

Grade XX Paper Phenolic

Grade XX Paper Phenolic is a paper based high-pressure laminate. It is intended primarily for mechanical applications and is suitable for electrical applications as well. It is designated by MIL-I-24768/21 Type PBG-P and the NEMA grade is XXP.

Property	Units	Grade XX Paper Phenolic
Physical		
Specific Gravity	-	1.35
Moisture Absorption (.062")	%	2.0
Mechanical		
Rockwell Hardness (.062")	M Scale	95
Flexural Strength (.062") LW	psi	22,000
CW	psi	17,000
Tensile Strength (.125") LW	psi	13,500
CW	psi	11,500
Izod Impact Strength E-48/50 (.500") LW	ft-lb/in	.50
CW	ft-lb/in	.40
Compressive Strength flatwise (.500")	psi	25,000
Bond Strength (.500")	lbs	900
Shear Strength (perpendicular) (.062")	psi	11,500
Thermal		
Maximum Operating Temperature	°F	266
Flammability Rating - U. L. 94		HB
Electrical		
Permittivity (.062") Condition D-24/23	-	6.2
Dissipation Factor (.062") Condition D-24/23	-	.052
Breakdown Voltage Condition - A (.062") D-48/50	V	40,000
		5,000

LW – Length Wise of the sheet, direction of manufacturing

CW – Cross Wise, perpendicular to Length Wise

NOTE: The information contained herein are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. Contact us for manufacturers' complete material property datasheets. All values at 73°F (23°C) unless otherwise noted.