkali-resistant fiberglass reinforcement mesh inside the plaster layer and skim coat, 10x10 mm high weight mesh. The mesh must be extended approximately 30 cm beyond the discontinuity line of the materials and be applied in the thickness of the plaster and not in complete adherence to the masonry. For outdoor applications, in order to avoid possible water absorption, provide a technical cut at the base of the dehumidifying plaster system that detaches the plaster body from floors, sidewalks, roads or generally horizontal surfaces subject to water deposits also temporary. Allow the dehumidifying plaster to dry adequately before proceeding with finishing and decorating.

CLEANING

The tools used must be cleaned with water before the mortar hardens; subsequently, cleaning can only take place by mechanical removal.

ITEM OF SPECIFICATIONS

Application of multifunctional, premixed, lightened, fiber-reinforced mortar, to be applied manually or with a continuous plastering machine, for the creation of macroporous plasters with high permeability to water vapor for the restoration of masonry affected by capillary rising damp. The total thickness must not be less than 2 cm at any point. Compliant with standard **EN 998–1 type R**, type **MURO ASCIUTTO–3in1** by **HERAKEM SRL**.

WARNINGS

- Avoid application at temperatures below + 5 ° C or above + 35 ° C
- Avoid application on frozen, dusty, unstable and inconsistent substrates.
- Apply finishing and decoration products suitable for renovation
- Do not apply in direct sunlight or with strong ventilation
- Avoid decorating the surfaces treated with paints that can hinder the evaporation of humidity
- In the case of application of the skirting board, provide for the application of an osmotic strip, of the same height as the skirting board itself
- Do not add binders or aggregates to the product
- Avoid application on walls spoiled by infiltration and / or invasion water.
- Different absorptions, application temperatures and heterogeneity of the base supports aesthetically condition the final result of colored mineral finishes.
- In case of strong salinity, carry out a low pressure washing cycle with clean water to expel as much salt as possible from the substrate.
- Protect from driving rain for 2 or 3 days after application.
- Avoid application in strong winds or on overheated surfaces in full sun.
- Keep the bags in their packaging intact, away from the sun and away from humidity.

TECHNICAL DATA *(at +22±1°C and 55±5% R.H.)

Appearance	powder	Air occluded (hardened)	about 30%
Color	gray	Compressive strength after 28 days	5.7 MPa
Maximum grain size	< 2 mm	Flexural strength	3.7 MPa
Density of the powder	approx. 1480 kg/m ³	Adhesion to the substrate	0.3 N/mm ²
Density of the mix	approx. 1330 kg/m ³	Water absorption by capillarity	0.03 kg/(m ² min ^{0.5})
Bulk density of hardened mortar	approx. 1250 kg/m ³	Thermal conductivity	0,39/0,44 W/mK tabulated value
Minimum application thickness	2 cm	Coefficient of permeability to water vapor	μ =11
Maximum application thickness	3 cm	Reaction to fire	Class A1
Workability time	about 60 min		

Consumption	10 kg/m² per cm of applied thickness	Packaging	25 kg bag
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PRODUCT FOR PROFESSIONAL USE ONLY

All the data and indications given in this technical data sheet, although resulting from laboratory tests carried out and from our direct application experiences, due to the infinite number of variables linked to the construction site conditions, are to be considered, in any case, purely indicative. Therefore, before applying the product, the user is required to establish whether it is suitable for the use envisaged by him, in the specific hygrothermal and application conditions foreseen at the time of use and, in any case, he assumes all responsibility for it. We are not liable for damage to people or things deriving from improper use of the product. We reserve the right to modify the data contained therein as a result of improvements and technical progress.