

# PLASKOLITE

## LIGHTING SOLUTIONS



# PLASKOLITE

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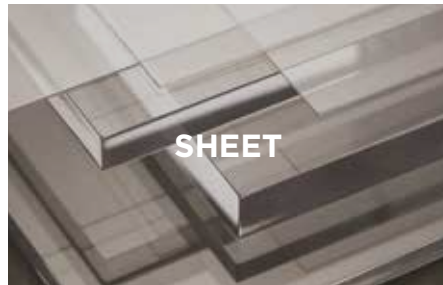
**OUR MISSION IS TO DELIVER SUPERIOR ENGINEERED THERMOPLASTIC SOLUTIONS TO THE WORLD THROUGH LONG-LASTING CUSTOMER RELATIONSHIPS AND HANDS-ON CUSTOMER SERVICE.**

Founded in 1950, PLASKOLITE has built a reputation for providing the highest quality products in the industry. PLASKOLITE is a global manufacturing leader of engineered thermoplastics, which includes Acrylic, Polycarbonate, ABS, Olefin, PVC and PETG Sheet, Extruded Profiles and PMMA Polymers.

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## LIGHTING SOLUTIONS

PLASKOLITE'S commitment to the lighting industry encompasses sheet, profiles, & polymers. Our innovative products are designed to be used with LEDs for energy efficiency & pleasing aesthetics. Coupled with our flexible design process, customers can have a truly custom solution to address their needs.



**VERTICAL INTEGRATION**



**COMPREHENSIVE PRODUCT OFFERING**

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## LIGHTING MANUFACTURING LOCATIONS

