

## Redco™ INDUSTRIAL LAMINATES

## **METRIC**

NEMA GRADE MICARTA ® GRADE	UNITS	ASTM	XXX 254	LE 221	CE 51F33	400	G-5 259-2	G-9 H12426	G-10 H22033
BASE MATERIAL			Paper	Fine Weave Fabric	Medium Weave Fabric	Medium Weave Fabric	Glass Cloth	Glass Cloth	Glass Cloth
RESIN			Phenolic	Phenolic	Phenolic	Phenolic	Melamine	Melamine	Ероху
COLOUR			Tan	Tan	Natural	Black	Grey	Grey	Green
DENSITY	lbs/in3 (g/cm3)		0.049 (1.36)	0.048 (1.33)	0.05 (1.38)	0.051 (1.41)	0.074 (2.04)	0.074 (2.04)	0.067 (1.85)
WATER ABSORPTION (1/8" thick)	percent	D229	0.4	0.7	1.1	1.1	0.4	0.2	0.05
HARDNESS	Rockwell "M"	D229	110	100	105	109	115	120	115
TENSILE (with grain)	PSI (MPa)	D229	15000 (103)	14000 (96)	13000 (90)	13000 (90)	40000 (276)	45000 (310)	50000 (345)
COMPRESSIVE (flatwise)	PSI (MPa)	D229	36000 (248)	38000 (262)	37000 (255)	45000 (310)	65000 (448)	65000 (448)	50000 (345)
FLEXURAL (flatwise with grain) (1/8" thick)	PSI (MPa)	D229	20000 (137)	22000 (151)	19000 (131)	21000 (144)	50000 (345)	55000 (380)	60000 (413)
BONDING STRENGTH (1/2" thick)	lb (kg)	D229	1200 (545.5)	1800 (818.2)	2000 (909.1)	2200 (1000)	1800 (818.2)	2300 (1045.5)	2600 (1181.8)
IMPACT STRENGTH (Izod. Edgewise with grain)	ft-lb/in. notch (J/m of notch)	D732	0.5 (27)	1.5 (81)	1.8 (97)	1.7 (92)	10 (540)	13 (702)	10 (540)
SHEAR (flatwise) (1/8" thick)	PSI (MPa)	D229	7000 (48)	11000 (76)	10000 (70)	15000 (103)	30000 (207)	-	-
DIELECTRIC STRENGTH (perpen- dicular) (1/8" thick)	vpm (short time)	D229	600	350	200		300	-	550
DISSIPATION FACTOR (at 106cycles/sec)		D229	0.037	0.040	-	-	0.019	0.018	0.020
DIELECTRIC CONSTANT (at 106cycles/sec)		D229	5.2	5.1	-	-	6.3*	7.2	5.0
VOLUME RESISTIVITY	megohm-cm	D229	3 x 10 7	7 x 10 4	-	-	6 x 10 7	1.5 x 10 7	6 x 10 6
SURFACE RESISTIV- ITY	megohms	D229	7 x 10 5	6 x 10 4	-	-	6 x 10 6	1,5 x 10 7	1 x 10 6
ARC RESISTANCE	seconds	D495	-	-	-	-	180	180	100