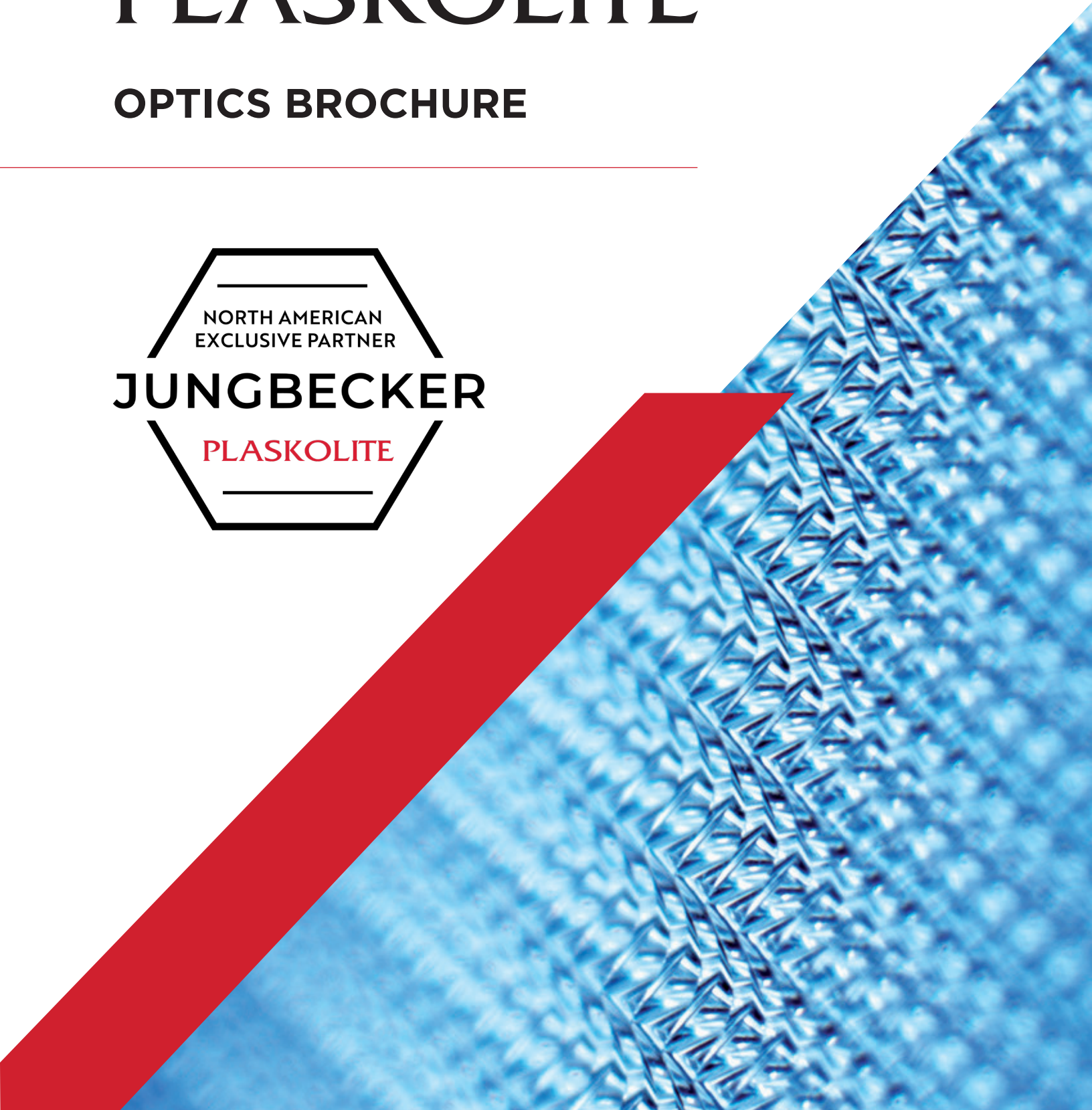# PLASKOLITE

OPTICS BROCHURE

NORTH AMERICAN
EXCLUSIVE PARTNER

JUNGBECKER

PLASKOLITE
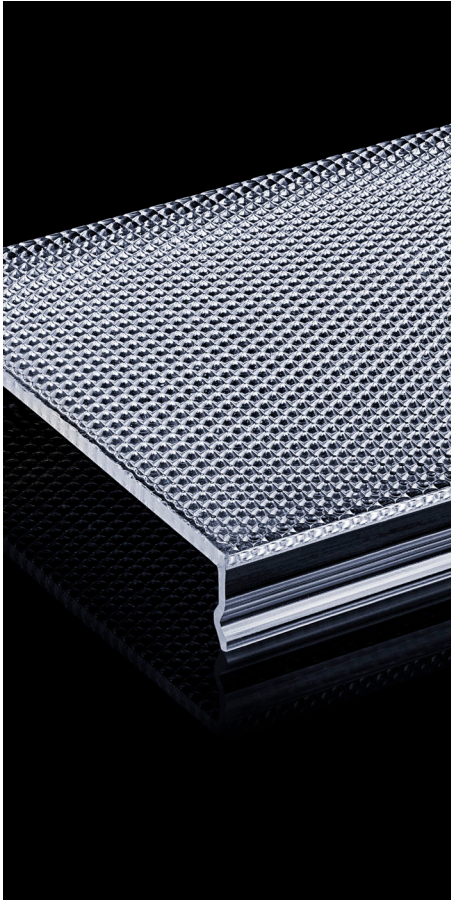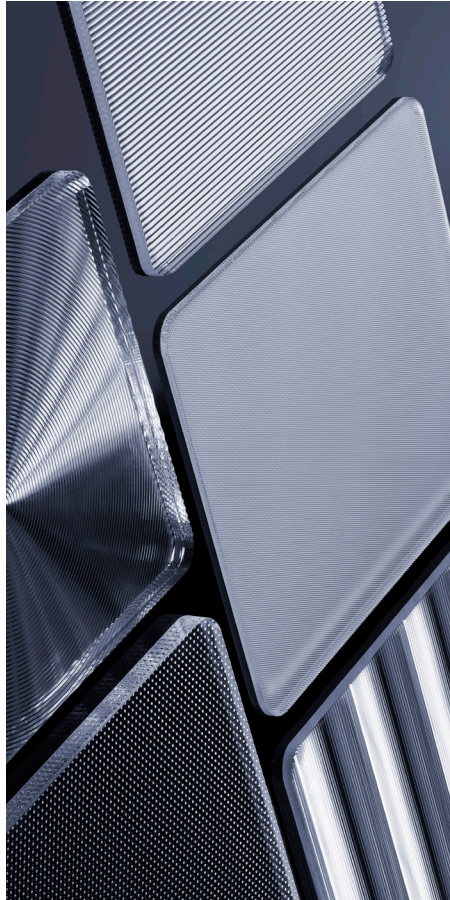
INTRODUCTION

Plaskolite is the industry leader in thermoplastic solutions for various lighting products, including extruded sheet, custom extruded profiles, films and lenses. The Jungbecker partnership builds on that portfolio with the addition of new technologies that steer light with tremendous precision, avoiding unwanted diffusion, minimizing light pollution, and enabling creative lighting applications.

PROFILE

SHEET

MOLDED OPTICS

PRODUCTION
Jungbecker's specific hot-embossing and injection molding technology enables precise light guiding solutions while ensuring the greatest possible efficiency.

CUSTOMIZATION
Development and production of customized optical components and systems in plastics, from conception to production in sheets, profiles, and injection molded volumetric optics.

Visiting plaskolite.com/lighting for more information.

