

PLASKOLITE

**OPTIX® L CONTINUOUS CAST
ACRYLIC**

PRODUCT GUIDE



Plaskolite sets imagination
free with the high performance
characteristics and beautiful
aesthetics of **OPTIX L**

Discover more...
visit www.plaskolite.com

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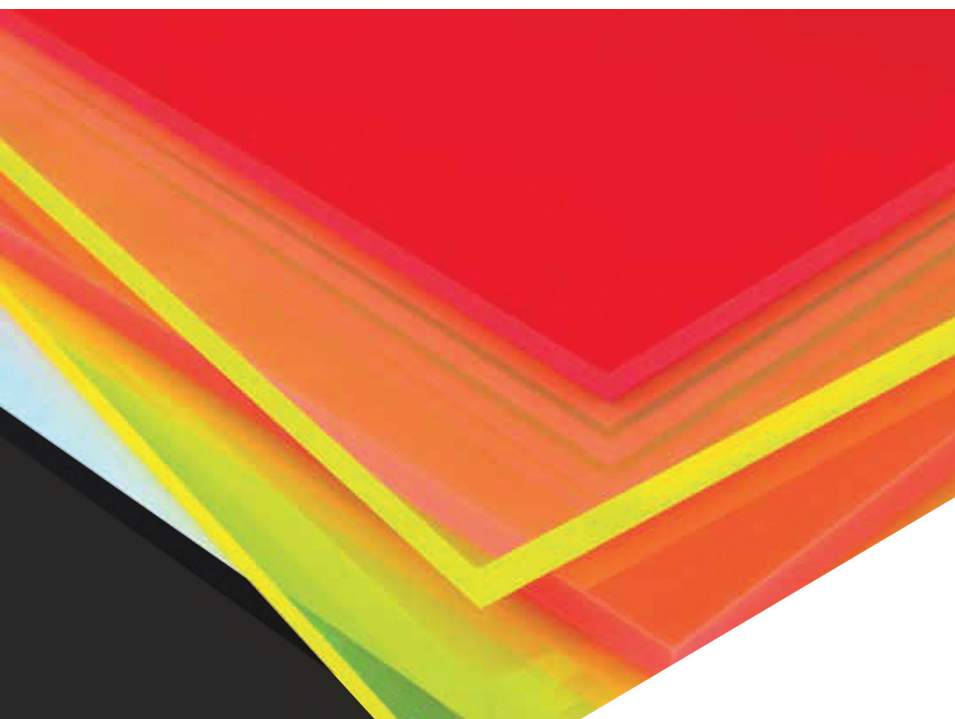
OPTIX L MYST

A chic frosted look that softly diffuses light and adds subtle elegance. This continuous cast acrylic sheet has a frost effect permanently infused throughout the sheet, which means it remains intact through any processing or fabrication techniques; simple beauty that lasts.

Features and Benefits

- » Permanent frost effect throughout the sheet
- » Easy to shape, form and fabricate
- » Excellent line bending and edge finishing
- » Works well with many light sources
- » More impact resistant than glass
- » Easy to clean
- » Lightweight

DESIGNER SERIES



OPTIX L FLUORESCENT

Fluorescents continue as a key design trend and are a great way for designers and fabricators to inject eye-catching appeal into their work. OPTIX® L continuous cast Fluorescents combine colored, transparent sheet with fluorescent edge to have instant stand out appeal for retail display, interiors and more.

Features and Benefits

- » Vibrant transparent colors
- » Striking fluorescent edge
- » Easy to shape, form and fabricate
- » Excellent aesthetics, design versatility
- » Color retention through processing

OPTIX L VARIO

Inspired by the Tropics, our Vario continuous cast acrylic range offers six transparent colors that have become design classics. The striking live edge contrasts beautifully with the subtle surface color and provides designers unlimited versatility in their creative work.

Features and Benefits

- » Subtle colored transparents
- » Striking edge
- » Light and shade create visual effects
- » Versatility
- » Easy to shape, form and fabricate
- » Scratch resistant
- » Strong and durable



DESIGNER SERIES

OPTIX L METROPOLITAN

Taking inspiration from the world's great cities, OPTIX L Metropolitan continuous cast acrylic combines the beautiful transparency of cast acrylic with high definition edges. The unique colored edge effect is inherent in the sheet, which means it is retained whatever the shape, fabrication method or application.

