

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	8,990Psi	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	13,500Psi	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'

COLOURS AND TRANSMITTANCE (ASTM D 1003)

THICKNESS	CLEAR	WHITE	DIFFUSER	BRONZE	BLUE	GREEN	TURQUOISE	GREY
4	79	20	-	30	38	30	30	9
5	77.5	19	-	26.5	36.5	28.5	29	8.25
6	75	18	51	23	35	27	28	7.5

SIZE

Max. Width : 2,100mm

Width Tolerance : 0.1mm

Length Tolerance : 0; +5mm

THICKNESS & OVERALL THICKNESS TOLERANCE

THICKNESS	OVERALL THICKNESS	WEIGHT G/M ²	MASS TOLERANCE PER UNIT AREA
4		800	
5	-/+0.10MM	1,100	-/+1%
6		1,300	
8		1,500	

BENDING

THICKNESS	MIN. BEND RADIUS
4	700
5	800
6	900
8	1,100

ACOUSTIC VALUE

THICKNESS	SOUND REDUCTION	COMMENT
4	12	
5	13	EN ISO 10140 & EN ISO 717-1
6	14	
8	16	

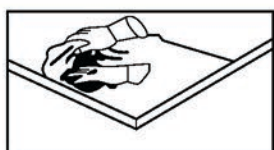
THERMAL TRANSMITTANCE & THERMAL RESISTANCE

THICKNESS	U-VALUE	R[(M2.K)/W]
4	3.77W/m2.K	0.1
5	3.55W/m2.K	0.115
6	3.33W/m2.K	0.13
8	3.05W/m2.k	0.016

POLYCARBONATE TWINWALL SHEETS
CAN BE PRODUCED WITH CLOSED EDGES
ON BOTH SIDE FOR THE WIDTH OF
1220MM AND 2100MM

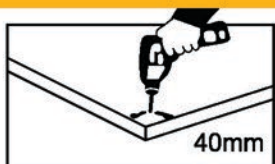
INSTALLATION INSTRUCTION

THIS SIDE UP



UV protection coating is on the side of printed packing film. Installed the UV protection side up and removed all packing film immediately after installation.

CUTTING



Use an electric on fine tooth saw only for cutting. To prevent rough cutting and safety matter, the sheet must be properly supported before cutting.

DRILLING



All holes must be drilled at least 40mm from the edge of sheet. Consider to the expansion, hole must be drilled approximately 3mm larger than the fixing screw.

KEEP AWAY



Keep the sheet away from incompatible chemical, concrete and oil which may cause the sheet damaged.