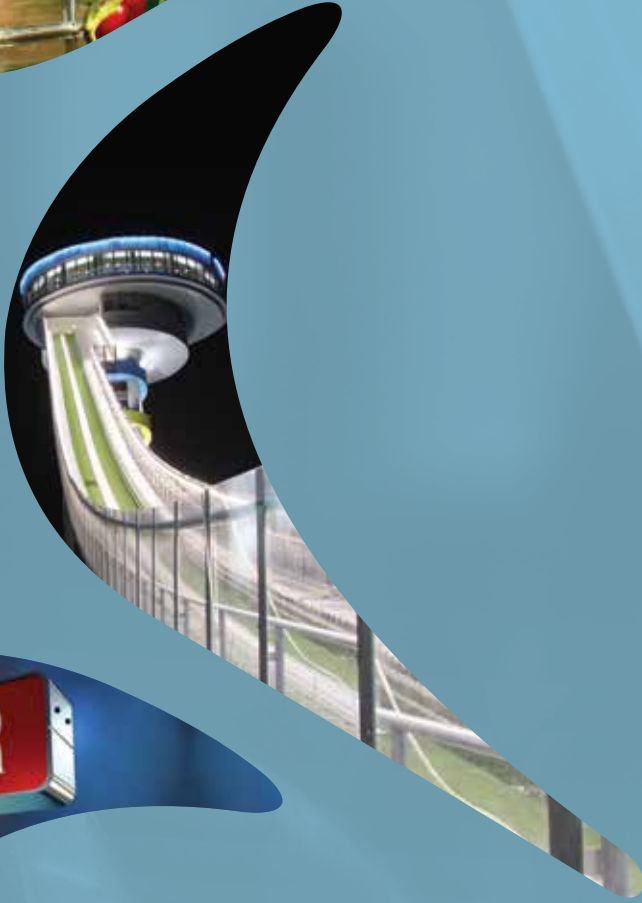


  
**IşıkPlastik**

---

  
**Policam**



---

**PLASTIC  
SHEETS**





Since 1997 Işık Plastik has built up an incomparable know-how and experience in production of extruded plastic sheets and a well deserved reputation in sign, display, construction, greenhouse, lighting, white goods, safety, automotive, sanitary and furniture industries.

With its cutting edge technology and massive capacity Işık has always been at the heart of the plastic sheet industry at home and is gaining important market share around the globe every year.

Under a dynamic management, continuous check-ups of the company functions, eliminate inefficient processes, thus running the company more efficiently. In today's highly competitive environment, sourcing is a key and restless function in the company which assures best available raw and auxiliary materials at optimum price/quality ratio.

Today Işık has become a giant, with its 20.000 tons capacity of plastic sheets and foils and 18.000 tons capacity of plastic packaging and masterbatch and generating 60 million USD with 240 employees.

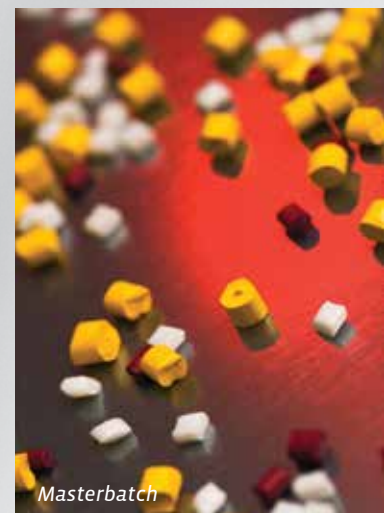


Işık Plastik is a diversified plastic products manufacturing company, offering a wide range of products not only in industrial plastic sheets but in 3 different business lines:

- Food Packaging
- Industrial Plastic Sheets
- Masterbatch and compounds



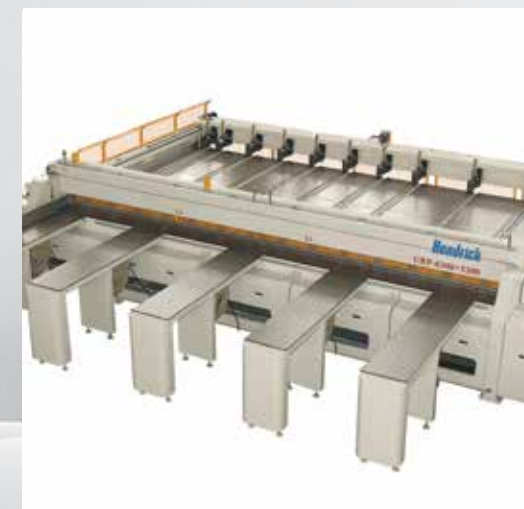
Işık Plastik is in production at Gebze Industrial Zone since 1997





# All our energy is invested to success

- 2013 As part of our continuous investment, 2 new polycarbonate multiwall lines together with 4 dies were installed in 2013. With these lines Işık enriched its product range with 7 wall 16 and 20 mm and 9 wall 25 and 32 mm sheets.
- 2013 A CNC panel saw was installed to satisfy growing number of cut-to-size orders of diversifying customer base.
- 2012 Işık went into a partnership with world's largest acrylic sheets producer Plaskolite Inc.(Ohio, USA) to erect a 1000 tons cast acrylic plant in Malatya, Turkey. This state of the art cast plant, unique in Turkey, is planned to start production in 2014.
- 2012 A new warehouse of 6000 sqm equipped with panel size racks was brought into service.





# Technology is our best friend!

**Işık has always been following the latest manufacturing technologies in plastic extrusion and therefore invest to the state of the art machines of the well known extruder manufacturers.**

The investment strategy which combines cutting edge and massive capacity production technology together with medium capacity and flexible production units gives Işık the strength to cope with any size customer from a local sign maker to a world's leading sheet distributors.

