

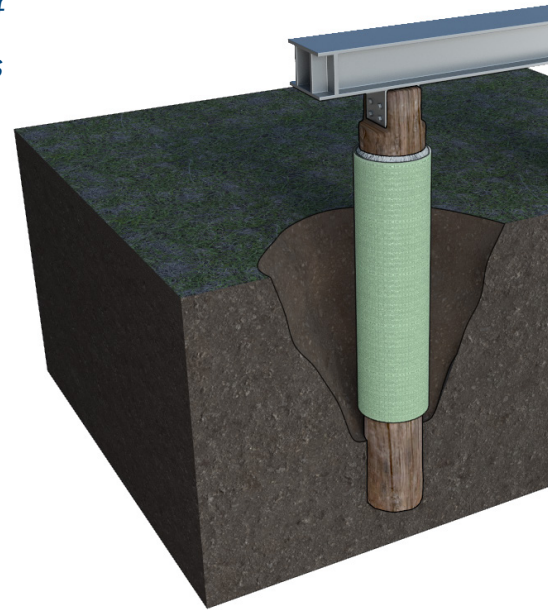


# TIMBER PILE REPAIR & STRENGTHENING SYSTEMS: V-Wrap™ GFRP Timber Pile Restoration System



*Timber piles placed in soil, are subject to a variety of deterioration mechanisms including bug infestation, fungus and dry rot. Additionally, timber piles over time will shrink which may cause internal voids that impact their strength.*

STRUCTURAL TECHNOLOGIES' V-Wrap™ Timber Pile Restoration Systems combine lightweight, high-strength glass fibers bonded with adhesive resins to a formed concrete jacket to restore deteriorated timber piles structural capacity and provide long-term protection.



## FIELD FABRICATED SYSTEM COMPONENTS:

### V-Wrap™ GRFP Composite

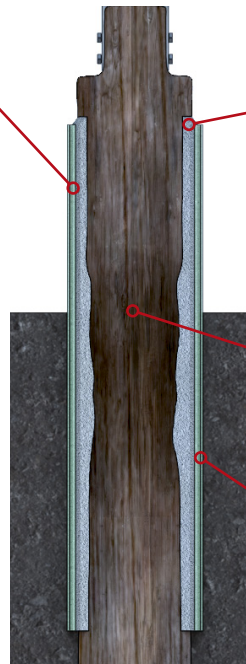


V-Wrap EG50 is a unidirectional glass fiber fabric with fiber oriented in the 0° direction and additional yellow glass cross fibers at the 90°. V-Wrap EG50 system is field laminated using

environmentally friendly, two-part 100% solids and high strength structural adhesives to form a glass fiber reinforced polymer (GFRP) system used to reinforce structural elements.

#### Cured Laminate Properties

Fiber Type	E-Glass
Strength per Unit Width	2,824 lbs/in (494 N/mm)
Ultimate Tensile Strength	70.6 ksi (487 MPa)
Modulus of Elasticity	3,870 ksi (26,680 MPa)
Elongation at Break	1.80%
Nominal Ply Thickness	0.04 in (1.02 mm)



### V-Wrap™ PF Epoxy Putty

Top of pile repair system utilizes V-Wrap™ PF, two-part, 100% solids, epoxy to form a slope to carry away moisture from the timber pile.

### V-Wrap™ Tstrata 330 Epoxy

Tstrata 330, a high strength epoxy mixed with filler, is placed in or around the pile, filling voids and cavities while also providing a surface for installation of the V-Wrap™ GRFP Composite.

### Protective Coating

Optional coatings may be applied to the cured laminate for additional protection.