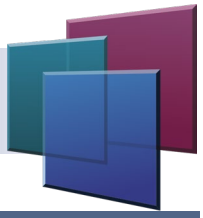
OPTIX L EDGE LIT



OPTIX L Edge Lit (OPTIX L-EL) continuous cast acrylic sheet is manufactured using an exclusive light diffusion technology. When this sheet is combined with reflective tape and white backing, its lighting capabilities become optimally enhanced. LED, fluorescent or neon light sources may be used to create stunning displays or fixtures. OPTIX L-EL allows users to create ADA compliant signage for interior and exterior applications. The better the light source, the better the panel will illuminate. OPTIX L-EL is available in 0.118″, 0.157″, 0.236″ and 0.315″ thicknesses.

Applications

Framed signage, ADA compliant signs, displays, lighting fixtures and wayfinding

Typical Properties*

Property	Test Method	Units	Values
PHYSICAL			
Specific gravity	ASTM D 792	-	1.19
Water absorption 24 hrs @ 23°C	ADTM D 570	%	0.2
2 hrs boiling water immersion		%	0.6
MECHANICAL			
Tensile strength	ASTM D 638	psi	11,000
% elongation @ break		%	7.6
Modulus of elasticity		psi	465,000
% elongation @ yield		%	6.0
Flexural strength	ASTM D 790	psi	14,700
Flexural modulus			461,000
Impact strength	ASTM D 695		
Compressive strength (x-y plane)		psi	83,300
Compressive stress @ yield		psi	18,000
Compressive modulus		psi	279,000
Charpy (un-notched)	ASTM D 256	Ft-lb/in/in	5.0
Charpy (notched)	ASTM D 6110	J/m	20.8
Shear Strength (punch tool)	ASTM D 732	psi	11,200
Izod (procedure A)	ASTM D 702	%	2.5 maximum
OPTICAL			
Refractive index	ASTM D 542	-	1.49
Haze	ASTM D 1003	%	5 maximum
Light transmission	ASTM D 1003	%	89 maximum
Yellowness index		-	<0.5
THERMAL			
Maximum continuous service temp	-	°F	175
Coefficient of thermal conductivity	-	Btu-in/ft^2/ hr/°F	1.45
Deflection temperature under load	ASTM D 648	°F	200
Coefficient of linear thermal expansion	ASTM D 696	In/in/°F	3.5 E-05
Specific heat	-	Btu/lb/°F	0.35
Smoke density rating	ASTM D 2843	%	13.5
Smoke developed index	ASTM E 84	-	750
Flame spread index	ASTM E 84	-	95
Specific energy	-	Btu/lb	11,300

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Self-ignition temperature	ASTM D 1929	°F	750
Radiant panel, flame spread index	ASTM E 162	-	155
Horizontal burn	ASTM D 635	In/min	0.71
UL Horizontal burn rating	UL 94	-	HB
ELECTRICAL			
Volume resistivity	ASTM D 257	Ohm/cm	>3.912E+15
Surface resistivity	ASTM D 257	Ohm/sq	>5.237E+15
Dielectric strength (2000v/sec)	ASTM D 149	V/mil	354
Dielectric constant, k			
60 Hz	ASTM D150	Hz	3.3
1KHz			3.0
1MHz			2.7
Dissipation factor, D			
60 Hz	ASTM D 495	Hz	0.06
1 KHz			0.04
1 MHz			0.02
Arc resistance	ASTM D 495	-	No tracking

*Typical properties are not intended for specification purposes.

These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use are beyond our control. We recommend that the prospective user determines the suitability of our materials and suggestions before adopting them on a commercial scale.