



Anti-shrinkage, fibre-reinforced mortar R3

DESCRIPTION

Ready to use cement based mixture composed of cement and industrial sands (max. particle size of 1.2 mm) and reinforced with polyamide fibres. Suitable for vertical restorations, the applied layers have very high adhesion, durability, impermeability, exceptional mechanical and chemical resistance, and practically no shrinkage, resistant to freeze and thaw cycles. For indoor and outdoor use.

MAIN PROPERTIES

- Excellent workability;
- Can be worked with a trowel

TECHNICAL DATA

Volatile organic compounds (VOC)	Not covered by Directive 2004/42/CE.
Classification (UNI EN 1504-3)	Base-coat filler, solvent-free, single-component, physically drying, matte vinyl-based
Granulometry (EN 13300 / EN 1062)	1.2mm
Chloride Content (EN 1015-17)	≤ 0.05%
Bond strength (EN 1542)	≥ 1.5 MPa
Determination of shrinkage and expansion (EN 12617-4)	2 MPa
Resistance to carbonation (EN 13295)	Pass
Elastic modulus (EN 13412)	20GPa
Thermal Compatibility Part 1 (EN 13687-1)	≥ 1.5 MPa
Capillary absorption (EN 13057)	≤ 0.5 Kg/(m ² ·h ^{0.5})
Apparent bulk volume	1350 ± 50 g/l
Bulk volume in paste	2000 ± 50 g/l
Type of binder	Cement-based (UNI 8681: TA)
Mixing Ratio	17% with water; 4.25 Litres per 25Kg package
Maximum application thickness	minimum 1 cm maximum 5 cm
Drying time	Under normal conditions, it can be covered after 12-24 hours; however, drying time depends on the absorption of the substrate and environmental conditions
Reaction to fire (EN 13501-1)	Class A1
Compressive strenght (EN 12190)	Class R3

CHARACTERISTICS

Pot-life of mixture	About 1 hour
Coverage	19 kg/m ² per mm of thickness
Overpaintable	Compatibility with other products: compatible with all water-based products
Colour range	Grey

Dilution

Water

APPLICATION

Notes:

TOWERIP expands slightly to compensate for shrinkage of the mix. Do not apply on surfaces that are in direct sunlight, frozen or very hot. Do not apply when it is very windy or when there is fog or rain. The conditions must last at least 2 days after application.

Suitable Substrates:

Structural repairs of cement-based surfaces. Do not use on gypsum-based surfaces

Ambient Conditions:

min +5°C max +35°C

Preparation of the Substrate:

All substrates should be carefully prepared by manual brushing and/or washing. Clean the reinforcement bars with a steel brush, then apply Griptow passivating mortar. Wet the contact surfaces until they are completely soaked: start a few hours before casting to ensure that the pores in the substrate are saturated. Immediately before application, remove any excess water on the surface with compressed air or sponges. Do not apply on gypsum-based substrates, painted surfaces or substrates with low mechanical strength.

Type of Equipment:

spatula, mason's trowel

Application Procedure:

In a cement mixer that already contains 90% of the water, mix the correct amount of mortar to create the mixture; mix until it is smooth and free of lumps (normally around 5 min). Add water as needed to adjust workability.

Using a mason's trowel or mechanical plastering machine, apply a layer that is not thinner than 1 cm and not thicker than 4-5 cm. TOWERIP can be finished with a trowel. Keep the surface of the mortar moist and in any case prevent rapid evaporation of the water content. This operation is particularly important when the weather is hot, dry and windy. On thick vertical surfaces or ceilings, application must be performed in stages to prevent the weight of the material itself from causing "tears" while it is still plastic and thus causing cracks.

STORAGE

Disposal and safety indications:

Dispose of in accordance with local regulations.

For information on possible hazards, refer to the safety data sheet

Packaging:

25 kg bags

Storage:

1 year on a pallet and when stored in a dry place in undamaged packages at between 5 and 30°C.

TECHNOLOGIES/CERTIFICATIONS