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**LINDEN, NJ**



**CHARLOTTE, NC**



**MONTERREY, MEXICO**



**OLIVE BRANCH, MS**

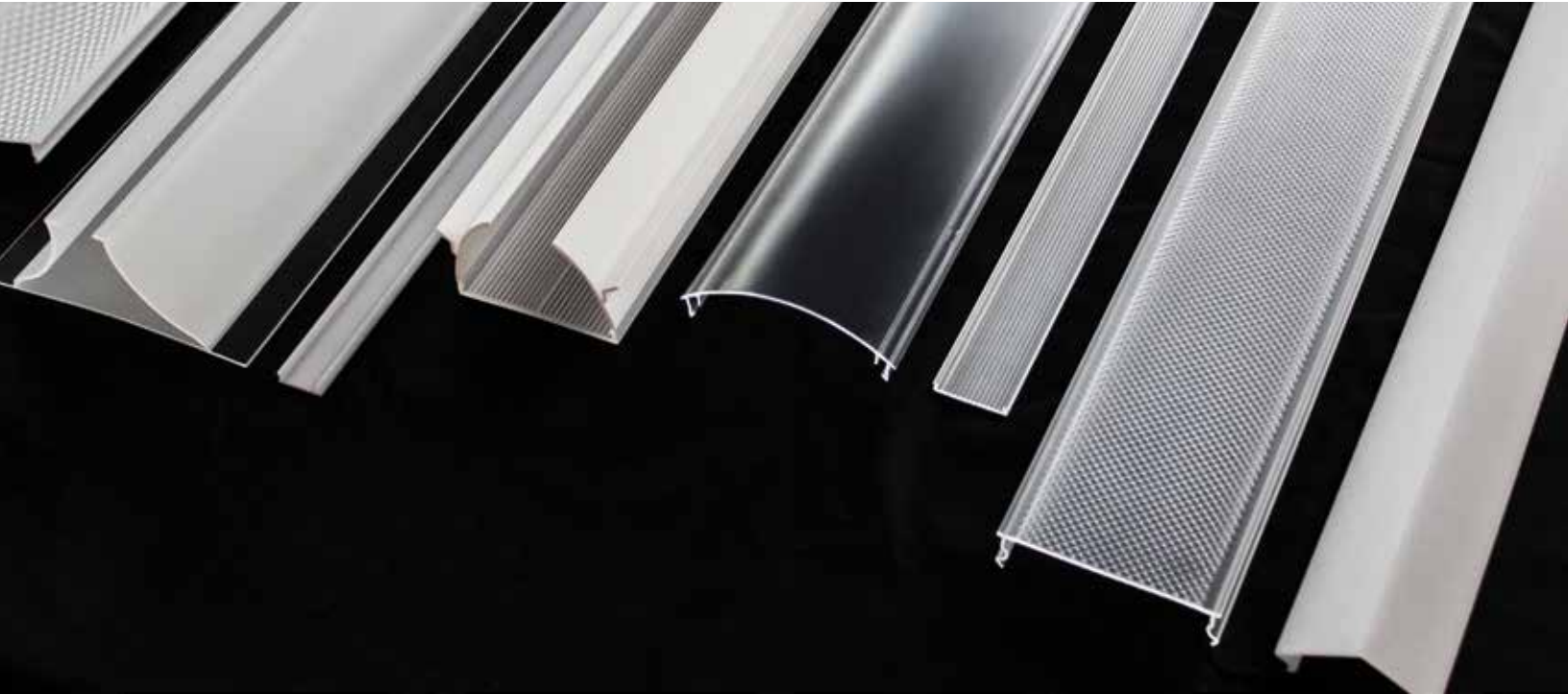


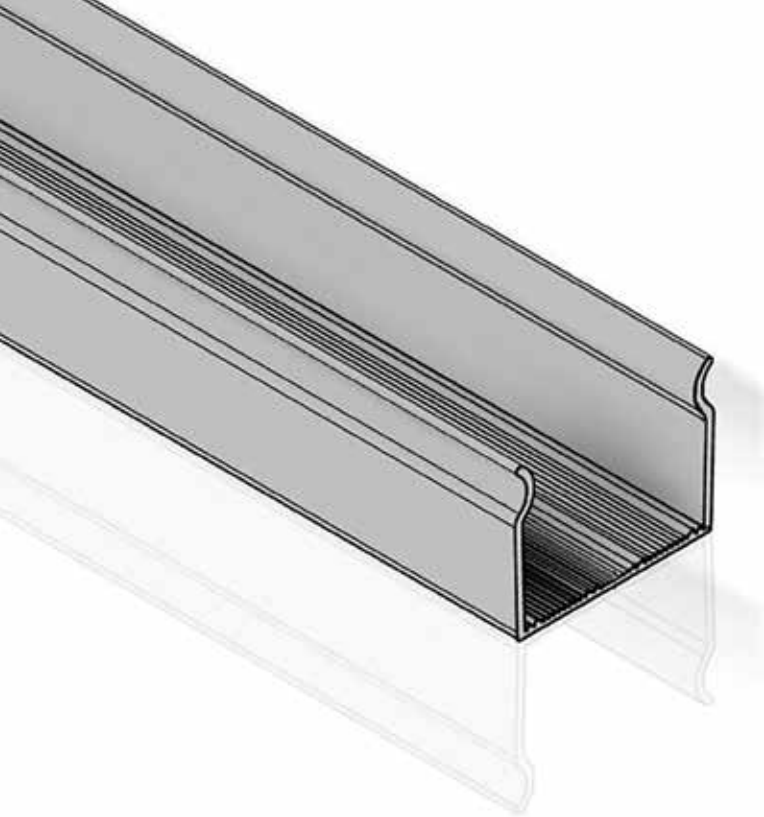
**PROFILE MANUFACTURING**

**SHEET AND FILM  
MANUFACTURING**

**01**

# CUSTOM PROFILES





## DESIGN & MANUFACTURING OF CUSTOM PROFILES

Every project begins following our custom manufacturing process that offers extensive new product development methodology.

