

Poromap Rinzafo

Prepacked salt-resistant mortar to be applied before the dehumidifying and thermal insulating render Poromap Intonaco



WHERE TO USE

Poromap Rinzafo is used as a primer for the reparation of stone, brick and tuff buildings damaged by capillary rising damp.

Some application examples

Poromap Rinzafo must always be used as a first layer applied directly onto the clean masonry after removing the existing render in the following cases:

- As a dehumidifying render on masonry subject to strong rising damp.
- As a dehumidifying render on interior and exterior masonries of recently constructed buildings that have problems of rising damp.
- As a dehumidifying render on constructions built on waterfronts or by the sea.
- As a render on stone, brick and tuff masonries.
- As a dehumidifying render on stone (particularly porous such as lime) and/or bricks, including burnt bricks (e.g. walls, columns, vaults, etc.) structures and wherever saline efflorescence exists.
- As a dehumidifying render on structures subject to soluble salts such as chlorides, sulphates and nitrates.

TECHNICAL CHARACTERISTICS

Poromap Rinzafo is a prepacked powder mortar composed of special hydraulic binders with pozzolanic reaction and highly resistant to sulphates, natural sand

and special additives prepared according to a special formula developed in the Mapei research laboratories.

After mixing **Poromap Rinzafo** with water in a mixer, it becomes a slightly fluid mortar easily workable on both vertical surfaces and ceilings. It is especially suitable for improving the adhesion and chemical/physical resistance to soluble salts of macro-porous dehumidifying mortars (which is already excellent and is in compliance with the WTA recommendations).

Poromap Rinzafo's special properties prevent soluble salts such as chlorides, sulphates and nitrates, from penetrating the macro-porous mortar. The hygroscopicity of these soluble salts can cause localised humidity in mortars used in insufficiently ventilated areas.

Under certain temperatures and humidity conditions, the presence of these salts on the render surface causes moisture to be drawn into it because of the high affinity of water with the salts themselves. The use of **Poromap Rinzafo** is especially advantageous because it uniformes the absorption of the substrate and improves the adhesion of the dehumidifying mortars.

Poromap Rinzafo's mechanical performances, porosity and modulus of elasticity are similar to those of the hydrated lime, pozzolan-lime and hydraulic lime mortars once used in building.

Because of **Poromap Rinzafo**'s composition and despite its high porosity, it is so durable as to make it practically indestructible when attacked by various



aggressive natural phenomena: freeze-thaw cycles, alkali-aggregate reaction and attack of sulphate salts, nitrates and chlorides that are often in masonries and in soils on which they are built.

RECOMMENDATIONS

- Always use **PoroMap Rinzafo** as a primer coat approximately 5 mm thick on surfaces subject to rising damp before applying **PoroMap Intonaco**, dehumidifying render.
- Do not add additives, cement or other binders (lime and gypsum) to **PoroMap Rinzafo**.
- Do not apply **PoroMap Rinzafo** at temperatures below +5°C.
- Apply **PoroMap Rinzafo** on clean substrate saturated with water.

APPLICATION PROCEDURE

Preparing the substrate

The structure to be restored must be properly prepared before applying the mortar. Remove the render completely up to 50 cm above the damp area, or at least as high up as twice the depth of the wall. The operation can be carried out manually or by machine and must reach the underlying masonry. If there are large voids left when removing the old render, 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 efflorescences and the soluble salts that are in the masonry.

Thoroughly wet the structure, including the stones or the bricks to be inserted before applying **PoroMap 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

PoroMap Rinzafo can be applied both by trowel and by spray. In the first case prepare **PoroMap Rinzafo** in any ordinary job site mixer. Pour in the minimum amount of water (approx. 4.3 litres for each bag of product), then, in a continuous flow, add the contents of the bags opened beforehand. Mix for approx. 3 minutes, then check that the contents are mixed thoroughly, removing any unmixed powder from the sides of the mixer.

Add more water if needed, up to a total of 4.6 litres per bag, including the amount poured initially.

Mix for a further 2-3 minutes, depending on the efficiency of the mixer, in order to obtain the ideal plasticity.

Applying the mortar

Spread the mortar as a first coat on the previously prepared substrate in a thickness of 5 mm. This thin first coat will make the subsequent coat of **PoroMap Intonaco**

easier to bond and creates a barrier resistant to soluble salts. The mortar may be applied by trowelling.

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

Although **PoroMap Rinzafo** 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 these cases water should be sprayed on the product after it has finished setting.

Apply **PoroMap Intonaco** within a couple of hours (max 2-3 hours) on the set **PoroMap Rinzafo**. The total thickness of the render must not be less than 2 cm.

For the mixing and application methods, refer to the **PoroMap Intonaco** technical data sheet.

Cleaning

Mortar that has not hardened yet can be removed from tools with water. Once the mortar has hardened, cleaning becomes very difficult and tools can only be cleaned mechanically.

CONSUMPTION

7.5-8 kg/m² per 5 mm of thickness.

PACKAGING

25 kg bags.

STORAGE

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

Manufactured in compliance with the regulations of the 2003/53/EC Directive.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

PoroMap Rinzafo contains cement that, in contact with sweat or other bodily fluids, produces an irritant alkaline reaction and allergies to those predisposed. 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 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 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
for the product are available
upon request and from
www.mapei.com**

TECHNICAL DATA (typical values)

PRODUCT IDENTITY

Appearance:	powder
Colour:	grey
Bulk density (kg/m³):	1,000-1,100
Maximum diameter of aggregate (mm):	2.5
Storage:	12 months in a dry place in original unopened packaging
Hazard classification according to EC 1999/45:	irritant. Before using refer to the "Safety instructions for preparation and application" paragraph and the information on the packaging and Safety Data Sheet
Customs class:	3824 50 90

FINAL PERFORMANCES

Mix ratio:	one 25 kg bag with 4.3-4.6 litres of water
Composition (kg/m³): – PoroMap Rinzafo: – water:	approx. 1,525 approx. 275
Consistency of mix:	plastic
Density (kg/m³): (according to DIN 18555 part 2a):	1,700-1,900
Colour:	grey
Resistance to water vapour transmission (μ) (according to DIN 52615):	< 20
Max thickness that can be applied (mm):	5
Application temperature range:	from +5°C to +35°C
Pot life of mix (at +23°C and 50% R.H.):	approx. 1 h
Compressive strength (N/mm²) (according to DIN 18555 part 3a): – after 28 days:	10-15

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