Features and Benefits

- » Excellent optical qualities
- » More impact resistant than glass
- » Easy to shape, form and fabricate
- » Easy to clean
- » Uniform thickness
- » Lightweight
- » Superior craze resistance





OPTIX L BLOCK

This cell cast acrylic is ideal for chunky, ultra bright 3D characters and features optimized light transmission properties that maximize the economic and environmental benefits of LED technology. It is easy to fabricate and can be used with white or colored LEDs, to create exciting visual communications.

Features and Benefits

- » Ideal for specialist, custom-designed installations
- » Optimized for LED-illuminated characters
- » Guaranteed indoor and outdoor performance
- » Constant transmitted color regardless of light source
- » Exceptional bright, clean light aesthetics
- » Lightweight

*Product not manufactured by Plaskolite

ILLUMINATIONS SERIES



OPTIX L EDGE LIT

Developed specifically for edge lit applications including lighting and signage, our Edge Lit continuous cast acrylic is formulated with evenly dispersed illuminating particles to provide bright, even illumination. Suitable for use with LEDs, fluorescent and cold cathode light sources.

Features and Benefits

- » Brighter, slimmer and lighter
- » Single or double sided applications
- » Suitable for indoor and outdoor use
- » Energy efficient and even illumination
- » ADA compliant (< 2" deep)
- » Only USA manufacturer of continuous cast product for Edge Lit applications

OPTIX L B/W

Black/White can illuminate in a variety of colors based on the color of the LEDs used; for example, the signage will be black in daylight and not illuminated. When illuminated, other colors become visible depending upon the LED's that are being used, allowing the design to illuminate in colors from white to red.

Features and Benefits

- » Unique formulation displays your message when backlit - without the use of overlays or vinyl
- » Continuous cast acrylic
- » Smooth gloss finish
- » Indoor or outdoor applications
- » Made exclusively with Lucite® monomer
- » Manufactured in the USA



ILLUMINATIONS SE- RIES



OPTIX L MUSEUM GRADE

Developed for exacting standards in museum applications, this continuous cast acrylic filters out 98% of harmful UV, which causes fading and decomposition of exhibits. For maximum protection and optimum clarity, UV light between 200-400nm wavelength must be blocked while visible light between 400-700 must be allowed through.

Features and Benefits

- » Excellent optical quality and clarity
- » Meets demanding museum standards
- » No black specks – GUARANTEED
- » More impact resistant than glass
- » Allows for easy fabrication and fitting
- » Superior craze resistance
- » Lightweight and easy to clean
- » Uniform thickness

SPECIALTY SERIES



OPTIX L FRAME GRADE

With 100% guarantee for zero black speck contamination in frame applications, continuous cast acrylic is the ideal choice. OPTIX L Frame Grade is easy to clean and offers superior craze and chemical resistance. It is available in thicknesses from 0.090" – 0.220" and in a wide range of sheet sizes.

Features and Benefits

- » Highest clarity
- » No black specks – GUARANTEED
- » Meets demanding museum standards
- » Easy fabrication and fitting
- » interior or exterior applications
- » Provides framing solutions for homes, museums, public buildings and private showcases

OPTIX L ECOSHADE

A revolutionary product, EcoShade is a continuous cast acrylic sheet featuring innovative components distributed uniformly throughout the material to permanently reduce heat transmitted through windows and skylights during summer months and heat lost during winter.

Features and Benefits

- » Reflects >75% of IR radiation in sunlight
- » Lowers energy costs
- » Protects furniture from fading
- » Iridescent color effect for excellent aesthetics
- » Designer and architect preferred
- » Unique sheet component for long-life performance



SPECIALTY SERIES

OPTIX L UTRAN

Designed to transmit UV-A and UV-B light used in many applications, from medical treatment to sun tanning equipment and greenhouses, our Utran continuous cast acrylic sheet is transparent to UV light and provides the superior quality, durability and clarity needed for these applications.

