CORDÓN CARBOTEC

DESCRIPTION

A set of unidirectional carbon fibre yarns of high mechanical resistance, housed inside a cotton thread net that gives them a "rope" appearance. Once stiffened with epoxy adhesive, they are used to anchor and structurally connect CARBOTEC systems or other types of structural reinforcement systems to the foundation to be reinforced.

TECHNICAL CARACTERISTICS

Unidirectional carbon fibre.

ADVANTAGES AND USES

- Use in structural reinforcement and conservative restoration.
- Anchoring and connection system for carbon fibre fabrics, sheets and plates, between them and the foundation.
- Prior to installation, it must be previously stiffened by applying Carbotec Adhesive.
- Coating agent and placing a counterweight that allows obtaining a connector with straight directrix, leaving without
- Coat one end (in the case of a single connector) or two ends (in the case of a double connector).
- Corrosion resistant: no additional treatment required.

SUITABLE SUBSTRATES

- Concrete, mortars of adequate strength, and similar. For other foundations, please contact our technical department.
- The foundations must be resistant, stable, healthy and clean, free of dust, remains of release agents, organic products, etc.
- If necessary, the foundation shall be prepared by manual or mechanical means so that it has a surface free of surface grout and of adequate porosity.

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APPLICATION PROCEDURE

PLACEMENT AFTER REINFORCEMENT

- After applying the CARBOTEC or similar reinforcement system to the structure to be reinforced, a series of holes are drilled in the structure (also drilling the applied reinforcement), as many holes as the number of fioccos to be applied.
- The depth of the holes shall be the same as the length of the rigid part of the FIOCCO CARBOTEC rod once it has been formed, adding 2 cm more to it.The diameter will be approximately 2-3 mm larger than the diameter of the formed FIOCCO CARBOTEC.
- Once the holes have been drilled, they should be thoroughly cleaned by vacuuming or blowing out the dust with water or pressurised air.
- Cut the FIOCCO CARBOTEC to the length required in the project and remove the cotton thread from the ends that are not to be stiffened.
- Once the holes are clean and dry, the stem is glued with CARBOTEC ADHESIVE and the rigid part of the CARBOTEC FIOCCO is inserted once it has been shaped, leaving the soft part hanging.
- The amount of anchoring resin ADHESIVO CARBOTEC LÁMINA shall be such as to fill the free space between the hole and the shaft of FIOCCO CARBOTEC once fully stiffened. This can only be achieved if the resin can be seen to come to the front when the FIOCCO CARBOTEC is inserted.
- Glue the soft carbon fibre part of the fiocco with CARBOTEC LAMINA ADHESIVE, spreading and opening the fibres in all directions, forming a circle with the fibres. It thus adheres to the pre-applied surface of the reinforcement element. The whole becomes a monolithic element.
- Apply manually with a spatula or brush ADHESIVO CARBOTEC LÁMINA as a final surface coating covering the areas where the fioccos have been placed.

PLACEMENT PRIOR TO REINFORCEMENT

- Prior to the application of the reinforcement system, a series of holes are drilled in the supporting structure, as many holes as the number of fioccos to be applied.
- Clean the holes and glue the stems of the fioccos, as described in the METHOD OF USE ABOVE.
- Glue the soft carbon fibre part with CARBOTEC LAMINA ADHESIVE, spreading and opening the fibres in all directions, forming a circle with the fibres. It thus adheres to the surface of the structure to be reinforced.
- Apply manually with a spatula or brush ADHESIVO CARBOTEC LÁMINA as a final surface coating, covering the areas where the fioccos have been placed and on the whole structure to be reinforced, serving as an adhesive for the reinforcement system to be installed.
- Install the reinforcement system according to the instructions in its data sheet

RECOMMENDATIONS

- Use within the recommended temperature ranges and weather conditions when applying CARBOTEC film, fabric and adhesives.
- The insertion holes must be completely free of dust.

PACKAGING AND STORAGE

Rolls of 10 m length. Available diametres: 8, 10, and 12 mm Store in their original unopened containers in a cool, dry place at temperatures between 5 and 30 ºC and always away from direct sunlight and the weather.

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TECHNICAL DATA

8 mm	
Diametre	8 mm
Equivalent area	21,24 mm^2
Resistance to the traction	5.100 MPa
Elastic model	245 gPA
Fibre weight	43±5% g/ml
Density	1.78 g/cm^3
Elongation at break	2,10%

10 mm	
Diametre	10 mm
Equivalent area	26,80 mm^2
Resistance to the traction	5.100 MPa
Elastic model	245 gPA
Fibre weight	60±5% g/ml
Density	1.78 g/cm^3
Elongation at break	2,10%

12 mm	
Diametre	12 mm
Equivalent area	31,40 mm^2
Resistance to the traction	5.100 MPa
Elastic model	245 gPA
Fibre weight	68±5% g/ml
Density	1.78 g/cm^3
AElongation at break	2,10%

LEGAL DISCLAIMER

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