KREVO Carbon Rod

High-strength pultruded CFRP reinforcement rods | Structural strengthening | 6-12 mm diameters

PRODUCT DESCRIPTION

KREVO Carbon Rod comprises ready-to-use pultruded carbon-fiber-reinforced polymer (CFRP) rods for strengthening concrete, masonry and timber members. The lightweight, high-tensile-strength rods can be bonded into designed chases in existing structural elements and may also be specified for new construction requiring corrosion-resistant reinforcement.

ADVANTAGES

- Lightweight, high-strength reinforcement with a high strength-to-weight ratio.
- Fast installation using a compatible structural bonding adhesive.
- Near-surface installation can preserve the external appearance of the structure.
- Suitable for structural strengthening and corrosion-resistant reinforcement applications.
- Can be combined with compatible CFRP strips and fabrics in engineered strengthening systems.

TYPICAL USES

Beams and slabs • Walls • Culverts • Existing concrete, masonry and timber elements • Near-surface-mounted strengthening • Corrosion-resistant reinforcement for selected new construction.

PRODUCT INFORMATION

PARAMETER	SPECIFICATION
Material type	Pultruded carbon-fiber-reinforced polymer (CFRP)
Product form	Ready-to-use rigid carbon-fiber reinforcement rod
Strengthening application	Bonded into properly prepared and dimensioned chases
Typical compatible substrates	Concrete, masonry and timber; subject to engineering design
Typical adhesive	Compatible high-performance structural bonding resin
Supply length	1 m - 3 m rods
Standard diameters	6 mm, 8 mm, 10 mm and 12 mm
Storage / shelf life	Keep dry and shaded, protected from direct sunlight; no stated shelf-life limit under these conditions

TECHNICAL PERFORMANCE SPECIFICATION | PULTRUDED CFRP ROD

PROPERTY	SPECIFIED VALUE
Tensile strength	2,500 MPa
Tensile modulus	150 GPa
Available nominal diameters	6 mm | 8 mm | 10 mm | 12 mm
Corresponding cross-sectional area	28.28 | 50.27 | 78.88 | 113.11 mm^2

Application & System Data

KREVO Carbon Rod | Chase preparation, bonding system and installation requirements

APPLICATION PROPERTIES

PARAMETER	REQUIREMENT	INSTALLATION DETAIL	CONTROL
Rod diameter	6, 8, 10 or 12 mm	Select to approved strengthening design	Check actual diameter
Chase geometry	Project-designed	Cut to required width and depth	Check alignment and dimensions
Adhesive placement	Compatible structural resin	Initial fill approx. half chase depth	Full bond and encapsulation

The bonding system, cure time and permissible installation conditions depend on the selected structural epoxy. Confirm adhesive compatibility and follow its current product-specific instructions.

TYPICAL SYSTEM BUILD-UP

STAGE	MATERIAL / METHOD
1 | Prepared substrate	Sound concrete, masonry or timber element as approved by structural design
2 | Cut chase	Chase sized and aligned to the approved reinforcement detail
3 | Bonding epoxy	Fill prepared chase to approximately half its depth
4 | Carbon rod	Press rod steadily into wet epoxy to displace resin around the rod
5 | Finish	Top up resin as required and level flush with the surface

SUBSTRATE PREPARATION

Cut a chase of the specified width, depth and alignment. Confirm that the substrate remains structurally sound. Remove dust, oil, grease, moisture and loose material; clean the chase thoroughly so the bonding epoxy can make continuous contact with its walls and the reinforcement rod.

GROOVE GEOMETRY & QUALITY CONTROL

Chase dimensions, edge distances, embedment and rod spacing shall follow the structural engineer's approved details. Assess existing cracks and damage before chasing. The prepared channel must be clean and dry, and the epoxy must fully surround the installed rod without voids.

CONTROL ITEM	APPLICATION REQUIREMENT
Chase condition	Sound, dry and free from dust, oil, grease and loose particles
Chase dimensions	Width, depth, location and spacing to structural design
Epoxy bond	Use KREVO Carbon Bond EP with full contact and no entrapped voids

Do not cut into critical existing reinforcement or other embedded services without the design engineer's approval. Test the substrate and bonding arrangement when required by the project specification.

INSTALLATION READINESS

Prepare approved drawings, a site-specific method statement, suitable cutting and cleaning tools, matched adhesive components and trained applicators. Plan resin placement and rod insertion within the adhesive's usable working time.

Installation & Product Support

KREVO Carbon Rod | Placement, finishing, quality checks, safety and global contacts

INSTALLATION PROCEDURE

- Verify the structural strengthening layout and mark the required chase locations accurately.
- Cut each chase to the specified depth and width; remove debris and clean thoroughly.
- Mix KREVO Carbon Bond EP in accordance with its instructions.
- Transfer the mixed epoxy into the chase, filling it to approximately half of the groove depth.

ROD EMBEDDING & FINISHING

- Immediately press the KREVO Carbon Rod slowly into the fresh adhesive, allowing resin to flow around it.
- Make sure resin fills the full annular space, without air voids or dry contact areas.
- Top up the chase as necessary and level the exposed resin to produce a smooth, flush finish.
- Protect from movement and loading until KREVO Carbon Bond EP adhesive cure has reached the approved service condition.

LIMITATIONS & SERVICE NOTES

- Use only for engineered strengthening systems with approved reinforcement details and adhesive selection.
- Do not install into wet, unsound or contaminated chases; establish adequate substrate bond capacity.
- Observe the compatible epoxy's mixing ratio, working time, application conditions and cure period.
- Prevent cutting damage to retained reinforcement, utilities and the existing structural element.
- Clean tools before resin hardens using an approved solvent-based cleaner; cured epoxy needs mechanical removal.

HEALTH, SAFETY & ENVIRONMENT

Industrial use by trained operatives only. Review the current Safety Data Sheets for rods, cutting operations and all bonding materials. Wear safety eyewear, gloves, appropriate protective clothing and dust/respiratory protection during cutting and chasing. Provide adequate ventilation and safe dust extraction. Keep resins and cleaning liquids out of drains and dispose of waste responsibly.

QUALITY & PRODUCT INFORMATION

The reinforcement design, rod diameter, adhesive compatibility, embedment and bond performance must be confirmed for each project. The listed mechanical properties are specification values; verify conformity of the supplied KREVO Carbon Rod against current production test and quality records before issuing certified performance claims.

KREVO | GLOBAL CONTACTS

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