### Full in-house design engineering capabilities:

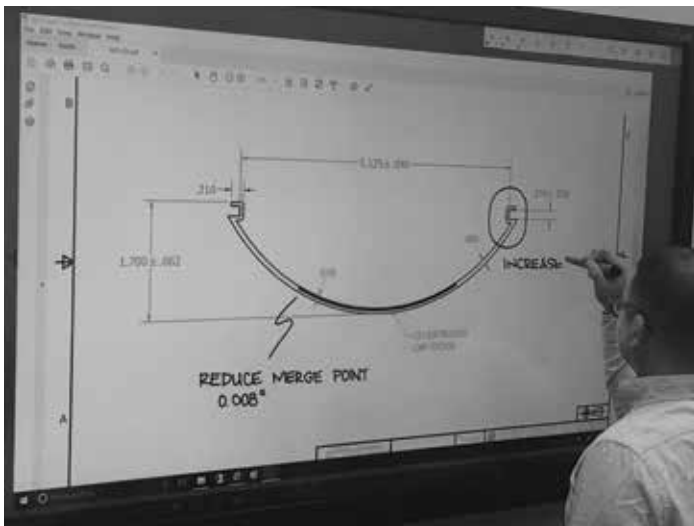
- » Quick and easy process from sampling to full-scale production
- » In-house tooling
  - » Machining/routing
  - » EDM wire cutting
  - » 3D prototyping

### MATERIALS: (co-extrusion available)

- » Acrylic
- » Polycarbonate
- » ABS
- » Styrene
- » HIPS
- » PETG
- » Please inquire for additional materials

### PRODUCTION LOCATIONS:

- » Linden, NJ
- » Monterrey, MX
- » Charlotte, NC



02

OPTIX<sup>®</sup>

ACRYLIC SHEET & FILM





## OPTIX ACRYLIC LED SHEET

### OPTIX LED PXT the next generation of acrylic diffusers

Standard thickness: 0.060", 0.080", 0.118" (1.5mm, 2.0mm, 3.0mm)  
Standard dimensions: 48"x 96" (1220mm x 2440mm)

- » Optimized for high light transmission with high diffusion/hiding power
- » Fine matte texture surface on 2 sides
- » Product harmonization: available in polymer, sheet and profile
- » UL HB rated

### OPTIX LED SATIN thin-gauge acrylic diffusers

Standard thickness: 0.040" (1.0mm)  
Standard dimensions: 48"x 96" (1220mm x 2440mm)

- » Enables narrower dimensions and thinner gauges while maintaining hiding power
- » Matte textured surface on one side for superior reduction of gloss
- » Colorless and white acrylic

## OPTIX SPECIALTY OVERLAY FILMS

### OPTIX Flexilume and Flex G2 acrylic overlays

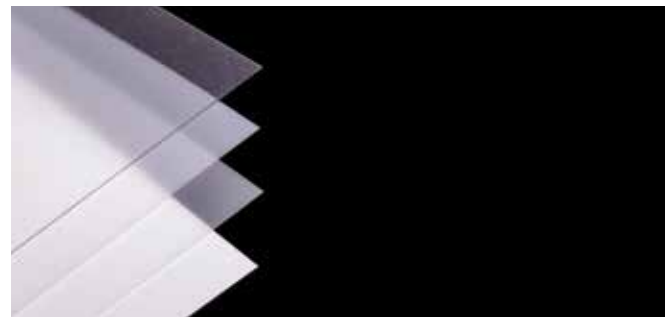
Standard thickness: 0.010", 0.014", 0.020", 0.030"  
(0.25mm, 0.35mm, 0.5mm, 0.75mm)  
Standard dimensions: 50" x 50" (1270mm x 1270mm)

- » Fine matte surface pattern on one side
- » Clear or diffusive formulations
- » Excellent hiding at close distances to light sources
- » Lambertian distribution

### OPTIX Flex - RFL reflective white film

Standard thickness: 0.014" (0.35mm)  
Standard dimensions: 50" x 50" (1270mm x 1270mm)

- » 96% reflectivity
- » Fine matte texture, one side
- » Minimal light source color shift
- » Adhesive liner available

