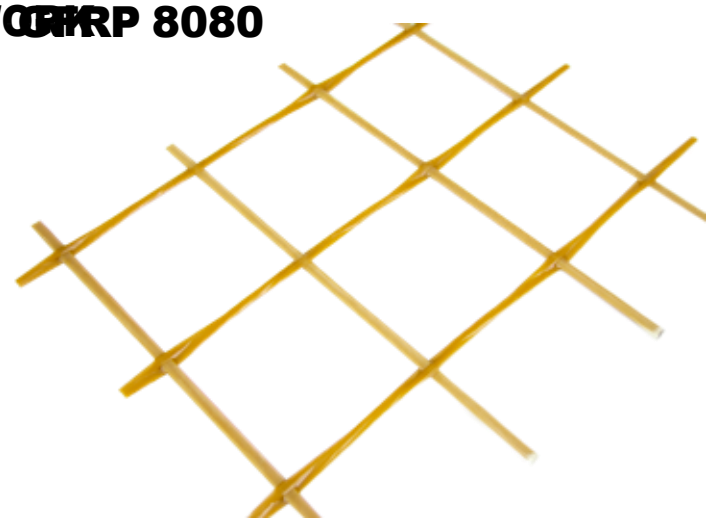
HERCUNET

STRUCTURAL NETWORK GFRP 8080



INDEX

1. DATA AND DOCUMENTATION

Code	Description	Measurements (m)	Weight	Colour	Pkg. / Pallet
RET03-40880	Hercunet - Structural Network 8080	2,0 x 20,0	490 g/m2	gold	40 m2 / - m2

MATERIAL Made of alkali-resistant GFRP (Glass Fibre Reinforced Polymer), composite mesh and a weight of 490 g/m^2 .

TECHNICAL DATA

GEOMETRIC CHARACTERISTICS

Mesh: 80 x 80 mm
No. of bars Warp: 12.5
No. plot bars: 12.5
Average net thickness: 4 mm
Nominal single bar cross-section: 10 mm2
Nominal fibre area: 5.7 mm2

MECHANICAL CHARACTERISTICS MESH

Weft-Weave Load: 5 kN
Maximum Load: 62.5 kN/m
Elastic Modulus: 23 GPa
Average tensile and bar axial stiffness: 230 kN
Average tensile and fibre axial stiffness: 131.1 kN
Elongation at break: 1.50 %.
Weight: 490 g/m2

CHEMICAL-PHYSICAL CHARACTERISTICS

Fibre cross-section: 24-34 µm
Thermosetting resin: epoxy Resin
density: 1.15 - 1.25 g/ml
Fibre/resin weight ratio: 80/20 %.
Packaging: 20 m roll, height 2 m.

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GFRP STRUCTURAL MESH 8080

CHARACTERISTICS The mesh is ideal for the consolidation and structural reinforcement of masonry, stone and tuff structural elements for static or seismic improvement and retrofitting.
Concrete and reinforced screeds.
Versatile: can optionally be applied with different inorganic natural hydraulic lime NHL 5 or traditional matrices. Restoration: special attention is paid to its combination with inorganic natural hydraulic lime NHL 5 matrix, making it a reinforcement and consolidation system for structures subject to superintendence constraints and for all artistic and cultural heritage where the use of materials compatible with those of the period is essential.
The BIO FORCE ONE natural hydraulic lime matrix is able to reinforce without altering the system's breathability and thermo-hygrometric equilibrium.
Reversibility: systems that are easy to remove and thus restore pre-consolidation conditions to existing structures.
Resistant: high technical performance of resistance and load bearing.
Easy: extremely simple installation following a few simple steps.

2. USE and INSTALLATION

Specifically for the in-plane and out-of-plane bending and shear reinforcement of structural elements. Hooping and banding.
Innovative floor stiffeners and reinforced kerbs.
Particular use for the extra-/intra-ossal reinforcement of masonry and/or stone vaults and arches.
Collaborating screeds and castings.
Masonry elements of brick, stone, mixed masonry stone and tuff. Evaluation of the most suitable matrix depending on the type of substrate.

Laying

Before proceeding with the application of the reinforcement system, the substrate must be cleaned and properly prepared.

Without connections:
Once the substrate has been properly prepared, proceed with the application of the first layer of inorganic matrix (BIO FORCE ONE) according to the type chosen as per the project specifications.
Application of HERCUNET reinforcement mesh.
Application of the second layer of inorganic matrix (BIO FORCE ONE).

With connections:
Connector application (Helikon helical bars)
Application of HERCUNET reinforcement mesh and HERCUNET mesh gussets at the connectors. Application of the inorganic matrix layer (BIO FORCE ONE).

3. SPECIFICATION ITEM

Entry	Description	U.M.	Price
Dak.B.RET03.40880	Supply and installation of GFRP (Glass Fibre Reinforced Polymer) AR Mesh for structural reinforcement of brick, stone, tuff, limestone walls, floors, ceilings and vaults. The mesh is a square mesh measuring 80 x 80 mm, produced using Pullweaving technology, consisting of fibreglass and thermosetting epoxy resin, woven with twisted warp and flat weft inserted in warp, with 12.5 bars per metre, average tensile modulus 23 GPa, tensile strength of single bar 5 kN, elongation at break 1.5%.	m2	-

4. FURTHER ADVICE

- Product for professional use.
- Do not modify the product.
- Store the product in a dry place, in the original unopened packaging.
- Consult the safety data sheet before using the product.
- The data given correspond to the technical and application knowledge in our possession for an appropriate use of the product, therefore we recommend that a prior practical test be carried out in order to check the suitability of the product for its intended use and consumption.
- Protect surfaces from weathering, sun, wind, rain and frost.
- Since our company is not the executor of the works and cannot directly intervene in the conditions of the sites and the manner in which the works are carried out, these indications are to be considered indicative and general in nature, and therefore not binding on it.
- Always refer to the updated versions of the data sheets available at www.dakota.eu.