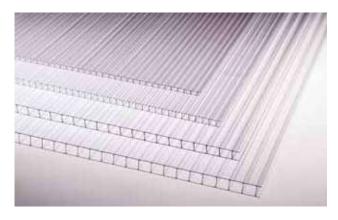


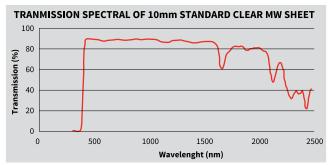
Işık Plastik Policam Polycarbonate Multiwall Sheets have excellent properties with a wide product range from 4mm simple twin wall structure up to 7 wall 16 & 20 mm and 9 wall 25 & 32 mm complex structured sheet. By the strengthened structure, these sheets offer increased durability and loading capacity 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.

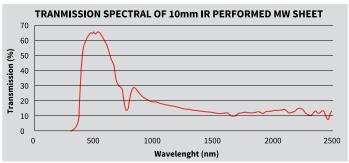


| General Properties | Value | Test Method |
|--|----------|----------------------|
| Density (gr/cm³) | 1,2 | ISO 1183 |
| Water Absorption (%) | 0.35 | ISO 62 |
| Tensile Modulus (Mpa) | 2300 | ISO 527 |
| Service Temperatures °C | -40/+120 | |
| Hail Resistance | PASSED | Internal test method |
| Vicat Softening Temperature ^o 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 deflaction temperature | °C | 127 |
| under load | °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/m²) | No Break | ISO 179-1 |







Product Liability Vlause: 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 tecnical information sheets- and to test products as to their suitably 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.





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

| C' (D.l' |
|--|
| Size of Policam |
| Balance la contra Malifera II Characte |
| Polycarbonate Multiwall Sheets |
| , , , , , , , , , , , , , , , , , , , |

| Max. Width | Width | *Standard | Tolerance |
|------------|-----------|-------------|-----------|
| (mm) | Tolerance | Length (mm) | 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

| Bending Radius of Policam |
|---------------------------------------|
| Polycarbonate Multiwall Sheets |

| Product | Profile | Thickness in mm | Min. Bend Radius |
|------------|---------|-----------------|---------------------|
| | | 4 | 700 |
| Twin-wall | \Box | 6 | 900 |
| | | 8 | 1200 |
| | | 10 | 1500 |
| Four-wall | | 8 | 1200 |
| our watt | | 10 | 1500 |
| riple-wall | | 16 | 2400 |

| Thickness & Overall Thickness Tolerance of Policam | |
|--|--|
| Polycarbonate Multiwall Sheets | |

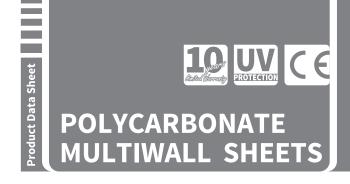
| Product | Profile | Thickness in mm | Overall thickness tolerance (mm) | Weight (min) g/m² | Weight (max) g/m² | Mass tolarence per unit area |
|-------------|--------------|--------------------|----------------------------------|----------------------|----------------------|---------------------------------|
| | | 4 | | 700 | 860 | ± 5% |
| Twin-wall | | 6 | ± 0,5 | 1000 | 1400 | ± 5% |
| | | 8 | | 1200 | 1600 | ± 5% |
| | | 10 | | 1300 | 1800 | ± 5% |
| Four-wall | | 8 | . 0. 5 | 1550 | 1700 | ± 5% |
| Tour Watt | | 10 | ± 0,5 | 1700 | 1900 | ± 0,5% |
| Triple-wall | | 16 | ± 0,5 | 2300 | 2800 | ± 5% |
| Seven-wall | \mathbb{X} | 16 | . 0.5 | 2500 | 2800 | ± 5% |
| Seven watt | | 20 | ± 0,5 | 2900 | 3200 | ± 5% |
| Nine-wall | | 25 | . 0.5 | 3200 | 3400 | ± 5% |
| watt | *** | 32 | ± 0,5 | 3500 | 3900 | ± 5% |

