



**Convolute Rolled Tube Composites Cross Reference for  
N-M Grades – ASTM & NEMA Standards – Military Specification &  
International Electrotechnical Commission (IEC) Standards**

<b>Norplex-Micarta Grade</b>	<b>ASTM D709 - NEMA LI-1-1998</b>	<b>Military - MIL-I- 24768 / "Sheet" – "Type"</b>	<b>International Electrotechnical Commission <sup>1</sup> IEC 61212-3-1 "Type"</b>
RT130, RT130M, RT130X	FR-4	/ 27, Type GEE-F	EP GC 23
RT504, RT504F	G-3 <sup>2</sup>	/ 18, Type GPG	PF GC 21
RT505, RT505F	G-5	/ 8, Type GMG	---
RT507, RT507F, RT507L	G-7	/ 17, Type GSG	SI GC 21
RT509, RT509F	G-9	/ 1, Type GME	MF GC 21
RT500, RT500F, RT500M, RT500X, RT520M, RT520X, RT521M, RT521X RT571	G-10	/ 2, Type GEE	EP GC 21
RT511, RT511F, RT511M	G-10 <sup>3</sup>	/ 2, Type GEE	EP GC 22
RT310, RT342	C	/ 16, Type FBM	PF CC 22
RTB320	LE	/ 13, Type FBE	PF CC 21
RTB320X, RTB320Z	LE	/ 13, Type FBE <sup>4</sup>	PF CC 21
RT610	X	/ 12, Type PBM	PF CP 21
RT628, RT629	XX	/ 11, Type PBG	PF CP 23
RT630	XXX	/ 10, Type PBE	PF CP 24

<sup>1</sup> Compliance to the IEC Specifications is being evaluated. Certification cannot be made at this time.

<sup>2</sup> Although G-3 tubing grades are recognized by NEMA, ASTM and MIL-I-24768 standards as a material form, property requirements are undefined at this time.

<sup>3</sup> NEMA Standard LI-1 and MIL-I-24768 do not recognize a high temperature epoxy glass convolute rolled tube form, but, these materials are manufactured with a high temperature epoxy resin system, commonly used for NEMA G-11 and MIL-I-24768/27, type GEB sheet products, and do have improved thermal properties at elevated temperatures.

<sup>4</sup> Also complies with Federal Specification WW-L-2887, FBEFW Type