Features and Benefits

- » 92% UV transmission
- » Withstands heavy-duty, continuous use
- » More impact resistant than glass
- » Easy to shape, form, fabricate and fit
- » Smooth, glossy surface
- » Warm to the touch
- » Easy to clean





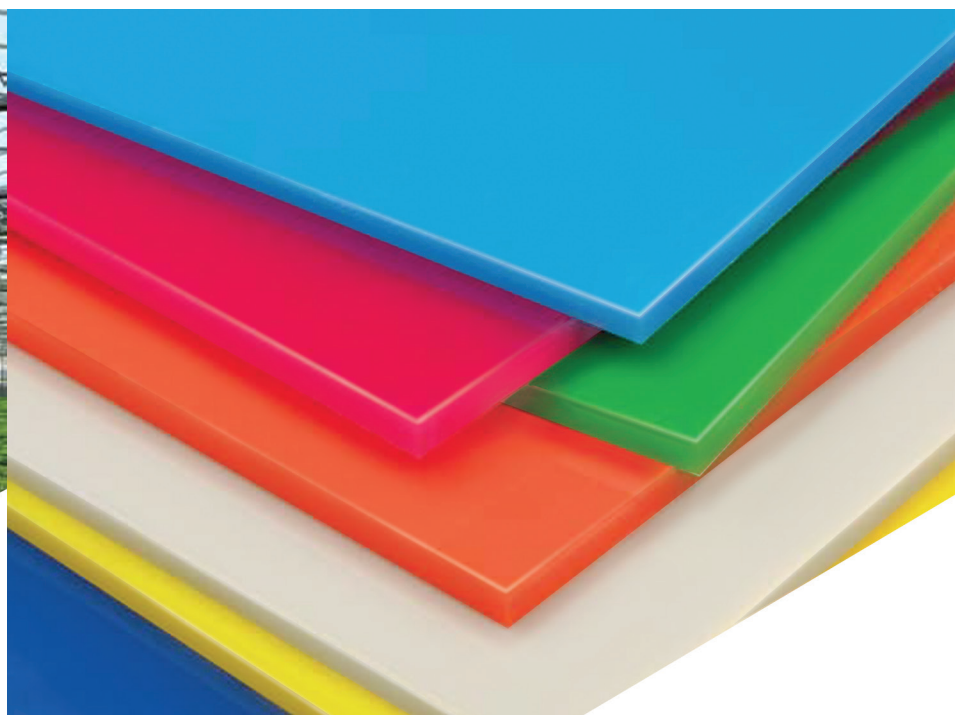
OPTIX L CLEAR

Our continuous cast clear acrylic sheet products are high in molecular weight and combine excellent aesthetics with outstanding performance characteristics. These characteristics give designers and fabricators the ultimate flexibility. We now offer OPTIX L Clear in standard and extra thick options.

Features and Benefits

- » Excellent optical clarity
- » Exceptional UV stability
- » Superior craze resistance
- » Resists surface marks and scratching
- » Easy to shape, form and fabricate
- » Uniform thickness

STANDARD SERIES



OPTIX L COLORS

Our continuous cast colored acrylic sheet products are high in molecular weight and combine beautiful color options with outstanding performance qualities. As well as standard colors, we offer a color matching service to meet any design specification

Features and Benefits

- » Rich, long-lasting color
- » Exceptional UV stability
- » Superior craze resistance
- » Resists surface marks and scratching
- » Easy to shape, form and fabricate
- » Uniform thickness

PRODUCT APPLICATIONS

	MYST	FLUORESCENT	VARIO	METROPOLITAN	BLOCK	EDGE LIT	MUSEUM GRADE	FRAME GRADE	ECOSHADE	UTRAN	CLEAR	COLORS
Advertising display	•	•	•	•	•	•	•	•	•		•	•
Antimicrobial protection											•	•
Architecture	•	•	•	•	•	•	•		•	•	•	•
Art / Design	•	•	•	•	•	•	•	•	•		•	•
Automotive				•		•						
Cabinets	•	•	•	•		•	•		•		•	•
Corporate identity	•	•	•	•	•	•	•		•		•	•
Cosmetics display	•	•	•	•	•	•	•	•	•		•	•
Exhibitions / Tradeshows	•	•	•	•	•	•	•	•	•	•	•	•
Furniture / Accessories	•	•	•	•	•	•	•		•		•	•
Hospitality	•	•	•	•	•	•	•	•	•		•	•
Interior design	•	•	•	•	•	•	•		•	•	•	•
Lighting	•	•	•	•	•	•			•		•	•
Medical	•	•	•	•		•			•		•	•
Museum display	•		•								•	•
Non-military aviation											•	•
Nursery - furniture / accessories	•	•	•	•		•	•		•		•	•
POP display / Store fixtures	•	•	•	•	•	•	•	•	•	•	•	•
Safety shields	•	•	•	•		•	•	•	•	•	•	•
Screens / Monitors						•					•	•
Signage - way finding / directional	•	•	•	•	•	•	•		•		•	•
Skylights / Windows	•								•	•	•	•
Solid surfaces	•	•	•	•		•			•		•	•
Sound barriers											•	•
Windshields				•							•	•

