

**MATERIAL DATA SHEET****Material:** Lamitex® Grade G-5 Glass Melamine Laminate Sheet**Description:** Lamitex® G-5 glass/melamine laminated sheet is most frequently preferred for applications that require high mechanical strength, self extinguishing properties and exceptional arc and tracking resistance, especially in humid environments.

Standards:	NEMA LI-1 Grade	G-5	Availability: G-5 is also manufactured as round tubes (convolute wound), rods, molded channel, angle, square and rectangular tubes and fabricated custom parts.
	MIL-I-24768	/ 8 Type GMG	
	EN 60893	MF GC 201	
	DIN	Hgw 2272	
	British Standard	3953 MF-4	

Physical Properties	Test Condition	ASTM	Typical Values
Thickness			.125"
Specific Gravity		D792	1.90
Rockwell Hardness (M Scale)		D785	120
Moisture Absorption (maximum)		D229	2.0%
Flexural Strength	Condition A: Lengthwise Crosswise	D229	44,000 psi 38,000 psi
Tensile Strength	Condition A: Lengthwise Crosswise		37,000 psi 30,000 psi
Compressive Strength	Condition A: Flatwise Edgewise	D695	70,000 psi 25,000 psi
Izod Impact Strength (.500" thick)	E48/50: Lengthwise Crosswise	D229	7.0 ft-lb/in. (notch) 5.5 ft-lb/in. (notch)
Bond Strength (.500" thick)	Condition A D 48/50	D229	1,570 lbs 1,400 lbs

Thermal & Electrical Properties

Temperature Index Electrical / Mechanical			50°C / 140°C
Coefficient of Thermal Expansion			10.0 cm/cm/°C x 10 ⁻⁶
U.L.® 94 Flammability Rating			94-V0
Dielectric Breakdown Voltage (step x step)	Condition A / D 48/50	D229	23.0 kV / 5.0 kV
Maximum Permittivity @ 1 MHz	Condition A / D 24/23	D229	7.80 / 8.00
Maximum Dissipation @ 1 MHz	Condition A / D 24/23	D229	0.02 / 0.080
Dielectric Strength (short time)	Condition A	D229	260 Vpm
Dielectric Strength (step x step)	Condition A	D229	160 Vpm
Arc Resistance	Condition A	D 495	185 seconds

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