

Light Guide Panel Product Details

PRODUCT INTRODUCTION

Light Guide Panel (LGP) was developed specifically for edge-lit illumination signage and displays, giving excellent brightness and evenness of illumination. Formulated with evenly dispersed diffusion particles resulting in bright and uniform illumination. The LGP can be illuminated by a variety of light sources, i.e., LED's, Fluorescent and cold cathode. The better the light source the better the panel will illuminate.

FEATURES AND BENEFITS

- Brighter
- Thinner, available in .236 and .315" and therefore lighter
- Highest quality continuous cast acrylic
- Single- or double-sided applications
- Indoor or outdoor applications
- Even illumination
- Energy efficient, requiring less energy to illuminate large areas
- ADA compliant. Allows for ultra thin signage (less than 2" deep)



APPLICATIONS

- Illuminated Poster Box
- Retail Displays
- Airport Signage
- Point-of-Purchase Displays
- Bus Shelter Advertising
- Way Finding Signage
- Interior Lighting
- Menu Board
- Trade Show Exhibits
- In-Floor Lighting



PRODUCT AVAILABILITY

Continuous Cast Acrylic Sheet
Standard sheet size 51" x 108.375"
Thickness .236" & .315"
Color - Transparent

(Cut sheets and other additional specification information available upon request.)



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PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	UNIT	VALUE
OPTICAL			
Luminous Transmittance	ASTM D1003, JIS K 7361-1	%	93
Haze	ASTM D1003, JIS K 7136	%	0.5
Refractive Index	ASTM D542, JIS K 7142	-	1.49
MECHANICAL			
Tensile Strength (rupture)	ASTM D638, JIS K 7162	MPa	75
Elongation at Rupture	ASTM D638, JIS K 7162	%	4.5
Flexural Strength (rupture)	ASTM D790, JIS K 7171	MPa	120
Modulus (elasticity)	ASTM D790, ASTM D785, JIS K 7171	GPa	3.2
Rockwell Hardness	ASTM D256, JIS K 7002-2	M scale	100
Izod (impact)	ASTM D6110, JIS K 7110	kJ/M ² kJ/M ²	2.0
Charpy (impact)	JIS K 7111		17
THERMAL			
Specific Heat	JIS K 7213	J/g°C	1.5
Deflection Temperature Under Load	ASTM D648, JIS K 7191-2	°C	96
Coefficient of Thermal Expansion	ASTM D696, JIS K 7197	cm/cm/deg	7.E-05
ELECTRICAL			
Surface Resistivity	ASTM D257, JIS K 6911	Ω/sq	>1E16
MISCELLANEOUS			
Abrasion/Mar Resistance (Tabor - 100 cycles)	ASTM D4060, JIS K 7204	% haze	40
Specific Gravity	ASTM D792, JIS K 7112	g/cm ³	1.19
Water Absorption	ASTM D570, JIS K 7209	%	0.3
Flammability	UL 94		HB
Intrinsic Viscosity	JIS K 7367-1	l/g	cross-linking

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