

PRODUCT DATA SHEET (REV20251203)

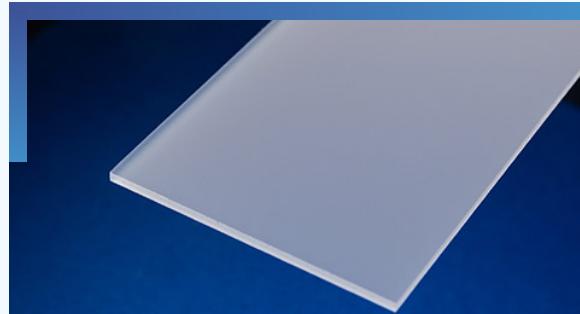
PMMA LED DIFFUSING (ACRYLIC) SHEET

Create flawless illuminated displays with SRT LED Diffusing Acrylic (PMMA-Ice). This specialized extruded sheet features a smooth 'Ice White' finish engineered to optimize light output while completely masking individual LED hotspots.

With a high light transmission of 72% and a half-power angle of 55°, it provides bright, uniform illumination for lightboxes, architectural lighting, and natural skylights. It retains all the fabrication benefits of standard acrylic, allowing for easy laser cutting, bonding, and polishing.

KEY ADVANTAGES

- Hides LED hotspots completely
- High light transmission (72%)
- Uniform light diffusion
- Smooth surface (Easy maintenance)
- Energy efficient for lightboxes
- UV stable and weather resistant



TYPICAL APPLICATIONS

- Backlit Signs and Graphics: Provides a smooth, consistent light source behind large advertisements, posters, or digital prints
- Retail Displays: Highlights products in illuminated display cases and shelving units.
- Integrated Architectural Lighting: Used in modern designs for feature walls, coves, and partitions where the lighting is seamlessly integrated into the structure.



AVAILABLE DIMENSIONS

- Sizes: 3050 x 2050 mm
- 2 mm - other thicknesses on request
- Color - Ice White
- Cut-to-size and custom fabrication available



The information contained within this datasheet is for guidance only.

The data is not exhaustive. All figures quoted are nominal. Any applications should be checked with SRT Plastics prior to use.

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PMMA **LED DIFFUSING** (ACRYLIC) SHEET

PROPERTY	VALUE	UNIT	STANDARD
PHYSICAL PROPERTIES			
Density	1,19	g/cm ³	ISO 1183
Refractive index (20°C)	1,49	-	ASTM D-542
Water Absorption (24h)	0,20	%	ISO 62
MECHANICAL PROPERTIES			
Tensile Strength	76	MPa	ISO 527
Elastic Modulus	3200	MPa	ISO 527
Flexural Modulus	3200	MPa	ISO 178
Charpy Impact (Unnotched)	20	kJ/m ²	ISO 179
Rockwell Hardness	M95 - M105	R Scale	ISO 2039-2
THERMAL PROPERTIES			
Max Service Temperature (Continuous)	85	°C	Internal
Vicat Softening Temp. (50N)	103	°C	ISO 306
HDT/A (1.80 Mpa)	95	°C	ISO 75-2
Coeff. Of Linear Thermal Expansion	7.0	x10 ⁻⁵ /°C	ISO 11359-2
FLAMMABILITY			
Flammability Rating (>3mm)	HB	-	UL94
OPTICAL PROPERTIES			
Light Transmission	72%		ASTM D-1003

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