

Tyfo® SCH Fibr™ Anchors

Composite Anchors using Tyfo® S Epoxy

DESCRIPTION

The Tyfo® SCH Fibr™-Anchor is comprised of Tyfo® S Epoxy and Tyfo® SCH carbon fiber reinforced roving. Tyfo® SCH is a custom, uni-directional carbon roving for improved end details and force transfer. The Tyfo® S Epoxy is a two-component epoxy matrix material for saturation and bonding applications.

USE

Tyfo® SCH Fibr™-Anchor is combined with Tyfo® Epoxy to improve end details and anchorage of various Fibrwrap® designs.

ADVANTAGES

- Durability
- Good high & low temperature properties
- Long working time
- High tensile modulus and strength
- Ambient cure
- 100% solvent-free

PACKAGING

Packaged in lots of 50 anchors. Weight will vary based on anchor design requirements.

EPOXY MIX RATIO

100.0 component A to 42.0 component B by volume. (100 component A to 34.5 component B by weight.)

SHELF LIFE

Epoxy - two years in original, unopened and properly stored containers.
Fabric - ten years in proper storage conditions.

STORAGE CONDITIONS

Store at 40° to 90° F (4° to 32° C). Avoid freezing. Avoid moisture and water contamination.

CERTIFICATE OF COMPLIANCE

- Will be supplied upon request, complete with state and federal packaging laws with copy of labels used.
- Material safety data sheets will be supplied upon request.
- Possesses 0% V.O.C. level per ASTM B-2369.

TYPICAL DRY FIBER PROPERTIES

Tensile Strength	550,000 psi (3.79 GPa)
Tensile Modulus	33.4 x 10 ⁶ psi (230 GPa)
Ultimate Elongation	1.7%

COMPOSITE GROSS LAMINATE PROPERTIES

PROPERTY	ASTM METHOD	ASTM METHOD	DESIGN VALUE*
Ultimate tensile strength in primary fiber direction, psi	D-3039	127,000 psi (876 MPa)	107,950 psi (745 MPa)
Elongation at break	D-3039	1.2%	1.2%
Tensile Modulus, psi	D-3039	10.5 x 10 ⁶ psi (72.4 GPa)	8.9 x 10 ⁶ psi (61.5 GPa)

* Design and specification values will vary based on individual project requirements and required area of composite anchor. Standard anchor diameters are 1/2" and 3/4", however, individual project designs will govern the required area. Contact Fyfe Co. LLC engineers to determine required design.

EPOXY MATERIAL PROPERTIES

Curing Schedule 72 hours post cure at 140° F (60° C).		
PROPERTY	ASTM METHOD	TYPICAL TEST VALUE*
T _g	D-4065	180° F (82° C)
Tensile Strength ¹ , psi	D-638 Type 1	10,500 psi (72.4 MPa)
Tensile Modulus, psi	D-638 Type 1	461,000 psi (3.18 GPa)
Elongation Percent	D-638 Type 1	5.0%
Flexural Strength, psi	D-790	17,900 psi (123.4 MPa)
Flexural Modulus, psi	D-790	452,000 psi (3.12 GPa)

¹ Testing temperature: 70° F (21° C) Crosshead speed: 0.5 in. (13mm)/min. Grips Instron 2716-0055 - 30 kips
* Specification values can be provided upon request.