

Sheet Ground Rods

Sheet Ground Rods are turned from bars of material from already cured sheets. When looking at a cross section, laminations are parallel. Generally, properties of sheet ground rods conform to the grade of sheet stock from which they are cut. In comparison to Rolled and Molded Rods which are produced from prepreg that has been wound around a mandrel, placed in cylindrical molds, mandrel removed and then cured under high temperature and pressure. There is no industry standard for sheet ground rods. If you require rods to an industry standard, please consider our line of rolled and molded rods.

Norplex-Micarta Offers Sheet Ground Rods

Property Comparison - Effect of Orientation on Properties*

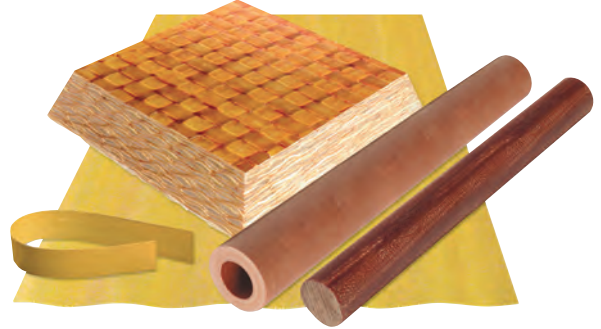
Test Description	ASTM Method	Units	Orientation	
			Sheet Ground Rod	Rolled & Molded Rod
Flexural Modulus % Difference Orientation	D349 Condition A	%	4.9	1.7
Flatwise Flexural Strength	D349 Condition A	psi	14,473	18,969
Edgewise Flexural Strength	D349 Condition A	psi	15,979	17,713
Axial Tensile Strength	D349 Condition A	psi	5,778	11,910

* Actual test results from same material and diameter of sheet ground and rolled and molded type rods. Values for demonstration only, not typical or speculation values.

No industry standard exists for sheet ground rods. Diameter tolerances are the same as rolled and molded rods. No other tolerances have been established. No certificate of analysis is available. CoC will be of a commercial type and will reference the underlying sheet standard.

Innovation backed by over 100 years of experience

Norplex-Micarta produces thermoset composite prepregs, sheets, and shapes from facilities in North America and China. Utilizing several different resin systems on nearly limitless different reinforcements, we offer to industry unrivaled repeatability, scalability, and affordability. From demanding high voltage equipment, to the cold of space, to the pressure of oil and gas exploration in the depths of the earth and nearly everywhere in between, thermoset composites can be engineered to your specific requirements.



Resin Systems

melamine

Arc Resistant, Self-extinguishing, Excellent electrical properties, Colorless, Better hardness than phenolic

phenolic

Good chemical and thermal resistance, Inherently low in flammability, Low cost

epoxy

Excellent electrical insulation, Good chemical resistance, Predictable thermal response

Reinforcements

fiberglass

Highest Strength, Excellent flammability, Lowest moisture absorption, Excellent insulation

cotton

Will not cold flow, Better mechanical properties than paper, Easy to machine, Good heat resistance, Low water absorption

paper

Easily machined or punched, Good electrical insulator, Low Cost

ElectroLAM[™] Composite Materials for a range of electrical devices and applications

Norplex-Micarta ElectroLAM[™] materials are designed and engineered thermoset composites for electrical applications and devices throughout a wide scope of industries. The power generation industry relies on high temperature laminates, prepregs and specialty molded shapes that can endure extreme heat and mechanical conditions. For electrical transmission and distribution equipment such as control devices and power transformers, ElectroLAM[™] materials are fully insulative, fully conductive, or semi conductive in order to create static dissipative products. In medical and scientific devices, critical imaging and other equipment utilizes rigid high-performance insulation. And in rail and mass transit applications, ElectroLAM[™] composites provide electrical insulation for motor mounts and surrounding electrical equipment.