

## WHERE TO USE

Transpirant installation layers and pointing on internal and external stone, brick, tuff and mixed "natural finish" load-bearing and buffer walls, including those of historical and artistic interest.

For new load-bearing and buffer walls or for rebuilding old walls.

#### Some application examples

- Building new walls and restoring old walls, including those of historical and artistic interest with a conservation order or under the protection of the National Trust.
- Pointing between layers of stone, brick and tuff on masonry with a "natural finish".
- Making installation and "reinforced" joints using rebar or composites (such as Maperod).
- Building facing walls using mortar with guaranteed performance characteristics.
- Touching-up and plumbing facing walls with gaps and/or uneven surfaces.

### **TECHNICAL CHARACTERISTICS**

Mape-Antique Allettamento is a pre-blended, cement-free masonry mortar in powder form made from natural hydraulic lime, Eco-Pozzolan, natural sand, special additives and micro-fibres according to a formulation developed in MAPEI's research laboratories. This product is classified as G according to EN 998-2 Standards: "Guaranteed performance, general purpose masonry mortar for external use on elements with structural requirements", Class M 5, with compressive

strength > 5 N/mm². When mixed with water in a cement mixer, **Mape-Antique Allettamento** forms a salt-resistant masonry mortar with a plastic-thixotropic consistency and good trowelability. Thanks to its special composition, **Mape-Antique Allettamento** has an extremely low rate of hygrometric shrinkage which drastically reduces the risk of the formation of cracks in the mortar. It also has properties which make the product resistant to various chemical-physical aggressive phenomena, such as soluble salts, freeze-thaw cycles, the leaching action of rainwater and alkali-aggregate reactions.

Typical values are shown in the Technical Data table (see Application Data and Final Performance sections) which refer to the main characteristics of

**Mape-Antique Allettamento** at both the fresh and hardened states.

### **RECOMMENDATIONS**

- Mape-Antique Allettamento must be applied in layers at least 5 mm thick.
- Do not use Mape-Antique Allettamento for casting into formwork (use Mape-Antique LC mixed with aggregates with a suitable grain size).
- Do not use Mape-Antique Allettamento to make consolidating slurry for injection into structures (use Mape-Antique I or Mape-Antique F21).
- Do not use Mape-Antique Allettamento for "reinforced" render (use Mape-Antique Strutturale NHL).
- Never add additives, cement or other binders (lime and gypsum) to Mape-Antique Allettamento.





Removing the excess mortar



Cleaning the mortar joints with a millet brush



Finishing the mortar joints

- Do not apply products which could have a significant impact on the transpiration properties of Mape-Antique Allettamento. Use water-repellent treatments such as Antipluviol S or Antipluviol W.
- Do not apply Mape-Antique Allettamento if the temperature is lower than +5°C.

# **APPLICATION PROCEDURE Preparation of the substrate**

Remove all traces of loose or crumbly material, dust, mould and any other material which could compromise the bond of **Mape-Antique Allettamento** either manually or with mechanical means until the substrate is clean, sound and compact. Remove any weak installation mortar between the masonry blocks; then clean the wall with low-pressure water jets to remove any efflorescence or salts present on the surface. Repeat this operation several times if necessary.

If weak substrates need to be consolidated, apply a number of coats of **Consolidante 8020** or **Primer 3296** (refer to the relative Technical Data Sheets).

Before applying **Mape-Antique Allettamento** the substrate must be saturated to prevent it from absorbing water from the mortar and compromising the final performance characteristics of the mortar. Excess water must be left to evaporate so that the masonry is saturated and the surface is dry. Compressed air may be used to speed up this process.

If the substrate cannot be saturated with water, we recommend that it is at least dampened to allow **Mape-Antique Allettamento** to bond correctly.

## Preparation of the product

Prepare Mape-Antique Allettamento with a vertical cement mixer. Small amounts of the product may be prepared using a low-speed electric drill with a mixing attachment. Mixing the product by hand is not recommended. After pouring the minimum amount of clean water required into the mixer (4.5 litres per 25 kg bag of Mape-Antique Allettamento), slowly add the powdered mortar in a continuous flow. Mix for approximately 3 minutes and check that the blend is well mixed, even and free of lumps and that no material has stuck to the sides and bottom of the mixer.

Add a further amount of water if required up to a total of 5 litres per bag, including the water added at the start of mixing.

Then mix Mape-Antique Allettamento again

for a further 2-3 minutes to obtain an even, "plastic" and thixotropic blend.

## **Application of the product**

Mape-Antique Allettamento must be applied with a trowel. If the mortar is used to point "natural finish" masonry, apply the mortar between the blocks with a slight pressure to help it bond well. Any excess mortar must be removed immediately after application,

including from masonry construction elements. If necessary, clean the joints with a damp sponge or with a millet brush. For "natural finish" masonry, form a "laying bed" and then lay the construction elements in place by pressing them down well to make sure they are held in position. Remove the excess mortar with a trowel.

