

Torggler

Concrete Restoration

RESTAURO FINITURA

Premixed, single-component, resin-bonded, fibre-reinforced, class C MC IR fine mortar according to EN 1504-2 for smoothing and protecting concrete elements.



- Outstanding workability and adhesion to the substrate
- Excellent mechanical strength and surface hardness
- Reduced capillary absorption
- Resistant to CO₂ penetration
- Applicable in thickness from 1 to 3 mm
- Perfect degree of finish



APPLICATION AREAS

Restauro Finitura is particularly suitable for:

- Surface levelling, even extensive, of cast concrete.
- Finishing of concrete and restored structures with mortars from the Restauro, Strutturale or Colabile lines.
- Finishing cementitious mortars with good mechanical resistance mechanical strength.

In accordance with EN 1504-9, the field of application of the Restauro Finish is referred to in Principles 3 (Concrete restoration) and 7 (Preservation and restoration of passivity) by means of methods 3.1 (Application of mortar by hand) and 7.1 (Increase of cover by addition of cement mortar or concrete).

TYPES OF SUBSTRATE

- Concrete and reinforced concrete.
- Concrete and reinforced concrete structures restored with mortars from the Restauro, Strutturale or Colabile line.
- Cementitious mortars and substrates with good mechanical resistance.

MAXIMUM ATTAINABLE THICKNESSES

3 mm

FEATURES

Restauro Finitura is a single-component, ready-to-use, grey-coloured cementitious mortar, based on high-strength cements, selected fine-grained aggregates, synthetic resins, fibres and specific additives. Once mixed with water, the result is a mix with excellent workability, good thixotropy, easy to apply with a construction trowel without dripping or scraps. Its excellent water retention reduces the risk of "burning" even in critical climatic conditions (summer temperatures and ventilation); in this case, however, it is necessary to take appropriate precautions (avoid direct exposure to the sun, mix with cold water, apply the product preferably during cooler hours and little sunshine, etc.). The presence of special polymers gives the mortar excellent adhesion to the substrate. Specific additives make the hardened skimming impermeable to water and resistant to CO₂ penetration. Restauro Finitura is a product for the surface repair of concrete structures by means of hydraulic mortar of class C MC IR according to EN 1504-2.

WARNINGS

- Never mix with other binders such as cement, hydraulic lime, gypsum, etc.
- Do not add water when the mixture has already started setting.
- Stop using the mixed product when it has already started to set, so take care to prepare from time to time a quantity of mixture that can be applied within its workability time.
- Do not carry out the skimming at high temperatures and with strong ventilation. Protect from direct sunlight. In the hot season, wait for the cooler hours to apply, mix with cold water and protect the surface from ventilation.
- Do not apply Restauro Finitura at temperatures below +5 °C or above +30 °C.

INSTRUCTIONS FOR USE

Preparation for use

The substrate must be clean and sound, free of dust, brittle material and dirt in general. Residues of release agent, if any, must be carefully removed. In the case of damaged concrete, remove all loose, crumbling and inconsistent parts with careful hammering and chiselling until the substrate is sound and strong. The rebars that may have emerged must be completely removed from the carbonated concrete and treated until it is "white" using a hydro-sandblaster or dry sandblaster and protected with Restauro Finitura. Cavities and irregularities must be reconstructed with products from the Restauro, Strutturale or Colabile lines.

Product preparation

Mix Restauro Finitura with about 19 – 21% water (equal to about 4.75 – 5.25 litres for a 25 kg bag), stirring with a mechanical stirrer (low-speed drill with propeller or mortar mixer) until the mixture is homogeneous and free of lumps. In the case of small mixtures, it is also possible to mix by hand with a masonry trowel, but in this case the water required may be greater, resulting in a deterioration in mechanical performance and a decrease in resistance to carbonation. The mix prepared in this way has a workability time of about 50 minutes under normal conditions (20 °C); at higher temperatures the workability time is shortened, while it is longer at lower temperatures. Wet the substrate until it is saturated and allow the excess water to evaporate or remove it with a sponge, taking care to eliminate any surface water film.

Instructions for application

Apply the Restauro Finitura mixture by hand using an American trowel in a maximum thickness of 2-3 mm. If the substrate conditions require the application of thicker coats, apply several coats of 2-3 mm, waiting for the previous coat to set before applying the next one, but in any case apply the next coat before the previous one has finished setting. Once the product has set well (in normal conditions between 20 and 30 minutes) finish with a sponge trowel. Wait at least 10 days before applying protective paint.

Cleaning

The tools used for laying can be cleaned with water before the mortar hardens; afterwards cleaning can be carried out only by mechanical removal.

TECHNICAL SPECIFICATIONS

PARAMETER	VALUE	REQUEST EN 1504-2
POWDER PRODUCT VARIATION		
Consistency	Powder	
Bulk density (MIT 13*)	1.300 kg/litre	
Particle size (EN 12192-1)	0-0.5 mm	
FRESH MIXTURE VARIATION		
Mixing water	19-21 % of water (4.75-5.25 litres of water per 25 kg)	
Mixture density (EN 1015-6)	2.020 kg/litre	
Mixture consistency	thixotropic	
Setting times (EN 196-3) setting start	approx. 5 hours	
Setting times (EN 196-3) setting end	approx. 7 hours	
Mixture workability time (EN 13395)	approx. 50 min	
Application temperature	from +5 °C to +30 °C	
Consumption	approx. 1.7 kg/m ² each mm of thickness	
HARDENED PRODUCT VARIATION		
Operating temperature	from -20 °C to +90 °C	
Bond strength on concrete (EN 1542)	> 2 MPa	For rigid systems nontrafficked: ≥ 1,0 MPa
Bond strength on concrete (EN 1542)	> 2 MPa	For rigid systems trafficked: ≥ 2,0 MPa
Liquid water transmission rate (EN 1062-3)	W < 0,1 Class III	W < 0,1 kg/(m ² ·h ^{0,5})
Water vapour permeability (Equivalent air thickness S _D) (EN ISO 7783-1)	SD < 0,2 m Class I (water vapour permeability)	Class I S _D < 5m; Class II 5m ≤ S _D ≤ 50m; Class III S _D ≥ 50m
Reaction to fire (EN 13501-1)	Class A1	Manufacturer's declared value

1 MPa equals 1 N/mm²* Torggler's Internal Methods (MIT) are available on request.

Color	Grey
Packaging	bag
Packaging size	25 kg
Pallet	50 bags

CONSUMPTION

The consumption of Restauro Finitura is approx. 1.7 kg/m² each mm of thickness.

STORAGE

Restauro Finitura must be stored in a dry and sheltered place. In the original closed bags it is kept for at least 12 months. **PROTECT FROM HUMIDITY.**

CERTIFICATIONS

Product classified as a protective coating (C) according to EN 1504-2 (principles MC and IR).

LEGEND OF CLASSIFICATION ACCORDING TO EN 1504-2	
TYPES	
H	Hydrophobic impregnation
I	Impregnation
C	Coating
CLASSES	
PI	Protection against penetration risks
MC	Moisture control
PR	Physical resistance/surface improvement
RC	Resistance to chemical agents
IR	Increased resistivity by limiting moisture content

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. Version 01.09.2023.