



Version: 1.0

Presspahn Limited
 Wharnccliffe Works
 Harrogate Road
 Bradford
 BD2 3TB
 Tel: +44 (0) 1274 636333
 Fax: +44 (0) 1274 626024

Epoxy Glass FR4 - Technical Data Bulletin (NP130)

Grade: NP130

Nema Grade: FR-4

UL Listed: Yes

Description: NP130 is a woven glass fabric combined with halogenated epoxy resin system. NP130 is produced to printed circuit board quality standards. It is flame retardant, meets UL-94 flammability classification V-0. NP 130 meets the requirements of MIL-I-24768/27, Type GEE-F

Thickness tested: 0.0620", 0.125" & 0.500"

General Physical Properties	Units	Value
Specific Gravity	-	1.8
Rockwell Hardness (0.062")	M Scale	110
Moisture Absorption (0.062")	%	0.1
Flexural Strength LW (0.062") CW	Psi	70,000 60,000
Tensile Strength LW (0.125") CW	Psi	45,000 38,000
Izod impact strength LW (E-48/50 – 0.500") CW	ft-lb/in notched	14.0 12.0
Compressive Strength flatwise (0.500")	Psi	55000
Bonding Strength (0.500")	Lb	2200
Shear Strength (Perpendicular) (0.062")	Psi	22000

Thermal & Electrical Properties	Units	Value
Temperature Index (electrical/mechanical)	°C	130/140 ¹
Coefficient of Thermal Expansion X-axis (0.062") Y-axis	"/°C●10 ⁻⁶	10.0 12.0
Flammability Rating UL94	Class	V-0
Breakdown Voltage Condition A (0.062") D-48/50	KV	65 54
Electric Strength Condition A (0.062") D-48/50	V/mil	800 750
Permittivity (0.062") Condition D-24/23	-	4.8
Dissipation Factor (0.062") Condition D-24/23	-	0.03
Arc Resistance (0.125") D-495	Sec	100
Comparative Tracking Index (0.125") D3638	-	150
T _g	°C	127

¹ NEMA LI-6: This temperature is a recommendation only and based upon experience in various applications. The maximum operating temperature is dependent upon the application and should be investigated prior to use.

The information contained in this leaflet has been prepared with care and is accurate to the knowledge of Presspahn Limited. The Company does not accept any liability either in respect of the contents or arising from the use of this information. Typical properties are given in this brochure and these must not be taken as minimum standard values.