



THE GUND COMPANY

Manufacturers & fabricators of engineered material solutions

Item:	G11R, Roving Reinforced G11, Glass Epoxy Laminate			
Description:	Roving reinforced G11 materials are continuous filament woven fiberglass sheets bonded with high temperature epoxy resin. The material has the ability to maintain excellent mechanical, electrical, and physical properties at elevated temperature to 180°C. The Gund Company is RoHS compliant to ensure reliability, safety, and consistency			
Availability:	Laminate Sheets	Thickness:	English Units	SI Units
			0.010" to 5.0"	0.25 mm to 127 mm
		Standard Sheet Size:	48" x 96"	122 cm x 244 cm
			48" x 120"	122 cm x 305 cm
Fabricated Parts:	The Gund Company custom fabricates insulation materials to the exact specifications and drawings of our customers.			
Standards:	NEMA LI-1 Grade G-11 - IEC 60893-3-2 EPGC205			

IEC 60893-3-2 EP GC 205 Required Properties

Key Characteristics		Test Method	Units	IEC Requirement	Typical Values
Flexural Strength	At 23°C	ISO 178	MPa	340	558
	At 150°C			150	238
IZOD Impact Strength		ISO 179	kJ/m ²	34	310
Electric Strength at 90°C in Oil, Perpendicular to Laminates		IEC 60243	kV/mm	9	21
Breakdown Voltage at 90°C in Oil, Parallel to Laminations		IEC 60243	kV	35	> 50
Insulation Resistance After Immersion in Water		IEC 60167	Ω	5x10 ⁴	1.4x10 ¹²
Thermal Endurance		IEC 60216	°C	180	190
Proof Tracking Index		IEC 60112	V	-	CTI200
Flammability >3mm		UL94	Class	-	V-1

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Material Data Sheet

Name of the Material

Additional Engineering Properties

Key Characteristics		Test Method	Units	Typical Values
Flexural Strength at 180°C		ISO 178	MPa	170.3
Water Absorption		ISO 1183-1	%	0.02
Compressive Strength	Perpendicular	ISO 604	MPa	492.1
	Parallel			374.3
Tensile Strength		ISO 527-4	MPa	439.5
Insulation Resistance		IEC 60167	Ω	2.6 x 10 ¹⁵

Key Characteristics	Units - English (SI)	Typical Values
Standard Color	--	Green
Specific Gravity	lb./in ³ (g/cc)	0.068 (1.89)