

PHYSICAL PROPERTIES OF TRICEL HONEYCOMB

Core Designation	Shear Strength in PSI (ASTM C273)		Shear Modulus in PSI (ASTM C273)		Shear Elongation in % (ASTM C393 SB)		Maximum Facing Stress in PSI (ASTM C393 SB)		Maximum Core Shear Stress in PSI (ASTM C393 SB)		EI Per 1" Width in #/IN ² (ASTM C393 SB)		Maximum Facing Stress in PSI (ASTM C393 LB)		Maximum Core Shear Stress in PSI (ASTM C393 LB)		EI Per 1" Width in #/IN ² (ASTM C393 LB)		Stiffness "D" in #/IN ² (ASTM C393 LB)		Compression in PSI (ASTM C365)		Density #/FT ³ (ASTM C271)
	L	T	L	T	L	T	L	T	L	T	L	T	L	T	L	T	L	T	L	T	Strength	Modulus	
	1/2 - 60 - 60 - 15%	41.3	18.2	3,984	1,666	2.34	3.57	434	237	37.2	20.1	2.96E+04	1.78E+04	6,355	3,309	38.4	18.5	1.07E+05	7.18E+05	356,477	192,261	36.0	1,415
3/8 - 60 - 60 - 15%	68.2	25.8	6,940	1,878	1.79	2.72	735	289	63.8	24.9	4.92E+04	1.97E+04	9,011	4,727	48.3	23.5	1.14E+05	7.23E+05	379,270	260,608	53.0	2,110	2.42
1/4 - 60 - 60 - 15%	110.1	37.1	9,243	2,089	2.03	2.80	1,184	423	102.3	36.6	7.27E+04	2.52E+04	14,465	6,221	78.4	30.2	1.19E+05	7.68E+05	376,986	299,345	94.8	2,814	2.95
1/2 - 60 - 60 - 0%	*Unimpregnated grades are not recommended for Structural applications.																				9.5	488	1.31
1/2 - 80 - 80 - 0%	Longitudinal and Transverse Shear Values are not furnished.																				16.5	704	1.61
3/8 - 50 - 50 - 0%																					16.9	667	1.75
3/8 - 60 - 60 - 0%																					23.3	1,047	2.04
3/8 - 80 - 80 - 0%																					31.7	1,362	2.33
1/4 - 50 - 50 - 0%																					27.3	1,051	2.42
1/4 - 60 - 60 - 0%																					34.2	1,292	2.66
<p>**All Values are the strengths of the core 1" thickness based upon extensive laboratory testing per ASTM Standards. A Safety factor appropriate for given design should be applied to the shear strength and compressive strength data. A safety factor of 4 to 1 is recommended for most structural applications.</p> <p>↑ ↑ ↑ ↑ % of Phenolic Resin Content</p> <p>↑ ↑ ↑ Paper Grade of Fluted Member</p> <p>↑ ↑ Paper Grade of Liner Member</p> <p>↑ Cell Size (Amplitude of Sine Wave)</p>																							