# PLASKOLITE LIGHTING SOLUTIONS

# PLASKOLITE

PERFORMANCE PLASTIC MANUFACTURING: SHEET, POLYMER, PROFILES



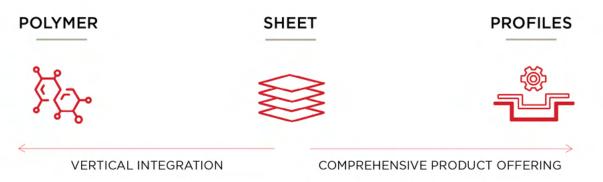
## OUR MISSION

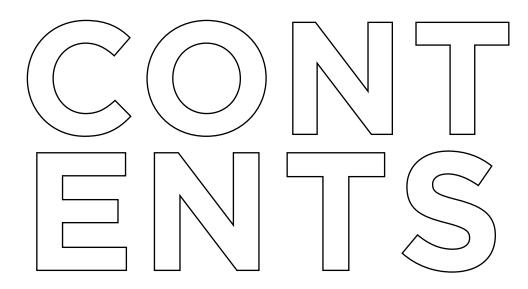
TO PRODUCE INNOVATIVE ENGINEERING THERMOPLASTICS THE RIGHT WAY; THROUGH LONG-LASTING CUSTOMER RELATIONSHIPS, HANDS-ON CUSTOMER SERVICE AND RESPONSIBLE MANUFACTURING



# 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.





- 4 CUSTOM PROFILES
- 6 OPTIX® ACRYLIC SHEET & FILM
- 7 TUFFAK® POLYCARBONATE SHEET
- 8 ADDITIONAL SHEET PRODUCTS
- **10** FABRICATION CAPABILITIES
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# **CUSTOM PROFILES**

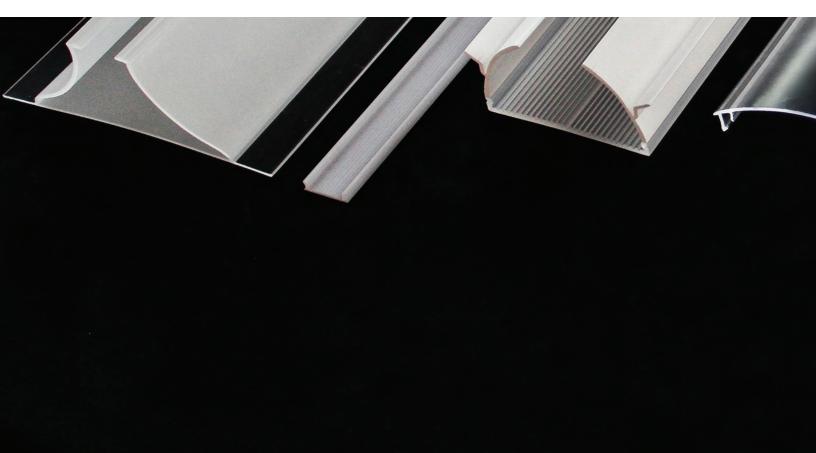
#### DESIGN & MANUFACTURING OF CUSTOM PROFILES

# FULL IN-HOUSE DESIGN ENGINEERING CAPABILITES

PLASKOLITE offers high-performance lighting profiles with advanced extrusion capabilities, superior diffusion, and customizable designs. Using OPTIX acrylic, TUFFAK polycarbonate, and custom blends, we deliver durable, efficient solutions for architectural, commercial, and specialty lighting applications. Every project begins with our comprehensive new product development methodology, ensuring a smooth transition from prototyping to full-scale production. Our expert in-house team collaborates with you every step of the way, offering flexibility and precision.

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





#### MATERIALS

Our lighting profiles are available in a range of high-performance thermoplastics, including co-extrusion capabilities to enhance material properties. Choose from:

- » Acrylic
- » Styrene
- » Polycarbonate
- » HIPS

» ABS

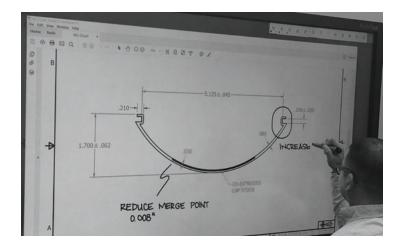
» PETG

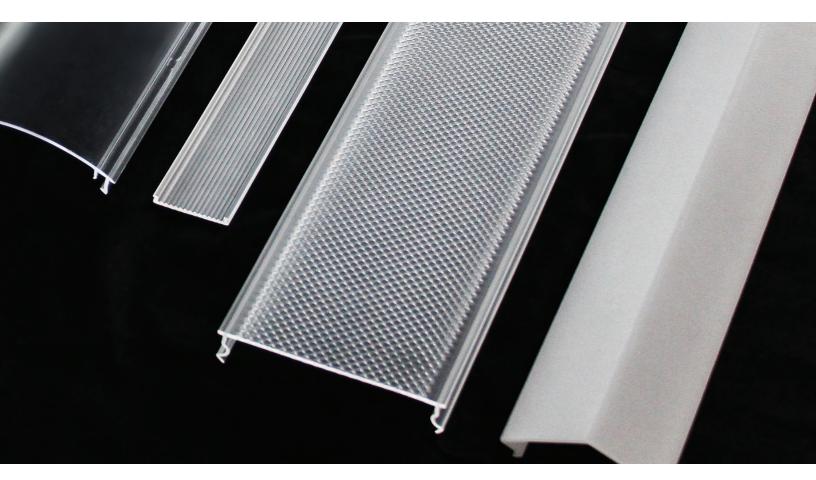
*Please inquire for additional materials. Coextrusion available.* 

