

# Torggler

## Restoration

# RISAN ONE

**Pre-mixed cementitious mortar 3-in-1. Multi-functional for the creation of renovation plasters on masonry affected by rising damp and saline efflorescence.**



- Does not require saline efflorescence treatment
- Single product used for both keying and rendering
- High efflorescence resistance
- Excellent porosity and water repellent properties
- Quick to apply



## APPLICATION AREAS

Risan One is ideal:

- as an outdoor renovating plaster and for outdoor wall bases resistant to rising damp and saline efflorescence in old buildings;
- as an indoor plaster for dehumidifying walls subject to rising damp, even in basements or ground floors, provided they are ventilated and not subject to water infiltration.

## FEATURES

Risan One is a ready-to-use, single-component, grey cementitious mortar based on special sulphate resistant, pozzolanic binders, selected aggregates, special synthetic resins and specific additives. After mixing with water, you obtain a light, highly workable and highly thixotropic plaster that is easy to apply on both walls and ceilings. The special sulphate resistant, pozzolanic binders used in the mix block surface efflorescence caused by the presence of hygroscopic salts in the masonry to be renovated. The highly dispersible, water repellent synthetic resins provide excellent adhesion to the masonry to be renovated, allowing the product to be used both as a keying coat and a saline efflorescence barrier.

## WARNINGS

- Do not apply the product at temperatures below +5°C or above +30°C.
- Do not mix the product with other binders such as cement, hydraulic lime, gypsum, etc.
- Do not use the mixed product when it has already started to set. Therefore, always prepare quantities of mix which can be used within the pot life.

## INSTRUCTIONS FOR USE

Hammer and scrape the masonry to be renovated to remove all loose, crumbling or non-cohesive material. If the masonry is old and damp, scrape off the old plaster completely to a height of at least 50 cm above the line of damp. Remove all traces of crumbling sealing mortar between brick courses or in between stone slabs or blocks and wash thoroughly with a jet of water under pressure. Large cavities may be filled with brick fragments and ordinary plastering mortar.

### Risan one must be applied in two separate stages:

**1. Keying coat and saline efflorescence barrier:** mix Risan One with approximately 14 – 16 % water (about 3.5 – 4.0 litres per 25 Kg bag) in a cement mixer for about 3 minutes or using a drill with mixer attachment for about 2 minutes until the mixture is smooth, light and soft. The mixture prepared should be used immediately after mixing. If this is impossible and the mixture is left to stand for more than 20 minutes, mix again briefly, adding small quantities of water, if necessary, to restore the right consistency. In this way, the mixture remains workable (pot life) for at least 60 minutes under normal conditions (20°C). Higher temperatures reduce the pot life. Apply the mixture by hand with a trowel in a uniform layer approximately 5 mm thick. The keying coat must have a rough surface, so do not smooth it off with a float or other tool. Make sure the keying coat is at least 5 mm thick on the entire surface of the masonry to be renovated. Wait at least 6 hours for the keying coat to harden sufficiently before applying the next rendering coat.

**2. Renovating plaster:** mix risan one with approximately 13 – 15 % water (about 3.25 – 3.75 litres per 25 Kg bag) in a cement mixer for about 3 minutes or using a drill with mixer attachment for about 2 minutes until the mixture is smooth, light and soft. The mixture prepared should be used immediately after mixing. If this is impossible and the mixture is left to stand for more than 20 minutes, mix again briefly, adding small quantities of water, if necessary, to restore the right consistency. In this way, the mixture remains workable (pot life) for at least 60 minutes under normal conditions (20°C). Higher temperatures reduce the pot life. Apply the mixture by hand with a trowel in a layer at least 2 cm thick. Smooth off with float but avoid smoothing too finely so as not to close the pores in the surface of the plaster. If a thicker total layer of product is required, the thickness of the keying and saline efflorescence barrier coat can be increased up to a maximum of 15 mm thick and, if necessary, the renovating plaster coat up to a maximum of 3 cm. For an even thicker layer, apply two successive renovating plaster coats. Wait for one coat to harden sufficiently (at least 6 hours) before applying the next coat. When used outdoors, avoid exposure to direct sunlight and strong wind during application. If this is not possible, keep the plaster moistened with a fine spray of water. Indoors, the surface may be finished with Finitura or other breathable lime-based finishing plaster, while outdoors, only Finitura should be used. Indoors, the final paint coating may consist of any highly breathable paint. Outdoors, use only Risan Pittura or other silicon or silica paint. The tools used for applying the plaster may be cleaned with water before it hardens. Once hardened, the plaster must be scraped off.

## TECHNICAL SPECIFICATIONS

### MEASURED OF FRESH MIX

Apparent density	approx 1,350 kg/l
Grain size (according to UNI EN 1015-1)	0 – 2,5 mm
% mixing water	13 – 15 % pari a 3,25 – 3,75 litres per 25 kg bag
Mix consistency (according to UNI EN 1015-3)	170 mm
Density of mix when fresh (according to UNI EN 1015-6)	approx 1,490 kg/l
Air content (according to UNI EN 1015-7)	33 %
Water retention (according to DIN 18555-7)	90 %
Workability (according to WTA 2-2-91)	0,5 cm
Application temperature	from +5 °C a +30 °C

Operating temperature	from -20 °C a +90 °C
<b>MEASURED ON HARDENED MIX</b>	
Density of mix when hardened (according to DIN 18555-3)	1,390 kg/l
Resistance to diffusion of water vapour – $\mu$ (according to DIN 52615)	8,8
Compression strength $\beta_d$ (according to UNI EN 1015-11)	< 5,0 N/mm <sup>2</sup>
Bending strength $\beta_{bz}$ (according to UNI EN 1015-11)	2,2 N/mm <sup>2</sup>
Factor ( $\beta_d/\beta_{bz}$ )	2,2
Water absorption coefficient W24 (according to DIN 52617)	0,6 kg/m <sup>2</sup>
Water absorption depth (according to DIN 52617)	3 mm
Total porosity (according to WTA 2-2-91)	41 %
Efflorescence	resistance
$\mu=W24=s$ (for layers 2 cm = 0.02 m thick)	approx. 0,110
Compression modulus of elasticity (according to MIT 90)*	3.500 N/mm <sup>2</sup>

\* Torggler's internal methods (MIT) are available on request.

Color	Grey
Packaging	bag
Packaging size	25 kg
Pallet	50 bags

## CONSUMPTION

Consumption of Risan One is approximately 13 Kg/m<sup>2</sup> per cm of thickness.

## STORAGE

Store in a dry, protected place. Unopened in its original bags the product can be stored for at least 12 months.

## CERTIFICATIONS

The EC Declaration of Conformity, including copies of official test reports, is available on request.

The information contained in this document is reported on the basis of our experience and knowledge; therefore, any recommendations and suggestions made are without any guarantee and must be verified before using the product by those who intend to use it, who assume all responsibility that may result from its use since the conditions of use are not under our direct control. In case of doubt, it is always advisable to make preliminary tests and/or ask for the intervention of our technicians. Torggler reserves the right to modify, replace and/or delete the items, as well as to change the product data in this document without prior notice; in this case the indications given here may no longer be valid. Always refer to the latest version of the data sheet, available at [www.torggler.com](http://www.torggler.com). Version 04.10.2021.