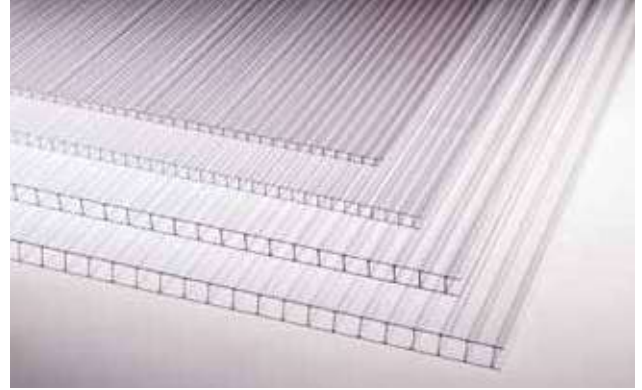


POLYCARBONATE MULTIWALL SHEETS

Işık Plastik Policam Polycarbonate Multiwall Sheets have excellent properties with a wide product range from 4mm simple twin wall structure up to 7 wall 16 & 20 mm and 9 wall 25 & 32 mm complex structured sheet. By the strengthened structure, these sheets offer increased durability and loading capacity with reduced deflection and also their good heat retention values, our Climax series give buildings the best performance in energy saving. Policam Polycarbonate Multiwall Sheet is a perfect solution for applications requiring a material; high light transmission, thermal insulation and resistance, lightness of weight with strength, high impact resistance, flame retardation, great economy and design flexibility. Application fields include such as commercial green house where good thermal insulation and hail resistance is necessary together with high light transmission, constructional purposes for various glazing applications, skylights, walkways, windows, shelters, and insulated roofing, architectural purposes with the ability to be cold-formed into arches and also can be used for walkways, indoor shopping centers, swimming pool coverings, skylights and other enclosures, home improvement purposes for easy do-it-yourself projects like window replacements, shower enclosures, hobby greenhouses, partitions, light covers, patio covers, carports and more. From production to end application, Policam mw sheet maintains its durability. Even when exposed to elevated outdoor temperatures over a long period of time (protective film is removed) maintains its structural integrity. It resists cracking and splintering during fabrication, assuring you a high degree of safety and it can be cold formed on site. Multiwall sheet is extremely stronger than glass and is ideal for replacing old roofs. Because of its strength, light weight and pleasing appearance, polycarbonate is ideal for conservatory roofs and is used by most of conservatory manu-facturers. With the UV protective layer, it provides great protection to the sunlight while allowing excellent light transmission. Policam Polycarbonate Multiwall Sheets come with a 10 year limited warranty.



General Properties

	Value	Test Method
Density (gr/cm ³)	1,2	ISO 1183
Water Absorption (%)	0.35	ISO 62
Tensile Modulus (Mpa)	2300	ISO 527
Service Temperatures °C	-40/+120	
Hail Resistance	PASSED	Internal test method
Vicat Softening Temperature °C	145	ISO 306

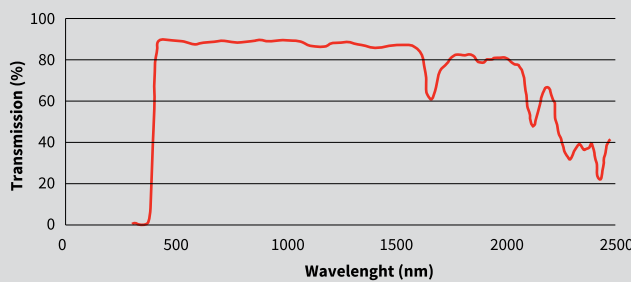
THERMAL PROPERTIES

	Unit	Value
Coefficient of linear thermal expansion, parallel 23 to 55 °C	mm/m°C	0,065
Thermal conductivity	W/mK	0,2
Heat deflection temperature under load	°C	127
	°C	139

