

# Plastics for Lighting Applications



## BENEFITS OF PLASTIC:

- Outstanding light transmission
- LED diffusing grades available
- Resists damage during shipping and installation
- Can be thermoformed into complex shapes
- Lightweight for low shipping cost and easy installation
- Some grades can be bent and cold formed
- Thin sheet and film can be used to retrofit existing light fixtures
- Light diffusing films can be formed into curved shapes

## Plastic materials to meet your needs

Lighting manufacturers face the complex challenge of creating aesthetically pleasing fixtures that achieve the perfect warm or cool color and the right levels of light transmission and diffusion. Curbell Plastics offers a wide range of plastic film and sheet light diffuser materials that can accommodate any lighting fixture application.

Diffusing light from LED lamps can be particularly challenging since LEDs tend to create "hot spots" of concentrated light that are difficult to diffuse. Our product line includes materials such as OPTIX® LD acrylic sheet, PLEXIGAS® Sylk acrylic sheet, and Makrofol® LM (light management) polycarbonate films engineered to transmit and diffuse light generated by LED lamps.

## Material selection, expert advice

*"Curbell Plastics offered us many different diffuser options for our new architectural lighting fixture. With their help, we were able to achieve the exact look that we wanted. Their ability to quickly and accurately cut large quantities of plastic diffusers helps to keep our production running on schedule."*

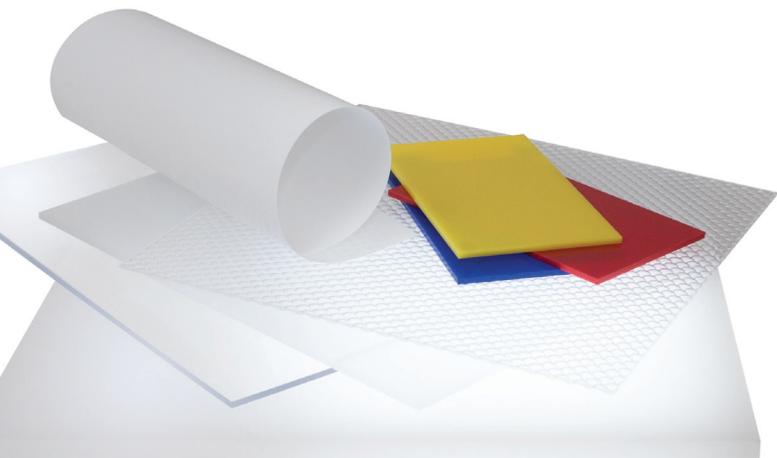
– Curbell Customer Feedback

## TYPICAL APPLICATIONS:

- Indoor and outdoor light fixtures
- Lighted point-of-purchase displays
- Lighted retail store merchandisers
- Backlit signs
- Lighted architectural features
- Machine vision systems
- Mass transit lighting
- Aerospace lighting

## COMMON MATERIALS:

- Acrylic
- KSH® lighting panels
- Makrofol® DE 1-4 films
- Makrofol® LM films
- OPTIX® 95
- OPTIX® Frost
- OPTIX® LD
- OPTIX® NG
- PLEXIGLAS® Sylk
- Polycarbonate
- Polycarbonate film
- TUFFAK® DX-NR
- TUFFAK® Lumen XT



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