



THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

C-109 Semi-Conductive

Item:	Grade C-109: Semi-Conductive Glass Reinforced Laminate			
Description:	C-109 is a semi-conductive glass reinforced laminate that is typically utilized as middle or bottom filler insulation in the stator slots of large rotating apparatus. As a semi-conductive material, C-109 provides a pathway to dissipate partial discharge, static charges and flashovers to prevent the damaging effects of corona discharge.			
Availability:	Laminate Sheets:		English Units (in)	SI Units (mm)
		Thickness:	0.020 to 0.5	0.5 to 9.52
		Sheet Size:	36 x 72	914 x 1828
	Fabricated Parts:	The Gund Company custom fabricates insulation materials to the exact specifications and drawings specified by our customers.		

Key Characteristics	Test Method	Units - English (SI)	Typical Values	
Standard Color	--	--	Black	
Density	--	lbs./in ³ (g/cc)	0.054 (1.6)	
Water Absorption (0.125")	ASTM D-570	%	0.5	
Tensile Strength	ASTM D-638	psi (MPa)	16,500 (114)	
Compressive Strength	ASTM D-695	psi (MPa)	42,000 (290)	
Flexural Strength	ASTM D-790	psi (MPa)	Lengthwise	30,000 (207)
			Crosswise	33,000 (228)
Shear Strength	ASTM D-732	psi (MPa)	17,000 (117)	
Relative Temperature Index ¹	UL 746B	°C	180	
IZOD Impact Strength, Notched	ASTM D-256	ft-lbs/in	14	
Bond Strength	ASTM D-229	lb (kg)	850 (386)	
Surface Resistivity	ASTM D-257	Ohms/Square	500-50,000	

¹ Flexural Strength tested for determining mechanical RTI

Data supplied above are typical values and are not to be considered specification values. All of the information, suggestions and recommendations pertaining to the properties and uses of the products herein are based upon tests and data believed to be accurate; however, the final determination regarding suitability of any material described herein for the contemplated application, the manner of such use, and whether the use infringes any patents is the sole responsibility of the user. There is no warranty, expressed or implied, including, without limitation warranty of merchantability or fitness for a particular purpose. Under no circumstances shall we be liable for incidental or consequential loss or damage.