

Polycarbonate

Polycarbonate is used in industrial applications to divide between spaces without impairing visibility. This material is shatter-proof and impact resistant.

Part numbers

ST-PN-004-0001

Finish

Gloss (with protective film)

Colors Available

Clear



Material Specifications

		Test Method	Metric		Imperial	
THERMAL	Coefficient of Thermal Expansion	D 696	µm/(m.K)	67.50	µin./in.°F	37.50
	Coefficient of Thermal Conductivity	C 177	W/(m.K)	0.195	BTU in./(hr.ft².°F)	1.35
	Heat Deflection Temperature @ 264 psi	D 648	°C	132.2222222	°F	270
	Heat Deflection Temperature @ 66 psi	D 648	°C	137.7777778	°F	280
	Brittleness Temperature	D 746	°C	-128.8888889	°F	-200
	Shading Coefficient, clear @ 0.236"	NFRC 100-2010			-	0.97
	U factor @ 0.236" (summer, winter)	NFRC 100-2010	W/m2K	4.83, 5.22	BTU in./(hr.ft².°F)	0.85,0.92
	U factor @ 0.375" (summer, winter)	NFRC 100-2010	W/m2K	4.43,4.83	BTU in./(hr.ft².°F)	0.78,0.85
MECHANICAL	Tensile strength, Ultimate	D 638	MPa	65.5	PSI	9500
	Tensile strength, Yield	D 638	MPa	62.1	PSI	9000
	Tensile modulus of elasticity	D 638	MPa	2344.2	PSI	340000
	Elongation at yield	D 638			%	110
	Flexural strength	D 790	MPa	93.1	PSI	13500
	Flexural modulus of elasticity	D 790	MPa	2378.7	PSI	345000
	Compressive strength	D 695	MPa	86.2	PSI	12500
	Compressive modulus	D 695	MPa	2378.7	PSI	345000
	Shear Strength, Ultimate	D 732	MPa	68.9	PSI	10000
	Shear Strength, Yield	D 732	MPa	41.4	PSI	6000
	Shear Modulus	D 732	MPa	786.0	PSI	114000
	Izod Impact unnotched	D 256	J/cm	32	ft-lbs/in	60 (no break)
	Izod Impact notched	D 256	J/cm	9.6	ft-lbs/in	18
	Instrumented Impact @ 0.125"	D 3763	J	64	ft-lbs	47
Rockwell Hardness	D 785			-	M70/R118	
ELECTRICAL	Dielectric constant at 10 Hz	D 150			-	2.96
	Dielectric constant at 60 Hz	D 150			-	3.17
	Volume resistivity	D 257	Ohm-in	3.22835E+16	Ohm-cm	8.20E+16
	Dissipation Factor @ 60 Hz	D 150			-	0.0009
	Dielectric Strength, in air @ 0.125"	D 149	kV/cm	149.6	V/mil	380
OTHER	Refractive Index	D 542			-	1.586
	Light Transmission, Clear @ 0.118"	D 1003			%	86
	Poisson's Ratio	D 132			-	0.38