ECA Carbon Fiber

Carbon fiber sheets used for FRP structural strengthening





Product Description

ECA Carbon Fiber is a high strength, directional carbon fiber fabric. Material is field laminated using European Concrete Additives Epoxy to form a carbon fiber reinforced polymer used to strengthen structural concrete elements.

Typical Properties

Technical Data	230 gsm	430 gsm
Modulus of elasticity	230KN/mm ²	230KN/mm ²
Tensile Strength	4900N/mm ²	4900N/mm ²
Weight of C fiber(main direction)	200g/m ²	400g/m ²
Density	1.8 g/cm ³	1.8 g/cm ³
Thickness for static design weight/density	0.112 mm	0.25 mm

Where to Use

Load Increases

- Increased live loads
- Increased traffic volumes on bridges
- Installation of heavy machinery in industrial buildings
- Vibrating structures
- Changes of building utilization

Seismic Strengthening

- Column wrapping
- Masonry walls

Damage to Structural Parts

- Aging of construction materials
- Vehicle impact
- Fire
- Blast resistance

Change in Structural System

- Removal of walls or columns
- Removal of slab sections for openings
- Design or construction defects
- Insufficient reinforcements
- Insufficient structural depth

Advantages

- Shear, confinement or flexural strengthening
- Flexible
- High Strength
- Light Weight
- Non-corrosive
- Alkali Resistant
- Low aesthetic impact

Application

Fibers must be completely saturated in resin. Carry out work only under appropriate environmental conditions.

Packaging

ECA Carbon Fiber 230/400 system:
Width: 500mm, Length: 50m
ECA Carbon Fiber 230/200 system:
Width: 500mm, Length: 100m

Shelf Life

ECA Carbon Fiber has a shelf life of more than 24 months if stored on warehouse conditions.

Precautions

Make sure that you obtain a copy of the European Concrete Additives (MSDS).

Contact Information

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