TechnoRod™G

Glass Rebar

TECHNOPOL
مـــقـــاوم ســـازی تکـــنـــوپــل

PRODUCT DESCRIPTION

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

Buildings Structures	Transportation Infrastructure
Oil, Gas & Industrial	Waterfront Structures

Water & Wastewater

Industrial Facilities

TECHNICAL DATA

	Unit	TechnoRod™G
Density	gr/cm^3	2.0
Fiber Type		Glass
Fiber volume fraction		70%
Tensile strength	MPa	1300
Shear strength	MPa	193
Pull-out strength	MPa	11.6
Fiber Volume Fraction		70%
Modulus of Elasticity	GPa	40.8
Elongation at Break		1.6%

ADVANTAGES

- TechnoRod™G 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 wall.
- Effective topside reinforcing product for slabs and beams.

TYPICAL USES

TechnoRod™G 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™G 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™G 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 1.5 times the rod diameter. Groove surfaces must be clean and sound. It must be dry and free of frost.

CUTTING TechnoRod™G *COMPOSITE CARBON ROD*
TechnoRod™G Rod can be cut to appropriate length using a reciprocal saw with a fine tooth blade, grinder or wall chaser tool.

APPLICATION.
TechnoRod™G 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°C – 35°C

SHELF LIFE

Shelf life is 10 years.

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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.

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