Even though Mape-Antique Allettamento contains products which contrict the formation of micro-cracks, it is good practice to apply the mortar when the wall is not exposed to direct sunlight and wind. In such cases, such as during hot and/or particularly windy weather, take special care when curing the mortar, especially during the first 36-48 hours. Spray water on the surface or employ other systems to prevent the mixing water evaporating off too quickly.

#### **FINISHING COAT**

If a transpirant water-repellent treatment is to be applied, especially for constructions particularly exposed to rain, wait until the mortar is completely cured and apply **Antipluviol S**, siloxane resin impregnator in solvent, or **Antipluviol W**, siloxane resin impregnator in water dispersion.

## **Cleaning**

The mortar may be removed from tools with water before it hardens. Once hardened, the cleaning is difficult and must be carried out mechanically.

#### **PACKAGING**

25 kg bags.

#### COLOUR

**Mape-Antique Allettamento** is available in 7 colours.

## CONSUMPTION

16.5 kg/m<sup>2</sup> (per cm of thickness).

#### **STORAGE**

12 months in a dry, covered environment in its original, unopened packaging.

## SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Mape-Antique Allettamento contains special hydraulic binders which, in contact with sweat or other body fluids may cause corrosion or damage to the eyes. When applying the product, wear protective gloves and goggles and take the usual precautions for handling chemicals. If the product comes in contact with the eyes or skin wash immediately with plenty of clean water and seek medical attention.

For further and complete information about the safe use of our product please refer to the latest version of our Material Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE.

## **TECHNICAL DATA (typical values)**

PRODUCT IDENTITY				
Type of mortar (EN 998-2):	G - Guaranteed performance, general-purpose masonry mortar for external use on elements with structural requirements			
Appearance:	powder			
Colour:	available in 7 different colours			
Type of hydraulic binder (EN 459-1):	NHL 3.5 and NHL 5			
Maximum size of aggregate (EN 1015-1) (mm):	1.5			
Bulk density (kg/m³):	1,500			
Chloride content (EN 1015-17) (%):	Requirements EN 998-2	Performance of product		
	< 0.1	< 0.05		
APPLICATION DATA OF PRODUCT (at +20°C - 50% R.H.)				
Mixing ratio:	100 parts of <b>Mape-Antique Allettamento</b> with 18-20 parts of water (4.5-5 litres of water per 25 kg bag of product)			
Appearance of blend:	thixotropic			
Consistency of fresh mortar (EN 1015-3) (mm):	175			
Apparent density of fresh mortar (EN 1015-6) (kg/m³):	1,950			
Porosity of the mix while still fresh (EN 1015-7) (%):	6			
Application temperature range:	from +5°C to +35°C			
Workability time of fresh mortar (EN 1015-9):	approx. 60 minutes			
Minimum applicable thickness (mm):	5			
Maximum applicable thickness per layer (mm):	30			



Performance characteristic	Test method	Requirements according to EN 998-2	Performance of product
Compressive strength after 28 days (N/mm²):	EN 1015-11	from Class M 1 (> 1 N/mm²) to Class M d (> 25 N/mm²)	Class M 5
Bond strength to substrate (N/mm²):	EN 1015-12	not required	≥ 0.5 Failure mode (FP) = B
Initial shear strength (N/mm²):	EN 998-2 Annex C	tabulated value	0.15
Capillary action water absorption [kg/(m²·min <sup>0.5</sup> )]:	EN 1015-18	declared value	< 0.3
Coefficient of permeability to water vapour (μ):	EN 1015-19	tabulated value	15/35
Thermal conductivity (λ <sub>10,dry</sub> ) (W/m·K):	EN 1745	tabulated value	0.77
Reaction to fire:	EN 13501-1	value declared by manufacturer	Class A1
Resistance to sulphates (%):	ASTM C 1012 mod.	not required	< 0.02
Saline efflorescence (after semi-immersion in water):	/	not required	absent



Pointing the joint in a stone wall



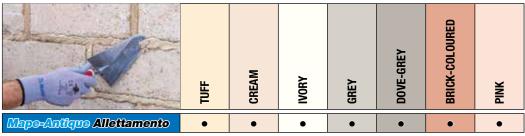
Finishing the surface with a millet brush



Finishing the surface with a sponge







N.B.: Due to the printing processes involved, the colours should be taken as merely indicative of the shades of the actual product

### **WARNING**

Although the technical details and recommendations contained in this product data sheet 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 application; 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.

Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.com



All relevant references for the product are available upon request and from www.mapei.com

