# T E C H N I C A L D A T A

# **CARBON BEAM 35/150**

#### **DESCRIPTION**

35 Stitch-Bonded Uni-Directional Carbon Fabric is produced from Continuous Tow Carbon Fiber. Unique fiber spreading techniques are utilized to obtain the correct UD fabric weight.

#### Manufacturer

CPR Products, Inc. 1315 West Lark Ind. Park. St. Louis, MO 631026

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#### **Benefits**

- Economical
- Low profile repair
- Adds structural integrity
- Can be used in conjunction with crack injection

#### How to use

Surface Preparation: Surface must be clean and sound 13-14 inches wide in area of installation. May require grinding to obtain exposure to solid concrete. Remove all dirt, grease, wax, curing compounds and other foreign matter. Remove water and dust from all surfaces prior to application. Prepared surface area should be vertical to wall and no more than four feet apart.

#### **PROPERTIES OF CARBON BEAM 35/150**

#### PRODUCT COMPONENTS

(all weights in grams per square meter)

UD 150 158

Glass 34 tex 10
Polyester Veil Polyester Stitch 76 dtex 6
Binder resin Powder 8

# **FABRIC CONSTRUCTION**

Stitch Length 3.6mm
Stitch Pattern Tricot
Dry Thickness 0.4mm
Sheet Size 12"x24"

#### FIBER PROPERTIES

Tensile Strength 213 kpsi (213,000 psi)
Tensile Modulus 16.7 Mpsi (16.7 million psi)
Compressive Strength 113 ksi (113,000 psi)
Compressive Modulus 15.8 msi (15.8 million psi)

Density 0.065lb/in Fiber Diameter 0.283 mils Carbon Content 95 %

(Based on Fiber Volume Fraction (FVF) of 55%)

#### Installation:

Center each piece of the carbon fiber vertically to wall within the prepared area. Fabric toes must be vertical to wall. Be certain to get complete surface contact with #500 Bonding Epoxy already

applied to the full length of repair area. Roll out all air pockets using a thin nap roller in the vertical direction of the toes. Apply a second coat of #500 over the entire fabric area using the same vertical motion. Allow to cure.

# CPR PRODUCTS, INC.

## **Packaging**

Carbon Beam consist of: 100 lineal foot x 12 inch wide roll of Carbon Fiber.

#### Limitations/Precautions

- Temperature of substrate must be above 40°F.
- New Concrete must be at least 28 days old.

## Storage

Carbon Beam should be stored in a dry environment between 60-80 deg. F.

#### **Technical Service**

Complete technical service and specification services are available from the manufacturer and their authorized representatives.

# Warranty

All recommendations, statements and technical data contained herein are based on tests we believe to be reliable and correct. CPR Products, Inc. warrants its products to be free of manufacturing defects and that at the time and/ or place of shipment our material will meet current published physical properties when applied with ASTM and CPR Products, Inc. standards. CPR Products. Inc. liability is limited to the replacement of the material if found to be defective. As CPR Products, Inc. has no control of the use to which others may put its products, it is recommended the products be tested to determine if suitable for specific application and/or our information is valid in a particular circumstance. Responsibility remains with the architect, engineer, contractor and the owner for the design, application and proper installation of each product. Nothing contained herein shall be construed to be a recommendation to use or as a license to operate under or to infringe any existing patents.