



Mape-Antique Rinzafo

Light-coloured salt-resistant adhesive mortar for use as a first coat before applying Mape-Antique MC, Mape-Antique CC, and Mape-Antique LC dehumidifying mortars



WHERE TO USE

Mape-Antique Rinzafo is especially recommended for use as a first coat in the restoration of old stone, tuff, and brick buildings damaged by the strong presence of chlorides.

Some application examples

Mape-Antique Rinzafo should be used as a first coat over masonry in the following cases:

- As a dehumidifying mortar over masonry subject to strong rising damp.
- As a dehumidifying mortar for structures on the waterfront or seashore.
- Plastering over tuff masonry.
- As a dehumidifying mortar over stone (especially porous stone) and/or brick, including underburnt brick (walls, columns, vaulting, etc.) and wherever saline efflorescence is present.
- As a dehumidifying mortar for structures damaged by the presence of chlorides.
- As a bond coat over difficult surfaces (e.g. stone masonry).

TECHNICAL CHARACTERISTICS

Mape-Antique Rinzafo is a cement-free premixed powdered mortar composed of special hydraulic binders with pozzolanic action, natural sand, special additives and synthetic fibers manufactured from a formula developed in the Mapei Research and Development laboratories.

After **Mape-Antique Rinzafo** is mixed with water in a mixer it forms a fluid mortar that is easily workable on both vertical surfaces and soffits. It is especially recommended to improve the adhesion and chemical/physical resistance to soluble salts of macro-porous mortars such as **Mape-Antique MC**, **Mape-Antique CC**, and **Mape-Antique LC** dehumidifying mortars.

Mape-Antique Rinzafo's special properties prevent soluble salts from penetrating macro-porous mortars. The hygroscopicity of soluble salts such as chlorides can cause localised humidity in mortars used in insufficiently ventilated areas.

Under certain temperature and humidity conditions the presence of these salts on the surface of the plaster causes moisture to be drawn into it because of their high affinity with water.

Mape-Antique Rinzafo need not be used when no strong concentrations of salts, especially chlorides, are present. However, the product makes the substrate absorb **Mape-Antique** dehumidifying mortars evenly and improves adhesion.

Mape-Antique Rinzafo's mechanical performance, porosity and modulus of elasticity are similar to those of the "antique" hydrated lime, pozzolan-lime and hydraulic lime mortars once used in building.

Mape-Antique Rinzafo is so hard as to make it practically indestructible when attacked by various aggressive natural phenomena: freeze-thaw cycles, alkali-aggregate reaction, and most importantly sulphate salts and chlorides that are often present in masonry.



These phenomena slowly but steadily damage period buildings because the porosity of the materials used originally in their construction renders them vulnerable to aggressive agents. These same agents can also attack hydrated lime, pozzolan-lime and hydraulic lime mortars if used for restoration.

Mape-Antique Rinzaffo, however, resists these attacks, despite its intrinsic porosity and its mechanical “delicacy”, because it is chemically and physically insensitive to these aggressive attacks.

RECOMMENDATIONS

- Do not use **Mape-Antique Rinzaffo** as a finishing mortar (use **Mape-Antique MC**, **Mape-Antique CC**, or **Mape-Antique LC**).
- Always use **Mape-Antique Rinzaffo** as a first coat approx. 5 mm thick on substrates where chlorides are present before applying **Mape-Antique MC**, **Mape-Antique CC**, or **Mape-Antique LC**.
- Do not add additives, cement or other binders (lime or gypsum) to **Mape-Antique Rinzaffo**.
- Do not apply **Mape-Antique Rinzaffo** at temperatures lower than +5°C.
- The substrate should be clean and saturated with water before applying the **Mape-Antique Rinzaffo**.
- **Mape-Antique Rinzaffo** should always be used when the masonry cannot be properly washed down (e.g. occupied interiors).

APPLICATION PROCEDURE

Preparing the substrate

The structure to be restored must be properly prepared before mixing the mortar. Completely remove the plaster up to 50 cm above the damp area, or at least as high up as twice the depth of the wall. The mortar can be applied manually or by machine and must reach down to the underlying masonry. If there are large voids left when removing the old plaster, new stones and/or bricks must be substituted that resemble the original materials as much as possible in substance and appearance. After removing all loose material (dirt, grease, etc.) wash down the structure with water to remove the efflorescence and soluble salts present in the masonry. Thoroughly wet the structure, including the stone or brick to be inserted, before applying the **Mape-Antique Rinzaffo**.

Let the excess free water evaporate so that the masonry is saturated but the surface is dry. Compressed air may be used to accelerate this operation.

Preparing the product

Prepare the mortar in any ordinary job site mixer. Pour in the minimum amount of water (approx. 5 litres for each bag of product), then, in a continuous flow, add the contents of the bags that have been opened beforehand. Mix for 3 minutes, then check that the contents are mixed thoroughly, scraping the sides of the mixer to loosen any powder that has not been dissolved. Add more water if needed, up to a total of 5.5 litres per bag, including the amount

poured in initially. Mix for another 2-3 minutes, depending on the efficiency of the mixer, in order to obtain the ideal plasticity for trowelling.

