

G-MESH ANGLE

Preformed impregnated glass fibre mesh angle for structural strengthening to existing masonry using the CRM reinforced plaster technique

FIELDS OF APPLICATION

- As a corner element for strengthening existing brick, tufa, and irregular stone masonry.
- For static and seismic improvement and upgrading to existing loadbearing masonry buildings.
- As a component in the assembly of the **CRM (Composite Reinforced Mortar) system** consisting of the alkali-resistant glass fibre meshes **G-MESH 400** and **G-MESH 490** with Ruregold **MX-RW High Performance**, **MX-CP Lime**, and **MX-15 Plaster** structural plaster mortars.
- **G-MESH ANGLE** is consistent with the "*Guidelines for the identification, qualification and acceptance control of preformed mesh systems in fibre-reinforced composite materials with a polymer matrix to be used for the structural consolidation of existing buildings with the reinforced plaster technique CRM (Composite Reinforced Mortar)*", published by Decree of the President of the Higher Council of Public Works on 29/05/2019.

PROPERTIES AND ADVANTAGES OF THE SYSTEM

- Alkali resistant GFRP fibreglass reinforcement.
- High Young's modulus of elasticity and excellent mechanical strength.
- Highly compatible with masonry.
- Also ideal for historic and monumental buildings.
- Reversible.
- Easy to apply.
- Practical to use.

METHOD OF APPLICATION

After positioning the **G-MESH 400** or **G-MESH 490**, the **HELICAL CONNECTOR**, and the **G-MESH GUSSET** (see mesh technical data sheet for the complete CRM system installation), apply **G-MESH ANGLE** at the corners/edges of the masonry building (internal and external wall faces). Provide for overlaps of approximately 2 openings in the **G-MESH 400**, **G-MESH 490**, and **G-MESH ANGLE** meshes and always at least 150 mm.

TECHNICAL CHARACTERISTICS

Constituent properties of the angle component	Glass fibre impregnated with epoxy resin
Weight of the GFRP mesh	490 g/m ²
Load of single weft bar	5 kN
Load of single warp bar	5 kN
Maximum mesh weft load	60 kN/m
Maximum mesh warp load	60 kN/m
Young's modulus of elasticity of the mesh	> 25 GPa
Ultimate elongation of the mesh	1.50 %
Mesh opening size	80x80 mm
Packaging	10 pieces L 60 cm (30 per side) and H 200 cm
Application temperature	From +5°C to +35°C

WARNINGS

- The product must be kept dry and unopened, in its original packaging.
- The surface must be protected from weather.

For further technical information, contact Ruregold Technical Support on +39 02.48011962 – info@ruregold.it.

SPECIFICATION ITEM

Supply and fix Ruregold **G-MESH ANGLE** pre-formed L-shaped 80x80 mm composite GFRP (Glass Fibre Reinforced Polymer) mesh component, length 2 m, width 30 cm per side, weight 490 g/m², warp and weft tensile strength 60 kN/m.

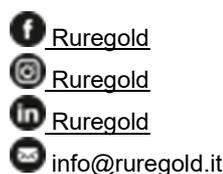
This composite GFRP pre-formed mesh angle is used as a component in the Ruregold CRM (Composite Reinforced Mortar) system in combination with Ruregold pre-formed **G-MESH 490** 80x80 square mesh weighing 490 g/m², or

Ruregold preformed **G-MESH 400** 80x120 mm rectangular mesh, equivalent weight 400 g/m²; in combination with connection system consisting of Ruregold **HELICAL CONNECTOR** stainless steel bar and/or Ruregold preformed GFRP **G-MESH CONNECTOR** and Ruregold **G-MESH GUSSET** gusset for the distribution of stress concentrations at connections; and in combination with Ruregold **MX-RW High Performance**, **MX-15 Plaster**, or **MX-CP Lime** structural mortars.. The pre-formed mesh angle is required to give continuity to the CRM structural strengthening system at the corners/edges of buildings in structural consolidation and strengthening work to existing brick, tufa, and irregular stone walls. The system is consistent with the May 2019 CRM Guidelines. The surface must be prepared and the system applied in accordance with the manufacturer's instructions.

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This technical data sheet is not a specification.

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