TechnoRod™C

Carbon Fiber Rebar



PRODUCT DESCRIPTION

TechnoRod™C is high strength, pre-manufactured composite carbon/resin rods. TechnoRod™C is used as internal or external reinforcement providing additional strength and stiffness to concrete and masonry structural elements.



Buildings Structures



Transportation Infrastructure



Water & Wastewater



Oil, Gas & Industrial



Waterfront Structures



Industrial Facilities

TECHNICAL DATA		
	Unit	TechnoRod™C
Density	gr/cm³	1.785
Fiber Type		Carbon
Matrix Type		Epoxy Vinylester Resin
Tensile strength	MPa	2068
Fiber Volume Fraction		70%
Modulus of Elasticity	GPa	131
Elongation at Break		1.58%

ADVANTAGES

- TechnoRod™C rods can be effectively anchored into adjacent members.
- Non-corrosive.
- Light-weight.
- High-strength.
- Low impact on member appearance and aesthetically pleasing.
- Increasing in-plane or out- of-plane bending capacity of masonry
- Effective topside reinforcing product for slabs and beams.

TYPICAL USES

TechnoRod™C is especially attractive for strengthening of surfaces that could be subject to abrasive or mechanical damage, such as parking decks, slabs and walkways. For masonry structures, the TechnoRod™C rods can be installed in the existing joints, thus upgrading the capacity without negative aesthetic impact.

DESIGN

Design calculations shall be made and sealed by a licensed, independent engineer knowledgeable with the design of FRP strengthening systems.

INSTALLATION PROCEDURE

SURFACE PREPARATION

Integrity of the surface concrete should be checked prior to installing the TechnoRod™C rod. Corrosion of internal steel reinforcement should be adequately addressed prior to installing the product. Make grooves onto the surface of the concrete element. Minimum groove width and depth is 1.5times the rod diameter. Groove surfaces must be clean and sound. It must be dryland free of frost.

CUTTING TechnoRod™C COMPOSITE CARBON ROD

TechnoRod™C Rod can be cut to appropriate length using a reciprocal saw with a fine tooth blade, grinder or wall chaser tool.

APPLICATION.

TechnoRod™C rods are bonded in the grooves, below the surface, using applicable adhesive resin and/or putty filler.

STORAGE

Store out of direct sunlight in a dry place between $10^{\circ}\text{C} - 32^{\circ}\text{C}$





SHELF LIFE

Shelf life is 10 years.

CAUTION

All components of FRP systems may cause skin irritation and sensitization. Use of chemical resistant gloves is recommended. Avoid breathing vapors and dust. Get medical attention if you are breathing with difficulty. Resins products can cause strong eye irritation. Avoiding eye contact and Using safety goggles is necessary.

DISCLAIMER: All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the user's responsibility to satisfy himself, by his own information and test, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any hazard listed herein are the only ones which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or stements, whether in writing or oral, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and Technopol products makes no claim that these tests or any other tests, accurately represent all environments.