

TYPICAL PROPERTIES of GLASS LAMINATES (SHEET FORM)

(mechanical properties of rod and tube forms may differ)

ASTM or UL test	Property	G-3	G-5/G-9	G-7	G-10	G-11
PHYSICAL						
D792	Density (lb/in ³) (g/cm ³)	0.065 1.80	0.067 1.85	0.065 1.80	0.065 1.80	0.065 1.80
D570	Water Absorption, 24 hrs (%)	2.65	0.60	0.10	0.10	0.20
MECHANICAL						
D638	Tensile Strength (psi) -lengthwise -crosswise	42,000 34,000	61,600 51,100	20,000 -	45,000 38,000	43,000 37,000
D790	Flexural Strength (psi) -lengthwise -crosswise	40,500 34,000	61,600 51,100	30,000 -	75,000 65,000	80,000 70,000
D790	Flexural Modulus (Kpsi) -lengthwise -crosswise	1,800 1,400	2,000 1,700	1,600 -	2,700 2,400	3,000 2,700
D256	IZOD Notched Impact (ft-lb/in) -lengthwise -crosswise	12.0 11.0	12.5 8.5	13.0 -	14.0 12.0	12.0 9.0
D695	Compressive Strength (psi)	55,000	65,000	50,000	65,000	63,000
D785	Hardness, Rockwell M	M110	M115	M105	M110	M112
THERMAL						
D696	Coefficient of Linear Thermal Expansion (x 10 ⁻⁵ in./in./°F) -lengthwise -crosswise	0.83 1.00	0.83 1.00	0.72 0.90	0.55 0.66	0.72 0.83
-	Max Operating Temp (°F / °C)	340 / 170	285 / 140	430 / 220	284 / 140	329 / 165
C177	Thermal Conductivity (BTU-in/ft ² -hr-°F) (x 10 ⁻⁴ cal/cm-sec-°C)	2.0 7.0	2.0 7.0	2.0 7.0	2.0 7.0	2.0 7.0
UL94	Flammability Rating	H-B	V-0	H-B	H-B	H-B
ELECTRICAL						
D149	Dielectric Strength (V/mil) short time, 1/8" thick	460	300	350	800	900
D150	Dielectric Constant at 1 MHz	7.3	6.3	4.5		