



## ISO 9001: 2015 - QUALITY ASSURANCE

Distributor & Fabricator of Engineered Plastics & Electrical Insulation Products

# NEMA GRADE C/CE

Property Profile NEMA GRADE	Dimension	C	CE
Military Specifications		P-15035	P-15035
Military Type		FBM	FBG
Base Material Glass Cloth		Fabric	Fabric
Colour Green		Natural	Natural
Resin		Phenolic	Phenolic
<b>Physical Properties</b>			
Density	#/cu.in.	.051	.049
Water Absorption (1/8"thk)	%	1.5	1.1
Hardness	R"M"	100	105
Tensile Strength – with grain	PSI	11,000	13,000
Compressive Strength - Flatwise	PSI	40,000	39,000
Flexural – Flatwise with grain	PSI	19,000	22,000
Bonding Strength (1/2" thick)	#	2,200	1,900
<b>Electrical Properties</b>			
Impact – IZOD edgewise with grain	Ft.lb./in.	2.5	2.0
Shear – Flatwise (1/8" thick)	PSI	11,000	10,000
Dielectric Strength – perpendicular (Tested in transformer oil, 23° C)	VPM Short time	150	200
Dissipation Factor	10 <sup>6</sup> cycles/sec	-	-
Dielectric Constant	10 <sup>6</sup> cycles/sec	-	-
Volume Resistivity	Megaohms-cm	-	-
Surface Resistivity	Megaohms	-	-
Arc Resistance	Seconds	-	-
Operating Temperature	Degrees C.	150	130
Operating Temperature	Degrees F.	302	266
: Test Samples 1/8" thick laminate			
: Test Methods			
Impact Strength		D732 – condition E – 48/50	
Arc Resistance		D495 – condition A	
All others		D229	

These are average properties with periodic monitoring by NEMA. However, the final determination as to the suitability of this product for any use contemplated 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 GRT Genesis be liable for incidental or consequential damage.

Values are based on typical Test Methods and Conditions and published for Reference purposes only