

APEX Carbon Core PRODUCT DATA SHEET

APEX Carbon Honeycomb Core

STRENGTH

The unique manufacturing process allows for high strength and modulus at low densities.

RESILIENCE

The carbon fiber and epoxy combination resists moisture creating a stable structure in harsh environments.

FORMABILITY

The unique cellular geometry allows APEX Carbon Core to conform to curved surfaces.

- Designed to survive the toughest environments, APEX Carbon Core utilizes advanced high temperature materials oriented in a unique way to provide unchallenged performance.
- ✓ Utilizing an open weave carbon fabric creates natural cell to cell venting. No secondary perforation or slitting is needed.
- The carbon fiber enables drastically increased stiffness resulting in minimal deflection in the finished structure.
- APEX Carbon Core resists water and corrosion in a way that Aramid and aluminum cores cannot.
- ✓ The near zero CTE makes APEX Carbon Core perfect for precision structures subjected to a wide temperature range.

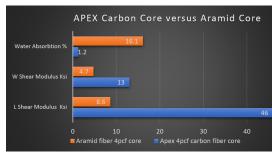
Standard Thickness 0.125"-3" Standard Sheet Size 48" x 96" For custom thickness and sheet sizes please inquire

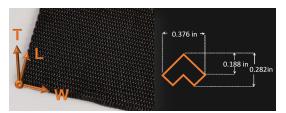
MECHANICAL PROPERTIES

PROPERTY	TYPICAL RESULT**	TEST METHOD
Density (Nominal)	4.4 PCF (Nominal)	ASTM C271
Glass Transition Temperature (DMATg) 375°F Post Cure	428°F	ASTM D7028
Glass Transition Temperature (DMA Tg) 375°F Post Cure	310°F	ASTM D7028
Compression Strength*	480psi	ASTM C365
Shear Strength L-Direction*	270 psi	ASTM C 273
Shear Strength W-Direction*	140 psi	ASTM C 273
Shear Modulus L-Direction*	50 ksi	ASTM C 273
Shear Modulus W-Direction*	12 ksi	ASTM C 273
Water Absorption	1.20%	ASTM C 272
Max Radius of Curvature*	5 inches	N/A

^{*} Tested at 0.5-inch thickness. **Properties are nominal and may differ for specific lots









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All the information contained in these properties is believed to be reliable. It is intended for comparison purposes only as each manufactured lot will exhibit variations. The user should evaluate the suitability of each product for their application. We cannot anticipate the variations in all end use and we make no warranties and assume no liability in connection with the use of this information.





