

X-Wrap Pultruded Rod

High strength carbon fiber reinforced rods for structural strengthening

Product Description

X-Wrap Pultruded Rods are ready to use pultruded carbon fiber rods which provide a lightweight, high tensile strength material suitable for the reinforcement or strengthening of concrete, masonry and timber elements of existing structures.

Advantages

- Lightweight and easy to apply
- Fast installation
- Does not affect the appearance of the structure
- High strength to weight ratio
- Can be used in conjunction with X-Wrap strips and fabrics for combined strengthening and maximum strength.

Uses

For the structural strengthening of:

- Beams
- Walls
- Slabs
- Culverts

They can also be used in new construction as a high strength corrosion resistance reinforcing bar.

Laboratory Test Data

Property	Typical Results
Tensile strength	2500 MPa
Tensile modulus	150 GPa

Supply

Supplied in 3m lengths
Sizes available:

Diameter (mm)	6	8	10	12
Cross sectional area (mm ²)	28.28	50.27	78.88	113.11

Shelf Life

X-Wrap Pultruded Rods should be stored in dry conditions and protected from direct sunlight; the shelf life under such conditions will be unlimited.

Installation Guidelines

X-Wrap Pultruded Rods can only be applied by an NCC X-Calibur Registered Contractor using trained personnel and the correct equipment. NCC X-Calibur does not allow any contractor on to the register unless they satisfy strict selection criteria. For each application NCC X-Calibur will provide a detailed method statement that the Registered Contractor will work to.

Surface Preparation

The substrate should be prepared by cutting a chase to the required width and depth and ensuring that it is sound, dry and free from all contaminants such as dust, oil and grease.

Application

The mixed X-Wrap Pultruded Rod adhesive should be transferred to an applicator cartridge or similar and placed into the prepared chase. The chase should be filled to approximately half its depth and the X-Wrap Pultruded Rod immediately pushed slowly into the resin displacing the resin to fill the annular space. The chase should then be topped up if required and the adhesive leveled to leave a smooth surface.

Cleaning

All tools should be cleaned using a proprietary solvent-based cleaner before the material hardeners. If the resin is allowed to set it can only be removed by mechanical means.

Health and Safety

This product is for industrial use only by trained operatives. It is potentially hazardous if not used correctly. Please refer to the Material Safety Data Sheet (MSDS) prior to the purchase and use of this product. The MSDS can be obtained via our website www.ncc.com.eg.

Authorized Technical Specialist

Please note that only NCC X-Calibur Authorized Technical Specialists ('ATSS') are permitted to change any of the information in this data sheet or to provide written recommendations concerning the use of this product. Visit www.ncc.com.eg for a full list of NCC X-Calibur ATSSs.

Datasheet Validity

NCC X-Calibur makes modifications to its product datasheets on a continuous basis. Please check the datasheet update section on www.ncc.com.eg to ensure you have the latest version.

Warranties

NCC X-Calibur supplies products that comply with the properties shown on the current datasheets. In the unlikely event that products supplied are proved not to comply with these properties, then we will replace the non-compliant product or refund the purchase price.

NCC X-Calibur does not warrant or guarantee the installation of the products as it does not have control of the installation or end use of the products. Any suspected defects must be reported to NCC X-Calibur in writing within five working days of being detected. NCC X-Calibur Construction Chemicals **makes no warranty as to merchantability or fitness for a particular purpose and this warranty is in lieu of all other warranties express or implied.** NCC X-Calibur Construction Chemicals shall not be liable for damages of any sort including remote or consequential damages, down time, or delay.