

## Thermal & Electrical Insulation Material Distributor

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## NEMA G5 - Industrial Laminate

Composition: Sheet Sizes: Color:

An electrical/mechanical grade of glass cloth laminate impregnated and cured with melamine resin.

Sheet sizes of 36"x48", 36"x72", Gray 48"x48", 48"x96" and 48"x108" in thicknesses: .031" to 4"

Cut and fabricated to shape.

## **Advantages:**

NEMA G5 has high mechanical strength and excellent electrical properties under dry conditions. It has high arc and heat resistance and is self extinguishing. It is used in the electrical industry in switch board panels, arc barriers, circuit breakers and as structural electrical parts.

## **Specifications:**

Density  $124 \, \text{lbs/ft}^3 - 0.72 \, \text{lbs/in}^3$ 

Maximum operating temperature electrical Not recommended at elevated temperatures

mechanical 310°F (140°C)

Water absorption 0.4%
Hardness (Rockwell M) 115

Compression strength 65,000 psi
Tensile strength 40,000 psi
Flexural strength 50,000 psi
Impact strength – Izod edgewise with grain 10.0 ft-lb/in

Impact strength – 1zod edgewise with grain 10.0 ft-lb/in 200 volts/mil Dielectric strength 300 volts/mil Dielectric constant (@106 cycles per second) 6.3

Dielectric constant (@10<sup>6</sup> cycles per second)

Volume resistivity

6.3

6 x 10<sup>7</sup> megohm-c

Volume resistivity 6 x 10<sup>7</sup> megohm-cm Arc resistance 180 sec

Surface resistivity 6 x 106 megohms

Parallel dielectric 50kv