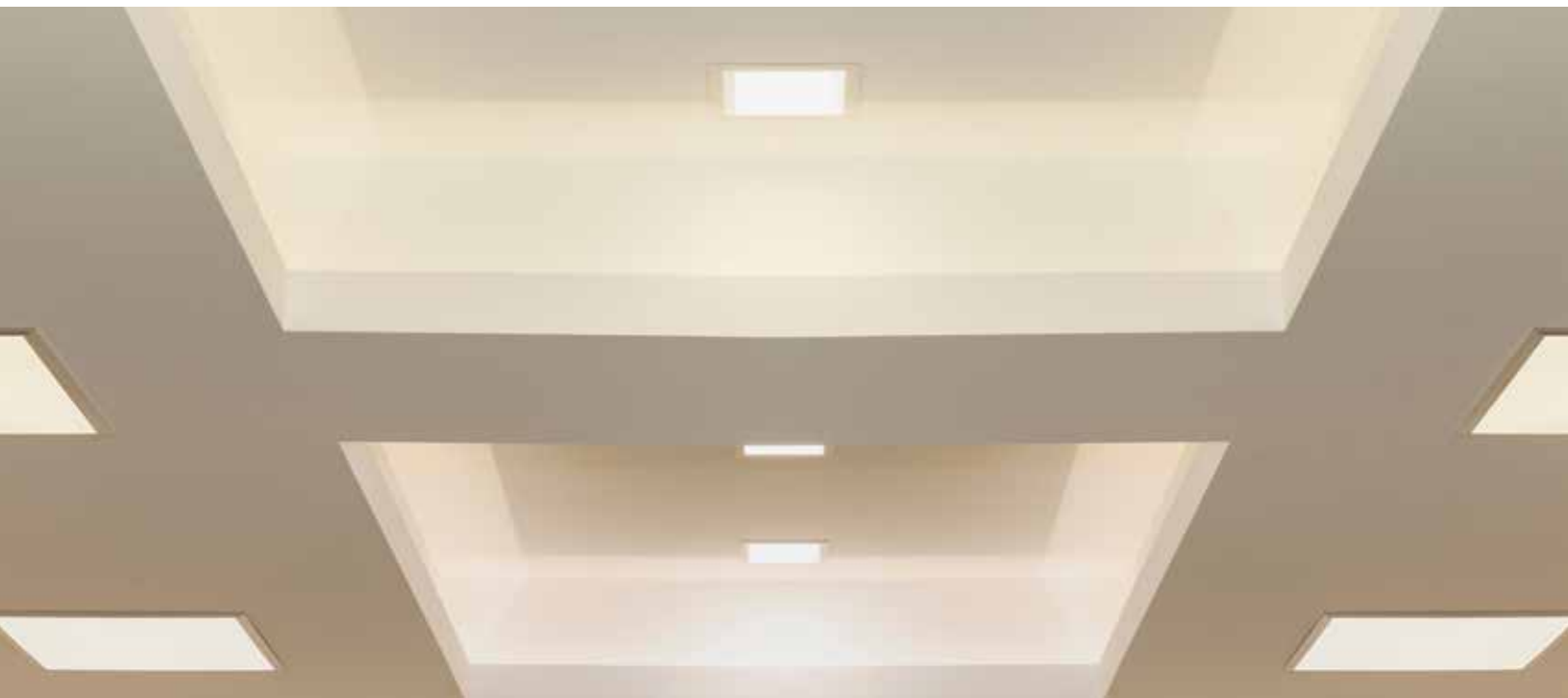


LIGHT TRANSMISSION/HALF ANGLE PERFORMANCE DATA  
AVAILABLE ON [plaskolite.com/resources](http://plaskolite.com/resources)

03

TUFFAK<sup>®</sup>

POLYCARBONATE SHEET





## TUFFAK POLYCARBONATE SHEET

**TUFFAK Lumen XT** diffusive polycarbonate sheet designed for LED lighting lenses

Standard thickness: 0.060", 0.118" (1.5mm, 3.0mm)  
Standard dimensions: 48" x 96" (1220mm x 2440mm)

