



**TuffTex Materials**  
RESTORATION MADE EASY



# RepWrap CFRP

Stitch-Bonded, Uni-Directional & Biaxial FRP Fabric

**TuffTex Materials**



**TuffTex Materials**  
RESTORATION MADE EASY



CFRP replaces Bridge Protection Anchor

Easily installed in plant or field!

Ready for UV Top Coat in 1 hr

## RepWrap

### FEATURES:

- Easy Installation
- Flexibility To Conform to Shape Variances
- High Strength
- Alkali Resistant
- Non-Corrosive
- Lightweight/ High Strength to Weight Ratio
- Low Impact Aesthetics

### USES:

- Blast Mitigation
- Changes or Increases in Design Criteria
- Increase Load Bearing Properties in Columns, Walls, Beams and Slabs
- Increase Seismic Ductility and Axial Loads on Concrete Columns and Elements
- Rehabilitate Structural Integrity Due to Impact or Deterioration
- Repair of Structures Damaged by Fire
- Strengthen Concrete Bridges, Silos, Tunnels, Parking Garages and Warehouse

TuffTex Materials  
2209 Donley Drive  
Austin, TX 78758  
Office: (512) 617-7334



## Uni-Directional Physical Properties

	300 UD	600 UD
<b>0° Carbon Fiber</b>	9.24 oz/sqy	18.63 oz/sqy
<b>A-Glass Veil: C-LA 0912</b>	1.20 oz/sqy	
<b>Polyester Stitch 167dtex</b>	0.50 oz/sqy	0.53 oz/sqy
<b>Total Fabric Weight</b>	10.94 oz/sqy	20.36 oz/sqy

### Fabric Construction

<b>Stitch Length</b>	0.13"	
<b>Stitch Pattern</b>	Tricot	
<b>Dry Thickness</b>	0.019"	0.039"
<b>Standard Roll Length</b>	345 ft	300 ft
<b>Dry Roll Width</b>	12.5", 25", & 50"	

### Typical Fiber Properties (Dry)

<b>Tensile Strength (ASTM D4018)</b>	735 ksi	638 ksi
<b>Tensile Modulus (ASTM D4018)</b>	35.3 Msi	37 Msi
<b>Elongation at Break (ASTM D4018)</b>	2.09%	1.70%

### Composite Average Properties\*

<b>Tensile Strength (ASTM D3039)</b>	211 ksi	735 ksi
<b>Tensile Modulus (ASTM D3039)</b>	15.0 Msi	13.5 Msi
<b>Elongation at Break (ASTM D3039)</b>	1.4%	1.3%

\*Average values shown. Typical fiber Volume Fraction (FVF) is 40.5% values shown are RepWrap 300 UD without protective coating

### Composite Design Properties\*\*

<b>Tensile Strength (ASTM D3039)</b>	180 ksi	735 ksi
<b>Tensile Modulus (ASTM D3039)</b>	13.5 Msi	11.2 Msi
<b>Elongation at Break (ASTM D3039)</b>	1.3%	1.0%

\*\*Based on ACI 440.2R Document; Average - 3 Standard Deviations

## RepWrap

**RepWrap** fabrics are lightweight, high-tensile strength, stitch bonded, carbon fiber fabrics produced from our continuous, low-carbon fiber. It easily wets out with **RepWrap Bond** saturating resin and can be installed using either the "wet lay-up" or "dry lay-up" techniques. TuffTex Materials **RepWrap** Systems are used to obtain a bonded fiber reinforced polymer (FRP) field laminate reinforcement system that will strengthen and enhance the performance of the structural elements once installed.

Fabrics are available in 300 and 600 gram weights per square meter forms, stitched, uni-directional, and 0/90 Biaxial. 1200 gram upon request.



Patch damaged concrete with RepPatch VOH

Wet or Dry layup RepWrap Bond

Apply FRP/CFRP sheets to concrete over the fresh saturant.

Apply second coat of RepWrap Bond and topcoat of RepCoat UV





**TuffTex Materials**  
RESTORATION MADE EASY



## EXTENSIVE INSTALLATION INSTRUCTIONS FOR EASE OF USE ARE AVAILABLE AND RECOMMENDED!

### CAUTION:

#### READ SDS PRIOR TO USING PRODUCT

Use with adequate ventilation. Wear protective clothing, gloves, and eye protection. (Goggles, Safety Glasses and/or Face Shield) Keep out of the reach of children. Do not take internally. In case of ingestion, seek medical help immediately. May cause skin irritation upon contact, especially if prolonged or repeated exposure. If skin contact occurs, wash immediately with soap and water and seek medical help as needed. If eye contact occurs, flush immediately with clean water and seek medical help as needed. Dispose of waste material in accordance with federal, state, and local requirements. Cured resins are innocuous. Dispose of waste material in accordance with federal, state, and local requirements.

### WARRANTY:

Due to the use of this product beyond our control, we assume no liability for damages of any kind, and the user accepts the product "as is" and without warranties, expressed or implied, from either TuffTex Materials or its agents. The suitability of the product for an intended use shall be solely up to the user. Our only obligation shall be to replace or pay for any material proved defective, with our liability limited to the purchase price of materials supplied by us.

### DISCLAIMER:

Refer to the SDS sheet before use. The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of TuffTex Materials. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Published technical data and instructions are subject to change without notice. Contact your local TuffTex distributor or technical representative for additional technical data and instructions.

# TuffTex Materials

2209 Donley Drive

Austin, TX 78758

Office: (512) 617-7334