**Our processing range:**

- Polycarbonate
- Acrylic
- PET-G
- ABS
- GPPS
- High Impact Polystyrene
- Polypropylene



The technology is not limited with production. Işık uses fully integrated business real-time ERP system SAP. This enables transactions to be processed end-to-end and eliminate data inconsistencies between sub-systems.





## Quality

**We at Işık, produce glass-like transparent sheets, refrigerator inner liners, roofing sheets to endure and to maintain your living standards and ensure your safety where possible, so that we can not compromise of quality.**

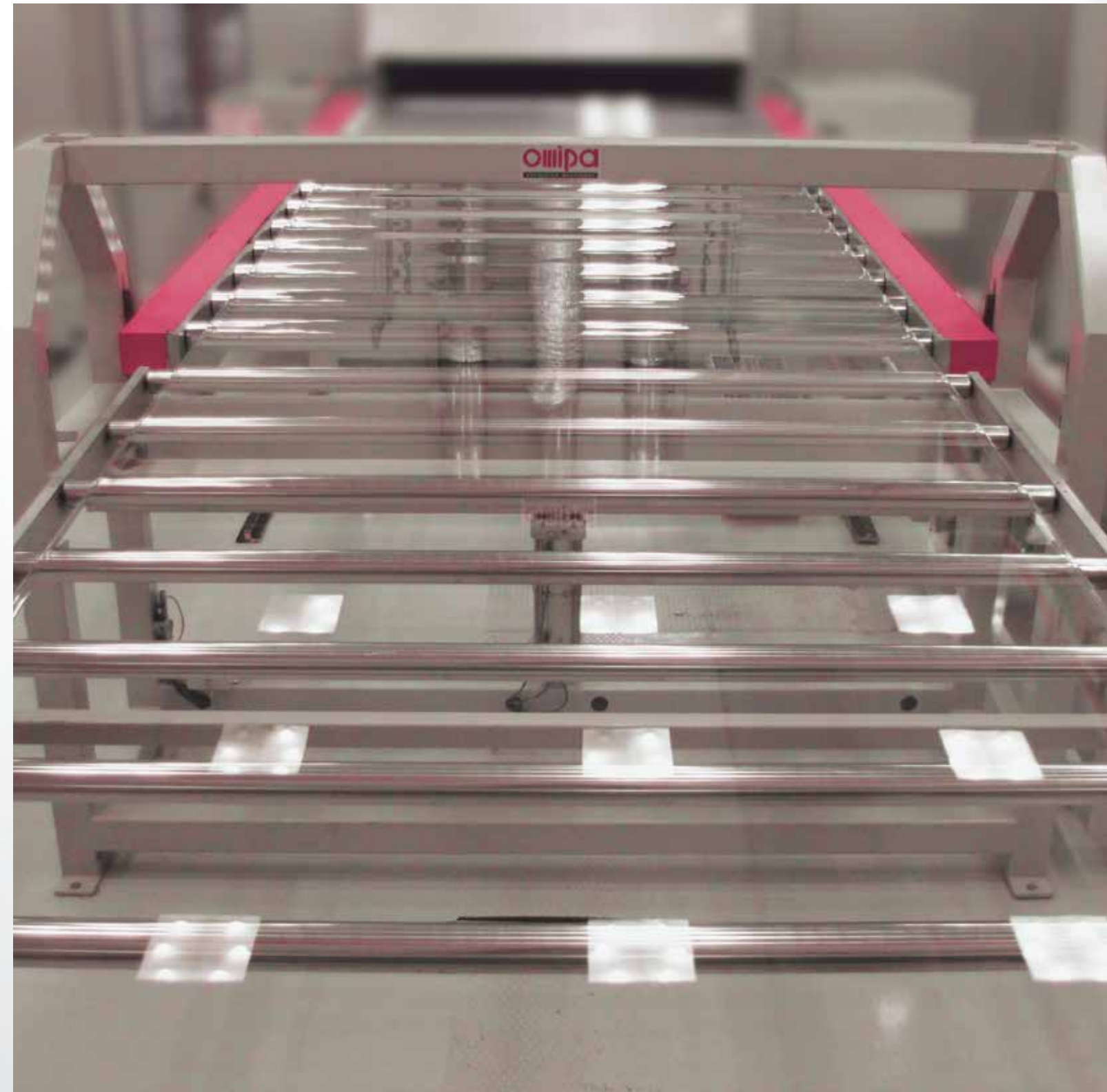
We at Işık are committed to value oriented quality from the perspective of the customer.

- Quality of workmanship and service are encouraged without adding unduly to cost.
- Quality is primarily dependent upon individual commitment and acceptance of responsibility by each employee for the quality of the products and services offered, both internal and external to the company.
- Efforts of continuous improvement focus on enhancement of product and process reliability and customer satisfaction.

Our quality department runs 7/24 in 3 shifts and uses fully equipped laboratory. Since 2001, the traceability and the quality system, is assured by a well documented system under ISO 9001.

### **Our fully equipped laboratory hourly checks includes:**

- Dimensional stability
- Orientation
- Internal stress
- UV layer thickness
- UV ageing
- Light transmission and haze
- Gloss
- Corona treatment
- Color intensity
- Color match by spectrophotometer



### **Işık Plastik is officially certified to :**

- ISO 9001:2008 Quality Management Systems
- ISO 22000 Food Safety Management Systems
- BRC/IOP Global Standard for Packaging&Packaging Materials

### **Our products conform with the following standards:**

- Acrylic Sheets: Turkish standards TSE EN 7823-2 and European Norms EN 7823-2.
- Polycarbonate multiwall sheets: Russian GOST R and TSEK of Turkish Standards Institute.
- We hold the european CE mark for our 12 and 15 mm SoundBlock PMMA and polycarbonate sheets for noise barriers.





