FRCM STRENGTHENING SYSTEM WITH CARBON FIBER

C-BAR

fka Ruredil X Bar

Pultruded carbon bar with improved adhesion for FRCM structural strengthening system

C-BAR is a connection system consisting of pultruded carbon fiber bars with improved adhesion, obtained by sandblasting, with differentiated diameter to meet different structural needs.
It is especially used in shear and bending reinforcements of concrete or masonry structures.
It guarantees an effective and safe anchorage to any type of substrate, allowing the rigidity of the structure to be increased to the service loads and increasing the load-bearing capacity of the reinforced structure.

THE SYSTEM IS MADE UP OF:

C-BAR

Pultruded carbon bar with improved adhesion available in the following versions:
- Ø 7,5 mm (3 m bar);
- Ø 10 mm (3 m bar).

MX-C Bar

Stabilized inorganic matrix for the application of C-BAR.

TECHNICAL CHARACTERISTICS

PROPERTIES OF THE PULTRUDED CARBON BARS	C-BAR 7,5	C-BAR 10,0
Nominal diameter (mm)	7,5	10,0
Minimum guaranteed section (mm^2)	44	78
Fiber section (mm^2)	26	47
Tensile strength (MPa)	1800	1800
Tensile modulus (GPa)	130	130
SPECIFICATIONS FOR THE SUPPLY		
Package	3 m bar Ø 7,5 mm	3 m bar Ø 10 mm
Consumption of dry premixed mortar	Calculate a length equal to that of the hole	

PROPERTIES OF THE ADHESIVE	MX-C Bar
Water for 25 kg of powder	7,5 - 8,0 liters
Fresh pourable adhesive for 25 kg of powder	16 liters
Consistency of fresh mortar	210 mm
Specific weight of fresh mortar (EN 1015-6)	2,00 ± 0,05 g/cc
Adhesion to the support	≥ 3 MPa the support breaks
Adherence to the bar	≥ 25 MPa
Reaction to fire (EN 13501-1)	Euroclass A1
SPECIFICATIONS FOR THE SUPPLY	
Package	25 kg bags
Consumption	Approx. 1,5 kg/m^2 per mm of thickness