

PRODUCT HIGHLIGHTS

Cost-effective fabrication of thick composite structure with chopped fiber **billet stock**.

DESCRIPTION

Typical Thickness 13–63.5 mm (0.5–2.5 in)

STANDARD BILLET BLOCK SIZES

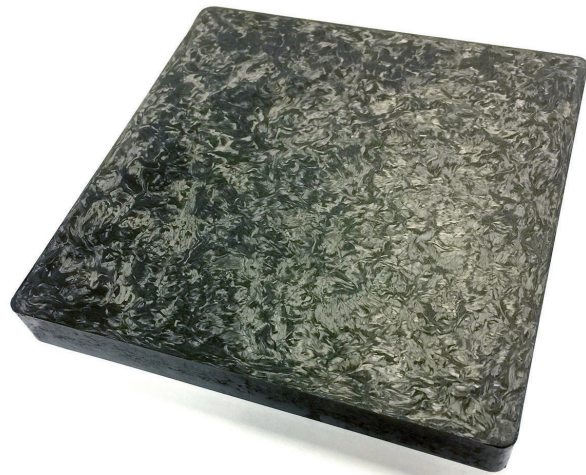
- ▶ 15.2 x 15.2 cm (6" x 6")
- ▶ 20.3 x 25.4 cm (8" x 10")
- ▶ 30.5 x 30.5 cm (12" x 12")
- ▶ 45.7 x 45.7 cm (18" x 18")
- ▶ 35.6 x 71.1 cm (14" x 28")

TYPICAL APPLICATIONS

- ▶ Hard point attachments
- ▶ Prototype/small-volume parts
- ▶ Initial design proofing of compression molded parts
- ▶ Hard to fabricate complex composites parts

TYPICAL NEAT RESIN PROPERTIES

- ▶ Part fabrication without the cost of tooling
- ▶ Reduces the cost of thick composite laminate manufacturing
- ▶ Provides significant labor efficiencies
- ▶ Weight reduction of 40% over aluminum



Starting shape

MS-4H, 1" CHOP LENGTH, MECHANICAL PROPERTIES

Properties	Condition	Method	Results	
Tensile Strength	RT	ASTM D 3039	144 MPa	20.9 ksi
Tensile Modulus	RT	ASTM D 3039	29.8 GPa	4.3 Msi
Flexural Strength	RT	ASTM D 6272	387 MPa	56.1 ksi
Flexural Modulus	RT	ASTM D 6272	29.7 GPa	4.3 Msi
Compressive Strength	RT	ASTM D 6484 (No Hole)	271 MPa	39.3 ksi
Compressive Modulus	RT	ASTM D 6484 (No Hole)	38.3 GPa	5.6 Msi
Pin Bearing (Single Shear)	RT	ASTM D 5961 Method B	441 MPa	63.9 ksi

Properties shown are from machined test coupons. Net molded test coupon properties will be considerably higher (see MS-4H TDS).

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