Material Specifications

Carbon Fiber Airex Foam Core

DragonPlate carbon fiber C70-40 Airex foam core is a unique closed cell, cross-linked polymer foam core. This is a lightweight structural foam that has good impact strength. While great for high strength applications which require a low panel weight, this is a carbon fiber foam core laminate that can resist crushing forces and supply an adequate mounting surface. The lay-up design is quasi-isotropic, consisting of three layers of carbon fiber on each side of a Airex foam core center. 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 Airex C70-40 Foam Core
- Compressive Strength: 65 psi
- Compressive Modulus: 5370 psi
- Tensile Strength: 100 psi
- Tensile Modulus: 4060 psi
- Density: 2.5 lb/ft³
- Shear Strength: 65 psi
- Shear Modulus: 1900 psi

Resin
Epoxy resin that accounts for approximately 50% of the composition

Lay Up Schedule
- 3 Layers Plain Weave Carbon Fiber
- C 70-40 Airex Foam
- 3 Layers Plain Weave Carbon Fiber

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>0.48</td>
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<tr>
<td>1/2” ± 0.020</td>
<td>~ 0.57”</td>
<td>+0.5”/-0</td>
<td>0.52</td>
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<tr>
<td>1” ± 0.020</td>
<td>~ 1.07”</td>
<td>+0.5”/-0</td>
<td>0.63</td>
</tr>
</tbody>
</table>

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

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

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