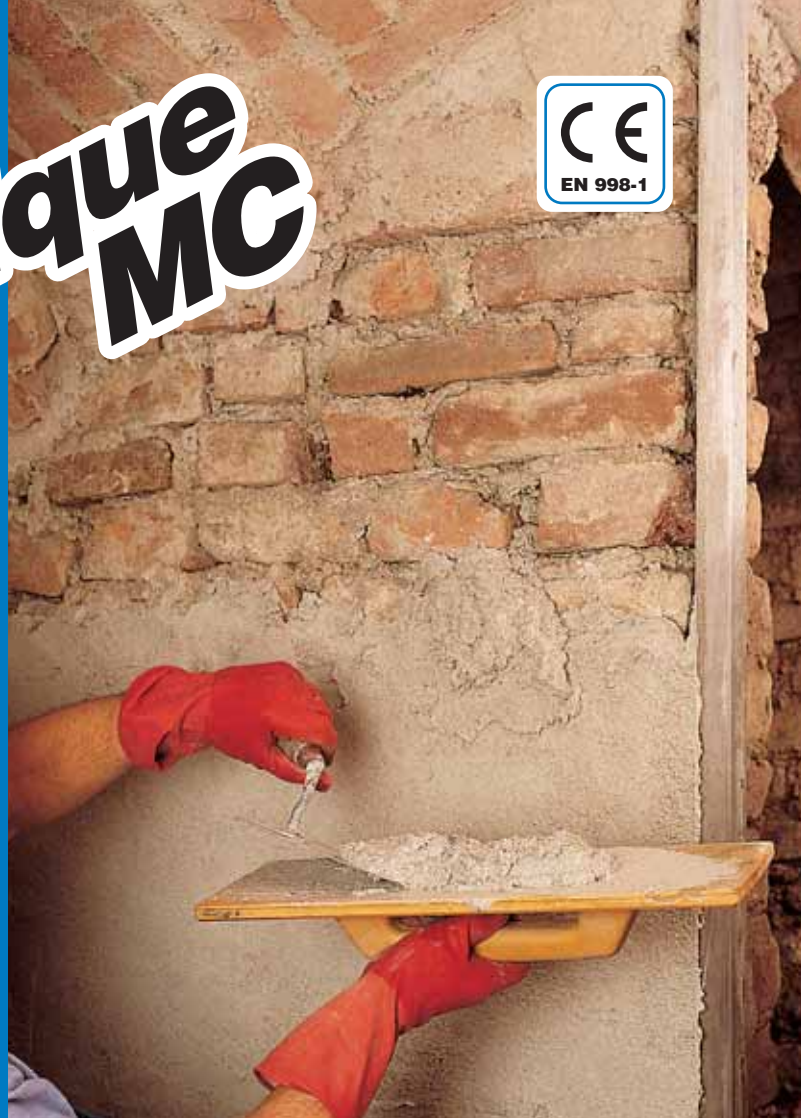




# Mape-Antique MC



**Premixed cement-free  
light-coloured  
dehumidifying mortar  
for the restoration  
of damp stone, brick  
and tuff masonry**



## WHERE TO USE

- Restoration of stone, brick or tuff buildings damaged by rising capillary damp (suitable for historical buildings).
- Restoration of structures damaged by sulphate salts.
- Applied after **Mape-Antique Rinzafo**, **Mape-Antique MC** is suitable for the restoration of buildings affected by strong presence of chlorides.

## Some application examples

- As a dehumidifying render on masonries subject to rising capillary damp.
- As a dehumidifying render on structures built by lagoons or by the sea.
- As a dehumidifying mortar over stone (especially porous, such as those of lime nature) or bricks, including burnt bricks, walls, columns, vaulting, etc. and wherever saline efflorescence exists.
- Restoring stone, brick or tuff renders bond with mortars which were originally mechanically weak.
- Grouting between stones, bricks and tuff of quarry-faced masonry.

## TECHNICAL CHARACTERISTICS

**Mape-Antique MC** is a premixed light-coloured cement-free powder mortar based on special hydraulic binders with pozzolanic action, natural sand, special additives and synthetic fibres developed according to a formula in the MAPEI Research Laboratories. After mixing **Mape-Antique MC** with water in a mixer, it forms a sulphate-resistant plastic-thixotropic consistency mortar that is easily workable on both vertical surfaces and ceilings. According to the 1965 Italian law and the 1972 Italian Ministerial Decree,

**Mape-Antique MC** can be defined as a mortar based on a hydraulic lime based binder.

In order for **Mape-Antique MC** to best carry out its dehumidifying action, even in the presence of high concentrations of salt, it must be applied over **Mape-Antique Rinzafo**, a barrier against salt that can prevent the formation of dangerous and unsightly efflorescence because of water evaporation.

