



UNI EN 1504-3
CLASSE R3

MEGAGROUT FIBRE



ABOUT THE PRODUCT

MegagROUT fibre is a controlled shrinkage cementitious mortar composed of high resistance hydraulic binders, siliceous aggregates, special additives and synthetic fibers. Mixed with water, it turns into a mortar of excellent workability with thixotropic effect, applicable in thick layers, even vertically, without casting. It has high characteristics of adhesion to old concrete, good impermeability to water and resistance to sulphates.

MegagROUT fibre used in combination with alkali resistant fiberglass mesh:

- consolidates the walls, avoids cracks and detachments of the mortar itself;
- increases the resistance to overturning of the walls under the action of seismic horizontal forces;
- connects the infill walls with the structural elements in concrete;
- limits the floor shattering.

Once hardened, it has good flexural and compressive strengths.

Elastic modulus, thermal expansion coefficient similar to a medium quality concrete. A thickness of 2 cm of hardened product presents a resistance to the diffusion of CO² equal to the thickness of 15 cm of a class C28/35 concrete.

FEATURES

It is used for the restoration of degraded concrete, such as repairs to the edges of beams and pillars, cornices, fronts of balconies, steps, damaged parapets due to the oxidation of reinforcement rods, regularization of gravel nests, reconstruction of the covering structure of concrete structures armed, filling of rigid joints, etc....

SPECIFICATION CLAUSE

Restoration of degraded concrete works, such as repair of edges of beams and pillars, cornices, fronts of balconies, damaged steps and parapets, by trowel or spray application of thixotropic, fiber-reinforced cement mortar with controlled shrinkage with a consumption of 19 kg/m² per cm of thickness. It can be used with alkali-resistant fiberglass mesh. If you use a fiberglass mesh, first apply a layer of malta megagROUT fibre 8 (min 5mm) on the substrate already prepared and then incorporate the fiberglasses mesh in the mortar being careful to leave a overlap of 10-15 cm in the terminal parts. The product, with a maximum grain size of 2.5 mm, has a compressive strength of 28 days equal to 40N/mm² and is applicable in thickness up to 4 cm per coat.

HOW TO USE

Pour 3,7-4.2 liters of clean water into a container or a cement mixer for each 25 kg bag of MEGAGROUT FIBRE and mix for about 5 minutes to obtain a homogeneous mixture free of lumps. The application can be carried out manually with a trowel or spatula, or by spraying with a suitable piston or auger plastering machine. This mixture remains workable for about 1 hour with a temperature of 23g°. The minimum applicable thickness for layer is about 10 mm, the maximum 40mm. In the event it is necessary to apply a second straty, carry out the operation before the previous one has completed the intake. However don't exceed 4 hours. To obtain a good surface finishing, use a trowel or a sponge.

PREPARATION OF THE SUBSTRATE

Remove carefully all deteriorated or peeling concrete with a chisel, until you reach the solid and consistent substrate. Clean the concrete and reinforcements rods by mechanical means (hydro-sandblasting or brushing) up to the removal of the existing oxide on the rods, of the surface cement laitance and any other trace of dirty. Apply Megafer on the rebars with a brush. As soon as the product is completely hardened, wet the area to be restored with water, eliminating any stagnation at the beginning of the work.



PACKAGING AND STORAGE

MEGAGROUT FBRE is supplied in polythene-lined bags of 25 kg on pallets, protected with an extensible hood. It is recommended to keep the product in a dry and sheltered place. It keeps for 3 months at least in the original closed.

MEGAGROUT FIBRE

FOR PROFESSIONALS

Mixing water	15 - 17 %
Colour	Light grey
Yield	19 kg/m ² for 1 cm thickness
Maximum diameter of aggregate	< 2,5 mm
Apparent bulk density	1,24 g/cm ³
Reaction to fire	Class A1
Compressive strenght after 28 days	> 40 MPa
Flexural strenght after 28 days	> 7 MPa
Elastic module	20.000 MPa
Adhesion to hardened concrete at 28 days	> 1,6 MPa
Capillary absorption	$\leq 0,5 \text{ Kg} \times \text{m}^{-2} \times \text{h}^{-0,5}$
Expansion to 28 days	0,056 %
Initial setting	90 minutes
Ending setting	240 minutes
Spreading mixture	75 %
Suggested thickness	10 - 40 mm for layer
Application temperature	From +5 °C to 35 ° C

The times shown in the above table referred to 20° C and 60% relative humidity are longer when the temperature is lower and shorter when the temperature is higher.

WARNING - The above mentioned instructions and rules – although matching our experience - are merely indicative and must be confirmed by thorough practical applications. Therefore, before using this product, the prospective user must establish whether it is suitable for the planned use and he/she will take full responsibility for its use.

SPECIAL WARNINGS

PRODUCT FOR PROFESSIONAL USE. After the application avoid the rapid evaporation of the water which could cause small superficial cracks due to the plastic shrinkage. keep the surface moist during the first 24 hours, by spraying water or covering it with waterproof sheets. tools can be cleaned with water if the mortar has not hardened yet, after setting it can be removed only mechanically. for more information or particular uses, please consult our office.