

## Tectoria RZ

ST12-1219

*NHL-based mortar for anti-salts barrier to be used in combination with macro-porus plaster Tectoria DF*



### DESCRIPTION

**Tectoria RZ** is a mortar used for anti-salts rough plastering, made out of NHL in combination with a maximum aggregates of 3 mm. **Tectoria RZ** has a low soluble salts content. It is a CE marked product as mortar for interior and exterior GP CS IV in compliance with the 998-1.

### ADVANTAGES

- Create a anti-salts barrier capable to avoid efflorescences formation in case of rising damp.
- Thanks to its colour it is very easy to recognize where the product has been applied.




### USES

Rough anti-salts plasters and adhesive bridge for the mortar **Tectoria DF**. Combining **Tectoria RZ** and Tectoria DF we obtain a restoration system capable to solve problems with rising damp on existing buildings both modern and historic. In accordance with requirements of WTA, the system has low weight, high breathability and is very porous, applicable under different exposure conditions.

### WORKS

- Dehumidifying multi-product plasters ([SA46](#)).

### APPLICATION

	Manual application		Mixing water: 5,5-6 lt/ 25Kg
	Max thickness per coat: first coat of rough plaster: 5 mm		

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

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

Brush the masonry and clean with a pressure washer until SSD conditions are achieved.

Mix **Tectoria RZ** with potable water, according to the table above, in concrete mixer until a fluid and homogenous mixture is achieved (mixing time: 3-4 mins).

Apply the product by hand with a trowel, spreading it uniformly on the entire surface creating a rough coat of 5 mm at least.

If certain zones present salts during 1-2 days after the above-mentioned application, apply one more coat of **Tectoria RZ**.

Wait for 1-2 days (at 20°C), wet the support until SSD are obtained and create a thin layer of **Tectoria RZ** to create a good adhesion bridge for the next application of **Tectoria DF**. **Tectoria DF** must be applied on the last coat of **Tectoria RZ** still fresh respecting a minimum thickness of 2 cm avoiding to compact excessively this coat while smoothing the surface.

The traditional skimming method is not recommended, it is better to use wooden or plastic levels that are removed during the final phase of application. The skim coating must be carried out when the plaster is completely cured (minimum 3 weeks, not less than a week per cm of thickness), so as to seal any shrinkage cracks that may

have formed, particularly in the case of thick layers of plaster. In case of thick layers and uneven or weak substrate **Kimitech 350** mesh has to be inserted in the finish. The surface must be fully dried before top coats of paint (water vapour permeable only) can be applied.

## CONSUMPTION

6 Kg/m<sup>2</sup>

## PACKAGING

Bags - 25 Kg.

Pallet 60x25 – 1500 Kg.

## 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.

Characteristics	Value
Appearance	Powder
Colour	Reddish grey
pH	11,5 - 12,5
Application temperature	+2 - +35 °C
Granulometry EN 1015-1 (size 3,00mm)	100 %
Granulometry EN 1015-1 (size 1,20 mm)	72 %
Granulometry EN 1015-1 (size 0,60 mm)	62 %
Granulometry EN 1015-1 (size 0,09 mm)	35 %
Capillar water absorption EN 10859	0,66 mg/cm <sup>2</sup> ·s <sup>1/2</sup>
Porosity Normal 4/80 (total porosity)	37 %
Porosity Normal 4/80 (Specific area)	5,34 m <sup>2</sup> /g
Compressive resistance at 28 days EN 1015-11	> 15 MPa
Flexural resistance at 7 days EN 1015-11	> 3 MPa
Flexural resistance at 28 days EN 1015-11	> 5 MPa

Characteristics	Value for GP mortar	Value
Dry bulk density EN 1015-10	Declared value	1730 Kg/m <sup>3</sup>
Compressive resistance at 28 days EN 1015-11	CS I (da 0,4 a 2,5) CS II (da 1,5 a 5,0) CS III (da 3,5 a 7,5) CS IV (≥6)	CS IV
Adhesion EN 1015-12	Declared value and failure mode (FP)	> 0,6 MPa - FP: B
Capillar water absorption EN 1015-18	Declared value	W0
Coefficient of permeability of water vapour EN 1015-19	Declared value	μ < 15
Thermal conductivity I <sub>10, dry, mat</sub> values EN 1745	Average value as per table (P = 50%)	0,72 W/m*K
Reaction to fire EN 13501 - 1	Declared value	A1

Durability	Declared value	NPD
Hazardous substances	Declared value	See SDS

## WARNING

Product for professional use.

In the restoration of masonry walls affected by rising damp, **Tectoria RZ** has to be used always as first rough plaster, in combination with **Tectoria DF** and never used for other different application.

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

Use the entire contents once the bag has been opened.

The product won't be mixed with mechanical stirrer, but only with concrete mixer ( avoid a too long mixing time).

One mixed, wait a few minutes before applying the mortar.

Avoid the application of **Tectoria RZ** on gypsum-based surface or on very weak support: in this case please contact our Technical Office.

If it is necessary to create a very thick dehumidifying plaster with **Tectoria DF**, proceed with several layers with a maximum thickness per coat of 2 cm. Between each coat wait for the necessary curing time in order to avoid the formation of cracks or problems ion therm of adhesion to the support.

If the application is carried out in poorly ventilated areas, in order to ensure a proper hydration of the product, install a forced ventilation.

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.

## TECHNICAL SPECIFICATIONS

### SK46 - Dehumidifying multi-product plasters

Removal of old plaster using as reference the external showed level of rising damp and adding up 2 times the thickness of the wall to be treated. Clean properly the entire surface to be treated removing dusts, old varnishing, detached parts and greases. Wet the surface until SSD conditions are achieved and apply a rough anti-salts coat using Tectoria RZ by Kimia S.p.A. or a similar product. This product will be spread uniformly on the entire surface, respecting a consumption of 6 kg/m<sup>2</sup>

If certain zones present salts during 1-2 days after the above-mentioned application, apply one more coat of Tectoria RZ..

Wait for 1-2 days (at 20°C), wet the support until SSD are obtained and create a thin layer of Tectoria RZ to create a good adhesion bridge for the next application of Tectoria DF. Tectoria DF must be applied on the last coat of Tectoria RZ still fresh respecting a minimum thickness of 2 cm avoiding to compact excessively this coat while smoothing the surface.

The rough anti-salts plaster, with a low content of water-soluble salts a high compatibility with ancient masonry structures, will be prepared and applied scrupulously following the instructions on the technical data sheets supplied by the manufacturer and must have the following characteristics:

- Dry bulk density EN 1015-10: 1730 kg/m<sup>3</sup>;
- Capillar water absorption EN 10859: 0,66 mg/cm<sup>2</sup>·s<sup>1/2</sup>;
- Porosity Normal 4/80 (total porosity): 37 %;
- Porosity Normal 4/80 (Specific area): 5,34 m<sup>2</sup>/g;
- Compressive resistance at 28 days EN 1015-11: > 15 MPa;
- Flexural resistance at 7 days EN 1015-11: > 3 MPa;
- Flexural resistance at 28 days EN 1015-11: > 5 MPa.

The product will be CE marked as GP CS IV mortar according to EN 998-1.