- » Meets UL94 V2 rating
- » Textured surface, one side
- » High impact resistance
- » Color temperatures: LC (cool) or LW (warm)
- » Great balance of diffusion with high light transmission

**TUFFAK Lumen XT-V** diffusive polycarbonate sheet specially formulated with enhanced flame rating

Standard thickness: 0.118" (3.0mm)  
Standard dimensions: 48" x 96" (1220mm x 2440mm)

- » Meets UL94 5VA
- » Maintains high optical performance
- » Allows the diffuser sheet to also serve as the electrical enclosure
- » Available in three diffusion levels
  - » LV3 (Low) / LV5 (Medium) / LV7 (High)
- » Color temperature equivalent to standard Lumen XT LC (cool)



**TUFFAK DX-NR** polycarbonate sheet engineered for exterior lighting lens applications

Standard thickness: 0.060", 0.118" (1.5mm, 3.0mm)  
Standard dimensions: 48" x 96" (1220mm x 2440mm)

- » UV resistant
- » Eliminates LED hot spots
- » High light transmission
- » Non-reflective surface
- » Wide service temperature range

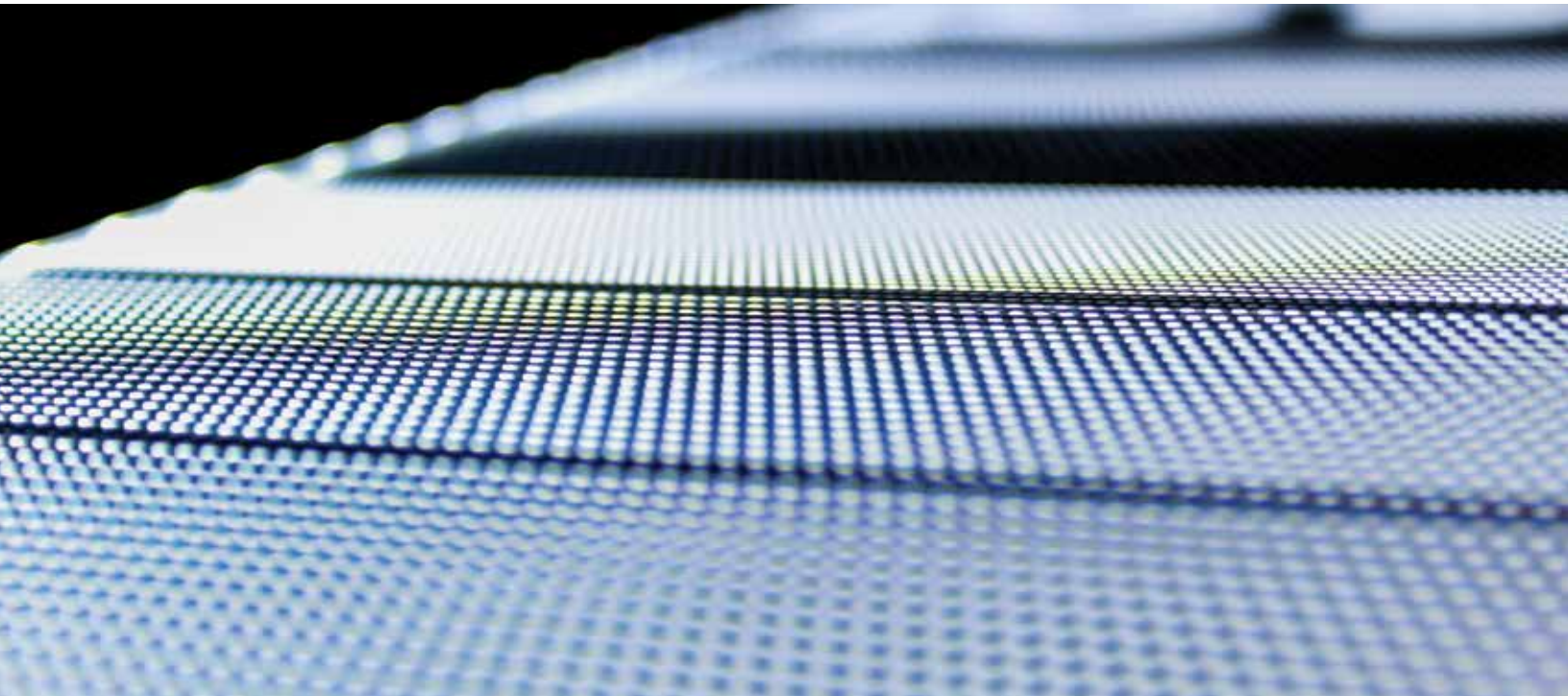


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**04**

ADDITIONAL  
SHEET PRODUCTS



## ADDITIONAL SHEET PRODUCTS

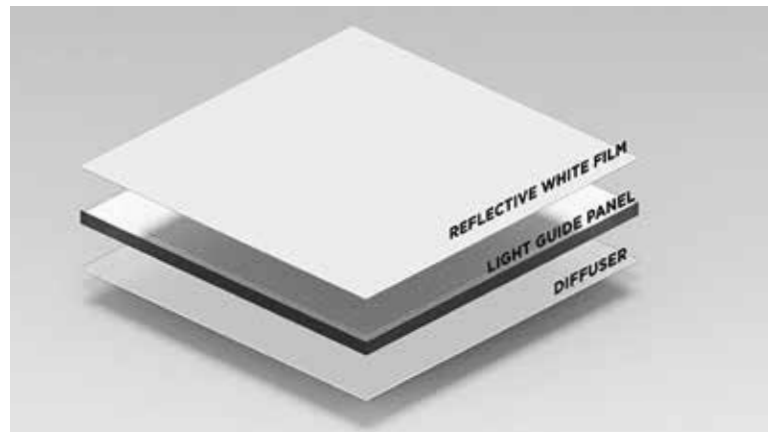
### OPTIX LGP custom laser-etched acrylic light guide panels

Standard thickness: 0.080" to 0.315" (2.0mm - 8.0mm)

Maximum etching area: 4' x 5' (1220mm x 1525mm)

- » Laser etched patterns
- » Optimal for edge lighting
- » UV resistant: suitable for indoor and outdoor use
- » Smooth gloss finish

Visit page 6 to learn more about our reflective white film and diffuser options.

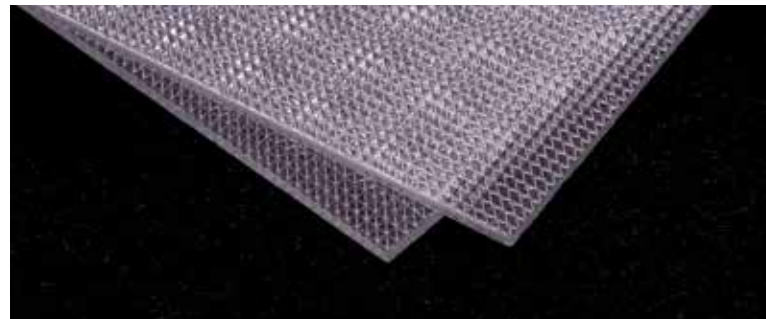


### OPTIX MICROMID deglaring sheet

Standard thickness: 0.080", 0.118" (2.0mm, 3.0mm)

Standard dimensions: 50" x 50" (1270mm x 1270mm)

- » Substantial high angle cutoff above 50 degrees
- » Key part of a system to meet Unified Glare Rating (UGR) levels
- » Acrylic substrate
- » UV stable, high clarity
- » Widths up to 60" (1525mm) upon request

