



# THE GUND COMPANY

Manufacturers & fabricators of engineered material solutions

Item:	Grade C-109/C-209: Semi-Conductive Glass Reinforced Laminate				
Description:	C-109/C-209 are semi-conductive glass reinforced laminates that are utilized as side-pack, side insulation in the stator slots of large rotating apparatus. As semi-conductive materials, C-109 and C-209 provide a pathway to dissipate partial discharge, static charges and flashovers to prevent the damaging effects of corona discharge.				
Availability:		C-109		C-209	
		English Units (in)	SI Units (mm)	English Units (in)	SI Units (mm)
	Thickness:	0.020 to 0.5	0.5 to 9.52	0.008 to 0.5	0.2 to 12.7
	Sheet Size:	36 x 72	914 x 1828	39 x 78	1000 x 1,981
Fabricated Parts:	The Gund Company custom fabricates insulation material to the exact specifications and drawings of our customers				

Key Characteristics	Test Method	Units - English (SI)	Typical Values	
			C-109	C-209
Standard Color	--	--	Black	Black
Density	--	lb/in <sup>3</sup> (g/cc)	0.054 (1.6)	0.033 (1.045)
Water Absorption (0.125")	ASTM D-570	%	0.5	0.58
Tensile Strength	ASTM D-638	psi (MPa)	16,500 (114)	35,000 (214)
Compressive Strength	ASTM D-695	psi (MPa)	42,000 (290)	58,000 (400)
Flexural Strength Length-Wise Cross-Wise	ASTM D-790	psi (MPa)	30,000 (207)	57,000 (393)
			33,000 (228)	80,000 (550)
Shear Strength	ASTM D-732	psi (MPa)	17,000 (117)	21,000 (144)
Relative Temperature Index <sup>1</sup>	UL 746E	°C	180	180
IZOD Impact Strength, Notched	ASTM D-256	ft-lbs/in	14	LW: 13 CW: 8.5
Bond Strength	ASTM D-229	lb (kg)	850 (386)	920 (417)
Surface Resistivity	ASTM D-257	Ohms/Square	500-50,000	500-50,000

<sup>1</sup> Flexural Strength tested for determining mechanical RTI