CatStrong UCF 120

Uniaxial Carbon Fiber Reinforced Polymer Fabric (UCF)
for Structural Strengthening of Concrete and Masonry Structures

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Product Description

CatStrong UCF 120 is a non-woven fabric made with high strength carbon fibers. *CatStrong* UCF 120 can be saturated with high strength epoxies to strengthen or retrofit concrete and masonry structures.

Benefits

- High strength and lightweight fabric
- Easy to impregnate using a saturating epoxy for a wet layup application
- Fabric flexibility allows for strengthening of various structural shapes (e.g., beams, columns, piles, pile caps, walls, etc.)

Uses

- Strengthening of reinforced concrete beams for increased load carrying capacity in flexure, shear, and torsion
- Restore capacity of concrete members with deteriorated/damaged rebars
- Confine concrete columns to increase axial and flexural capacity
- Restore strength due to cracking of concrete members
- Retrofit for design and/or construction defects

Packaging

- Shipping Package: 1.0 ft × 100 ft (0.3 m × 31 m) per roll
- Shipping Weight: 18.0 lb (8.2 kg) per roll

Dry Fabric Properties

• Width	12 in	305 mm
• Thickness (at 55% fiber volume)	0.030 in	0.76 mm

Saturated and Cured Laminate Properties

• Ultimate Load	120 kips/ft	1751 kN/m
• Tensile Strength[1]	413 ksi	2 848 MPa
• Tensile Modulus[1]	20 300 ksi	139 GPa

[1] Coupons, with fiber volume of 60.2%, were tested according to ASTM D3039

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