# The world is in our hands!

**The quality, service and short response to customer needs, attract attention all over the world.**

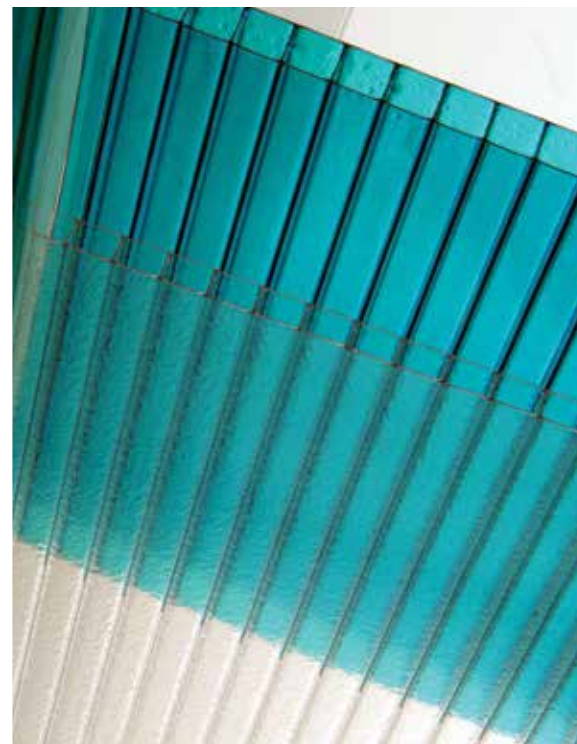
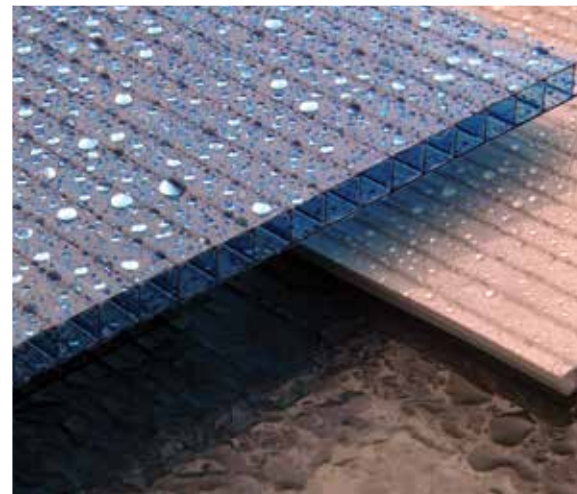
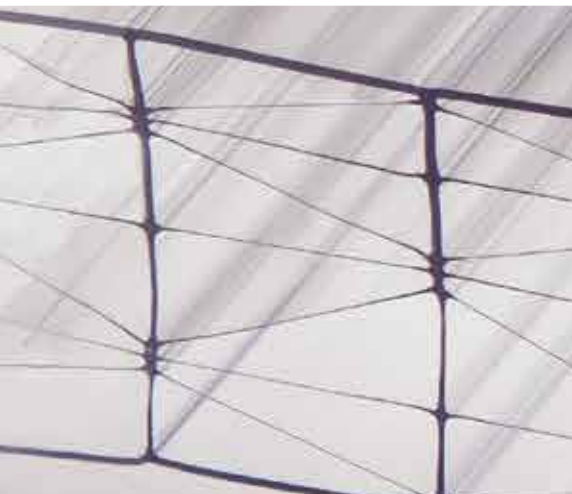
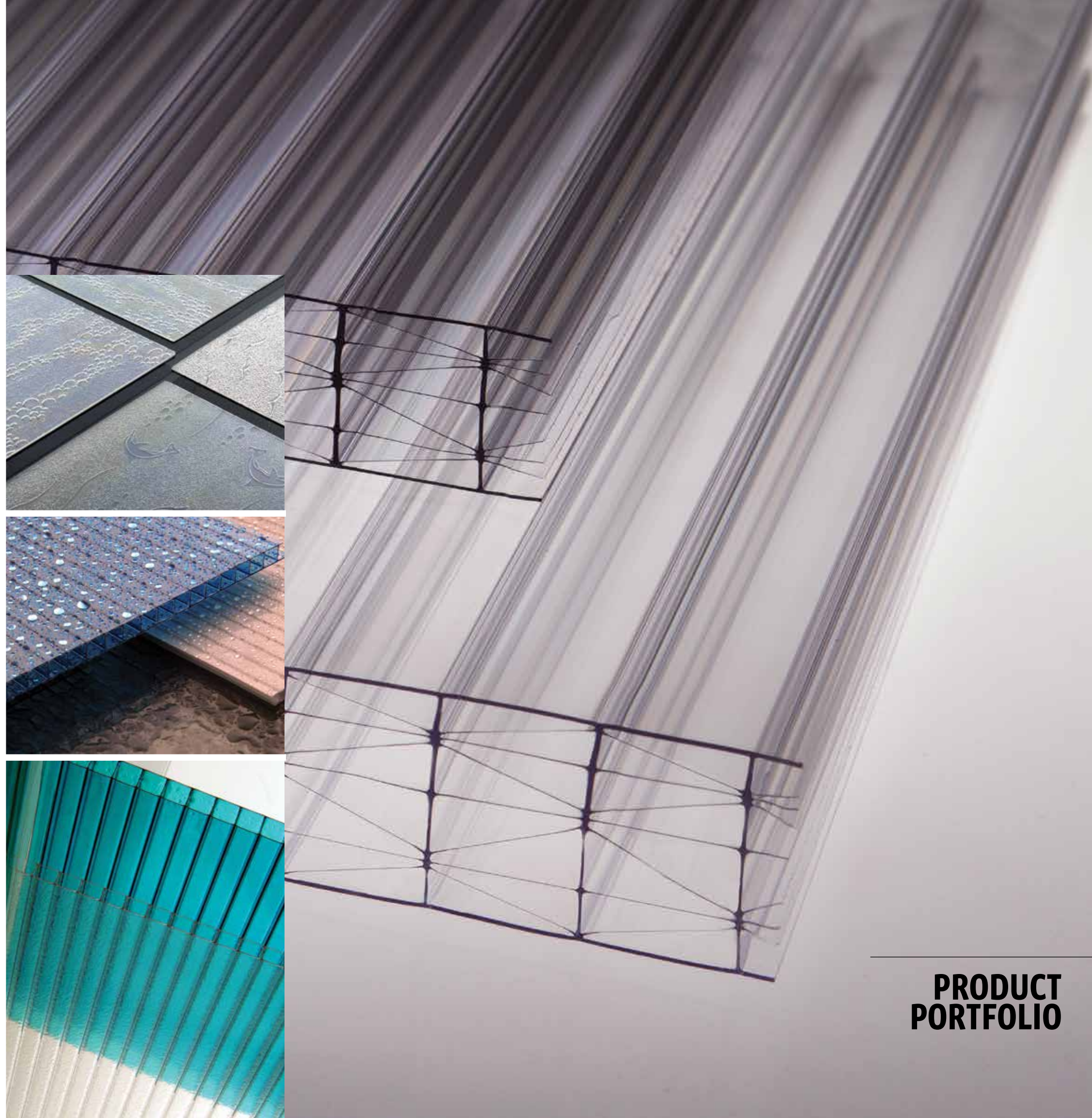
Therefore Işık has a market presence in all 5 continents and keeps expanding its distribution network.

