

# MX-RW

## High Performances



High performance mortar for the structural restoration of masonry



**MX-RW High Performances** is a premixed mortar based on a high pozzolan hydraulic binder and low salt content, select aggregates, additives, and polypropylene fibers.

Its particular composition excludes the possibility of chemical reactions with salts (sulphates, carbonates, nitrates, chlorides, etc.) present in the walls of old buildings. A thixotropic mortar is obtained by adding water. The mix is highly adhesive to masonry, tuff, and stone, durable, and suitable for repairs and structural plasters without shrinkage.

It is ready to use: just add water to obtain a thixotropic mixture with no bleeding or segregation phenomena. It can be applied by trowel or spray.

In cases where a high aesthetic quality of the surface is required, use a suitable finishing coat.



Ecological



Vapor permeable



Easy to install



Compatible with masonry

### THE PRODUCT:



#### ► MX-RW High Performances

Fiber-reinforced thixotropic mortar for the restoration of masonry, the construction of structural plasters and the preparation of the substrate for the application of structural reinforcements.

#### Complies with EN 998-2

MX-RW High Performances complies with EN 998-2 Mortar for general purposes for external use in elements subject to building code requirements (G).

### PROPERTIES

- High mechanical resistance to compression and bending;
- Excellent adherence to masonry;
- High breathability;
- Complete compatibility with historical masonry;
- Absence of shrinkage cracking;
- No bleeding;
- High impermeability to water and aggressive aqueous solutions;
- High resistance to chemical agents (chlorides, sulphates, acid rain, carbon dioxide, etc.);
- Resistance to freezing and thawing cycles;
- Ease and speed of installation and finishing.



## TECHNICAL CHARACTERISTICS

PROPERTIES OF THE MORTAR	MX-RW High Performances
Water per 100 kg of dry premix mortar	15 - 16 liters
Consistency of the mortar (EN 1015-3)	170 +/- 10 mm
Specific weight of fresh mortar (EN 1015-6)	2,10 ± 0,05 g/cc
Volume of fresh mortar per 100 kg of dry premix	about 55 liters
Fresh mortar workability time (20°C)	about 60 min.
Soluble chlorides (CEN/TC 125)	< 10 ppm
Soluble Nitrites/Nitrates (CEN/TC 125)	< 10 ppm
Mg <sup>++</sup> (CEN/TC 125)	< 350 ppm
Ca <sup>++</sup> (CEN/TC 125)	< 350 ppm
Na <sup>+</sup> (CEN/TC 125)	< 350 ppm
K <sup>+</sup> (CEN/TC 125)	< 350 ppm
Porosity of the mortar (Normal 4/80) - pore volume with d <0.5	68%
Porosity of the mortar (Normal 4/80) - open porosity	23%
Water absorption (EN 1015-18)	0,2 ((kg/(m <sup>2</sup> xmin <sup>0.5</sup> )))
Water vapor permeability (EN 1745-5.4.4)	μ 15/35 as per table
Thermal conductivity/Density (EN 1745-5.4.6)	(λ <sub>10,dry</sub> ) 0,82 W/mK (as per table)
Adhesive strength (EN 1015-12)	≥ 0,6 N/mm <sup>2</sup> – FP: C
Reaction to fire (EN 13501-1)	Euroclass A1
Compression resistance at 3, 7, 28 days (EN 1015-11)	≥ 26; ≥ 34; ≥ 49,5 MPa
Bending resistance at 3, 7, 28 days (EN 1015-11)	≥ 3,1; ≥ 3,8; ≥ 5,5 MPa
Elastic modulus at 28 days (EN 13412)	≥ 15 GPa
SPECIFICATIONS FOR THE SUPPLY	
Package	25 kg bags on 1,000 kg pallets
Consumption of dry premixed mortar	About 18 Kg/m <sup>2</sup> /cm



## FIELDS OF APPLICATION

- ▶ Repair of damaged masonry structures;
- ▶ Structural plasters reinforced with glass or steel fibers for the reinforcing of infill walls;
- ▶ Reinforcement load bearing outer layers reinforced with glass or steel fibers to consolidate vaults;
- ▶ Preparation layer on masonry elements (brick, tuff, stone) for the application of structural reinforcements with composite materials;
- ▶ Reconstruction of masonry with the "like for like" replacement technique;
- ▶ Consolidation of existing walls by restoring the sealing of joints (whether reinforced or not).