



Mape-Antique Rinzafo

Light-coloured salt-resistant cement-free prepacked mortar for use as a first coat before applying Mape-Antique MC, Mape-Antique CC, and Mape-Antique LC dehumidifying mortars on stone, brick and tuff substrates



WHERE TO USE

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

Some application examples

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

- As a dehumidifying mortar over masonry subjected to strong rising water.
- As a dehumidifying mortar for structures on the waterfront or in marine environment.
- Rendering over tuff masonry.
- As a dehumidifying mortar over stone (especially porous stone or of lime nature) and/or brick, including underburnt brick (walls, columns, vaults, etc.) and wherever salt efflorescences are present.
- As a dehumidifying mortar for structures damaged by the presence of chlorides.
- As coat to improve bonding over difficult surfaces (e.g. stone masonry).

TECHNICAL CHARACTERISTICS

Mape-Antique Rinzafo is a cement-free prepacked powder 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 based on **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 render causes moisture to be drawn into it because of their high affinity with water.

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

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

Mape-Antique Rinzafo, however, resists these attacks, despite its intrinsic porosity because it is chemically and physically insensitive to these aggressive attacks.

RECOMMENDATIONS

- Do not use **Mape-Antique Rinzafo** as a finishing mortar (use **Mape-Antique MC**, **Mape-Antique CC**, or **Mape-Antique LC**).
- Always use **Mape-Antique Rinzafo** 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 Rinzafo**.
- Do not apply **Mape-Antique Rinzafo** at temperatures lower than +5°C.
- The substrate should be clean and saturated with water before applying the **Mape-Antique Rinzafo**.
- **Mape-Antique Rinzafo** 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 render 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 Rinzafo**.

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 Rinzafo** 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.

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

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

Let the **Mape-Antique Rinzafo** 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 Rinzafo** 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 **Mape-Antique 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 render can be painted with **Silexcolor Paint**, also available in 34 colours. For buildings especially exposed to rain that need not be painted any particular colour, masonry can be protected with **Antipluvio 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 7-8 kg/m² per 5 mm of thickness.

PACKAGING

20-kg bags.

TECHNICAL DATA (typical values)**PRODUCT IDENTITY**

Appearance:	powder
Colour:	light-coloured
Bulk density (kg/m³):	1000-1100
Maximum diameter of aggregate (mm):	2.5
Storage:	12 months in a dry place in original sealed packaging
Hazard classification according to EC 99/45:	irritant Before use refer to the "Safety instructions for the preparation and application" paragraph and the information on the packing and safety data sheet
Customs class:	3824 50 90

FINAL PERFORMANCE DATA IN MORTAR

Mix ratio:	one 20 kg bag with 5-5.5 litres of water
Composition (kg/dm³): – Mape-Antique Rinzafo: – water:	approx. 1490 approx. 390
Consistency of mix:	semi-fluid
Density of mix (kg/m³):	1800-1950 (depending on the mixing)
Colour:	light-coloured
Flow (%) (UNI 7044):	100-150
Porosity (%):	4-8
Resistance to water vapour (μ):	< 30
Maximum thickness (mm):	5
Application temperature:	from +5°C to +35°C
Workability of mix (at +23°C - 50% R.H.):	approximately 1 h
Compressive strength (N/mm²) – at 7 days: – at 28 days:	> 5 > 7
Dynamic modulus of elasticity (N/mm²) – at 28 days:	< 8000
Setting time (at +23°C): – initial: – final:	< 6 h < 12 h
Resistance to sulphates (%): (expansion at 30 days of specimens 40x40x160 mm cured for 28 days with R.H. = 95% and T = +20°C and immersed in sulphate solution 10% of Na ₂ SO ₄):	< 0.02
Efflorescence (semi-immersion in water):	absent

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SAFETY INSTRUCTIONS FOR THE PREPARATION AND APPLICATION

Contains special hydraulic binders that in contact with sweat and other body fluids produce an alkaline reaction. Irritant for the eyes and skin. Wear protective gloves and goggles. For further information refer to the safety data sheet.

STORAGE

12 months. Store in a dry sheltered place in original unopened packaging.

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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