PLASKOLITE

A GLOBAL LEADER IN THE PRODUCTION OF THERMOPLASTIC SHEET

FOUNDED IN 1950

Our Mission: to deliver superior thermoplastic sheet, coatings and polymers to the world, through long-lasting customer relationships and hands-on customer service.

MANUFACTURING LOCATIONS



From our founding, PLASKOLITE strives to treat our employees, our customers, our community and the world, with kindness, dignity and respect. This drives our continuing effort to create sustainable products, in a sustainable manner, for future generations. This on-going commitment is expressed in the

PLASKOLITE Sustainable Ecosystem:

QUICK FACTS

STATUS: Privately held

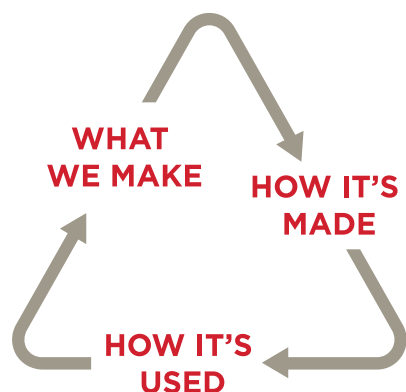
GLOBAL HEADQUARTERS: Columbus, OH

EMPLOYEES: 1900 Worldwide

MARKETS SERVED: Signage, Lighting, Retail Display, Construction, Transportation, Security, Bath & Spa, Industrial, Architecture, Green Houses

OUR PILLARS OF SUSTAINABILITY

EACH CONTRIBUTES TO MAKING THE WORLD A BETTER PLACE



WHAT WE MAKE

Versatile, high-quality, durable thermoplastic materials...not single-use plastics

HOW IT'S MADE

How we make our products reflects our overall philosophy of continuous environmental improvement

HOW IT'S USED

Our thermoplastics play an important role in advancing human well-being, energy conservation and quality of life

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.

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TECHNICAL INFORMATION

Typical Properties

Property	Test Method	Units	Values
PHYSICAL			
Specific Gravity		ASTM D792	- 1.19
Optical Refractive Index		ASTM D542	- 1.49
Light Transmission- total		ASTM D1003	% 92
Light Transmission- haze		ASTM D1003	% <1
Water Absorption		ASTM D570	% 0.2
MECHANICAL			
Tensile Strength		ASTM D638	psi 11,000
Tensile Modulus of Elasticity		ASTM D638	psi 465,000
Flexural Strength		ASTM D790	psi 14,700
Flexural Modulus of Elasticity		ASTM D790	psi 461,000
Izod Impact Strength - Milled Notch		ASTM D256	ft-lb./in 0.32
Compressive Strength		ASTM D 695	psi 83,300
Shear Strength		ASTM D732	psi 11,200
Rockwell hardness		ASTM D785	- M-100
THERMAL			
Maximum Recommended Continuous Service Temperature		-	°F 175
Deflection Temperature @ 264 psi (1.8 MPa)		ASTM D648	°F 200
Coefficient of Linear Thermal Expansion		ASTM D696	in/in/°F 3.5×10^{-5}
Thermal Conductivity		ASTM C177	Btu-ft/ft ² /hr/°F 0.12
Flammability (Burning Rate)		ASTM D635	In/min 1.18
Flammability		UL 94	- HB
Smoke Density Rating		ASTM D2843	% 13.5
Self-Ignition Temperature		ASTM D1929	°F 750
Flame Spread Index		ASTM E84	- 110
Smoke Developed Index		ASTM E84	- 530
ELECTRICAL			
Dielectric Constant @ 1 KHz		ASTM D150	- 3.0
Dielectric Constant @ 1 MHz		ASTM D150	- 2.7
Dielectric Strength		ASTM D149	V/mil 354
Volume Resistivity		ASTM D257	Ohms/cm $>3.91 \times 10^{15}$