

## ASTM PROPERTY

<b>PLAGLAS®</b>	PRODUCT	Polycarbonate Light Diffusion Sheet / Roll
	GRADE	PC-WHT

The purpose of making the diffusion board is to minimize this loss and get most function out of it.

Properties	Test method	Condotion	Unit	Value
PHYSICAL PROPERTIES				
Specific gravity	ASTM D792	Natural	—	1.2
Water absorption	ASTM D570	23℃,24hr	%	0.58
OPTICAL PROPERTIES				
Light Transmittance	ASTM D1003	3mm	%	55
HAZE	ASTM D1003	—	%	99
Total Luminous Transmittance	ISO 13468-1	3mm	%	45
Light diffusivity	—	3mm	%	55
MECHANICAL PROPERTIES				
Tensile strength	ASTM D638	50mm/min	Mpa	66
Tensile strain	ASTM D638	50mm/min	%	135
Flexural strength	ASTM D790	2.8mm/min	Mpa	100
Flexural Modulus	ASTM D790	2.8mm/min	Mpa	2340
Izod impact strength	ASTM D256	3.2mm	KJ/m <sup>2</sup>	82
Charpy impact strength	ASTM D6110	3.0mm	KJ/m <sup>2</sup>	80
THERMAL PROPERTIES				
Heat deflection temperature	ASTM D648	1.8Mpa	℃	145
Heat deflection temperature	ASTM D648	0.45Mpa	℃	139
Linear expansion coefficient	ASTM D696	—	cm/cm/℃	6.8×10 <sup>-5</sup>
Vicat softening Temperature	ISO 306	B/50	℃	142

Application				
	Channel sign		LED light diffuser pannel	