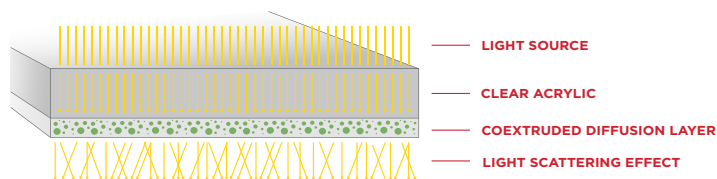


### OPTIX LED 95 co-extruded acrylic diffusion

Standard thickness: 0.080" - 0.220" (2.0mm - 5.6mm)

Standard dimensions: 48" x 96" (1220mm x 2440mm)

- » Acrylic diffusion technology in a thin, co-extruded layer for excellent light transmission
- » Maintains optics throughout thickness range
- » Excellent for large format applications requiring rigidity
- » Fine textured surface on cap layer



LIGHT TRANSMISSION/HALF ANGLE PERFORMANCE DATA  
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## ADDITIONAL SHEET PRODUCTS



**PLASKOLITE has built a partnership with JUNGBECKER OPTICS** that is focused on additional technologies that steer light with tremendous precision, avoiding unwanted diffusion, minimizing light pollution, and enabling creative lighting applications.

- » Hot embossing and injection molding technology enables precise light guiding solutions while ensuring the greatest possible efficiency
- » Development and production of customized optical components and systems in plastic, from conception to production in sheets, profiles and injection molded volumetric optics

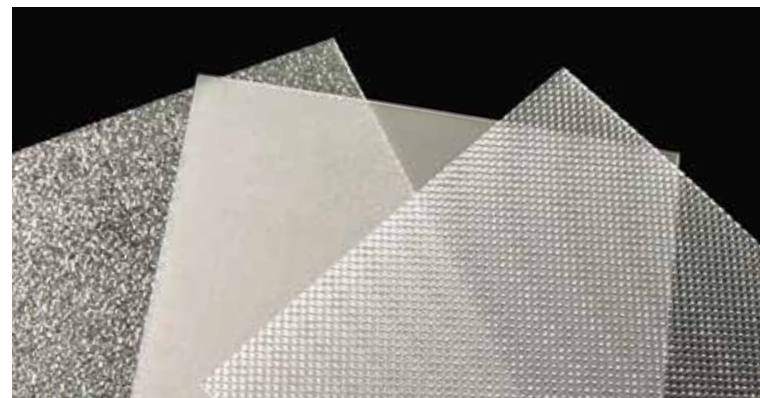
Visit [plaskolite.com/lighting](http://plaskolite.com/lighting) for more information.



## LEGACY PRODUCTS AND SURFACE STRUCTURE PRODUCTS

**OPTIX & TUFFAK GP Prismatic** for traditional lighting applications

- » UL94 HB rating
- » High light diffusion and light transmission
- » Reduces direct glare
- » OPTIX acrylic offers excellent efficiency and direct glare control with a large array of patterns
- » TUFFAK polycarbonate is virtually unbreakable and has high temperature resistance

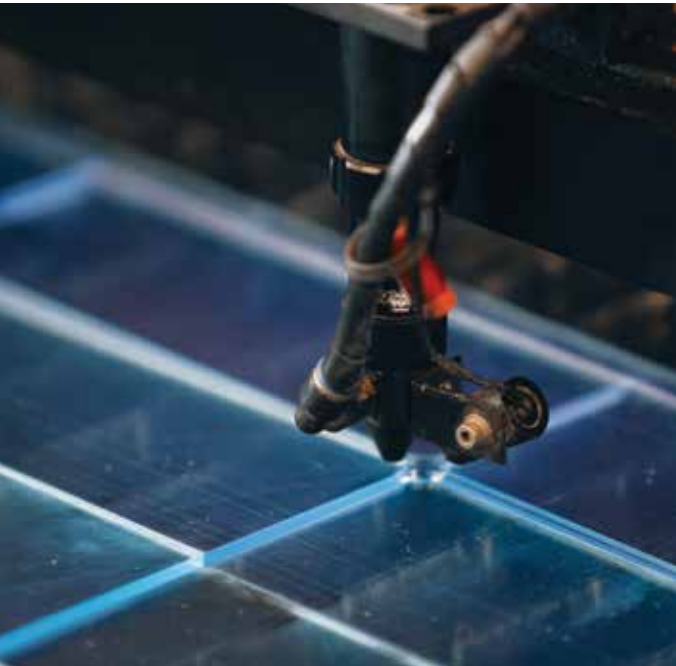


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**05**

# FABRICATION CAPABILITIES





## FABRICATION CAPABILITIES

Whether you're seeking intricate designs, flawless edges, or pristine finishes, our fabrication expertise and equipment combine to deliver unparalleled results.

