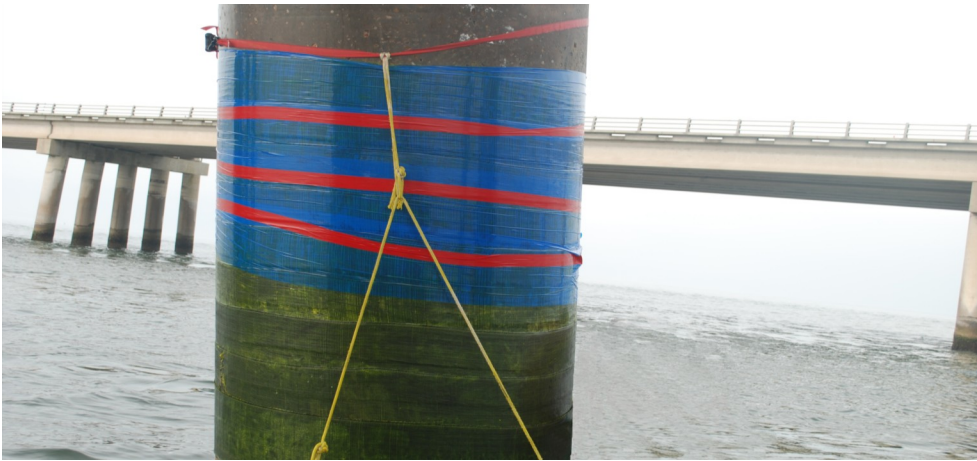


TITAN™-CB18E

CARBON FIBER STRUCTURAL REPAIR SYSTEM



Description

The Titan™-CB18E structural repair system is comprised of a unique, bi-axial carbon fiber fabric, saturated with NRI's proprietary epoxy system, Titan™-Saturant Epoxy. The Titan-CB18E carbon fiber is oriented in the 0° / 90° directions with the 0° direction being the primary, continuous fibers. The development of this system was designed to conform to ACI440 standards for nonmetallic composite reinforcing solution of concrete. The Titan-Saturant Epoxy system is a two-part, 100% solid epoxy system for use in a wide variety of environments possessing excellent chemical resistance and high temperature ratings.

Composite Mechanical Properties

Test	Method	Result
Tensile Strength	ASTM D3039	Primary: 133 ksi (9,209.39 bar) Secondary: 133 ksi (9,209.39 bar)
Elongation @ Break	ASTM D3039	1.46%
Tensile Modulus	ASTM D3039	7.14 msi (492,561.5 bar)
Laminate Thickness	Per layer	0.028"
Hardness, Shore D @ 75°F (24°C)	ASTM D2240	85

Dry Fiber Properties

Property	Value
Tensile Strength	550,000 psi (37,921.17 bar)
Dry Fiber Thickness	0.026"
Fiber Architecture	0°/90°, Bi-axial
Weight (per sq yd)	18.58 oz per square yard
Lloyd's Approved Fiber	Yes

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Typical Applications

- Structural reinforcement
- Containment and shear reinforcement
- Bridge column repair
- Pile repair
- Seismic retrofitting

Benefits

- Long working time even in hot environments
- Properties retained even at high temperature use
- Solvent free
- Applicable in damp and wet environments
- High strength and light weight
- Manufactured in ISO 9001 certified facility
- Full factory engineering consultation and support, ensuring safe and successful repairs

Titan-Saturant Epoxy Properties *

* See Titan Saturant Epoxy Datasheet for full technical data

