

Natural hydraulic lime based mortar to realize desalinized rinzafo (render) before Tectoria DF macroporous plaster. CE marked product as mortar for internal and external GP CS III in compliance with the EN 998-1.

Description

Limepor RZ is a ready-to-use restoration mortar consisting of natural hydraulic lime NHL, natural pozzolans and inert materials with a maximum granulometry of 3 mm. CE marked product as GP CS III in compliance with the 998-1.



Combined with Tectoria DF, the product it is part of a restoration system for walls subject to rising damp. Limepor RZ has a low content of water-soluble salts. In contact with water, the hydraulic lime reacts to form hydrated products that are extremely insoluble and very stable in terms of the chemical base.



Uses

Limepor RZ is used in combination with Tectoria DF to restore walls subject to rising damp, both in new buildings and in buildings of historic interest characterised by high salinity level (old farmhouses, villas, churches, structures of value).

The system, according to the WTA, is characterised by extremely light, breathable and porous, combined with good thermal insulation properties.

Application

Remove the plaster up to the highest point where the rising damp is still visible, plus two times the thickness of the wall; for exposed walls, the actual degree of humidity in the masonry must be completely analysed.

Clean the surface thoroughly to eliminate any flaking parts (for example any damaged rendering mortar between the hewn stones), grease, old paint and any other materials that might prejudice proper anchoring of the subsequent applications.

Brush the wall and clean it with a pressure washer until saturated (the substrate must be saturated with water but dry on the surface when the desalinating rough coat made using Limepor RZ is applied).

Mix Limepor RZ carefully using approx. 23% drinking water (5.5-6 litres for every 25 kg pack) in a cement-mixer until a smooth cream forms (mixing time of about 3-4 minutes).

Apply the mix using a trowel, being careful to spread it evenly across the entire surface, (this first coat must not be smoothed, but left rough) to create a rough coat 5 mm thick.

If, after 1-2 days, any parts of the wall show signs of salt efflorescence and/or particularly damp areas, apply another rough coat of Limepor RZ following the indications given above.

Wait for 1-2 days (at 20°C), saturate the wall substrate with water (to prevent cracking on shrinkage), wait until the surface is dry, then prepare a preliminary binding layer using Limepor RZ onto which, wet on wet, to apply the final Tectoria DF or Limepor MACRO dehumidifying mortar to a minimum thickness of 2 cm over the whole surface, being careful not to overly compress the mortar during the float finish.

It is not recommended that the traditional skimming level method be used, but it is better to use wooden or plastic levels that are removed during the final phase of application.

Subsequent levelling must be carried out when the plaster is completely cured (minimum 3 weeks), so as to seal any shrinkage cracks that may have formed, particularly in the case of thick layers of plaster.

In the case of thick layers and uneven or weak substrates it is recommended that Kimitech 350 mesh be inserted in the finish. The surface must be fully dried before top coats of paint (water vapour permeable only) can be applied.

Characteristics	Value
Appereance	Powder
Colori	Cocciopesto
pH in water dispersion	11,5 - 12,5
Application temperature	+2 - +35 °C
Granulometric distribution UNI EN 1015-1 (not-seved at 3,00mm)	100 %
Granulometric distribution UNI EN 1015-1 (not-seved at 1,20mm)	72 %
Granulometric distribution UNI EN 1015-1 (not-seved at 0,60mm)	62 %
Granulometric distribution UNI EN 1015-1 (not-seved at 0,09mm)	35 %
Apparent volumetric mass of wet mortar UNI EN 1015-6	1800 ± 50 Kg/m ³
Water absorption due to capillary action UNI 10859 (Cultural heritage-Normal)	0,66 mg/cm ² ·s ^{1/2}
Porosity Normal 4/80 (Total porosity)	37 %
Porosity Normal 4/80 (Specific surface area)	5,34 m ² /g
Compression strength 7 days UNI EN 1015-11	> 1,2 MPa
Compression strength 28 days UNI EN 1015-12	> 5 N/mm ²
Flexural strength 7 days UNI EN 1015-11	> 0,6 MPa
Flexural strength 28 days UNI EN 1015-11	> 2 MPa

Characteristics	Limit value for GP mortars	Typical value
Apparent volumic mass of wet mortar UNI EN 1015-6	Declared value	1800 ± 50 Kg/m ³
Resistance to compression 28 days UNI EN 1015-11	CS I (0,4 – 2,5 Mpa) CS II (1,5 – 5 Mpa) CS III (3,5 – 7,5 Mpa) CS IV (≥ 6 Mpa)	CS III
Adhesion UNI EN 1015-12		> 0,6 MPa
Water absorption due to capillary action UNI EN 1015-18	Declared value	W0
Water vapour permeability coefficient UNI EN 1015-19		μ < 15
Reaction-to-fire class		A1

Packaging

25 kg multilayer paper bags.
1,500 kg pallets.

Coverage

6-7 Kg/m² per 5 mm thickness.

Storage

Protect from humidity. Store in a dry, sheltered place. Stored in these conditions and in unopened containers, the product remains stable for 12 months.

Warning

Product intended for professional use.

In the restoration of walls subject to rising damp, Limepor RZ must always be applied as a rough coat together with Tectoria DF or Limepor MACRO; it can never be applied by itself or as a rough coat for other plasters/renders.

Before using, check bags have not been damaged, and do not use the products if there are any lumps.

Use the entire contents once the bags have been opened.

Only use enough water to obtain the right mix.

The product must never be mixed with a mechanical stirring device and agitator, but always with a cement mixer (in this case do not mix the product for too long, as this might alter its mechanical characteristics and make it liable to subsequent cracking and peeling), leaving the mortar to rest for a few minutes after mixing and before applying it.

Do not apply Limepor RZ to gypsum substrates, or to surfaces that are particularly weak and crumbling: in this case consult our Technical Support Service.

If it is necessary to lay thick layers of Tectoria DF or Limepor MACRO plaster, it is recommended that this be done in successive coats of maximum 2 cm, each one applied after the previous layer has dried, so as to avoid applying excessively thick layers of fresh plaster that might slip during setting, or differences in drying time between the surface and the internal mass that might result in the formation of micro-cracks and a decreased adhesion of the macroporous plaster to the substrate.

When applying in poorly ventilated areas (caverns, underwater rooms, etc.), in order to allow the product to dry and eliminate any surface condensation within the time limits indicated in these specifications, sufficient air circulation must be generated using forced ventilation (which should remain permanently when the areas treated are in use).

The product must not be used for dehumidification of basement walls showing back-pressure water seepage; in these cases please contact our technical department.

Do not apply at temperatures under +2 °C or above +35 °C, to surfaces in direct sunlight, when it is about to rain, or on windy or misty days.

The technical specifications and application methods recommended herein are based on our current knowledge and experience and do not represent any form of guarantee of the final results obtainable with the product.

It is the customer's responsibility to check that this data sheet is still effective and has not been replaced with a more recent version, and that the product is suitable for the intended use.