

PRODUCT DATA SHEET (REV20251203)

PMMA **OPAL** (ACRYLIC) SHEET

Achieve the classic illuminated look with SRT Opal Acrylic (PMMA-Opal). Engineered specifically for the advertising and signage industry, this extruded sheet (Ref. 385) offers an intense, solid white appearance by day and a uniform, glowing surface by night.

With a light transmission of 34%, it is denser than our 'Ice' grade, providing superior hiding power to completely mask internal wiring, structural elements, and LED modules. It is the definitive material for channel letters, deep lightboxes, and architectural features requiring a smooth, diffuse glow without visible internal components.

KEY ADVANTAGES

- Intense white daytime appearance
- 34% light transmission (High Diffusion)
- Completely hides internal components
- Uniform illumination without hotspots
- UV stable for outdoor signage
- Excellent laser cutting properties



TYPICAL APPLICATIONS

- LED Lighting Fixtures: Used extensively as diffusers in modern LED panel lights, strip light covers, ceiling tiles, and decorative lampshades, where the goal is to fully conceal the light source and achieve a soft, ambient glow.
- Architectural Features: It is used in ceiling panels, wall features, and room dividers that are backlit to create a calming, uniform lighting environment in retail, hospitality, and office spaces.



AVAILABLE DIMENSIONS

- Sizes: 3050 x 2050 mm
- 2 - 5 mm
- Color - Intense Opal 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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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	34%		ASTM D-1003

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