#### **PRODUCTION LOCATIONS**

To ensure efficient turnaround times and global availability, we manufacture lighting profiles at multiple locations:

- » Monterrey, MX
- » Charlotte, NC



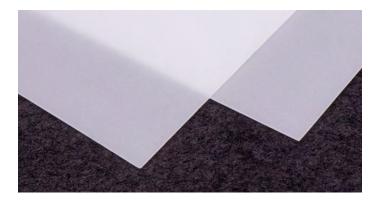


# **OPTIX ACRYLIC SHEET & FILM**

## OPTIX LED PXT

#### THE NEXT GENERATION OF ACRYLIC DIFFUSERS

- » Standard thickness: 0.060", 0.080", 0.118"
- » Standard dimensions: 49"x 97"
- » Optimized for high light transmission without trading diffusion/hiding power
- » Fine matte texture surface on 2 sides
- » Colorless and white options
- » UL HB rated



## **OPTIX DIFFUSIVE OVERLAYS**

#### OPTIX FLEXILUME AND FLEX G2 ACRYLIC OVERLAYS

- » Standard thickness: 0.010", 0.014", 0.020", 0.030"
- » Standard dimensions: 50" x 50"
- » Fine matte texture surface on 2 sides
- » Clear or diffusive formulations
- » Excellent hiding at close distances to light sources
- » Lambertian distribution

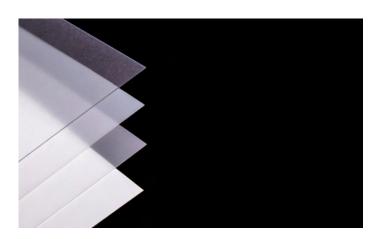




#### **OPTIX LED SATIN**

#### THIN GAUGE ACRYLIC DIFFUSERS

- » Standard thickness: 0.040"
- » Standard dimensions: 48" x 96"
- » Enables narrower dimensions and thinner gauges while maintaining hiding power
- » Matte textured surface for superior reduction of gloss
- » Colorless and white acrylic



## **REFLECTIVE WHITE OVERLAY**

#### OPTIX FLEX RFL

- » Standard thickness: 0.014"
- » Standard dimensions: 50" x 50"
- » 96% reflectivity
- » Fine matte texture, one side
- » Minimal light source color shift
- » Adhesive liner available

# TUFFAK POLYCARBONATE SHEET



## TUFFAK LUMEN XT

#### DIFFUSIVE POLYCARBONATE SHEET DESIGNED FOR LED LIGHTING LENSES

- » Standard thickness: 0.060", 0.118"
- » Standard dimensions: 48" x 96"
- » 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"
- » Meets UL94 VO, 5VA rating
- » Maintains high optical performance
- » Allows the diffuser sheet to also serve as the electrical enclosure
- » Available in three diffusion levels
- » Color temperature equivalent to standard Lumen XT LC (cool)

# ADDITIONAL SHEET PRODUCTS

## OPTIX MICROMID

#### DEGLARING SHEET

- » Standard thickness: 0.080", 0.118"
- » Standard dimensions: 50" x 50"
- » Substantial high angle cutoff above 50 degrees
- » Key part of a system to meet Unified Glare Rating (UGR) levels



## **OPTIX LED 95**

CO-EXTRUDED ACRYLIC DIFFUSION

- » Standard thickness: 0.118", 0.220"
- » Acrylic diffusion technology in a thin, co-extruded layer, which maintains optics throughout thickness range
- » Excellent for large format applications requiring rigidity
- » Fine textured surface on cap for reflective glare reduction

## LEGACY PATTERNS

OPTIX AND TUFFAK GP PRISMATIC FOR TRADITIONAL LIGHTING APPLICATIONS

» UL94 HB rating

» Variety of textured patterns that offer high light transmission and reduce direct glare

LIGHT SOURCE

CLEAR ACRYLIC

COEXTRUDED DIFFUSION LAYER

LIGHT SCATTERING EFFECT

- » OPTIX acrylic offers excellent efficiency, clarity and UV stability
- » TUFFAK polycarbonate is virtually unbreakable and has high temperature resistance





