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Material Specifications



Carbon Fiber Diviny Cell Foam Core

DragonPlate's carbon fiber Divinycell foam core utilizes Divinycell H100 high performance core. This is a medium density structural foam with very high strength to weight ratio. With high strength properties, this carbon fiber foam core laminate is an excellent choice for heavier duty applications where lighter density foams struggle. Divinycell H100 is also an excellent damage tolerant foam and is ideal for impact applications. Available in gloss, matte or texture on one side and texture on other side for bonding to other surfaces.

STANDARD CORES

CORE THICKNESS	LAMINATE THICKNESS	CUT SIZE TOLERANCE	ESTIMATED WEIGHT (lbs/ft ²)*
1/4" ± 0.020	~ 0.32"	+ 0.5" / -0	0.61
1/2" ± 0.020	~ 0.58"	+ 0.5" / -0	0.68
1" ± 0.020	~ 1.06"	+ 0.5" / -0	0.89

* Weight varies with core density

Available in Various Sizes

Finish: Textured, gloss, or matte / Textured

Additional Options

- Custom Sizes
- Custom Laminates
- Custom Thickness
- CNC Machining
- Design and Engineering Services

TECHNICAL SPECIFICATIONS

Properties of Carbon Fiber

Tensile Strength: 512 ksi
 Tensile Modulus: 33.4 Msi

Properties of Divinycell H100 Foam Core

Compressive Strength : 290 psi
 Compressive Modulus: 19580 psi
 Tensile Strength: 500 psi
 Tensile Modulus: 18855 psi
 Density: 6.25 lb/ft³
 Shear Strength: 232 psi
 Shear Modulus: 5080 psi

Resin

Epoxy resin that accounts for approximately 50% of the composition

$W_f \approx 50\%$

Lay Up Schedule

3 Layers Plain Weave Carbon Fiber
 Divinycell H100 Foam
 3 Layers Plain Weave Carbon Fiber