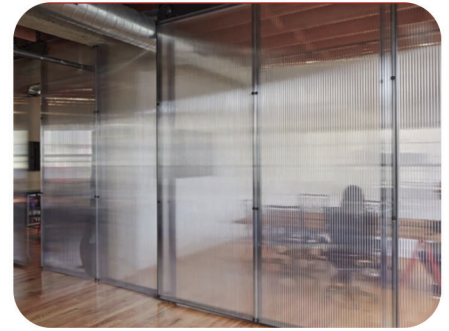




POLYCARBONATE (PC) MULTIWALL SHEETS

POLYCARBONATE MULTIWALL SHEETS

APPLICATION AREAS



- Facade Applications
- Winter Gardens
- Parking lots
- Underpasses
- Walking paths
- Entrance eaves
- Sports facilities

- Factory windows and skylights
- Overpasses
- Greenhouses
- Patio and terrace roofs
- Roof skylights
- Interior partitions
- Sound barriers

- Pool cover systems
- Stair and balcony railings
- Billboards
- Office furniture
- Exhibition stands
- Bus stops



ADVANTAGES OF POLYCARBONATE SHEET



Excellent Thermal Insulation



6 Times Lighter Than Glass



Resistance to Different Climatic Conditions (-40 °C, +120 °C)



Ensures Homogeneous Distribution of Filtered Light



Up to 90% Light Transmittance



Double or Single-Sided UV Protection



Provides Ease of installation



Easy Shaping with Hot & Cold Bending



Flame Retardant



Provides Sound Insulation

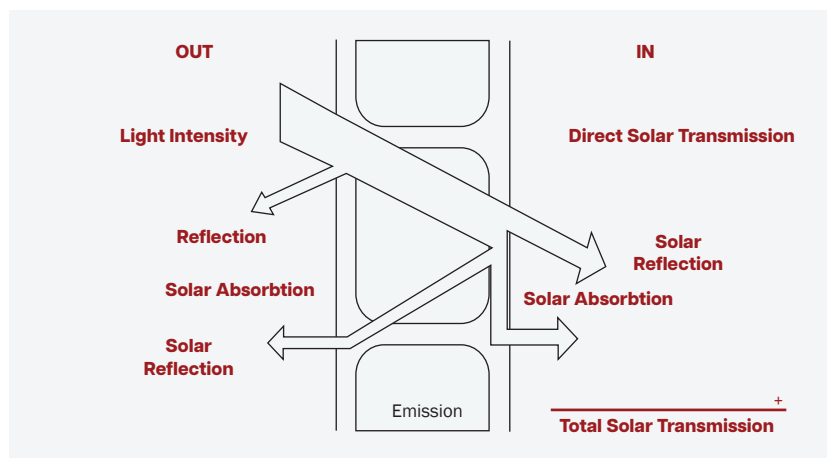


MULTI-WALL POLYCARBONATE SHEETS

Product	Profile	Thickness (mm)	Thickness Tolerance (mm)	Weight (min) (g)	Weight (max) (g)	Weight tolerance per unit area (g)	Length (cm)	Width (cm)	Length Tolerance (cm)
Twin-Wall		4	± 5 %	650	860	± 5 %	600/580	210	± 3 %
		6		900	1400				
		8		1200	1600				
		10		1300	1900				
3-Wall		14	± 5 %	1900	2400	± 5 %	600/580	210	± 3 %
		16		2100	2800				
		18		2300	3000				
4-Wall		8	± 5 %	1300	1700	± 5 %	600/580	210	± 3 %
		10		1450	1900				
		12		1600	2100				
7-Wall		16	± 5 %	2500	2800	± 5 %	600/580	210	± 3 %
		20		2900	3200				
9-Wall		25	± 5 %	3200	3400	± 5 %	600/580	210	± 3 %
		32		3900	3900				

