



OLY TEX CARBO 300 BI-AX HR (high resistance) is a unidirectional carbon fiber fabric with a weight of 300 g / m² with high resistance specific for structural consolidation interventions of reinforced concrete elements, reinforced concrete, prestressed, masonry, steel and wood.

OLY TEX CARBO 300 BI-AX HR guarantees excellent characteristics of tensile strength, allows you to easily remedy precarious situations affecting both vertical structures and horizontals, allowing, unlike interventions made with traditional materials, reduced invasiveness, as they allow to keep the dimensions of the previous elements and the weight of the same and therefore of the entire structure almost unchanged. Composite materials have undoubted advantages: very high tensile strength, low specific weight, high resistance to environmental stresses. Furthermore, they have the advantage of being applied quickly and minimally invasive. The reinforcement properly placed can be subsequently plastered with traditional plasters on the market.

Features

Property OLY TEX CARBO 300 BI-AX HR	Value
Yarn density	1,81 g/cm ³
Strain at break, ϵ_{fk}	2,0%
Equivalent thickness (texture), t_f	0,83 mm
Equivalent thickness (warp), t_f	0,83 mm
Mechanical tensile strength, f_{fk}	4.900 MPa
Elastic module, E_f	240 GPa
Total weight	300 g/m ²
Warp weight (for calculation)	150 g/m ²
Weft weight	150 g/m ²

Store in a covered and dry place.

During the preparation and installation of the resins necessary for the application of the fabric, operators must wear waterproof gloves, a mask and goggles;

In case of contact with the eyes, rinse thoroughly with water;

In case of inhalation, breathe clean air;

In case of skin contact, simply rinse with water.

Due to their high adhesion, epoxy resins can damage work tools.

Therefore, it is recommended to wash the tools before hardening the products with solvents, and to use protective suits, in order to preserve the work clothes.

For more information, refer to the technical data sheets of the *OLY RESIN PRIMER*, *OLY RESIN 10* and *OLY RESIN 20* epoxy resins.

Pack

The fabric is available in rolls of 50 m, with variable widths.

The impregnation resin is available in 6 kg packs.

The bonding resin is available in 10 kg and 20 kg packs.

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1. Preparation and cleaning of the substrate in order to obtain perfectly clean and dry surfaces with sufficient mechanical characteristics.
2. In the case of uneven surfaces, it must be regularized with suitable hydraulic mortars.
3. In the case of surfaces with roughness less than 2 mm, apply two-component epoxy filler *OLY RESIN 10 (A + B)*.
4. Application by brush of a first layer of two-component epoxy resin *OLY RESIN 20 (A + B)* following the instructions in the relative technical data sheet.
5. Installation of the *OLY TEX CARBO 300 BI-AX HR* fabric with fibers oriented as per project and subsequent treatment with a special bubble-break roller.
6. Apply a second layer of *OLY RESIN 20 (A + B)* "fresh" and subsequent treatment with a suitable bubble-breaking roller.
7. If the subsequent laying of civil plasters is necessary, it is advisable to carry out a manual dusting with quartz sand on the still "fresh" system in order to increase the useful adhesion surface.

OLY RESIN 10 (A+B) ~ 1,0 ÷ 1,6 kg/m²

OLY RESIN 20 (A+B) ~ 0,6 ÷ 1,5 kg/m²

Warnings

The technical and mechanical characteristics and the methods of installation indicated in this sheet are based on an extensive analysis of the state of the art of the research and of the applications in question, but cannot imply any guarantee on our part on the final result of the product. applied in particular with regard to the installation of systems that must be carried out by specialized personnel.

The buyer is responsible for verifying the suitability of the products described in this document for the intended use and purposes. Olympus srl assumes no responsibility for the improper use of the material. The customer is required to verify that this sheet and the data contained therein are valid for the batch of product of his interest and are not outdated as replaced by subsequent editions and / or new product formulations or certifications. The customer is invited to contact our Technical Department in advance for further clarifications. This edition cancels and replaces any previous one.

Product for professional use

Rev. 001-20

For information, technical assistance and further systems for structural reinforcement, visit the website:

www.olympus-italia.com

E-mail:

info@olympus-italia.com