PRODUCT DATA SHEET (REV20250527)

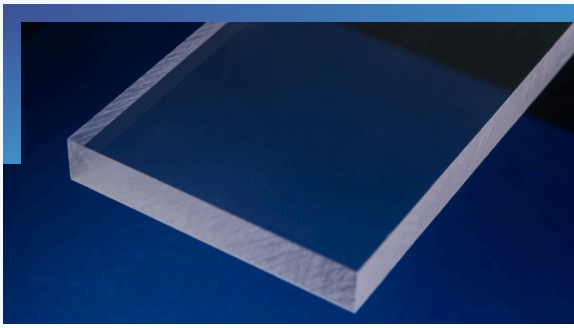
PC / POLYCARBONATE **CLEAR TRANSPARENT UV** SHEET

SRT Plastics Polycarbonate Clear Transparent UV sheets are high-performance, transparent thermoplastic sheets designed for demanding environments. With double-sided UV protection, these sheets maintain optical clarity and mechanical strength even in prolonged outdoor exposure. They are ideal for applications where traditional glass falls short due to weight, safety, or breakage concerns.

Thanks to their superior impact resistance, excellent fire behavior, and ease of fabrication, Polycarbonate Clear Transparent UV sheets offer a future-proof solution for architects, engineers, and OEMs seeking long-term performance without compromising on aesthetics or safety.

KEY ADVANTAGES

- Double-sided UV protection for extended outdoor performance
- More than 10x stronger than impact-modified PMMA
- Half the weight of glass for easier handling and reduced structural load
- Excellent fire classification according to EN 13501-1
- Easy to cut, thermoform, and machine
- 10-year warranty



TYPICAL APPLICATIONS

- Skylights, roof lights, barrel vaults, and architectural glazing
- Bus shelters and covered walkways
- Vending machine windows and poster protection
- Outdoor signage and lamp covers
- Greenhouses and sound barrier walls
- Stairs, railings, and safety glazing in public spaces

AVAILABLE DIMENSIONS

- Standard Sheet Sizes: 2050 x 3050 mm
- Thickness Range: 2 mm to 20 mm
- Custom sizes, textures, and thicknesses available upon request

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PROPERTY	VALUE	UNIT	STANDARD
PHYSICAL PROPERTIES			
Density	1,2	g/cm³	IS0 1183
Refractive index (20°C)	1.586	-	ISO 489
Moisture Absorption (24h, 23°C, 50% RH)	0.15	%	ISO 62
MECHANICAL PROPERTIES			
Tensile Strength (Yield / Break)	60 / 70	N/mm²	ISO 527
Elongation (Yield / Break)	6 / 110	%	ISO 527
Elastic Modulus	>2300	N/mm²	ISO 527
Flexural Modulus	>2300	N/mm²	ISO 178
Impact Strength (charpy unnotched, -40°C)	NB	kJ/m²	ISO 179
Impact Strength (charpy notched, -30°C)	11	kJ/m²	ISO 179
Izod Notched Impact (+23°C / -30°C)	65 / 10	kJ/m²	ISO 180
THERMAL PROPERTIES			
Heat Deflection Temp (HDT A - 1.80 Nmm²)	132	°C	ISO 75
Heat Deflection Temp (HDT B - 0.45 Nmm²)	142	°C	ISO 75
Vicat Softening Temp (VST - B120 / B50)	149 / 148 °C	°C I	SO 306
Thermal Conductivity	0.20	W/m-K	ISO 8302
Linear Thermal Expansion (20°C - 70°C)	$65x10^{-6}$	K^{-1}	ISO 11359-2
ELECTRICAL PROPERTIES			
Volume Resistivity (Dry)	$>10^{14}$	Ω.m	IEC 62631
Surface Resistivity (Dry)	10^{16}	Ω	IEC 62631
Dielectric Strength (Dry)	30	kV/mm	IEC 60243
Dielectric Constant (Dry, 50Hz)	3		IEC 62631
Dielectric Constant (Dry 1MHz)	2.9		IEC 62631
Dissapation Factor (tan δ) (Dry 50Hz)	0.001		IEC 62631
Dissapation Factor (tan δ) (Dry 1MHz)	0.01		IEC 62631