

# GLASS EPOXY G-10

## Glass-Reinforced Epoxy Laminate (NEMA G-10)

Engineered glass-epoxy laminate. Made to perform, machined to spec.

Glass-fiber reinforced epoxy laminate combines woven E-glass cloth with an epoxy resin binder, producing a dimensionally stable composite with high mechanical strength, excellent dielectric properties, and broad chemical resistance. It machines cleanly with carbide tooling and is the workhorse insulator for printed-circuit substrates, tooling jigs, and structural electrical hardware.

GENERAL	
Specific gravity	1.8
Flammability rating	94HB
Water absorption 24 hours	0.11

MECHANICAL	
Tensile strength	40,000 psi 275 MPa
Compressive strength	65,000 psi 445 MPa
Flexural strength LW -A 0.125"	75,000 psi 515 MPa
Bond strength	2,200 psi 15 MPa
Shear strength	19,000 psi 130 MPa
Hardness M scale	110
Izod impact strength at 49°C LW	14.00

NEMA LI 1 – G-10/FR-4 GRADE LAMINATES

MIL-I-24768/2

ROHS / REACH

### APPLICATIONS

- Insulators
- Jigs and other fixtures
- Printed circuit boards
- Medical diagnosis equipment
- Test boards
- Rocket cases

### STANDARD COLORS

Natural / Black Opaque

### OPERATING ENVIRONMENT

Maximum temperature **140 °C**  
280 °F