

Thermal & Electrical Insulation Material Distributor

Natural

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NEMA G3 - Industrial Laminate

Composition: Sheet Sizes: Color:

A mechanical grade of glass cloth laminate impregnated and cured with phenolic resin. Sheet sizes of 36"x48", 48"x48", 48"x96" and 48"x108" in thicknesses: .031" to 5"

Cut and fabricated to shape.

Advantages:

NEMA G3 has high mechanical strength with excellent electrical properties and has a low water absorption rate. It has high heat resistance and high impact resistance. It is used in structural applications such as seals and gaskets.

Specifications:

Density $121 \text{ lbs/ft}^3 - 0.70 \text{ lbs/in}^3$

Maximum operating temperature electrical 284°F (140°C)

mechanical 338°F (170°C)
Water absorption 0.8%

Hardness (Rockwell M)

Compression strength

Tensile strength

Flexural strength

Jayout edgewise with grain

11.0 ft-lb/in

Impact strength – Izod edgewise with grain 11.0 ft-lb/in Dielectric strength 400 volts/mil

Dielectric constant (@10⁶ cycles per second) 7.3

Volume resistivity 1.3×10^4 megohm-cm

Arc resistance

Surface resistivity $4.6 \times 10^4 \text{ megohms}$

Parallel dielectric 50kv