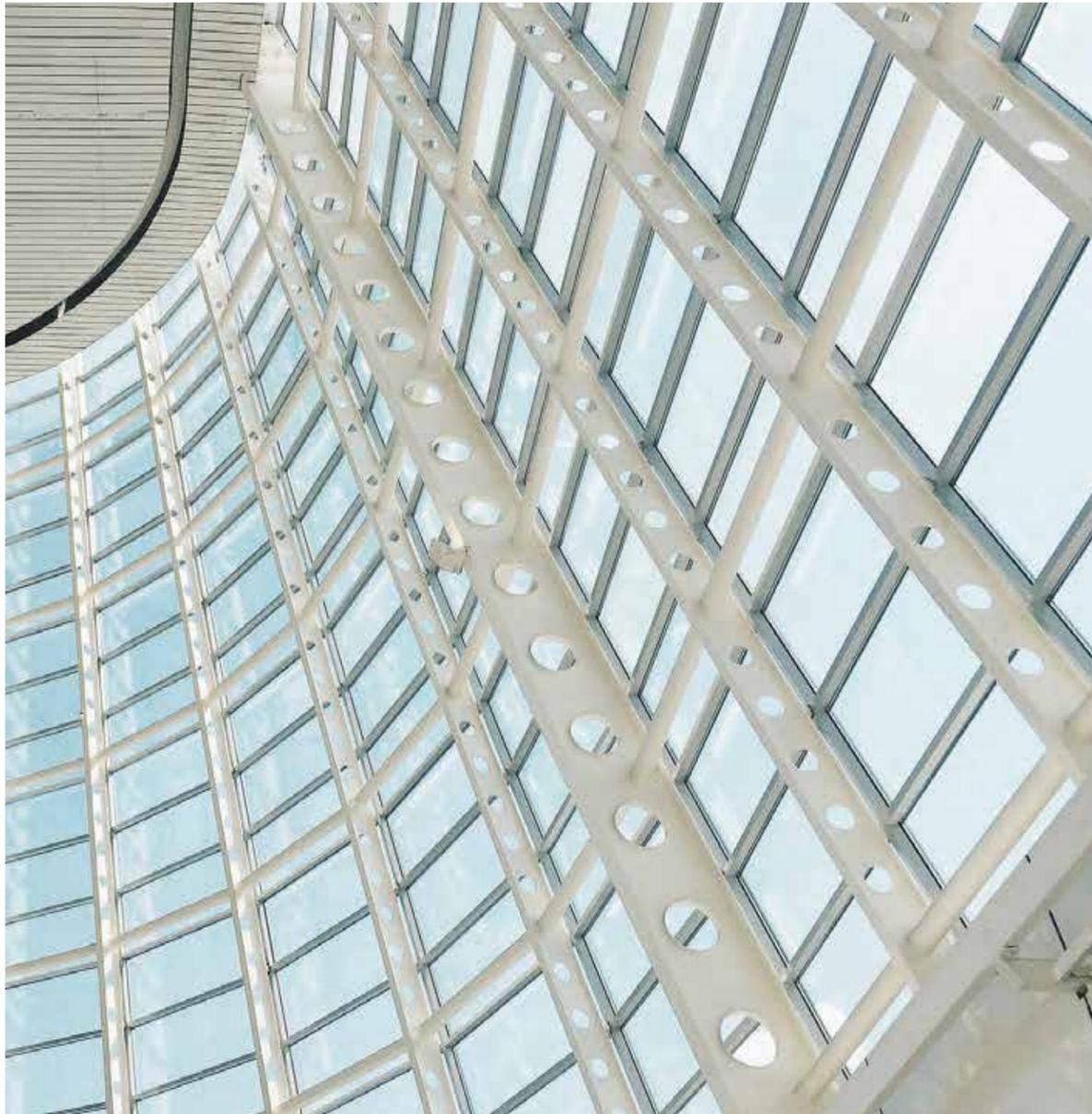




CATALOG

for Industrial Polycarbonate Sheet

Light Diffusion polycarbonate
General polycarbonate
Properties of PLAGLAS®



Contact Us

E-mail.
john@theledforyou.com

Mobile.
+82 -10 - 2513 - 0594

Web.
<https://theledforyou.com/>





for Industrial Pc Sheet

Contents

Properties of PLAGLAS®

General Polycarbonate

Solid thin Sheet 0.8-1T

Solid Sheet / Roll

Light Diffusion Polycarbonate



Properties of PLAGLAS®

What is PLAGLAS?

It is a transparent and/or colored plastic board made of polycarbonate. It is light weight compared to glass or acrylic board; it is approximately 250 times stronger to impact than conventional glass and approximately 50 times stronger to impact than acrylic.