Multiwall Sheet Minimum Bending Radius

Product	Profile	Thickness (mm)	Bending Radius
Twin-Wall		4	600 mm
		6	900 mm
		8	1200 mm
		10	1500 mm
3-Wall		14	2100 mm
		16	2400 mm
		18	2700 mm
4-Wall		8	1600 mm
		10	2000 mm
		12	2700 mm



Color And Light Transmittance (%)

Product	Thickness	Standard Colors							
		Transparent	Bronze	White	Diffuser	Blue	Green	Turquoise	Gray
Twin-Wall	4	82	28	39	60	40	30	30	10
	6	81	26	39	56	36	27	28	9
	8	80	24	39	52	30	24	26	7
	10	78	22	40	50	29	22	24	7
3-Wall	14	72	20	44					
	16	70	18	42	36	20	15		3
	18	68	17	42					
4-Wall	8	74	22	39	52	32	24		
	10	73	20	38	50	28	22		
	12	72	18	37	48	26			

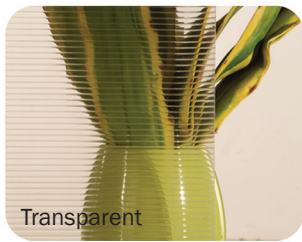
* Custom colors can be produced upon request. Based on EN 410 standard. Frosted series of all colors are produced. Production is carried out in the desired weight.



General Features	Typical Features	Units	Values	Test Methods
	Density	g/cm ³	1,2	ASTM D 792
	Water absorption saturation (water 23 °C)	%	< 0,45	ASTM D 570
	Water absorption balance (23 °C , at 50% relative humidity)	%	0,12	ASTM D 570

Mechanical Properties	Tensile Stress at the Yield	MPa	60	ASTM D 638
	Tensile Stress at Break	MPa	70	ASTM D 638
	Elongation at Yield	%	6	ASTM D 638
	Elongation at Break	%	125	ASTM D 638
	Tensile Modulus	MPa	2400	ASTM D 638
	Flexural Strength	MPa	100	ASTM D 790
	Taber Abrasion	mg/1000 cycles	10	ASTM D 1044
	Charpy Notched Impact Strength	kJ/m ²	40	ASTM D 256
	Izod Notched Impact Strength	kJ/m ²	75	ASTM D 256A
	Impact Resistance	joule	72	ASTM F 736

Thermal Properties	Vicat Softening Temperature	°C	148	ASTM D 1525
	Heat Deflection Temperature	°C	132	ASTM D 648
	Thermal Index - Electrical Properties	°C	100	UL 746B
	Thermal Index - Mechanical Properties	°C	120	UL 746B
	Coefficient Linear Thermal Expansion	mm/m °C	0,065	ASTM D 696
	Shrinkage	%	< 3	BSEN ISO



Fire Class	
Method	Class
EN 13501	B, s1, d0

Polycarbonate Sheets Production Tolerances	
Length	± 2 mm
Width	± 1 mm
Diagonal	≤ 3 mm

**Accredited laboratory approved. *For more detailed information, please consult Teknorm.

Sound Reduction Values (EN ISO 10140-4 & EN ISO 717-1)

Product	Thickness (mm)	Sound Reduction Values (dB)
Twin-Wall	4	12
	6	14
	8	15
	10	16
3-Wall	16	18
4-Wall	8	17
	10	18
7-Wall	16	17
	20	19
9-Wall	25	19
	32	20

Heat Conductivity and Resistance to Heat (EN ISO 6946) U Value

Product	Thickness (mm)	U Value (W/m ² - K)	R [(m ² -K)/(W/m ² - K)]
Twin-Wall	4	3,77	0,10
	6	3,33	0,13
	8	3,04	0,16
	10	2,83	0,20
3-Wall	16	2,10	0,31
4-Wall	8	2,69	0,18
	10	2,43	0,24
7-Wall	16	1,86	0,37
9-Wall	20	1,65	0,44
	25	1,35	0,57
	32	1,18	0,68