Işık uses every logistic advantage that two biggest GDP generating cities Istanbul and Kocaeli offer.

- Factory is located on the Trans-European Motorway (TEM)
- 15 km to MSC YILPORT container terminal
- 20 km to the Sabiha Gökçen International Airport
- 40 km to Derince custom house railway station
- 45 km to Haydarpaşa container port, biggest in Marmara region







**PRODUCT  
PORTFOLIO**





## State of the art technology. Irreproachable sheets.

Our acrylic sheets are produced with a 20 ton/day capacity well equipped Omipa line. Production is isolated in a clean room against dust and particles to protect our pure transparent sheets. 100% virgin raw material is the key of the excellent light transmission (92%) and low haze values of our transparent sheets.

## What if you are forced to stop the assembly of a stand due to the inconsistent thicknesses of your acrylic sheets?

Assembly lines of high quality displays, lighting fixtures i.e. work with tight tolerances. Metal profiles and jigsaw designs necessite uniform sheet thickness. This is when you need Policam acrylic sheets. Our production process provide uniform thickness (t) throughout the sheet with a max tolerance of ±10% for thicknesses 2-3 mm and ± 15% for 3-15 mm.

## CE certified

Our SOUNDBLOCK acrylic sheets specifically developped for noise barriers are CE certified and supplied to various projects in Europe and Turkey. The airborne sound insulation value of our 15 mm sheet is 30dB and is classified as Class B3 under EN 14388.

## Don't be limited with our standard sizes, order cut-to-size!

Acrylic sheets can be run-to-size as small as 820\* 700 mm at the end of the line. Smaller sizes can be prepared in our sizing unit to satisfy your needs.

### PROPERTIES

- Excellent thermoforming capabilities
- Very good UV resistance
- B2 / Class 4 / UL 94 HB fire rated
- 92% light transmission
- Outstanding weatherability
- High impact resistance
- Easily fabricated
- Resistant to inorganic acids
- Suitable for food contact
- Max continuous operating temperature 70 C
- Max intermittent operating temperature 90 C

### SUGGESTED THERMOFORMING CONDITIONS

	Units	Policam XT	PIA Cell Cast
Thermoforming for Sheet Thickness			
3 to 10 mm			
Optimal Forming Temperature	°C	160	195
Forming Temperature Range	°C	130-180	175-200
Heating Time (two sided infrared)	min	1-10	2-25
Cooling Time	min	0.5-4	1-7
Optimal Mold Temperature	°C	85	90
Free Shrinkage at Forming Temperature			
Extrusion Direction	%	1-3	0-2
Transversal Direction	%	0	0-2

## SIGN & DISPLAY

POLICAM manufactures high gloss acrylic sheets for sign and display industry. They are suitable to thermoform for vacuuming, blowing, forming and bending. Their uniform thickness make them the most suitable acrylic sheets for printing applications and laser cutting. POLICAM acrylic sheets have a very good UV resistance and weathering thus making them perfect material to use for outdoor applications.

**Thickness:** 1,5mm – 15 mm  
**Standard Sizes:** 1350\*2050 mm ; 2050\*3050 mm  
**Colors:** Clear, White, Black, Opal, Diffuser White, Bronze, Blue, Red  
**Accessories:** Bonding agent

## LIGHTING

POLICAM specifically develops acrylic sheets for lighting fixtures and solutions. These opal sheets with different light transmission values, are enhanced with high efficient diffuser particles to provide the best performance to smooth and homogenize the hot spots and uneven light distribution. Acrylics are widely used in lighting for their following advantages:

- High heat and chemical resistance.
- High impact resistance.
- High UV resistance and excellent weatherability.
- Precision optical properties.
- Product consistency and process uniformity.
- Design flexibility

Ideal for use with fluorescent, incandescent, and high intensity discharge (HID) light sources, acrylics are the material of choice for leading light manufacturers.