Physical properties

TEST ITEM	Unit	Value	Test Method	
Sound Proof	STC	25	ASTM E9097	
Light Transmission	%	89	ASTM D1003	
Refractive Index		1.59	ASTM D572	
Gradient	M SCALE	76	ASTM D785	
Haze	%	1	ASTM D1003	
Yellowness Index	YI	Less than 2.0	ASTM D1925	
Water Absorption	23°C	%	0.3	ASTM D570
	23°C	%	0.58	ASTM D570

Solid thin Sheet 0.8-1T



Light Transmission

High Light Transmission rate



Heat resistance

Excellent heat resistance; strong in high temperature



Self-extinguishability



Numerical stability

Excellent numerical stability



Impact resistance

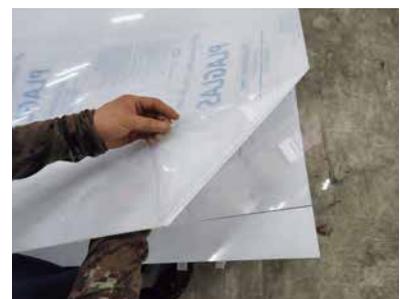
250 times stronger than glass
/ 50 times stronger than acrylic



Fabrication

Excellent thermocivity ; Good resistant against
external temperature change

product detail cut



Physical properties

Properties		Test method	Unit	Value	Unit	Value	
Physical Properties	Specific gravity	ASTM D792	—	1.20	—	1.20	
	Absorb rate 23°C, 24 hr	ASTM D570	%	0.20	%	0.20	
	Refractive index	ASTM D542	—	1.59	—	1.59	
Optical properties	Total light transmittance	ASTM D1003	%	86	%	86	
	Haze	ASTM D1003	%	1.0	%	1.0	
	Yellowness index	ASTM D1925	YI	2.0	YI	2.0	
Mechanical properties	Tensile strength	ASTM D638	Psi	9500	Mpa	65.0	
	Elongation rate	ASTM D638	%	100	%	100	
	Curve Strength	ASTM D790	Psi	14000	Mpa	96.0	
	Curve Elasticity	ASTM D790	Psi	332000	Mpa	2289	
	Izod impact strength(@ 3mm) (Notched)	ASTM D256	T-LBS/IN	16.0(P)	J/m	854.4(P)	
	Rockwell hardness	ASTM D785	R SCALE	115	R SCALE	115	
Thermal properties	Load Deformation	(@ 1.820 MPA)	ASTM D648	°F	°F	275	135
		(@ 0.455 MPA)				284	140
	Linear Expansion Coefficient		ASTM D696	in/in/°F	3.75 X 10-5	cm/cm/°C	6 X 10-5
	Flame resistance		UL 94	—	V0, V2	—	V0, V2

Applications



Electronic product cases

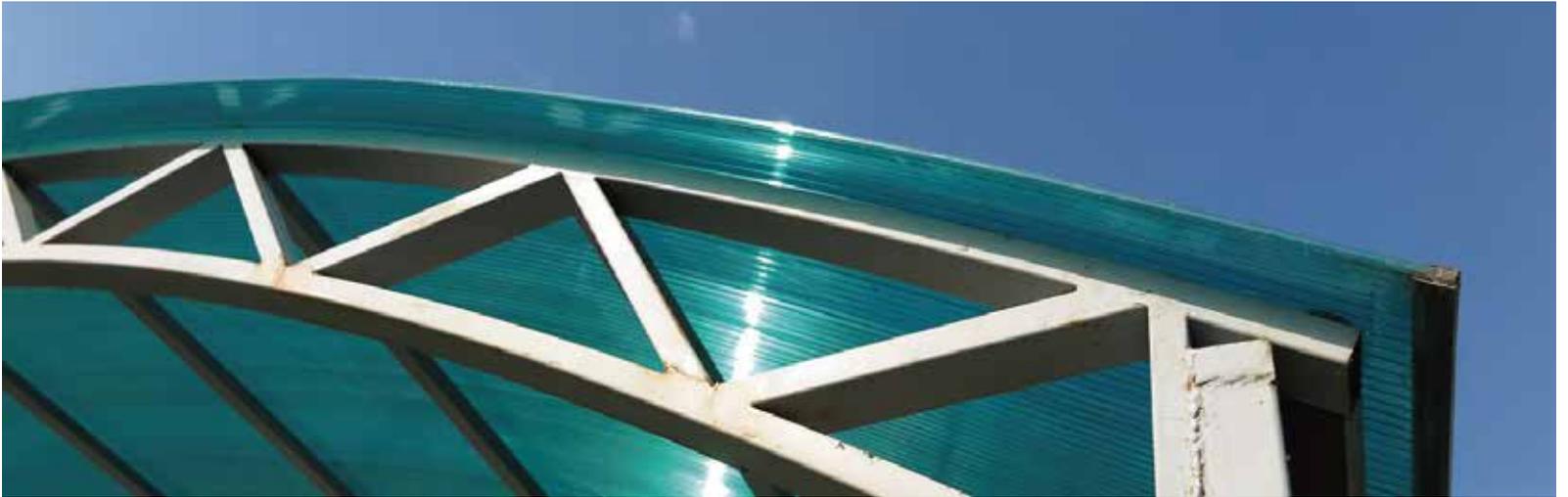


Goggles for welding helmet



Corona virus Face shield

Solid Sheet / Roll



Light performance

The light transmittance is transparent like glass, and it is good as a shading screen or as a substitute for ceilings and windows for natural light.



