



## Anti-shrinkage, fibre-reinforced mortar R4

### DESCRIPTION

Ready to use cement based mixture composed of cement and industrial sands (max. particle size of 3 mm) and reinforced with polyvinyl acetate (PVA) 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. Restricted to professional users. For indoor and outdoor use.

### MAIN PROPERTIES

- High adhesion on concrete;
- Excellent mechanical resistance;
- Suitable for horizontal surfaces

### TECHNICAL DATA

Volatile organic compounds (VOC)	Not covered by Directive 2004/42/CE.
Classification (UNI EN 1504-3)	Base-coat mortar, solvent-free, single-component, physically drying and matte
Granulometry (EN 13300 / EN 1062)	3mm
Chloride Content (EN 1015-17)	≤ 0.05%
Bond strength (EN 1542)	≥ 2.0 MPa
Determination of shrinkage and expansion (EN 12617-4)	2 MPa
Resistance to carbonation (EN 13295)	Pass
Elastic modulus (EN 13412)	27GPa
Thermal Compatibility Part 1 (EN 13687-1)	≥ 1.5 MPa
Capillary absorption (EN 13057)	≤ 0.5 Kg/(m <sup>2</sup> ·h <sup>0.5</sup> )
Apparent bulk volume	1400 ± 50 g/l
Bulk volume in paste	2050 ± 50 g/l
Type of binder	Cement-based (UNI 8681: TA)
Mixing Ratio	18% with water; 4.5 Litres per 25Kg package
Maximum application thickness	minimum 1 cm maximum 5 cm
Drying time	Under normal conditions, it can be covered after 24-48 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 R4

### CHARACTERISTICS

Pot-life of mixture	About 1 hour
Coverage	18 kg/m <sup>2</sup> per mm of thickness

Overpaintable

TOWERIP 108 can be skimmed with Tow BN Anticarbonatazione after 24-48 h depending on the environmental conditions and is compatible with all cement-based products

Colour range

Grey

Dilution

Water

## APPLICATION

### Notes:

TOWERIP 108 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 apply 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, plastering machine

### 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 5 cm. TOWERIP 108 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

