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

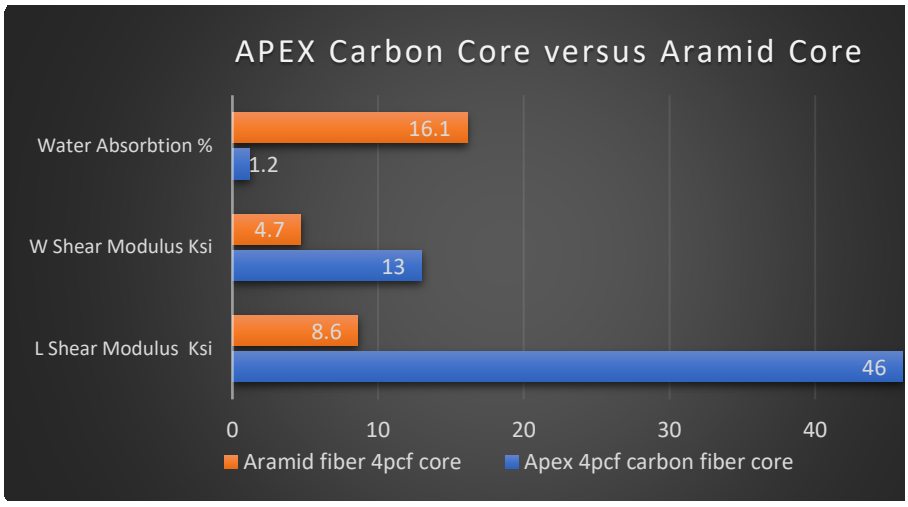
The unique manufacturing process allows for high strength and modulus at low densities.

RESILIENCE

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

FORMABILITY

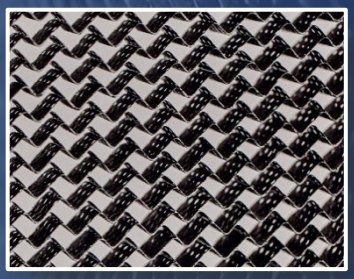
The unique cellular geometry allows APEX core to conform to curved surfaces



Mechanical Properties

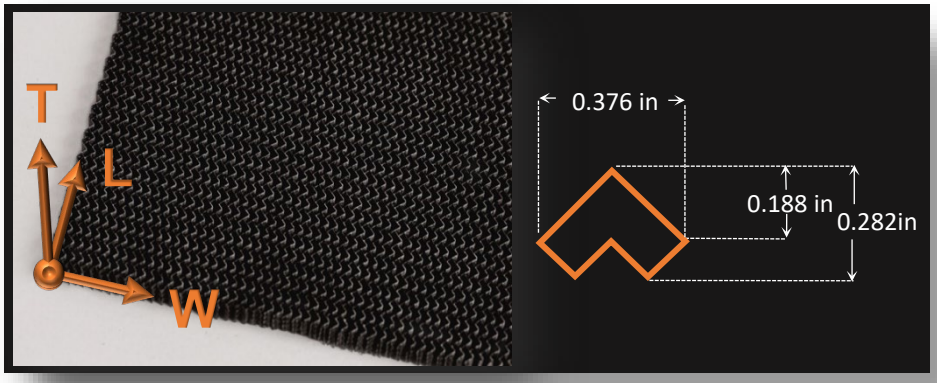
Examination or Test	Typical Result**	Test Method
Density (nominal)	4.4 pcf	ASTM C271
Glass Transition Temperature (DMA Tg) 375°F Post Cure	428°F	ASTM D7028
Glass Transition Temperature (DMA Tg) Green State	310 °F	ASTM D7028
Compression Strength*	480 psi	ASTM C365
Shear Strength* L-Direction W-Direction	 270 psi 145 psi	ASTM C 273
Shear Modulus* L-Direction W-Direction	 50 ksi 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*



Scan to purchase
APEX Carbon Core

Size Chart and Geometry



Standard Sheet Dimensions		
Standard Sheet Size	**48" (W)**	**96" (L)**
Standard Thickness' (T)	**0.125" (min)**	**3"**
For Custom Tickness & Sheet Sizes Inquire with Orders@PatzMandT.com		

Manufactured by **Patz Materials and Technologies**

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

PMT
PATZ MATERIALS & TECHNOLOGIES

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