



# **Technical Data Sheet**

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### **Product Name : RELinforce C Lam PU**

RELinforce C Lam PU 120/5 RELinforce C Lam PU 100/5 RELinforce C Lam PU 50/5

# **Description**

Polyurethane (PU) Impregnated carbon fiber laminates for Structural reinforcement.

## **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**

- High Mechanical characteristics
- 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
- Peel-ply coverage for surface protection and enhancement of adhesion characteristics

### **Properties of RELinforce C Lam PU series**

| RELinforce C Lam PU               | 120/5  | 100/5    | 50/5 |
|-----------------------------------|--------|----------|------|
| Resin                             | PU     |          |      |
| Fiber Content, %                  | > 65   |          |      |
| Fiber Direction                   | 0°     |          |      |
| Width, mm                         | 120    | 98 ± 2   | 50   |
| Thickness, mm                     | 5      |          |      |
| Cross Section, mm <sup>2</sup>    | 600    | 490 ± 10 | 250  |
| Tensile Strength, MPa             | ≥ 1100 |          |      |
| Tensile Modulus, GPa              | ≥ 150  |          |      |
| Flexural Modulus, GPa             | > 140  |          |      |
| Flexural strain, %                | > 0.72 |          |      |
| Transverse Flexural Strength, MPa | > 50   |          |      |
| Interlaminar Shear Strength, MPa  | > 52   |          |      |

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#### Note:

- 1. Suggest adhering *RELinforce C Lam PU* using *RELinforce Lam A*. 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. Refer to RELinforce Lam A product datasheet to understand the property of adhesive.

## **Packaging Size**

RELinforce C Lam PU is supplied in 11M Length. Special length can be supplied depending on the requirement & availability.

### **Shelf Life**

NA

#### **Precaution**

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

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