In fact, thanks to its characteristics,

**Mape-Antique Rinzafo** can substantially increase **Mape-Antique MC**'s already high chemical-physical performances. Furthermore, **Mape-Antique Rinzafo** improves the bonding of the macro-porous render on difficult substrates (ex. stone masonries) and uniform absorption of stone-brick masonries.

Mortars prepared with **Mape-Antique MC** are very similar to the old mortars based on lime, pozzolan-lime or hydraulic lime originally used in the construction of period buildings in terms of colour, mechanical strength, modulus of elasticity and porosity.

Compared to the original mortars, however,

**Mape-Antique MC**-based repair mortars possess a durability that makes them virtually indestructible in the face of natural aggressions: rain, rising damp, cracks caused by plastic shrinkage, alkali-aggregate reaction and attack by the sulphate salts that are often present in masonries.

Despite their intrinsic porosity and "mechanical delicacy", **Mape-Antique MC**-based mortars are physically and chemically insensitive to aggressive attacks.

The technical data table ("Final Performances") lists some examples of typical data relating to the principal

# Mape-Antique MC

properties of mortar prepared with **Mape-Antique MC** in the plastic and cured state.

## RECOMMENDATIONS

- **Mape-Antique LC** mortar must be applied not less than 2 cm thick.
- Do not use **Mape-Antique MC** for consolidating slurry to be injected (use **Mape-Antique I**).
- Do not add additives, cement or other binders (lime or gypsum) to **Mape-Antique MC**.
- Do not finish the **Mape-Antique MC** surface with paints that can interfere with the moisture evaporation (use paints and mortars from the **Silexcolor** or **Silancolor** ranges, lime-based paints or **Antipluviol S**).
- Do not apply **Mape-Antique MC** at temperatures below +5°C.
- Apply **Mape-Antique MC** on a clean substrate.

## APPLICATION PROCEDURE

### Preparing the substrate

Before preparing the mortar it is essential that the structure to be repaired is carefully prepared. All damaged materials (mortar, stone, brick or tuff) should be removed and new samples procured should replace the original materials as much as possible both in appearance and substance.

In the presence of rising damp, completely remove the render at least 50 cm above the damp area and anyway for a minimum height of twice the thickness of the wall.

After removing all loose material (dust, grease, etc.) wash the structure with water to remove efflorescence and soluble salts that are in the masonry. If necessary repeat this operation several times, in order to dissolve any salt present between the masonry.

Always apply a 5 mm thick coat of **Mape-Antique Rinzaffo** after wetting the structure that needs repair as well as the stones or bricks that will be inserted into the structure. **Mape-Antique Rinzaffo** may also be used on substrates that have not been damaged by chlorides (see the **Mape-Antique Rinzaffo** technical data sheet).

Excess water must be left to evaporate so the section to be repaired is saturated with water inside yet dry on the surface. Compressed air can be used to speed up evaporation.

### Preparing the product

**Mape-Antique MC** is prepared in a normal cement mixer.

After pouring the minimum amount of water (approximately 3.5 litres for each bag of product), pour in the contents of the previously opened bags of

**Mape-Antique MC** in a steady flow.

Mix for 3 minutes and check that the mix is well blended, taking care to scrape any unblended powder from the sides of the mixer. More water can be added to the mix if needed, but the total amount should not exceed 4 litres per bag, including the amount poured in initially.

Mix again for 2 to 3 minutes, depending on the efficiency of the mixer, to obtain the optimum plasticity for application with a trowel.

## Applying the mortar

**Mape-Antique MC** prepared with water and according to the recommended method has a plastic consistency and is easy to apply. 2 hours after **Mape-Antique Rinzaffo** has hardened, apply the render with **Mape-Antique MC**. The total thickness must not be less than 2 cm. Both products must be applied with a trowel.

Although **Mape-Antique MC** contains substances that prevent cracking caused by plastic shrinkage, the mortar should not be applied to a wall exposed to direct sunlight or wind; if so, spray water abundantly on the rendering once applied.