**Thickness:** 1,5mm – 6 mm  
**Standard Sizes:** 1350\*2050 mm ; 2050\*3050 mm  
**Colors:** Clear, Opal 60, Opal 76, Diffuser White

## CONSTRUCTION

Acrylic is half of the density of glass and yet 17 times stronger. Moreover it can easily be cold bended onsite. Mostly used in construction as light domes, partition walls, glazing, roofing.

**Thickness:** 1,5mm – 15 mm  
**Standard Sizes:** 1350\*2050 mm ; 2050\*3050 mm  
**Colors:** Clear, White, Opal, Diffuser White, Bronze, Blue, Smoke  
**Accessories:** Aluminum and steel profiles. See Page 25

## NOISE BARRIERS

Policam SoundBlock is the trademark for specifically developed acrylic sheets for noise barriers. Generally demanded in thicknesses 12 and 15mm , these sheets are CE certified and supplied to highway and railway projects in Turkey and Europe.

**Thickness:** 10 mm – 15 mm  
**Standard Sizes:** 2050\*3050 mm ; 1000\*4000 mm  
**Colors:** Clear  
**Accessories:** Aluminum and steel profiles. See Page 25

## MIRROR ACRYLIC

Acrylic mirrors are lighter, safer than glass and easier to machine, to cut and to mount. Therefore they are ideal to use in automotive, yacht decoration, furnitures, child's toys, sign making and displays.

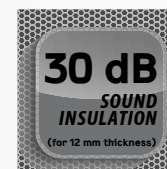
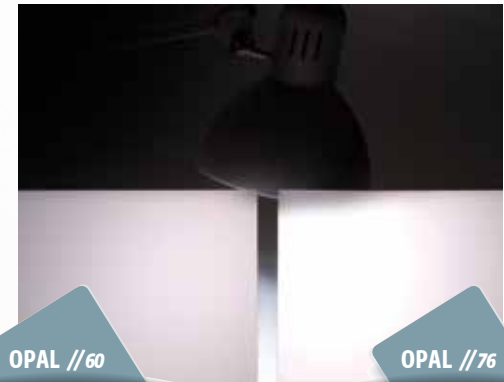
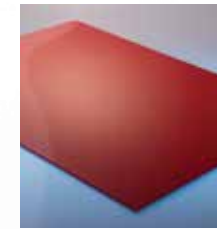
Our acrylic mirrors are protected by the industry's toughest protective back-coating.

**Thickness:** 1-4 mm  
**Standard sizes:** 1350x2050 , 1220x2440 mm  
**Colors:** Silver, gold, red, blue



CUT-TO-SIZE

100% UV PROTECTED







Ski Jump Ramps,  
Erzurum Winter Sports Center,  
Solid Polycarbonate 8-10 mm

## Devoted to perfection

Our polycarbonate sheets are produced with a 20 ton/day capacity well equipped Omipa line. Production is isolated in a clean room against dust and particles to protect our pure transparent sheets. 100% virgin raw material is the key of the excellent light transmission (88%) and low haze values of our transparent sheets.

## Policam is the answer

Sofisticated projects require new materials. Our Engineering and R&D department is here to meet your product specifications, what ever your colour, light transmission or heat reflection requirements are. They continously develop new formulations for various projects.

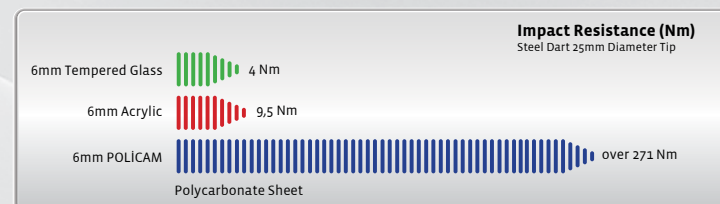
## CE certified

POLICAM SoundBlock solid polycarbonate sheets specifically developed for noise barriers are CE certified and supplied to various projects in Europe and Turkey. The airborne sound insulation value of our 12 mm sheet 31 dB and is classified as Category B3 under EN 14388.



## Solution provider with aluminum and steel profiles

We provide a wide range of aluminum and steel profiles and EPDM seals to be used with our sheets. See page 25 for details.



### PROPERTIES

- Very high impact resistance
- 88% light transmission
- B1 / Class 1Y / UL 94 HB fire rated
- Excellent thermoforming capabilities
- Outstanding weatherability
- Easily fabricated
- Can be cut with a shear
- Excellent resistance to dilute acids and mineral oils.
- Suitable for food contact (non UV treated)
- Max continuous operating temperature 130 C
- Max intermittent operating temperature 140 C

## CONSTRUCTION

Architects and engineers ask for heavy duty, reliable, light weight, custom color and yet reasonably priced transparent materials. All these requirements are combined in one product: POLICAM Solid Polycarbonate. It is 200 times stronger than glass and virtually unbreakable, produced with 10 year warranty, less than half of the density of glass, easily custom colored and reasonably priced comparing glass carrying the same specifications.

**Thickness:** 2 – 15 mm  
**Standard Sizes:** 2050\*3050 mm  
**Custom lengths can go up to 6 meters**  
**Colors:** Clear, White, Opal, Bronze, Smoke, Blue, Green  
**Accessories:** Aluminum and steel profiles. See Page 25.