## OPTIX LGP

# CUSTOM LASER-ETCHED ACRYLIC LIGHT GUIDE PANELS\*\*

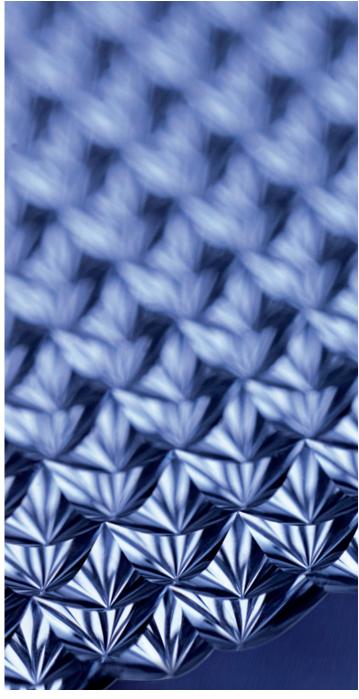
- » Maximum etching area: 4' x 5'
- » Customizable laser etched pattern
- » Optimal for edge lighting
- » UV resistant: suitable for indoor and outdoor use
- \*\* See page 6 to learn more about our reflective white film and diffuser options.



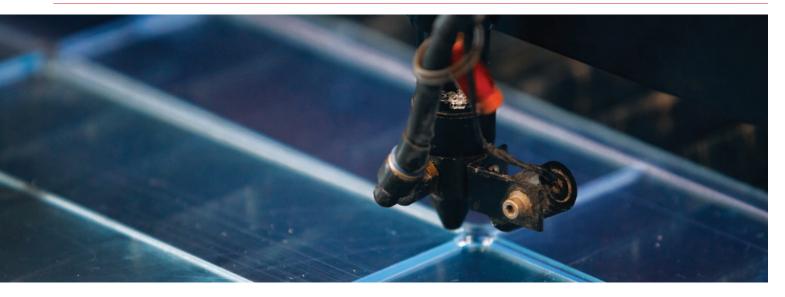
#### PLASKOLITE HAS PARTNERED WITH JUNGBECKER

**OPTICS** to advance innovative light-steering technologies that deliver exceptional precision. This collaboration enhances control over light distribution, minimizing light pollution, and unlocking new possibilities for creative lighting solutions.

- » Hot embossing 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



# 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

- » Max etching area approximately 4' x 5'
- » Custom patterns with varied etching depth for complex patterns

#### LASER CUTTING

- » 52" x 100" working area with 250W laser
- » Cuts thicknesses from 0.040" to 1" with high precision
- » Polished straight edge

#### EDGE POLISHING

- » Ability to edge-polish lengths up to 122"
- » 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



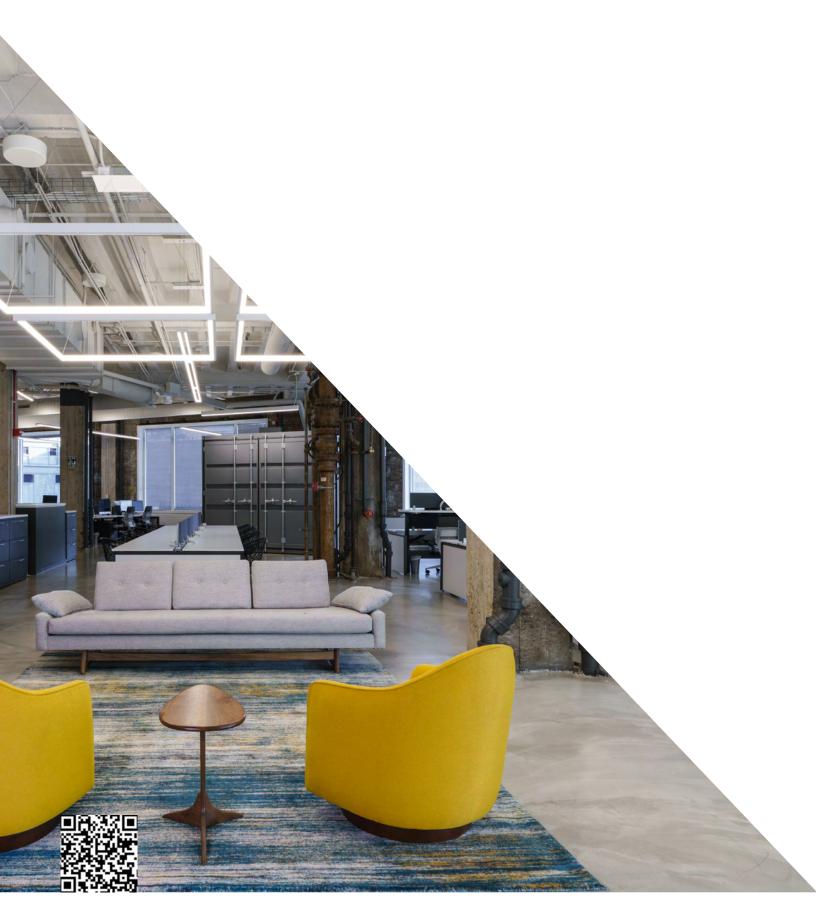
# POLYMERS



### **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.

- » 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 and UV transmitting/or absorbing grades available
- » Custom blends and formulations, have a low 6,000 lb. order minimum



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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