STANDARD PRODUCT OFFERING

Conical De-glaring Prism
The CDP is a unique product that provides outstanding de-glaring performance and allows best UGR ratings. Prisms are designed as cones and optimized for highest efficiency, smooth de-glaring characteristics, and an opal appearance.

Conical De-glaring Prism 15°
The CDP15 combines the excellent de-glaring performance of the cone structure with an asymmetric deflection of the passing light rays. A tilt of the cones supports asymmetric illumination effects.
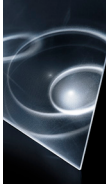
Micro Conical De-glaring Prism
Similar to CDP, with enhanced aesthetics by reducing the feature size and the options for material thickness 1mm - 3mm.

Linear De-glaring Prism
The LDP offers smooth and highly efficient de-glaring capabilities along the main axis of the sheet. Numerically optimized pyramidal structures with sharp edge radii are ideal for high-precision light guiding applications.

Delta De-glaring Prism
The DDP prism structure offers outstanding de-glaring performance with a reduced material thickness of 2mm only, providing almost the same mechanical stability as the proven structures in 3mm thickness .

Asymmetrical De-glaring Prism
The ADP is a special application of a linear microstructure. These prisms are asymmetrical with a one-sided perpendicular flank. Parallel light is deflected asymmetrically and therefore enables directed illumination of objects and surfaces.

Linear Prism 90°
The special geometry of perpendicular prisms for the LP90 efficiently solves: beam splitting, ray deflection, total reflection of perpendicular ray deflection incident light and much more.

Circular De-glaring Prism
The RDP is a special application of a circular Fresnel lens. Specifically optimized for smooth de-glaring, the linear prisms of our LDP are arranged circularly.

Linear Sine Prism
The LSP consists of linear prisms which are modified sinusoidally in their cross section. It works as an optical diffusor perpendicular to the main axis of the sheet, with the highest efficiency compared to opal materials.

Customized Edgelit Technology
Jungbecker edgelit technology offers individual solutions for a wide range of LGP applications. Customer specific optimization of the light decoupling elements in combination with a variety of different form factors allow for truly unique products with highest efficiency and a transparent appearance.
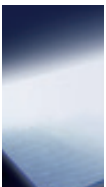
Light Guiding Prismatic Plate
The LGP decouples light which is fed into the sheet from the sides across the surface area by the integrated prismatic optics. The optical structure is not acting as a diffusor but uses reflection and refraction of the microprisms, which leads to a de-glared light distribution.
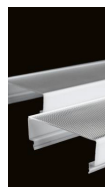
Injection Molded Optics
Specialized in highly precise, tailored light guiding solutions, with expertise in thick walled large lenses with high aspect ratios, optimized for best performance and efficient series production.

Customized Microstructures and Lens Arrays
Large-scaled arrays of precision microstructures, tailored according specific requirements, from aspherical hexagonal or squared convex arrays, our customer specific tooling options offer a wide range of customization while maintaining maximum efficiency.

exPRESS Technology
exPress technology offers the combination of extruded profile geometries and high precision microstructures for an outstanding de-glaring performance.

Customized Linear and Circular Fresnel Lenses
Fresnel Lenses can be made as linear or circular, focusing or dispersing, single or multiple in one sheet, with high precision structure details

JUNGBECKER

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:
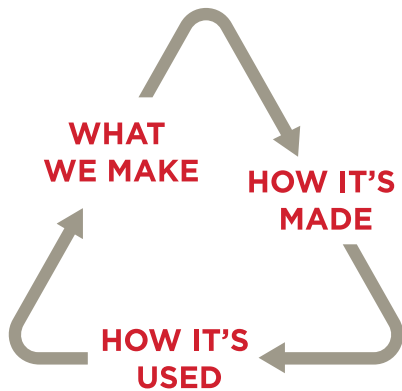
QUICK FACTS

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

WHAT WE MAKE

HOW IT'S MADE

HOW IT'S USED

PLASKOLITE

BRO115_OPTICS