

Product data sheet

August, 2023

SOLID POLYCARBONATE SHEET



Is a transparent, lightweight and yet heavy-duty polymer sheet without internal voids, coated with a double-sided UV protection, can withstand heavy loads and ensure reliability and attractive appearance of a structure. Can perform light scattering as an opal light diffuser. Unique properties of solid polycarbonate enable its wide use in urban, industrial and road construction, engineering, medicine, furniture manufacturing, advertising business, office and residential interiors, as well as in the social infrastructure.

ADVANTAGES:

- ✓ Highly translucent
- ✓ Durable
- ✓ Flexible
- ✓ Noise-absorbing
- ✓ Fireproof
- ✓ Moistureproof
- ✓ UV-resistant
- ✓ Eco-friendly
- ✓ Long-lasting

OPTION	DESCRIPTION		
Thicknesses:	0.5 / 0.6 / 1 / 1.5 / 2 / 3 / 4 / 5 / 6 / 8 / 10 / 12 mm		
Sizes (Standard):	1250 x 2050 mm	2050 x 3050 mm	2050 x 6110mm
Colors:	Transparent / Bronze / Anthracite / Opal		

PROPERTIES		VALUE
Physical Properties		
	Density	1200 kg/m ³
	Water absorption in Water Equilibrium, 23°C	0.35%
Mechanical Properties		
	Tensile strength	60 MPa
	Modulus of elasticity	2250 MPa
	Elongation at tear	110 %
	Charpy impact strength 23 °C, 3 mm, notched	80P kJ/m ²
Thermal		
	Coefficient of linear thermal expansion 0-50°C	65 x 10 ⁻⁶ K ⁻¹
	Heat conductivity (l)	0.21 W/mK
	Service Temperature Range	- 40°C to 100°C
Optical characteristics		
	Refractive index	1,457

LIGHT TRANSMISSION									
Thicknesses:		2mm	3mm	4mm	5mm	6mm	8mm	10mm	12mm
Colors:	Transparent	92 %	90 %	90 %	89 %	88 %	87 %	87 %	85%
	Bronze	40 %	40 %	40 %	40 %	40 %	40 %	40 %	40 %
	Anthracite	45 %	45 %	45 %	45 %	45 %	45 %	45 %	45 %
	Opal	30 %	30 %	30 %	30 %	30 %	30 %	30 %	30 %

DIRECT AIRBORNE SOUND INSULATION												
Thicknesses (mm):	0.5	0.6	1	1.5	2	3	4	5	6	8	10	12
R (dB):	NPD	NPD	NPD	NPD	NPD	NPD	27	28	29	30.5	31.5	32.5

COLD CURVING												
Thicknesses (mm):	0.5	0.6	1	1.5	2	3	4	5	6	8	10	12
Min Radius (mm):	250	250	250	300	300	500	700	900	1000	1500	1800	2200

FIRE RATING according EN 13501-1	
B s1 d0	1-4 mm
B s2 d0	5-6 mm

APPLICATIONS:

- ✓ Curved rooflights
- ✓ Covered walkways
- ✓ Rooflights and glazing
- ✓ Sunrooms
- ✓ Architectural roofing
- ✓ Exterior signage
- ✓ Industrial and architectural applications which require weather and UV protection
- ✓ Highway noise barriers
- ✓ Transparent partitions in medical and public service facilities

The technical data of our products are typical ones; the actually measured values are subject to production variations.

