



MATERIAL SPECIFICATION

PHYSICAL PROPERTIES

	METRIC	IMPERIAL	COMMENT
Density	1.20g/cc	0.0434lb/in	ISO 1183
Water Absorption	0,2%	0,2%	in water, 23 C' 24h; ISO 62
Linear Mold Shrinkage	0.0050-0.0070cm/cm at thickness 4.00mm	0.0050-0.0070cm/cm at thickness 0.157in	
Linear Mold Shrinkage Transverse	0.0050-0.0070cm/cm at thickness 4.00mm	0.0050-0.0070cm/cm at thickness 0.157in	
Melt Flow	8.4g/10min @load 1.2kg. Temperature 300C'	8.4g/10min @load 2.65lb. Temperature 572C'	ISO 1133

MECHANICAL PROPERTIES

	METRIC	IMPERIAL	COMMENT
Tensile Strength, Yield	62.0 Mpa	8990Psi	50mm/min; ISO 527
Elongation at Break	>=50%	>=50%	50mm/min; ISO 527
Tensile at Yield	6,00%	6,00%	50mm/min; ISO 527
Tensile Modulus	2.4GPa	348Psi	1mm/min; ISO 527
Flexural Strength	93.0MPa	13500Psi	2mm/min; ISO 178
Flexural Modulus	2.35Gpa	341Ksi	2mm/min; ISO 178
Charpy Impact Unnotched	N/B	N/B	ISO179
Charpy Impact Notched	7.60j/cm ²	36.2ft-ib/in ²	ISO179

OPTICAL PROPERTIES

	METRIC	IMPERIAL	COMMENT
Refractive Index	1,585	1,585	ASTM D542
Transmission, Visible	88% at Thickness 3.00mm	88% at Thickness 0.118in	ASDM D1003

THERMAL PROPERTIES

	METRIC	IMPERIAL
Coefficient of Linear thermal Expansion, Parallel 23 to 55 C'	0.065mm/m'c	0.00256in/m'c
Thermal conductivity	0.2W/mk	0.2W/mk
Heat deflection temperature	127C'	260.6F'
Under load	139C'	282.2F'

LIGHT TRANSMITTANCE (ASTM D 1003)

THICKNESS	CLEAR	WHITE	DIFFUSER	GREEN	BLUE	FUME	BRONZE
1.5 mm	0.060"	88					
2 mm	0.080"	88	30				20/50
3 mm	0.118"	87	30/60	50	17.5		20/50
4 mm	0.157"	87	30		42		20/50
5 mm	0.196"	86	25		42	7	16/50
6 mm	0.236"	85	25		42	8	16
7 mm	0.275"		20				
8 mm	0.315"	84	20				14.5/50
9 mm	0.354"		13.5				
10 mm	0.393"	82	15		32		14.5
12 mm	0.472"	81			32		50
15 mm	0.590"	79					

PRODUCT APPLICATION

- Roofing for industry building
- Architectural construction
- Field Barriers for Stadiums, Gymnasiums
- Skylight for constructions, swimming pools, shopping malls and airports
- Wind shields of motor veichles and helmet
- Sound barriers on higway and railways
- Police shields and security protections
- Sneeze Guards and Separations.

SIZE

Max. Width : 82.67" / 2,100 mm

Width Tolerance : 0.004" / 0.1mm

Standard Length : 48" / 2440 mm

Length Tolerance : 0; 0.197" / 0; +5 mm

THICKNESS & OVERALL THICKNESS TOLERANCE

THICKNESS	OVERALL THICKNESS	WEIGHT (MIN) G/M ²	MASS TOLERANCE PER UNIT AREA
1-30mm	Within ASTM standards. Factory target: +/- 0.008" or 0.20 mm	1,2	-/+3%

ACOUSTIC VALUE

THICKNESS	SOUND REDUCTION (dB)
8mm	28
12mm	31