RELINFORCE™ carbon fibre wrap

Reliance Industries Limited

Technical Data Sheet

Product Name: RELINFORCE C Fab 230

Carbon Fabric for FRP Structural Strengthening of Concrete Structures

Description

Unidirectional Carbon fabric of 230 GSM for Structural Reinforcement of Concrete Structures

Application Areas

- Structural strengthening, restoration, reconstruction, repair, seismic retrofitting of reinforced concrete
- Increasing the load capacity of concrete structures (including complex geometric shapes, as well as in confined spaces) without increasing their weight
- Increased seismic resistance
- Structural strengthening of concrete structures

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 230

Fiber type	High Strength CF
Width, mm	500
Fiber Direction	0^0
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]	≥ 450*
E-Modulus composite laminate, GPa, [ASTM D3039]	> 35*
Consumption of *RELINFORCE Fab S* (in kg/m^2)	~ 0.4

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** Composite laminate properties obtained on specimens (cured at 23°C, 7 days) of carbon tape impregnated by epoxy system RELINFORCE FAB S.*

Packaging Size

RELINFORCE C Fab 230 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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