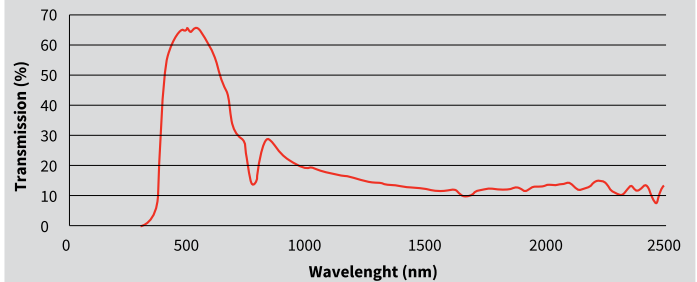
MECHANICAL PROPERTIES

	Value	Test Method
Tensile stress at yield (Mpa)	>60	ISO 527-2/1B/50
Elongation at yield (%)	6	ISO 527-2/1B/50
Tensile strength (Mpa)	>60	ISO 527-2/1B/50
Elongation at break (%)	> 70	ISO 527-2/1B/50
Elastic moduls (Mpa)	2400	ISO 527-2/1B/1
Limiting flexural stress (Mpa)	ca.90	ISO 178
Charpy impact strength (kj/m ²)	No Break	ISO 179-1

TRANSMISSION SPECTRAL OF 10mm STANDARD CLEAR MW SHEET



TRANSMISSION SPECTRAL OF 10mm IR PERFORMED MW SHEET



POLYCARBONATE MULTIWALL SHEETS

Applications of Policam PCMW Sheets

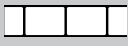
Conservatories • Canopies • Vertical glazing • Displays
• Covered walkways • Curved roof lights • Industrial roof lights • Signage • Greenhouse coverings • Walkways • Indoor shopping center • Swimming pool coverings • Skylights • Glazing applications, skylights, walkways, windows, shelters.

Properties of Policam PCMW Sheets

- Can be formable with cold bending.
- Service temperature -40 °C, +120 °C
- Very high impact resistance.
- Excellent light transmission.
- Excellent thermal insulation.
- Outstanding weatherability.
- Easy to cut & machine
- Chemical resistant.
- Sound insulation
- Hail resistant.
- UV resistant.
- Lightweight.
- B s1 d0



Bending Radius of Policam Polycarbonate Multiwall Sheets

Product	Profile	Thickness in mm	Min. Bend Radius
Twin-wall		4	700
		6	900
		8	1200
		10	1500
Four-wall		8	1200
		10	1500
Triple-wall		16	2400

Size of Policam Polycarbonate Multiwall Sheets

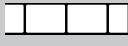
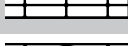
Max. Width (mm)	Width Tolerance	*Standard Length (mm)	Tolerance Length
**2100	-2 ; +6	6000	0 ; + 0,4 %

Policam pc mw sheets are produced according to EN 16153

* Depends on Customer Request

** 16;20;25 and 32 mm sheet can be produced with a width of 980mm both edges are closed

Thickness & Overall Thickness Tolerance of Policam Polycarbonate Multiwall Sheets

Product	Profile	Thickness in mm	Overall thickness tolerance (mm)	Weight (min) g/m ²	Weight (max) g/m ²	Mass tolerance per unit area
Twin-wall		4	± 0,5	700	860	± 5%
		6		1000	1400	± 5%
		8		1200	1600	± 5%
		10		1300	1800	± 5%
Four-wall		8	± 0,5	1550	1700	± 5%
		10		1700	1900	± 0,5%
Triple-wall		16	± 0,5	2300	2800	± 5%
Seven-wall		16	± 0,5	2500	2800	± 5%
		20		2900	3200	± 5%
Nine-wall		25	± 0,5	3200	3400	± 5%
		32		3500	3900	± 5%

