



Top Group Rapido

Mortar anti-shrinkage fibre-reinforced quick setting

CODE 4001/R



COLOUR Grey powder

PACKAGING Paper sack of kg 25

STORAGE 12 months at least, keeping the product in its original packaging stored in covered and dry place on wood palette.



CHARACTERISTICS

Premixed cementitious mortar in powder, anti-shrinkage, fibre-reinforced, thixotropic, with rapid setting and fine granulometry, based on cements, selected aggregates, synthetic macrofibre and specific admixtures. Conceived for the concrete structural restoration.

APPLICATION FIELDS

- Thanks to its quick setting property, it is perfect for fast and safe interventions, and its workability is obtained from cements modified with synthetic polymers, this mortar is particularly suitable for the following uses:
- Reconstruction of missing or deteriorated parts of beams, pillars, floors, steps, gallery, balconies, etc..
 - Reconstruction of the concrete-cover layer, due to the oxidation of the reinforcing steel in those reinforced-concrete structures.
 - Regularization of superficial flaws, construction joints, holes caused by the spacers, filling of rigid joints.

APPLICATION PROCEDURE

SURFACES PREPARATION

Remove by manual or mechanic chipping, all the deteriorated concrete and all the unstable or detached parts, until a resistant and solid substrate is obtained, so wash carefully from dust, greases and oils. Clean the bare metal by a sandblasting or a scratch-brush, and treat it with the rust converter Top Fer and/or the passivating Top San . Wet abundantly the substrate and apply the thixotropic mortar in a maximum thickness of 3-4 cm for each coat, up to a maximum total of 10 cm. Finish the product during the grip, by a sponge felt.

MORTAR PREPARATION

Mix one Top Group sack with 4,5 lt of clean water by a mixer at low speed, or a concrete mixer, for 5/6 minutes, until a dense, homogeneous lump free paste is obtained, and let it stand for 5/6 minutes at least, then mix it again.

rev. 03 del 30.09.2016



Pulizia mediante spazzola metallica del ferro da trattare



Trattamento con convertitore di ruggine Top Fer e/o passivante



Applicazione di Top Group

MORTAR APPLICATION

Apply the product by means of trowel in a maximum thickness of 3-4 cm each layer. Thickness upper than 2 cm, must be applied after the placement of contrasting irons, being carefully in applying 2 cm layer of concrete-cover at least. Lower thickness can be applied without the reinforcement, if the foundation is coarse. Later it will be possible, basing on the specific needs, accomplish the smoothing of the restored surface, with Rasocem KR. After the hardening it will be possible the application of mineral, plastic, silicate, siloxane finishing layers.

CONSUMPTION

1,6 - 1,7 kg/mq per mm of thickness.

TECHNICAL DATA

PRODUCT IDENTIFICATION DATA

Consistency	Powder
Colour	Grey
Dimension of The Aggregate	Diameter max 1,2mm
Density in dry state	1465 kg/m ³

PRODUCT IDENTIFICATION DATA

Mixture colour	Grey						
Ratio for mixture	Lt 4,5 of water per one sack It 25 (18%)						
Consistency	Thixotropic						
Density in fresh condition	2101 kg/m ³						
Pot Life	5-15 Minutes						
Interval Time between two layers	45 Minutes at 20°C						
Hydraulic shrinkage	<table border="0"> <tr> <td>In 7 days</td> <td>54 µm/m</td> </tr> <tr> <td>In 14 days</td> <td>85 µm/m</td> </tr> <tr> <td>In 28 days</td> <td>119 µm/m</td> </tr> </table>	In 7 days	54 µm/m	In 14 days	85 µm/m	In 28 days	119 µm/m
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End	35 minutes						
Application Temperature	Between +5°C and +30°C						

FINAL PERFORMANCES

Compressive strength (EN 12194)	48,4 N/mm ² (After 28 Days)
Flexural strength (EN 12194)	13,4 N/mm ² (After 28 Days)
Ion Chloride Content (EN 1015-17)	≤ 0,05 %
Bond strength (EN 1542)	≥ 2,0 MPa
Carbonation strength (EN 13295)	Passed
Elastic modulus (EN 13412)	17,42 GPa
Thermal compatibility (EN 13687-2)	NR
Capillary absorption (EN 13057)	≤ 0,5 kgm ² h ^{-0,5}
Dangerous Substances	In compliance with 5.4
Fire Reaction (EN 13501-1)	NR

TOOLS CLEANING

The non-hardened mortar can be washed away from the tools with water, in case of hardening it can be removed only mechanically.

WARNINGS

Apply the product in temperatures between +5°C and +30°C. After the application it is suggested to cure the mortar, in particular during hot or windy days, to avoid a fast evaporation of the water contained in the mixture, that can cause micro-cracking caused by the plastic shrinkage.

SAFETY INSTRUCTION

TOP GROUP RAPIDA contains cement that with body sweat can cause irritations; use protective gloves and glasses. For more information about the product safety, see the safety sheet.

ITEM SPECIFICATION

Reconstruction and/or repairing of concrete surfaces and facade elements, both horizontal and vertical, through an application on a coarse substrate of a thixotropic mortar, with a quick setting, fine granulometry, trowellable for finishing in civil buildings, based on cements, selected aggregates, synthetic macro-fibre and specific admixtures; TOP GROUP rapid of Plastimur s.r.l, to mix with 4,5 lt of clean water, applied with a trowel in a maximum thickness of 3-4 cm each layer. With a consumption of 1,6-1,7 kg/mq per mm of thickness. It has a compressive strength of 48,4 N/mm² and a flexural strength of about 13,4 N/mm².