Material Specifications

Carbon Fiber Divinycell 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.

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

Lay Up Schedule
- 3 Layers Plain Weave Carbon Fiber
- Divinycell H100 Foam
- 3 Layers Plain Weave Carbon Fiber

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

STANDARD CORES

<table>
<thead>
<tr>
<th>CORE THICKNESS</th>
<th>LAMINATE THICKNESS</th>
<th>CUT SIZE TOLERANCE</th>
<th>ESTIMATED WEIGHT (lbs/ft²)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4” ± 0.020</td>
<td>~0.32”</td>
<td>+0.5”/-0</td>
<td>0.61</td>
</tr>
<tr>
<td>1/2” ± 0.020</td>
<td>~0.58”</td>
<td>+0.5”/-0</td>
<td>0.68</td>
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<td>1” ± 0.020</td>
<td>~1.06”</td>
<td>+0.5”/-0</td>
<td>0.89</td>
</tr>
</tbody>
</table>

Available in Various Sizes
Finish: Textured, gloss, or matte / Textured

* Weight varies with core density

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