## NOISE BARRIERS

POLICAM SoundBlock® is a specifically developed and CE certified polycarbonate sheet to be used in noise barriers.

- UV protection on both sides.
- Good weathering resistance,
- 79% light transmission as per DIN5036-3,
- Fire rating –class B1 as per DIN 4102 & Class 1Y as per BS 476 part 7
- 31 dB noise reduction as per EN 14388 (for 12 mm thickness)

**Thickness:** 8 – 15 mm  
**Standard Sizes:** 2050\*3050 mm  
**Custom lengths can go up to 6 meters**  
**Colors:** Clear, White, Opal, Bronze, Smoke, Blue, Green  
**Accessories:** Aluminum and steel profiles. See Page 25.



## INSTRUMENT PANEL DISPLAY SCREENS

PoliFilm Printable Polycarbonate films are excellent choice for backlit signage and displays, graphic overlay panels, illuminated menu boards and vending machine graphics, point-of-purchase posters, retractable banner stands, tradeshow booth panels, transit advertising and bus shelter advertising.

**Thickness:** 0,5 – 1,8 mm  
**Standard Sizes:** 1220\*2050 mm  
**Colors:** Clear, Opal, White

## LIGHTING&ELECTRIC COMPONENTS

Lighting fixtures today are getting minimalistic and thinner with the introduction of LEDs. Thanks to its high temperature resistance (maximum continuous working temperature 130°C) polycarbonate is increasingly used in today's lighting fixtures. POLICAM specifically develops polycarbonate sheets with different light transmission values for lighting fixtures and solutions. They provide maximum light transmission (88%) and optimum light diffusion. Polycarbonate is self-extinguishing and have a good fire rating B1 / Class 1Y / UL 94 HB.

**Thickness:** 1-5 mm  
**Standard Sizes:** 2050\*3050 mm  
**Colors:** Clear, Opal 50, Opal 60, Opal 76, Diffuser White

OPAL //76

OPAL //60

OPAL //50

## SAFETY

No other material could replace polycarbonate in safety applications. POLICAM polycarbonate sheets are virtually unbreakable. Half the weight of glass, they provide ease of use and carrying. Polycarbonate is very easily drilled, cut and edge polished. Deep draws and sharp corners can be obtained by thermoforming.

