# **Strengthening Solutions**

# V-Wrap HM Carbon Fiber Anchors



structuraltechnologies.com +1-410-859-6539

## Typical Data for V-Wrap HM Carbon Fiber Anchors

Storage Conditions: Store dry at 40°F – 90°F (4°C to 32°C)

Color: Black Shelf life: 10 years

# Fiber Properties (Dry)

Tensile Strength: 790,000 psi (5,440 MPa)
Tensile Modulus: 42 x 10<sup>6</sup> psi (289,550 MPa)

Elongation: 1.9%

# Cured Laminate Properties Design Value

Tensile Strength: 165,000 psi (1,138 MPa)
Modulus of Elasticity: 15.0 x 10<sup>6</sup> psi (103,420 MPa)

Elongation at Break: 1.1%

Anchor Sizes Anchors are available in diameters ranging from 0.375" to 1.5" (9 mm to 37 mm) in

1/8" increments.

# **DESCRIPTION:**

V-Wrap Fiber Anchor is made with high strength, high modulus unidirectional carbon roving and is used to anchor V-Wrap carbon and glass fabric for improved force transfer.

## WHERE TO USE:

The V-Wrap HM Carbon Fiber Anchor is combined with V-Wrap epoxy adhesive and can be used as standalone reinforcement or to improve end details and anchorage of various V-Wrap designs.

## **ADVANTAGES:**

- Manufactured using ICC approved materials
- 100% solvent-free
- 0% VOC
- Long working time (3-6 hours)
- High tensile modulus and strength
- Ambient cure

## PACKAGING:

Lot sizes will vary based on job requirements. Weight will vary based on anchor design requirements.

## EPOXY:

V-Wrap Fiber Anchors can be installed using V-Wrap Epoxies.

# SHELF LIFE:

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

## STORAGE

Store material in a cool, dark space. Low humidity is recommended. Store at 40°F to 90°F (4°C to 32°C). Avoid freezing. Avoid moisture and water contamination.

# **HOW TO USE:**

## **DESIGN:**

The V-Wrap HM Carbon Fiber Anchors shall be designed to meet specific design criteria. The criteria for each project is dictated by the engineer of record and any relevant building codes and/or guidelines. Contact Structural Technologies engineers for support with anchor design.

# **INSTALLATION:**

The V-Wrap Composite Strengthening System to be installed by V-Wrap Composite Strengthening trained and certified applicators. Installation shall be in strict compliance with the V-Wrap Composite Strengthening system Installation Manual.

## LIMITATIONS:

Minimum application temperature of the epoxy is 40°F (4°C).

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## STORAGE:

Store in a cool place. Temporary storage of these components should not be in high temperatures, particularly the "A" part. The lids of both parts should be kept tightly sealed. Avoid freezing.

## SAFETY:

Avoid breathing vapors during installation. Avoid contact with eyes and skin. Use of an approved respirator with an organic absorption cartridge is recommended for possible vapors. Rubber gloves, rubber boots, and protective suits are recommended for handling and application of this material. Safety glasses or a face shield are recommended to prevent eye contact.

Part A - Irritant: Prolonged contact to the skin may cause irritation. Avoid eye contact.

Part B - Irritant: Corrosive. Contact with skin may cause severe burns. Avoid eye contact. Product is a strong sensitizer. Use of safety goggles and chemical resistant gloves recommended. Remove contaminated clothing. Avoid breathing vapors. Use adequate ventilation. Use of an organic vapor respirator recommended.

## FIRST AID:

In case of skin contact, wash thoroughly with soap and water. For eye contact, flush immediately with plenty of water; contact physician immediately. For respiratory problems, remove to fresh air. Wash clothing before reuse.

# **HANDLING:**

Use of approved personal protection equipment should be worn at all times. Particles mask is recommended when handling airborne particles. Gloves are recommended when handling fabrics and resins to avoid skin irritation. Safety glasses are recommended to prevent eye irritation. Wear chemical resistant clothing /gloves/goggles. Ventilate area. In absence of adequate ventilation, use properly fitted NIOSH respirator. Product Safety Data Sheets (SDS) are available and should be consulted and on hand whenever handling these products.

These products are for professional and industrial use only and are on installed by trained and qualified applicators. Trained applicators must follow installation instructions.

#### MAINTENANCE:

Periodically inspect the applied material and repair localized areas as needed.

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