## Finishing

Finishing can be carried out, as required, by simply levelling (immediately after application) with a float. In order to ensure that the render is highly vapour permeable, it is recommended not to firmly press the surface of the fresh render.

If a fine grained finishing is desired, **Mape-Antique FC** or **Mape-Antique FC/R** smoothing mortars can be used, but they tend to slightly reduce the vapour permeability of the render, because they contain fine graded aggregates.

Their use is not recommended when the masonry is subject to strong rising damp and in the presence of strong concentrations of soluble salts. In these cases, choose a finish with silicate-based **Silexcolor** mortar or siloxane-based **Silancolor** mortar which are available in 34 different colours, after an application of each product's relative primer (**Silexcolor Primer** or **Silancolor Primer**).

As an alternative to the above products, the render may be painted with **Silexcolor Paint** or **Silancolor Paint** (which are also available in 34 different colours) after an application of the same primers.

**Silexcolor Marmorino**, on the other hand, is suitable when an attractive, antique finish is required.

As an alternative paint the renders with **Silexcolor Paint**, also available in 34 colours. For surfaces especially exposed to rain and that do not require tinting, masonries can be protected with a transparent vapour-permeable treatment using **Antipluviol S**, a water repellent siloxane resin-based primer.

## CONSUMPTION

15 kg/m<sup>2</sup> per cm of thickness.

## Cleaning

Before hardening, the mortar can be removed from tools with water. Afterwards cleaning is very difficult and can only be carried out mechanically.

## PACKAGING

25 kg bags.

## STORAGE

12 months in a dry and sheltered place in original sealed packaging.

## SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

**Mape-Antique MC** contains special hydraulic binders that, when in contact with



Preparation the Mape-Antique MC mix



Float finishing render made with Mape-Antique MC



Pointing of brickwork

## TECHNICAL DATA (typical values)

### PRODUCT IDENTITY

<b>Consistency:</b>	powder
<b>Colour:</b>	light
<b>Bulk density (kg/m<sup>3</sup>):</b>	1500
<b>Maximum diameter (mm):</b>	2.4
<b>Dry solid content (%):</b>	100
<b>Storage:</b>	12 months in a dry place in original sealed packaging
<b>Hazard certification according to EC 99/45:</b>	irritant. Before using refer to the "Safety instructions for preparation and application" paragraph and the information on the packaging and Safety Data Sheet
<b>Customs class:</b>	3824 50 90

### APPLICATION DATA at +23°C and 50% R.H.

<b>Application temperature range:</b>	from +5°C to +35°C
<b>Pot life of mix:</b>	approximately 1 hour
<b>Waiting time after application of Mape-Antique Rinzafo:</b>	≤ 24 hours
<b>Max thickness per layer (mm):</b>	30

### FINAL PERFORMANCES IN MORTAR

<b>Mix ratio:</b>	one 25 kg bag with 3.5-4 litres of water
<b>Composition (kg/m<sup>3</sup>):</b> – Mape-Antique MC: – water:	1475 225
<b>Density of the mix (EN 1015/6) (kg/m<sup>3</sup>):</b>	1700 (the density may vary according to the mixing times and type of mixer used)
<b>Colour of the product after hardening:</b>	light
<b>Consistency of the mix:</b>	thixotropic
<b>Porosity of the mortar while still fresh (EN 1015/6) (%):</b>	> 20
<b>Resistance to vapour transmission (EN 1015/19) (μ):</b>	≤ 10
<b>Compressive strength EN 1015/11 (N/mm<sup>2</sup>):</b> – 28 days (category CS II):	1.5 ÷ 5
<b>Dynamic modulus of elasticity (N/mm<sup>2</sup>):</b> – 28 days:	5000
<b>Resistance to sulphates: expansion using the Austett test method (%):</b>	< 10
<b>Bonding strength (EN 1015/12) (N/mm<sup>2</sup>):</b>	≥ 0.4 B
<b>Thermal conductivity (EN 1745) (λ):</b>	0.70 W/mk
<b>Water absorption (EN 1015/18) (kg/m<sup>2</sup>):</b>	3.5
<b>Fireproof class (EN 13501-1):</b>	class A1



Levelling render made with Mape-Antique MC



Detail: Mape-Antique MC used for filling joints and rendering

# Mape-Antique MC

sweat or any other bodily fluids, produce an alkaline reaction. Irritant to the eyes and skin.

Wear protective gloves and goggles. For further information refer to the Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE.

## 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**



Bell tower restored with Mape-Antique MC



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