**Thickness:** 2-15 mm  
**Standard Sizes:** 2050\*3050 mm  
**Colors:** Clear, White, Opal, Bronze, Smoke, Blue, Green

UV2 2 SIDE UV PROTECTION

CUT-TO-SIZE

PAVING



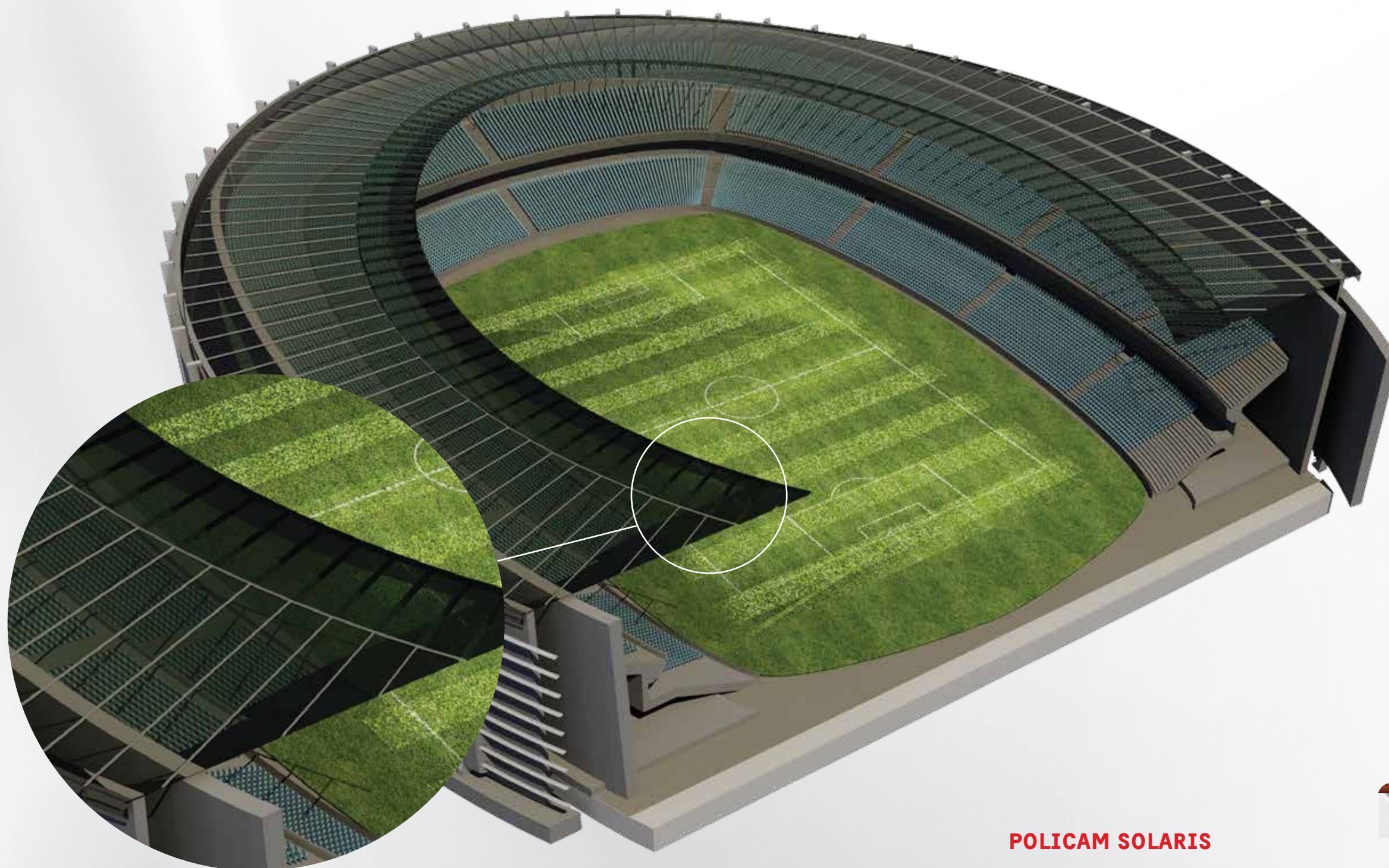
SOUND BLOCK



POLIFILM







## SOLARIS 8 mm SOLAR PERFORMANCE

		Solar Factor	
		50%	35%
Solar Transmittance	ST	52%	43.2%
Solar Heat Gain CO-EFF	SHGC	0.65	0.58
Shade CO-EFF	SC	0.74	0.67
Visible Transmittance	VT	52.5%	52%
Light to Solar Gain Ratio	LSC	0.81	0.9
Selectivity Index	SI	1	1.21

## POLICAM SOLARIS

Solaris is the trademark for our specially developed polycarbonate sheets for sunlight and heat protection with improved and controlled IR properties.

These special sheets are enhanced with metal powder to reflect excessive solar energy and with high efficient diffuser particles to provide the best performance to smooth and homogenize the solar light.

**Thickness:** 2 – 15 mm

**Standard Sizes:** 2050\*3050 mm

**Custom lengths can go up to 6 meters**

**Colors:** Aquamarine

**Accessories:** Aluminum and steel profiles. See Pages 25

**UV2** 2 SIDE UV PROTECTION

**CUT-TO-SIZE**







## Devoted to perfection

Our PETG sheets are produced with a 20 ton/day capacity well equipped Omipa line. Production is isolated in a clean room against dust and particles to protect our pure transparent sheets. 100% virgin raw material is the key of the excellent light transmission (89%) and low haze values of our transparent sheets.

## Save on the processing costs

PETG offers the opportunity to save on processing costs as a result of its ability to be formed at lower than usual temperatures and shorter cycle times. Combined with the chance to remove any surface scuffs with just a hot air blower before shipping the finished article, makes PETG a perfect cost-saver. And furthermore PETG sheets do not need pre-drying before thermoforming process. This saves a considerable amount of time and money.

## Clean as you wish

PETG sheets are resistant to most common cleaners and chemicals to prevent discoloration.

### PROPERTIES

- Very high impact resistance
- 89% light transmission
- Excellent transparency and gloss
- Superior chemical resistance when compared with many other transparent plastics
- Cost effective
- Lower cost alternative to polycarbonate
- Easy to fabricate
- Outstanding thermoforming capabilities in deep draw forming
- B1 / Class 1Y / UL 94 HB fire rated
- Excellent fire resistance. Low non-toxic smoke generation
- Suitable for food contact
- Sterilisable
- Can be cut with laser and with a shear
- Surface scratches can easily be removed with a heat gun
- Max continuous operating temperature 65 C
- Max intermittent operating temperature 72 C

### SIGN & DISPLAY

For your complex shapes and deep draw forming needs where you hesitate to use acrylic we offer you PETG sheets. 15 times tougher than acrylic, our PETG sheets are ideal for most demanding uses. They are easy to machine and process. It is the ideal plastic solution for moving parts like display cover hinges, joints and jigsaw-like designs.

**Thickness:** 2-10 mm  
**Standard sizes:** 2050\*3050 mm  
**Colors:** Clear, Opal, White

### INSTRUMENT PANEL DISPLAY SCREENS

PoliFilm printable PETG films are excellent choice for backlit signage and displays, graphic overlay panels, illuminated menu boards, vending machine graphics, point-of-purchase posters, retractable banner stands, tradeshow booth panels, transit advertising and bus shelter advertising.

**Thickness:** 0,5 – 1,5 mm  
**Standard Sizes:** 1220\*2440 mm  
**Colors:** Clear, Opal, White

Increasingly, vending machines are seen in most crowded and most visited places in daily life. They have to be distractive and appealing to reach their goal. And yet they have to be vandal-proof. Here enters PETG sheets in use. They are a superhero combining clarity with toughness, chemical resistance with fire safety and printability with deep draw formability.

### VENDING

**Thickness:** 2-10 mm  
**Standard sizes:** 2050\*3050 mm  
**Colors:** Clear, Opal, White

### MEDICAL

Gamma radiation is used in strelisation of the medical equipment. PETG's resistance to gamma radiation and to most chemicals makes it an indispensable plastic in medical field. Our PETG sheets are especially used in the production of infant incubators.

**Thickness:** 2-10 mm  
**Standard sizes:** 2050\*3050 mm  
**Colors:** Clear, Opal, White

### SAFETY

Our PETG sheets are widely used in safety equipments like machine covers, security glazing, visors thanks to their ease of thermoforming, wide freedom of design, high break resistance, excellent fire resistance and low non-toxic smoke generation, excellent transparency and brilliance, outstanding chemical resistance.

