

GLASS EPOXY FR-5

Flame-Retardant Glass-Reinforced Epoxy Laminate (NEMA FR-5)

Flame-retardant glass-epoxy with the strength to back it up.

Flame-retardant glass-fiber reinforced epoxy laminate built on a woven E-glass cloth and an FR-modified epoxy binder. It delivers the same high mechanical and dielectric strength as standard glass-epoxy laminate while meeting UL 94V-0 flammability requirements, making it the default substrate for safety-critical electrical and electronic hardware.

GENERAL	
Specific gravity	1.82
Flammability rating	94HB
Water absorption over 24 hours	0.20

MECHANICAL	
Tensile strength	63,000 psi 430 MPa
Flexural strength LW -A 0.125"	75,000 psi 515 MPa
Shear strength	22,000 psi 150 MPa
Bond strength	2,200 psi 15 MPa
Hardness Mohs Scale	112
Izod impact strength 49 degrees Celsius -LW	12.00

NEMA LI 1 – FR-4 / FR-5

MIL-I-24768/27 (FR-4)

UL 94V-0

ROHS / REACH

APPLICATIONS

- Sealing and gasket components
- Static electrical and induction system insulators
- Heating elements
- Rocket cases
- Cryogenic insulation
- Circuit board holders

STANDARD COLORS

Natural / Black Opaque

OPERATING ENVIRONMENT

Maximum operating temperature **180 °C**
355 °F