



MANUFACTURERS OF  
**ELECTRICAL INSULATION MATERIALS**  
 INSULATING COMPONENTS FOR  
**POWER SYSTEMS EQUIPMENT**

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## MATERIAL DATA SHEET

**Item:** C-109 Semi-Conductive Glass Reinforced Laminate

**Description:** C-109 is a semi-conductive glass reinforced laminate that is utilized as a side-pack, side insulation in the stator slots of larger rotating apparatus. As a semi-conductive material, C-109 provides a pathway to dissipate partial discharge, static charges, flashovers, and therefore preventing the damaging effects of corona discharge.

**Standards:** NEMALI-1 Not Applicable  
 IEC60893 Not Applicable

**Availability:** English units SI Units  
 Laminate Sheets: Thickness: 0.01"–.25" 0.25mm–6.35mm  
 Sheet Sizes: 37"x73" 94cmx185cm

**Fabricated Parts:** The Gund Company custom fabricates insulation materials to the exact specifications and drawings of our customers.

Key Characteristics:	Test Method	Units - English (SI)	Typical Values
Standard Color			Black
Density		lbs/in <sup>3</sup> (g/cc)	0.054(1.6)
Water Absorption(1/8" thick)	ASTMD-570	%	0.5
Tensile Strength	ASTMD-638	psi(MPa)	15,000(103)
Compressive Strength	ASTMD-695	psi(MPa)	49,000(338)
Flexural Strength (Lengthwise)	ASTMD-790	psi(MPa)	30,000(207)
(Crosswise)			33,000(228)
Shear Strength	ASTMD-732	psi(MPa)	15,000(103)
Thermal Class			Class H-180°C
Impact Strength IZOD(notched)	ASTMD-256 (method A)	ft-lbs/in	12
Bond Strength	ASTMD-229	lbf.(N)	850(3780)
Surface Resistivity	ASTMD-257	Ohms/square	500 to 50,000

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