PMT TECHNICAL DATA SHEET

APEX Carbon Core

*A new **cellular core** material for **high performance** structures.*

- *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 core resists water and corrosion in a way that Aramid and aluminum cores cannot.*
- *The near zero CTE makes APEX core perfect for precision structures subjected to a wide temperature range.*

STRENGTH

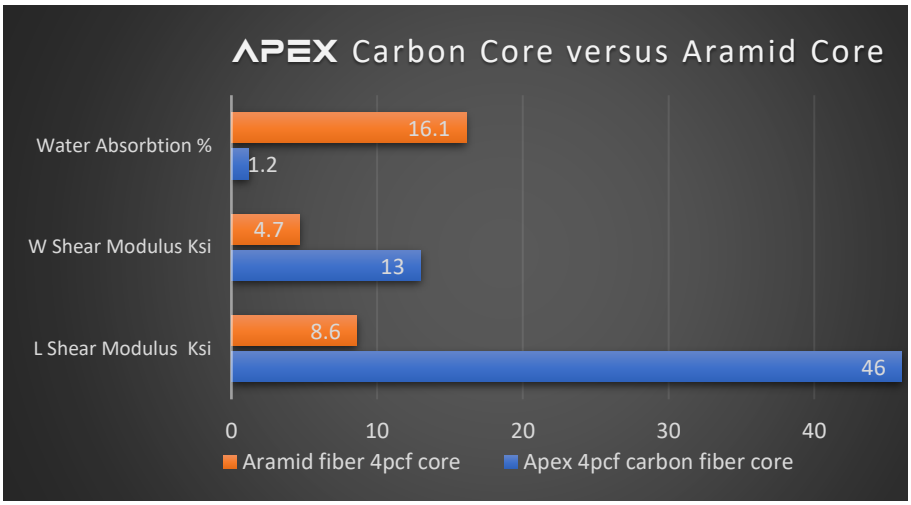
The unique manufacturing process allows for high strength and modulus at low densities.

RESILIENCE

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

FORMABILITY

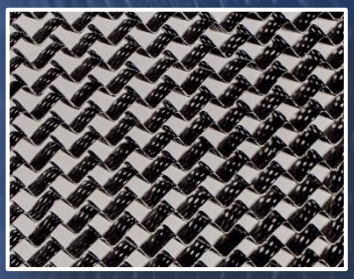
The unique cellular geometry allows APEX core to conform to curved surfaces



Mechanical Properties

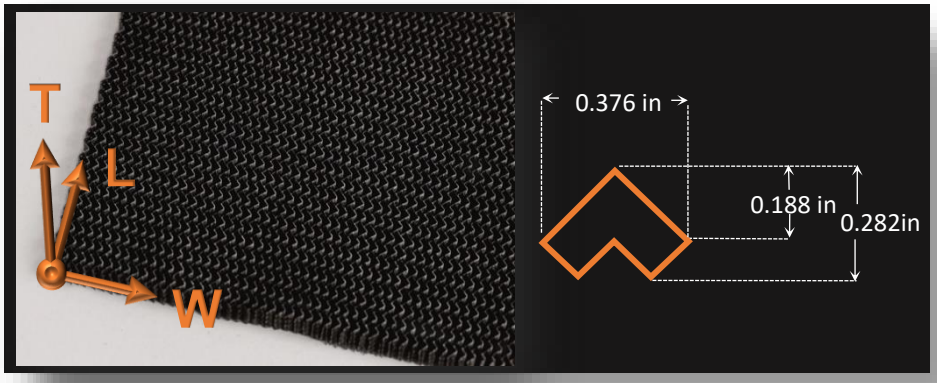
Examination or Test	Typical Result**	Test Method
Density	4.1 lb/ft^3	ASTM C271
Glass Transition Temperature (DMA Tg)	428°F	ASTM D7028
Compression Strength*	541 psi	ASTM C365
Shear Strength* L-Direction W-Direction	 286 psi 161 psi	ASTM C 273
Shear Modulus* L-Direction W-Direction	 46.4 ksi 13.2 ksi	ASTM C 273
Water Absorption	1.20%	ASTM C 272
Max. Radius of Curvature*	5 inches	NA

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



Scan to purchase
APEX Carbon Core

Size Chart and Geometry



Sheet Dimensions	Minimum (in)	Maximum (in)	Tolerance (in)
Thickness (T)	0.125	18	0.005
Length (L)	12	96	0.5
Width (W)	12	48	0.5

Manufactured by **Patz Materials and Technologies**

Direct Online sales at **AdvancedCompositesMM.com**
For custom orders contact **Orders@PatzMandT.com**

PMT
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