Heat insulation

It effectively blocks the flow of heat to reduce heating and cooling costs. As it blocks the flow of the outside air layer, it has excellent thermal insulation effect.



Self-extinguishability

Extinguished in high heat like fire but does not add to the spread of fire.



Plasticity

Easy to attach and process on curve from strength resilience. Can make exit and create windows, or apply for machine cover.



Impact resistance

It is about 250 times stronger than glass and 50 times stronger than acrylic. It can also be used for bulletproof purposes



Lightened weight

As it is only about 1/2 the weight of glass, there is little construction load on high-rise buildings and other structures, so it is effective in reducing costs for transportation and construction.

product detail cut



Applications



Soundproof walls



Canopy



Glass window replacement
on the outside of a building



Vending machine, machine covers,
sign boards

Light Diffusion Polycarbonate

Light is generated when a light source is turned on, the light that come to the diffusion board is curved slightly to progress to the diffused inside.

The light met with diffusion agent in the diffusion board repeats reflection and dispersion to make a steady brightness on the entire surface.

A large amount of light is lost in this process.

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



Structure and function

The light from the LED lamp hits the bead inside the plate there and is completed, further incorporating the light of the LED.

There are many more out there, and they will have higher luminance values.

Product features

<p>01 It has approximately 2.2 times more illumination than conventional neon lighting as light diffusion function is added to the polycarbonate. (More than 220%)</p>	<p>02 Provided in various product sizes from 1,000mm ~ 2,050mm; can apply to any size construction and minimize loss of material.</p>
<p>03 It covers better than other advertising boards; does not expose the lighting dots through the sign board on the back.</p>	<p>04 It is an innovative light diffusion PC where any kind of light source such as LED, neon, and gold cathode can be used to give a different kind of illumination.</p>
<p>05 Does not damage easily as it has excellent durability.</p>	<p>06 It is strong at curve or bending as plastic is the basic material.</p>
<p>07 It is much lower price than the conventional import products.</p>	<p>08 It has superb printability, value stability and plasticity.</p>

Applications



Channel Sign



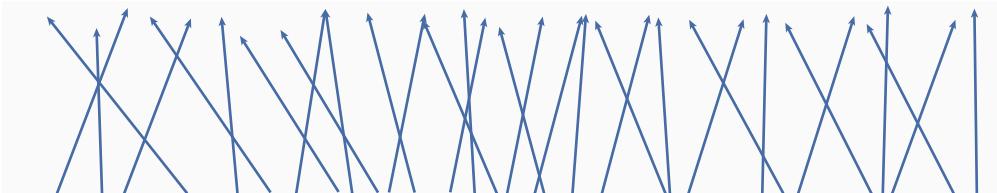
LED light diffuser panel

product detail cut

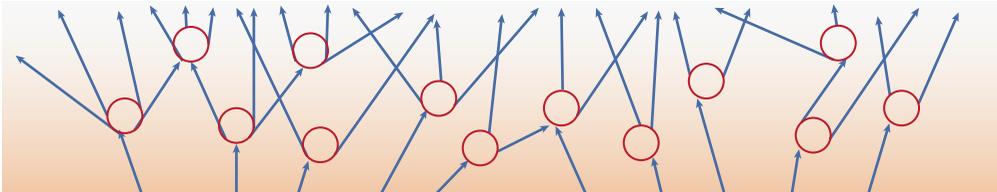


Standard

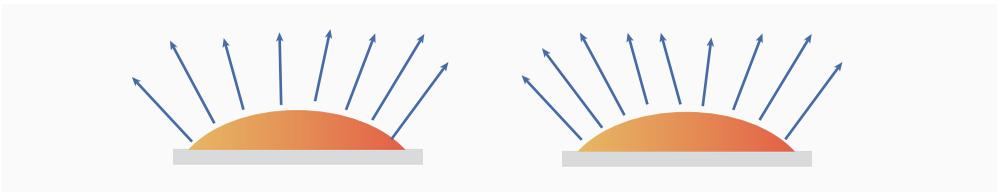
model name



sheet (bead)



LED Light Lamp Chip



Items	Product	Color	Size
Flat board(Sheet) Roll	PC-WHT	Milky White	* Thickness(T) : 1.8mm ~ 4.5mm * Width(W) : Shee2021-02-23t - 1,000mm, 1,220mm * Length(L) : Order madeSheet- 2,000mm/2,440mm/4,000mm Roll - 20m, 30m * Please contact for special sizes