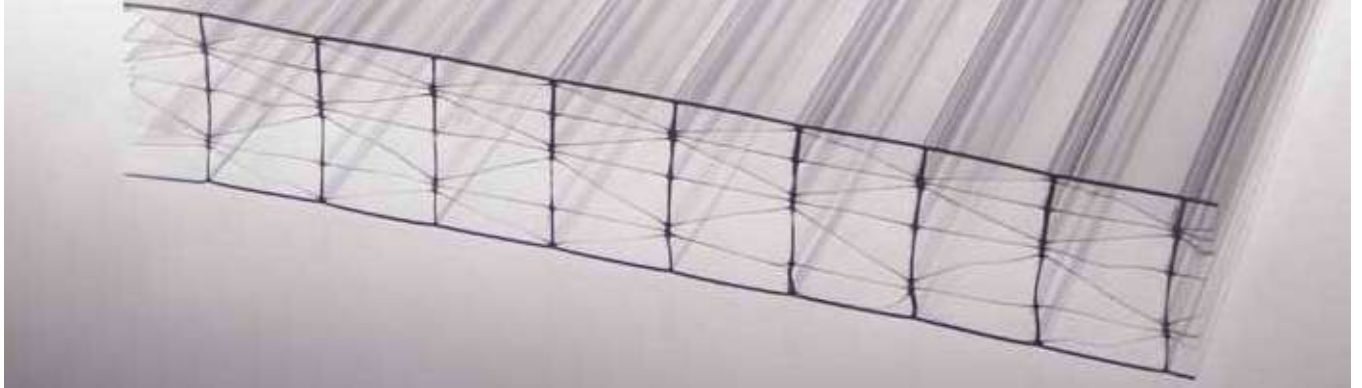
IR PERFORMED PCMW SHEET

Solar Performance		Cross Section	U factor (w/m ² K)	SHGC Solar Heat Gain Co-Efficient	L.T. Light Transmission	LSHG Light to Solar Heat Gain Ratio
10 mm.	std.		2,30	0,80	79,20	0,99
POLICAM IR Coated PC MULTIWALL			2,98	0,43	65,00	1,51

Product Liability Vause: This information and our technical advice - whether verbal, in writing or by way of trials- are given in good faith but without warranty and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to verify the information currently provided -especially that contained in our safety data and technical information sheets- and to test products as to their suitability for the intended process and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and therefore, entirely your own responsibility. Our products are sold in accordance with the current version of our General Conditions of Sale and Delivery.

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POLYCARBONATE MULTIWALL SHEETS



Fire Performance

Method	Classification
EN 13501	B, s1, d0

* For additional information please contact to ISIK PLASTIK.
* Certified by accredited laboratory

Acoustic Values (EN ISO 10140-4 & EN ISO 717-1)

Product	Thickness in mm	Sound Reduction Values (dB)
Twin Wall	4	12
	6	14
	8	15
	10	16
	12	17
Four Wall	10	18
	16	18
Seven Wall	16	17
	20	19
Nine Wall	25	19
	32	20

*This value can vary depending on sheet weight.
* Certified by accredited laboratory.

Thermal Transmittance & Thermal Resistance (EN ISO 6946)

Product	Thickness mm	U-value in W/m ² .K	R [(m ² .K) / W]
Twin-wall	4	3,77	0,10
	6	3,33	0,13
	8	3,04	0,16
	10	2,83	0,20
	12	2,69	0,18
Four-wall	10	2,43	0,24
	16	2,10	0,31
Seven-wall	16	1,86	0,37
	20	1,65	0,44
Nine-wall	25	1,35	0,57
	32	1,18	0,68

*This value can vary depending on sheet weight.

* Thermal conductivity of polycarbonate material was taken from EN ISO 10456 ($\lambda=0,2$ W/(mK)) and surface emissivity $\epsilon = 0,9$

Colours and Transmittance (ASTM D 1003)

Product	Thickness in mm	Standard Colours								Total Solar Energy Transmittance (EN 410)
		Clear	White	Diffuser	Bronze	Blue	Green	Turquase	Gray	**g-values
Twin Wall	4	79	20		30	38	30	28	9	76
	6	75	18	51	23	35	27	30	7,5	75
	8	76	14		15/28	28	24	24	8	71
	10	75	10	60	15/24	32	22	26	7	74
	12	62	14	50	28	28	24		8	61
Four Wall	10	61	10	50	24	32	22		7	67
	16	73	4,8	36	18	19	14,5		2,3	72
Seven Wall	16	53		28/38	20		14,5			55
	20	49		28						55
Nine Wall	25	44,5		26						51
	32	40		23						49

* Custom colors are available upon request subject to a minimum order.

** g value is total solar transmittance. Measurement made according to EN 410 standard

*** Clear, bronze, blue, green and turquoise colours have frosted series.

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