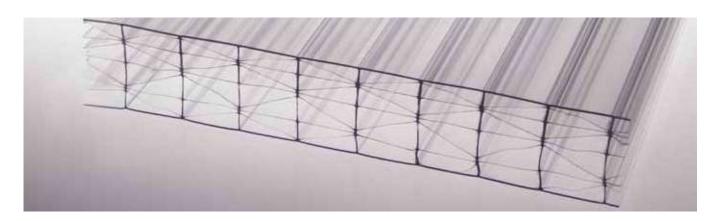
| IR PERFORMED PCMW SHEET | | | | | | |
|--|-----------|-----------------|------|--------------------------------------|----------------------------|--|
| Solar Performance Cross Section U factor (w/m2K) Solar I | | | | SHGC Solar Heat Gain Co-Efficient | L.T. Light Transmission | LSHG Light to Solar Heat Gain Ratio |
| 10 mm. | std. | distribution of | 2,30 | 0,80 | 79,20 | 0,99 |
| POLICAM PC MULTİWALL | IR Coated | | 2,98 | 0,43 | 65,00 | 1,51 |



Product Liability Vlause: 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 tecnical information sheets- and to test products as to their suitably 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.







Acoustic Values (EN ISO 10140-4 & EN ISO 717-1) Sound Reduction Values (dB) **Product Thickness** in mm 12 6 14 Twin Wall 8 15 10 16 8 17 Four Wall 10 18 Triple Wall 16 18 16 17 Seven Wall 20 19 25 19 Nine Wall 32 20

| | 32 | 1,18 |
|----------------------|-----------------|------------|
| *This value can vary | denendina on sh | eet weight |

Produ<u>ct</u>

Twin-wall

Four-wall

Triple-wall

Seven-wall

Nine-wall

Thermal Transmittance &

Thermal Resistance (EN ISO 6946)

4

6

8

10

8

10

16

16

20

25

U-value in W/m2.K

3.77

3,33

3,04

2,83

2,69

2,43

2,10

1,86

1,65

1,35

R [(m2.K) / W]

0,10

0.13

0.16

0,20

0,18

0,24

0,31

0,37

0.44

0,57

0,68

| Fire Performance | | | | | | |
|------------------|----------------|--|--|--|--|--|
| Method | Classification | | | | | |
| EN 13501 | B,s1,d0 | | | | | |

^{*} For additional information please contact to ISIK PLASTIK. * Certified by acreditated laboratory

| * | Cert | tified | by a | credit | ated | labor | atory. |
|---|------|--------|------|--------|------|-------|--------|

| Colours and Transmittance (ASTM D 1003) | | | | | | | | | | Total Solar Energy Transmitte (EN 410) |
|---|-----------|------------------|-------|----------|--------|------|-------|----------|------------|---|
| Product | Thickness | Standard Colours | | | | | | | **g-values | |
| | in mm | Clear | White | Diffuser | Bronze | Blue | Green | Turquase | Gray | Clear |
| | 4 | 79 | 20 | | 30 | 38 | 30 | 28 | 9 | 76 |
| Twin Wall | 6 | 75 | 18 | 51 | 23 | 35 | 27 | 30 | 7,5 | 75 |
| i win wall | 8 | 76 | 14 | | 15/28 | 28 | 24 | 24 | 8 | 71 |
| | 10 | 75 | 10 | 60 | 15/24 | 32 | 22 | 26 | 7 | 74 |
| Four Wall | 8 | 62 | 14 | 50 | 28 | 28 | 24 | | 8 | 61 |
| Four Wall | 10 | 61 | 10 | 50 | 24 | 32 | 22 | | 7 | 67 |
| Triple Wall | 16 | 73 | 4,8 | 36 | 18 | 19 | 14,5 | | 2,3 | 72 |
| Carram Wall | 16 | 53 | | 28/38 | 20 | | 14,5 | | | 55 |
| Seven Wall | 20 | 49 | | 28 | | | | | | 55 |
| Niine Well | 25 | 44,5 | | 26 | | | | | | 51 |
| Nine Wall | 32 | 40 | | 23 | | | | | | 49 |

- * Custom colors are avalible upon request subject to a minumum order.
- g value is total solar transmittance. Measurement made according to EN 410 standard
 Clear, bronze, blue, green and turquase colours have frosted series.



Product Liability Vlause: 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 tecnical information sheets- and to test products as to their suitably 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.

^{*}Thermal conductivity of polycarbonate material was taken from EN ISO 10456 (λ =0,2 $\dot{W}/(\dot{m}K)$) and surface emissivity ϵ = 0,9