

CARBON FIBER LAMINATES (CFRP)

Carbon fiber laminates are typically made by pressing multiple layers of carbon fiber fabric or unidirectional carbon fiber together under high pressure and temperature using a high-strength epoxy resin. The resulting plate/laminate is then cut into various sizes and shapes, depending on the specific application.

Carbon fiber laminates are increasingly being used in construction applications as a strengthening material due to their high strength-to-weight ratio, excellent stiffness, and durability. They are typically used to reinforce structures such as concrete, masonry, or steel that require additional support to withstand heavy loads, seismic forces, or other stresses.

In concrete structures, carbon fiber plates are commonly used to increase the flexural strength, shear strength and stiffness of beams, columns and slabs. In masonry structures, carbon fiber plates are used to reinforce walls and improve their resistance to seismic and wind loads. In steel structures, carbon fiber plates can be used to reinforce steel members and increase their load-carrying capacity. They can be anchored to the surface of the steel using mechanical fasteners, adhesive anchors, or a combination of both.

Technical Data Sheet:

DRY FIBER PROPERTIES

TENSILE STRENGTH:	4500 MPA	TENSILE MODULUS:	≥230 GPa
ELONGATION:	1.7 %	YARN TYPE:	12k Carbon Yarn

LAMINATE PROPERTIES

THICKNESS:	2 MM	WIDTH:	5 CM 10 CM 20 CM 30 CM
TENSILE STRENGTH:	≥2400 MPA	LENGTH:	50 M 100 M
TENSILE MODULUS:	≥160 GPa	SURFACE:	UD Woven Glossy
ELONGATION:	≥1.6%	PACKING:	Roll with bubble wrap

COMMENTS: We do customized production as per projects requirement. Customized packing are also available.

