



# SmithLamina™

## G11

SmithLamina® G-10 material is a continuous filament woven fibreglass sheet bonded with epoxy resin. The material has the ability to maintain excellent mechanical, electrical, and physical properties at elevated temperatures to 130°C. NEMA G-10 is a non-brominated, non-flame retardant grade of glass epoxy laminate.

The industry refers to "G-10" material when they want a flame retardant, V-0 rated glass epoxy laminate rated at 130°C RTI. Technically, NEMA G-10 is a non-flame retardant, non-brominated version of glass epoxy laminate. If a non-brominated material is required, please specifically address this issue.

The material is known to retain its high mechanical values and electrical insulating qualities in both dry and humid conditions. These attributes, along with good fabrication characteristics, lend utility to this grade for a wide variety of electrical and mechanical applications.

### Key Characteristics:

Grade: NEMA LI-1 Grade G10 / IEC 60893 EPGC 201 / Hgw 2372 / EP-3

Standard Colour: Green

Specific Density: 1.80 - 2.00 Gm/cm3

Thickness:

Standard Sizes:

### TECHNICAL DATA

Key Characteristics	Units	Typical Values
Rockwell Hardness (1/8")	M Scale	110
Moisture Absorption (1/8")	%	0.09
Tensile Strength (.125") CW	psi (MPa)	40000 (275)
Flexural Strength (.062")		
LW -	psi (Mpa)	54000 (372)
CW -		18000(124)
IZOD Impact Strength		
LW -	ft.-lbs./in.	10.0
CW -		9.0
Arc Resistance (.125")	Seconds	185
Compressive Strength, Flatwise	psi (MPa)	50,000 (344)
Density	Lb./in3	.069
Bond Strength (.500")	Kg	886
Electrical Temperature	°C	160°
Dielectric Strength(.500")	V/mil.	65
Rockwell Hardness (1/8")	M Scale	110
Moisture Absorption (1/8")	%	0.09
Tensile Strength (.125") CW	psi (MPa)	40000 (275)

All values are attributes of the used raw materials.

The physical data contained in this table are typical values. They are obtained on test specimens under specific conditions and represent average values of a large number of tests. The results obtained on these tests specimens cannot be applied to finished parts without reservations, as behaviour is influenced by processing and shaping.

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