



# **Technical Data Sheet**

Date of Issue: 1st May 2020 Page 1 of 2

## **Product Name: RELINFORCE C Fab 530**

Carbon Fabric for FRP Structural Strengthening

### Description

Unidirectional Carbon fabric of 530 GSM for Structural Reinforcement System

# **Application Areas**

- Structural strengthening, restoration, reconstruction, repair, seismic retrofitting of reinforced concrete/concrete, masonry, metal (Steel), Wood constructions.
- Increasing the load capacity of reinforced concrete/concrete, masonry, metallic and wooden structures (including complex geometric shapes, as well as in confined spaces) without increasing their weight.
- Increased seismic resistance.
- Structural strengthening of bridges.

## **Features & Benefits**

- Wide range of application
- Lightweight, system does not create an additional load on construction
- Corrosion resistance
- Minimum labor and time spent on work
- Low transportation cost
- Ability to perform repair without interrupting the operation of buildings or structures
- No additional costs for further operation

### **Properties of RELINFORCE C Fab 530**

Fiber type	High Strength CF
Width, mm	500
Fiber Direction	00
Weaving style	plain
Warp	12K / 24K Carbon
Weft	Glass Fiber (Thermo fixed)
Ends Warp, 10 cm	32 ± 1
Ends Weft, 10 cm	10 ± 1
Tensile Strength of Fiber, MPa	≥ 4900
E-Modulus of Fiber, GPa	≥ 250
Tensile Strength composite laminate, MPa [ASTM D3039]	≥ 800*
E-Modulus composite laminate, GPa [ASTM D3039]	> 55*
Consumption of <i>RELINFORCE Fab SF</i> (in kg/m²)	~ 0.5

Vadodara Composites Division, Village: Asoj, Vadodara-Halol Expressway, Taluka: Waghodia, Vadodara, Gujarat 391510





# **Technical Data Sheet**

Date of Issue: 1st May 2020 Page 2 of 2

#### Note:

- 1. \*Laminate prepared using RELINFORCE Fab SF. Result might change when used with other resin system.
- 2. Values mentioned above are indicative.
- 3. For Specific & Critical need, designer is advised to get independent testing to ascertain the values for assurance of intended performance.
- 4. Carbon Fabric of other GSM can be made on special request.

# **Packaging Size**

RELINFORCE C Fab 530 is supplied in 50M Roll Length in 1 cardboard

#### **Shelf Life**

NA

## **Precaution**

Precaution to be taken that it is kept in roll form only.

\*\*\*

Notice: No freedom from any patent owned by RIL or others is to be inferred. RIL assumes no obligation or liability for the information in this document. The information provided herein is presented in good faith and is based on the best of RIL's knowledge, information, and belief. Since use conditions at non-RIL facilities are beyond RIL's control and government requirements may differ from one location to another and may change with time, it is solely the Buyer's responsibility to determine whether RIL's products are appropriate for the Buyer's use, and to assure the Buyer's workplace, use, and disposal practices are in compliance with applicable government requirements. Consequently, RIL assumes no obligation or liability for use of these materials and makes no warranty, express or implied. The user of the information provided is solely responsible for compliance with any applicable government requirements. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

Vadodara Composites Division, Village: Asoj, Vadodara-Halol Expressway, Taluka: Waghodia, Vadodara, Gujarat 391510