



ISO 9001: 2015 - QUALITY ASSURANCE

Distributor & Fabricator of Engineered Plastics & Electrical Insulation Products

NEMA G10/FR4

Property Profile

GRT Genesis' G10-FR4 has good machining and punching qualities, high flexural, impact and bond strength at room temperatures; good electrical properties under dry and humid conditions; should not be used under mechanical load at elevated temperatures. This is self-extinguishing with excellent impact and bond strength at elevated temperatures. Conforms to MIL-p-18177 type GEE.

Colour			Green
Base Material			Glass Cloth
Thickness Range			.010" – 8.00"
Compressive Strength	(lb./sq.in)	(1/2 face)	85,000
Flexural Strength	(lb./sq.in)	(1/16" face-lengthwise)	71,000
Flexural Strength	(lb./sq.in)	(1/16" face-crosswise)	60,000
IZOD Impact	(ft.lb./in.notch)	(1/16" build-up edgewise)	9.6
Bonding Strength	(1/2" thick)		2,600 lbs.
Rockwell Hardness M Scale			130
Mechanical-temperature index			140° C
Electrical-temperature index			130° C
Dielectric Strength	(V/Mil)	(1/8" sample at 230° C)	550
Dielectric Constant	(10 ⁶ cycles/sec.)		5
Dissipation Factor	(10 ⁶ cycles/sec.)		.020
Volume Resistivity	Megahm-CM		6 x 10 ⁶
Surface Resistivity	Megahm		1 x 10 ⁶
Arc Resistance	seconds		100

Test Methods

Impact Strength	D732
Arc Resistance	D495
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