



Top Group

Mortar anti-shrinkage fibre-reinforced normal setting

CODE 4001



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 normal 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 thixotropic workability, 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 Lt 25 (18%) |
| Consistency | Thixotropic |
| Density in fresh condition | 2101 kg/m ³ |
| Pot Life | 45-50 Minutes |
| Interval time between two layers | : 2-3 hours at 20°C |
| Hydraulic shrinkage | In 7 Days 54 µm/m In 14 Days 85 µm/m In 28 Days 119 µm/m |
| Grip Time | Beginning At 20°C 3 hours and 30 minutes End 4 Hours and 40 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) | Passa |
| 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 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 normal setting, fine granulometry, trowellable for finishing in civil buildings, based on cements, selected aggregates, synthetic macro-fibre and specific admixtures; TOP GROUP 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.