



Global Thermoset Composite Solutions

Sheet Products - Property Comparison

			NP615	NP634	NP900
			Paper Surface - NP612 Core	Glass Fabric & Cellulosic Paper	Rubber & Cellulosic Paper
			Melamine	Phenolic	Phenolic
PHYSICAL PROPERTIES					
Specific Gravity (0.500")		-	1.41	Varies with thickness	--
Rockwell Hardness (0.250" Build-up)		M Scale	89	108	--
Moisture Absorption (0.062")	Condition D ₁ -24/23	%	3.00	0.72	--
Flexural Strength (0.062")	Condition A Lengthwise / Crosswise	psi	20,000 / 14,000	51,600 / 44,600	-- / --
	Condition E-1/150 T150 Lengthwise / Crosswise		-- / --	-- / --	-- / --
Flexural Modulus (0.062")	Lengthwise / Crosswise	kpsi	1,200 / 1,000	1,800 / 1,500	-- / --
Tensile Strength (0.125")	Lengthwise / Crosswise	psi	12,500 / 8,400	23,900 / 20,100	-- / --
Izod Impact Strength (0.500")	Condition E-48/50 Lengthwise / Crosswise	ft-lb/in (notched)	0.59 / 0.57	3.34 / 2.24	-- / --
Compressive Strength (0.500")	Flatwise	psi	18,000	41,500	--
Bonding Strength (0.500")	Condition A	lb	1,400	1,500	--
	Condition D-48/50		--	--	--
Shear Strength (0.062")	Perpendicular	psi	11,800	14,000	--
THERMAL PROPERTIES					
Temperature Index ¹	Electrical / Mechanical	°C	120 / 120	125 / 125	-- / --
Coefficient of Thermal Expansion (0.125")	X-axis / Y-axis	"/"°Cx10 ⁻⁶	-- / --	13.0 / 15.0	-- / --
Flammability Rating U.L. 94 (0.062")	Condition A	Class	HB	HB	--
ELECTRICAL PROPERTIES					
Dissipation Factor (0.062")	Condition D ₁ -24/23	-	0.096	0.037	--
Permittivity (0.062")	Condition D ₁ -24/23	-	6.49	5.20	--
Breakdown Voltage (0.062")	Condition A	kV	55	53	--
	Condition D-48/50		10	7	--
Electric Strength (0.062")	Condition A	V/mil	700	600	--
	Condition D-48/50		--	550	--
Arc Resistance D495 (0.125")	Condition A	sec	110	120	--
Comparative Tracking Index D3638 (0.125")		V	--	200	--

NOTE a: A double dash (--) indicates that the value has not been determined or is not applicable to the product.

NOTE b: All testing per ASTM D348 unless otherwise noted.

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