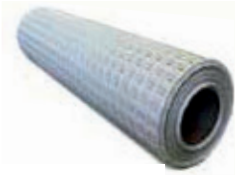
G-MESH 450

Alkali-resistant fiberglass mesh

G-MESH 450 is an alkali-resistant fiberglass mesh weighing 450 gr/m², isuitable for the restoration of masonry structures (brick, stone, tuff, etc.) with MX-RW High Performances and MX-CP Lime mortars. The special coating gives further resistance to alkalis.
When properly applied to the substrate, it gives the plaster suitable resistance to the stresses to which the underlying masonry is subject.

- Ecological
- Wet supports
- Compatible with masonry
- Fire resistant
- Vapor permeable
- Easy to install

THE SYSTEM IS MADE UP OF:



G-MESH 450
Fiberglass mesh of approx. 450 g/m², mesh size 33 x 35 mm.

MX-RW High Performances
Plaster mortar compatible with high strength masonry for structural plasters.

MX-CP Lime
Plaster mortar compatible with lime based masonry for structural plasters.

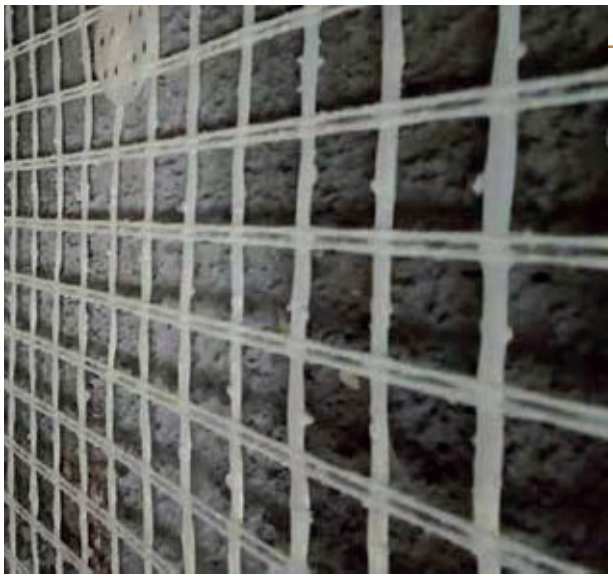
PROPERTIES OF THE SYSTEM

- Reinforced with alkali resistant fiber;
- High compatibility with masonry;
- Ideal for historic and listed buildings;
- Breathability and vapor permeability;
- Resistant to fire and high temperatures;
- Easy to apply;
- Practical to use.

TECHNICAL CHARACTERISTICS

MESH PROPERTIES	G-MESH 450
Mesh composition	Alkali-resistant fiber mesh + anti-alkaline coating
Weight uncoated mesh	369 g/m^2 ± 5 %
Weight coated mesh	450 g/m^2 ± 5 %
Mesh size	Aprox. 33 x 35 mm
SPECIFICATIONS FOR THE SUPPLY	
Package	Roll of 50 linear meters, height 100 cm
Consumption	Calculate overlapping the sheets by about 15 cm at the junctions

PROPERTIES OF FINISHING MORTAR	MX-RW High Performances	MX-CP Lime
Compressive strength 3/7/28 days	≥ 26; ≥ 34; ≥ 49,5 MPa	≥ 3; ≥ 6; ≥ 15 MPa
Bending resistance 3/7/28 days	≥ 3,1; ≥ 3,8; ≥ 5,5 MPa	≥ 0,6; ≥ 1,2; ≥ 2 MPa
Elastic modulus at 28 days	≥ 15 GPa	≥ 8,5 GPa
SPECIFICATIONS FOR THE SUPPLY		
Package	25 kg bags on 1,000 kg pallets	
Consumption of dry premixed mortar	About 18 Kg/m^2/cm	About 15 Kg/m^2/cm



FIELDS OF APPLICATION

- Structural plasters with alkali resistant reinforcement;
- Consolidation of listed and historical constructions;
- Structural plasters of masonry structures;
- Structural plaster on walls, vaults, and infill walls;
- Protection of non-structural components;
- Post-earthquake restoration and reconstruction of masonry elements;
- Reinforced cement.

G-JOINT

Connector made of unidirectional alkali resistant fiberglass

G-JOINT is a unidirectional alkali resistant fiberglass connector for the construction of the anchor between existing structures and G-Mesh 450.
The connection must be made on site and consists of a bundle of long unidirectional fibers held together in a special mesh which gives the bundle a cylindrical shape.
To be applied with MX-C JOINT matrix.

- Ecological
- Vapor permeable
- Compatible with masonry
- Non-toxic matrix

THE SYSTEM IS MADE UP OF:

G-JOINT
Fiberglass connector, available in diameters Ø 6/10/12 mm

MX-C JOINT
Stabilized inorganic matrix for impregnation and anchoring of the G-JOINT connector.

TECHNICAL CHARACTERISTICS

CONNECTOR PROPERTIES	G-JOINT	
Diameter	6 mm	10 mm
Fiber density	2,68 g/cm^3	
Tensile strength	719 MPa	777 MPa
Deformation at rupture	0,63%	0,87%
Elastic modulus	86 GPa	77 GPa
Dry fabric equivalent surface	14,33	24,18

PROPERTIES OF THE MATRIX	MX-C JOINT
Consistency (EN 13395-1)	190 mm
Specific weight fresh mortar	1,80 ± 0,05 g/cc
Water for 5 kg	1 - 1,05 liters (equal to 20%)
Compressive strength (EN196-1)	40,0 MPa
Flexural strength (EN l96-l)	3,0 MPa
Secant modulus (EN 13412)	18.500 MPa

SPECIFICATIONS FOR THE SUPPLY	
Package	Dispenser da 10 m
Consumption	In addition to the length required for the hole itself calculate an additional 15 cm for each end.

SPECIFICATIONS FOR THE SUPPLY	
Package	5 kg buckets
Consumption	8 - 10 kg for 10 m of connector.

FIELDS OF APPLICATION

- Structural plasters;
- Connections of vaults, perimeter walls.