

Technical Data Sheet

Issue No. 0.0

Date of Issue: Sep-2019

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Product Name: RELinforce G Fab 610 BD

Glass Fabric for FRP Structural Strengthening

Description

RELinforce G Fab 610 BD is woven bi-directional Glass Fabric of 610 GSM.

RELinforce G Fab 610 BD saturated with *RELinforce Fab S Series* product (Epoxy Resin Series for Fabric Saturation) form a composite matrix with high performance features.

Application Areas

- *RELinforce G Fab 610 BD* based composite increases flexural, shear & axial load capacity of the structure
- Can be applied on structures like,
 1. Seismic Retrofitting of Civil Structures
 2. Pipe Encasing for Leakage & Strengthening
 3. Column & Chimney
 4. Beam & Slab
 5. Silos & Tanks

Features & Benefits

- Woven Fabric helps prevent delamination, which occurs when unreinforced resin between composite layers crack and separate the layers, ultimately weakening the composite material
- Various Options available to give free hand to Designer to have tailor made system.
- Lower Thickness
- Light in Weight & do not increase dead weight on the structure

Properties of RELinforce G Fab 610 BD

Fabric Weight (Bi-directional)	610 GSM
0°	284 GSM
90°	326 GSM
Tensile Strength of Glass Fiber	3500 N/mm ²
Modulus of Elasticity of Glass Fiber	72 kN/mm ²
% Elongation @ Break of Glass Fiber	4.6

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Wide Width Tensile Strength (ISO 10319)	7000 kN/ mm ²
% Elongation @ Break of Glass Fabric (ISO 10319)	4.5
* Tensile Strength – Laminate (ASTM D3039)	250 N/mm ²
*% Elongation @ Break – Laminate (ASTM D3039)	3.8
*Tensile Modulus - Laminate (ASTM D3039)	14 GPa
*Thickness - Laminate	~0.9 mm
Consumption of <i>RELinforce Fab SF</i>	~ 0.6 Kg/ m 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. Glass Fabric of other GSM other than mentioned above can be made on special request.

Packaging

RELinforce G Fab 610 BD is supplied in 60M length & 1.25M wide Rolls.

Shelf Life

2 years from the date of manufacturing.

Precaution

Precaution to be taken that it is kept in roll form only & not to be bend right angle & stacked. Bending the loose fabric in right angle can cause damage to fiber matrix of the fabric.

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