

Technical Data Sheet

Date of Issue: 1st May 2020

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Product Name: RELINFORCE C Fab 600

Carbon Fabric for FRP Structural Strengthening

Description

Unidirectional Carbon fabric of 600 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 600

Fiber type	High Strength CF
Width, mm	500
Fiber Direction	0°
Weaving style	plain
Warp	12K / 24K Carbon
Weft	Glass Fiber (Thermo fixed)
Tensile Strength of Fiber, MPa	≥ 4900
E-Modulus of Fiber, GPa	≥ 250
Elongation of Fiber, %	> 2.1
Fibre Density, gm/cc	1.8 ± 0.05
Tensile Strength composite laminate, MPa [ASTM D3039]	≥ 1000*
E-Modulus composite laminate, GPa [ASTM D3039]	> 80*
Consumption of RELINFORCE Fab S (in kg/m ²)	~ 0.6

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Note:

1. *Laminate prepared using *RELINFORCE Fab S*. 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.
5. Consumption of *RELINFORCE Fab S* will depend on substrate surface roughness & porosity

Packaging Size

RELINFORCE C Fab 600 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.

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