### Laser Etching

- » Class 4 laser system
- » 2 worktables for high production yield
- » Custom patterns with varied etching depth for complex patterns
- » Max etching area approximately 4' x 5' (1220mm x 1525mm)

### Laser Cutting

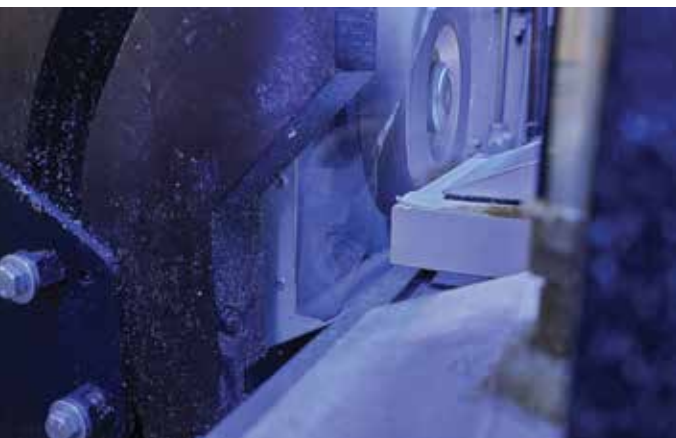
- » 250W laser to cut acrylic
- » 52" x 100" working area (1320mm x 2540mm)
- » K-vision camera system allows laser to orient cutting head to material using registration points
- » Polished edge

### Edge Polisher

- » Ability to edge-polish lengths up to 122" (3100mm)
- » Diamond edge polish with sharp corners
- » Crystal clear with no distortion

### Additional Fabrication Capabilities

- » Routing
- » Ultrasonic welding of end caps (profiles)
- » Dual miter saw cutting
- » Run-to-size available for acrylic and polycarbonate sheet



**06**

POLYMERS





## OPTIX PMMA POLYMERS

Plaskolite is the largest producer of custom-batch PMMA resins in North America. Used by extruders and injection molders, our wide range of general purpose, impact-modified, and specialty lighting grades are available with varying levels of heat resistance, light transmission and melt flow rates.

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- » 16 stock diffusive formulations at various light transmission and half angle outputs
  - » Available with or without low-gloss matte additive
  - » Impact resistant, high-heat resistant, UV transmitting and UV absorbing grades
  - » Custom blends and formulations, have a low 6,000 lbs. (2722kg) minimum order quantity

# PLASKOLITE

**A GLOBAL LEADER IN 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 & hands-on customer service.

## MANUFACTURING LOCATIONS:



## QUICK FACTS

**STATUS:** Privately held

**GLOBAL HEADQUARTERS:** Columbus, OH

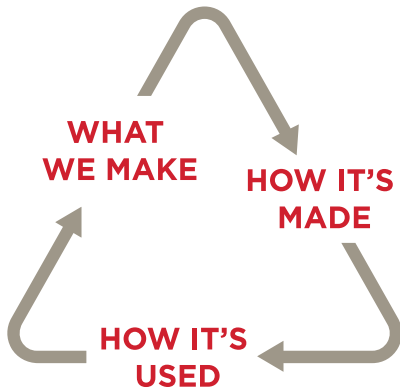
**EMPLOYEES:** 1900 Worldwide

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

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 ongoing commitment is expressed in the PLASKOLITE Sustainable Ecosystem.

## 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.

## PLASKOLITE

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