BIDIRECTIONAL CARBON FIBRE BALANCED MESH FOR STRUCTURAL STRENGTHENING OF





DRACO









ARMONET C 170 is a bidirectional carbon fibre balanced mesh specifically designed for structural strengthening to be used in combination with ARMOTECH MONO high-ductile mortar as reinforcement for concrete structures even in the event of exposure to fire or high temperatures. ARMONET C 170 improves the distribution of stress enhancing the overall ductility of the structures that are being reinforced or undergoing seismic retrofitting.

BENEFITS

- √ ARMONET C 170 is a carbon fibre mesh specifically designed to be used in combination with ARMOTECH MONO, the high-ductile mortar.
- √ It provides high ductility in structural reinforcement: In combination with ARMOTECH MONO, ARMONET C 170 allows to dissipate very large quantities of energy and to uniformly distribute stresses by increasing the structure ductility thus preventing its collapse.
- √ High tensile and shear strength: ARMONET C 170 exhibits significant mechanical properties, and used in combination with ARMOTECH MONO increases the structure's flexural strength, shear strength and combined bending and axial load strength.
- \checkmark Easy to cut and to fold to suit the substrate's shape: ARMONET C 170 is lightweight and easy to handle and cut. It can also be easily shaped to the substrates even if irregular.
- √ Resistant to weathering and chemical attack: ARMONET C 170 resists environmental stresses and is not subject to oxidation.
- ✓ Resistant to heat and fire: Used in combination with ARMOTECH MONO, **ARMONET C 170** maintains unchanged its physical-mechanical properties up to 550°C.





WHERE TO USE

- √ Structural strengthening of curtain walls in combination with FLUECO or ARMOTECH MONO mortars.
- √ Reinforcement on concrete elements.
- √ Increasing ductility in curtain and dividing walls of structures being reinforced or undergoing seismic retrofitting.





ARMONET C 170



APPLICATION INSTRUCTIONS

SUBSTRATE CLEANING

- Remove old plaster or deteriorated coatings residues; remove flaking and loose parts
- It will be necessary to remove the damaged layer with mechanical means until the sound and compact underlying surface is reached

SUBSTRATE PREPARATION

- Any crack, hole and empty space shall be fixed; the surface shall be uniform and the edges shall be rounded to a radius of curvature of not less than 2 cm. Remove dust if present.
- Saturate the masonry with water. This procedure, which needs to be carried out 24 hours before intervention, avoids mixing water absorption by the substrate, which could cause cracks and reduce the mortar adhesion capacity. Remove excess water.

APPLICATION

- Apply ARMONET C 170 by burying the mesh between two coats of ARMOTECH MONO high-ductile mortar (for preparation and laying, refer to the relevant data sheet). The first layer of mortar shall be approx. 3-4 mm thick.
- Apply the mesh on the product while it is still wet, and overlap the mesh ends by at least 10 cm. Apply the second layer of mortar at least 3-4 mm thick so that it completely covers the mesh.
- If required by the project specifications, it is possible to apply additional layers by repeating the process described above using the weton-wet technique.

PACKAGING AND STORAGE

ARMONET C 170 is supplied in 1x50 ml rolls. If the product is stored properly in its original packaging, indoors in a dry location, it maintains its original features for 24 months.

FEATURES

APPEARANCE	Bidirectional carbon fibre mesh balanced at 0/90° (Fibre 30K)
MESH WEIGHT PER UNIT OF AREA	approx 170 g/m²
RESISTANT AREA PER UNIT WIDTH	Axis 0° - 51,91 mm²/m Axis 90° - 48,55 mm²/m
MAXIMUM LOAD PER UNIT WIDTH	Axis 0° - 238,89 kN/m Axis 90° - 233,33 kN/m
MESH SIZE (CENTRE TO CENTRE DISTANCE)	15 x 15 mm
TENSILE STRENGTH (STRAND)	5520 MPa
MODULUS OF ELASTICITY (STRAND)	255 GPa
ELONGATION AT BREAKAGE (STRAND)	2.1 %
PACKAGING	1x50 m roll
STORAGE	24 months

Legal notice - SLCMP version dated 01.03.2017

In the technical specifications herein, Draco Italiana s.p.a. used the indicators therein specified, with the relevant standards.

Please check if this Sheet and the figures therein contained apply to the product batch you are interested in or if they have been overridden by any later release. If in doubt, check whether this Sheet matches the one applicable at the time of finalising the sales agreement, at www.draco-edilizia.it, and/or contact our Engineering Department.

No advice provided by our staff, either verbally or in writing at your request, about the potential applications of the Products shall be binding under the sales agreement or shall be considered an integral part of the agreement. Such advice is based on our experience and on the best available practical and/or scientific knowledge; as such, it shall not be binding or conditional on the buyer or user. Please try our products first to find out whether they are fit for your intended use or application; in any case, you shall be solely responsible for your choice.