Application

When mixed with water as recommended above, **Mape-Antique Rinzaffo** has a plastic consistency and is easy to apply. Spread the mortar as a first coat on the previously prepared substrate in a thickness of approx. 5 mm.

This thin first coat will make the subsequent coat of **Mape-Antique MC**, **Mape-Antique CC**, or **Mape-Antique LC** easier to bond and creates a chloride barrier. The mortar may also be applied with Turbosol, Putzmeister or similar worm screw type machines.

N.B. *Spray machines tend to compress the product during pumping. Check the density of the mortar at the nozzle of the pump to see if the amount of microbubbles of air corresponds to the amount recommended on the Technical Data Sheet (consult the table listed under “Technical Characteristics”).*

After applying the mortar, do not smooth it with a float.

Since **Mape-Antique Rinzaffo** contains ingredients that prevent cracking due to plastic shrinkage, it is a good rule to apply the product when the wall to be covered is not exposed to direct sunlight or wind, in which case water should be sprayed on the product after application.

Let the **Mape-Antique Rinzaffo** harden before applying the **Mape-Antique MC**, **Mape-Antique CC**, or **Mape-Antique LC** mortar.

Applying Mape-Antique MC, Mape-Antique CC, or Mape-Antique LC mortar

When the **Mape-Antique Rinzaffo** hardens, apply the **Mape-Antique MC**, **Mape-Antique CC**, or **Mape-Antique LC** mortar over it within 24 hours. The total thickness of the plaster should not be less than 2 cm. Consult the Technical Data Sheet of each product for mixing and application instructions.

Finishing

Mape-Antique MC, **Mape-Antique CC**, and **Mape-Antique LC** mortar can be finished by simply smoothing with a float. In order to keep the mortar as permeable as possible to water vapour we recommend not exerting too much pressure with the float. For finer-textured finishes **Mape-Antique FC** or **FC/R** may be used. These are fine-grained finishing mortars that tend to decrease permeability to water vapour, if only slightly. Therefore they should not be used if the structure is subject to strong rising damp or in the presence of strong concentrations of soluble salts. In these cases **Silexcolor Tonachino** should be used as an alternative. **Silexcolor Tonachino** is a silicate coating compound available in 34 colours. Otherwise, the plaster can be painted with **Silexcolor Paint**, also available in 34 colours.

TECHNICAL DATA (typical values)

PRODUCT IDENTIFICATION:

Appearance:	powder
Colour:	light-coloured
Specific weight:	1 ÷ 1.1 kg/l
Maximum diameter of aggregate:	2.5 mm
Shelf life:	12 months in a dry place in original sealed packaging
Hazard classification according to 88/EEC:	irritant
Customs class:	3824 50 90
Water-soluble alkaline salts:	< 0.1%

FINAL PERFORMANCE DATA IN MORTAR:

Composition: Mape-Antique Rinzafo: Water:	1450 ÷ 1550 kg/m ³ 380 ÷ 410 kg/m ³
Consistency of mix:	semi-fluid
Volume:	1800 ÷ 1950 kg/m ³ (depending on mixing)
Colour:	light-coloured
pH of mix:	12 ÷ 13
Flow (UNI 7044):	100 ÷ 150%
Porosity:	4 ÷ 8%
Resistance to water vapour:	μ < 30
Bleeding:	none
Maximum thickness:	5 mm
Application temperature:	from +5°C to +33°C
Workability of mix (at +23°C - 50% R.H.):	approximately 1 hour
Compressive strength (MPa) - at 7 days: - at 28 days:	> 5 > 7
Dynamic modulus of elasticity (MPa) - at 28 days:	< 8000
Setting time (at +23°C): - initial: - final:	< 6 hours < 12 hours
Resistance to sulphates - expansion at 30 days of specimens (40x40x160 mm) cured for 28 days (RH = 95%, T = +20°C) and then immersed in sulphate solution (10% Na₂SO₄):	< 0.02%
Efflorescence (semi-immersion in water):	absent
Coverage:	7 ÷ 8 kg/m ² per 5 mm

For buildings especially exposed to rain that need not be painted any particular colour, masonry can be protected with **Antipluviol S**, a transparent, water-repellent siloxane resin compound that is permeable to water vapour.

Cleaning

Mortar that has not yet hardened can be removed from tools with water. Once the mortar hardens it is very difficult to remove and tools can only be cleaned by machine.

COVERAGE

Approximately 7.5 kg/m² per 5 mm of thickness.

PACKAGING

20-kg paper bags.

STORAGE

12 months. Store in a dry sheltered place.

SAFETY INSTRUCTIONS FOR THE PREPARATION AND INSTALLATION

Mape-Antique Rinzaffo is irritating for the eyes and skin. In case of contact with the eyes, immediately wash with plenty of water and consult a doctor. Wear appropriate gloves.

FOR PROFESSIONALS.

WARNING

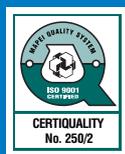
Although the technical details and recommendations contained in this product report correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical applications; for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application; in every case, the user alone is fully responsible for any consequences deriving from the use of the product.

All relevant references of the product are available upon request



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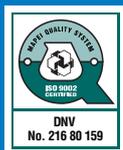
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