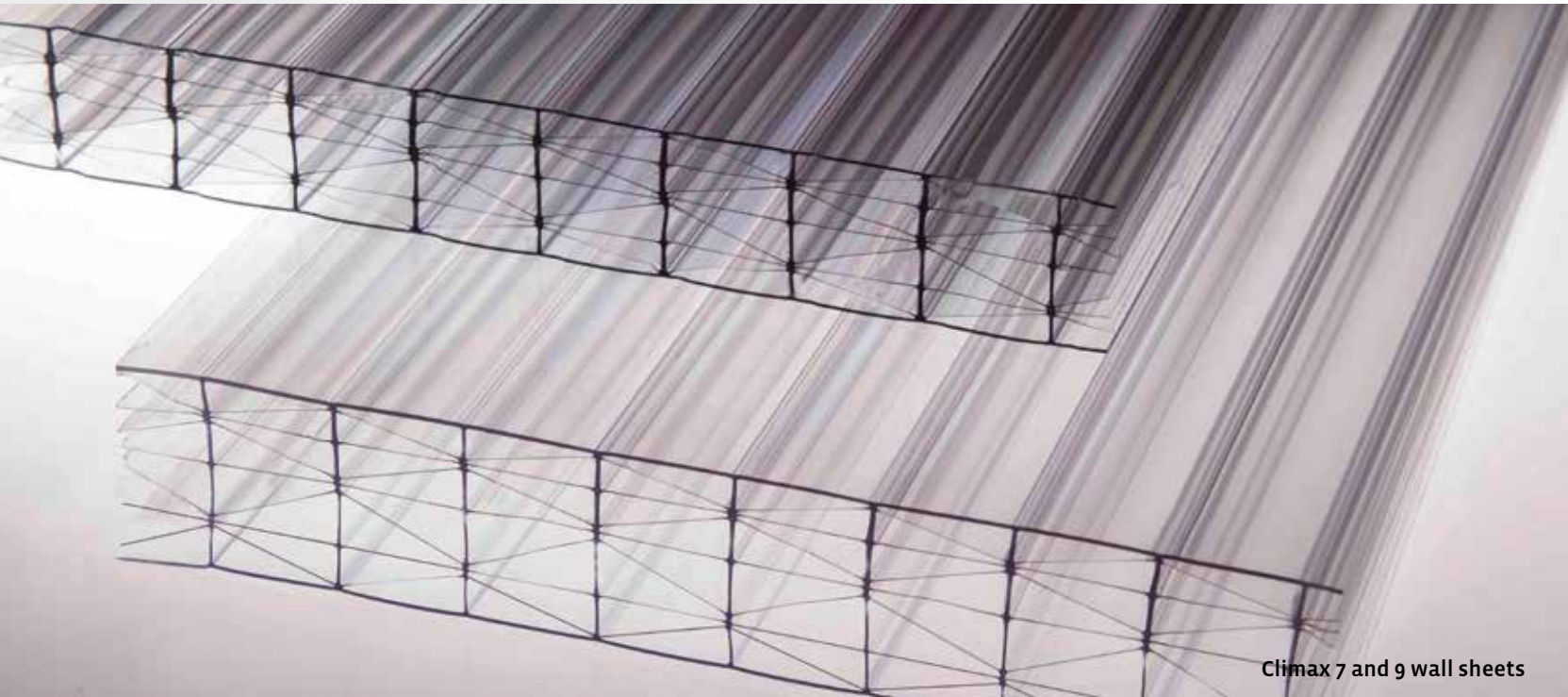
**Thickness:** 2-10 mm  
**Standard sizes:** 2050\*3050 mm  
**Colors:** Clear, Opal, White

**UV2** 2 SIDE UV PROTECTION

CUT-TO-SIZE







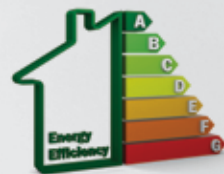
Climax 7 and 9 wall sheets

## Policam: First polycarbonate multiwall sheet of Turkey

POLICAM polycarbonate sheets were first produced in Turkey in 1998 by İŞIK PLASTİK. Since then the brand has won a deserved reputation with its quality and 10 years warranty. Every year over 2 million sqm (100 football stadium) POLICAM polycarbonate multiwall sheets are shipped in Turkey and to 25 countries in Europe, Africa, Asia and America.

## 7 and 9 walls structured Climax Serie was introduced in 2013

2 new Omipa lines of 15 tons/day capacity each, have enlarged the product range with 7 wall 16&20 mm and 9 wall 25&32 mm structured panels. With their strengthened structure, these panels offer increased durability and loading capacity with reduced deflection. With their good heat retention values, our CLIMAX serie gives buildings the best performance in energy efficiency.



## We do not only supply polycarbonate, we deliver turnkey projects

Thanks to our solution partners we were able to deliver many turnkey projects since 1998. From design to build, following the site assesment, in collaboration with our partners we design and build the supporting structure, supply polycarbonate sheets (cut to size if necessary), aluminum, steel and polycarbonate profiles, epdm seals and make installations at the project sites with our experienced teams.

## Conform GOST and TSEK standards

POLICAM polycarbonate multiwall sheets meet the stringent safety regulations and standards of Russian GOST R and Turkish Standard Institute's TSEK.



### PROPERTIES

- Very high impact resistance
- Excellent light transmission
- Excellent thermal insulation
- UV resistant
- B2 / Class 1Y / UL 94 HB fire rated
- Outstanding weatherability
- Easy to cut & machine
- Can be cold bent
- Chemical resistant
- Reduces noise transmission
- Lightweight
- Hail resistant
- Operational temperature -40C, +120C
- On site machining

## CONSTRUCTION & GREENHOUSES

Our latest Climax Serie is constituted of Z shape 7 walls and 9 walls structured sheets which offer exceptionally high thermal insulation. The Climax Serie is available in 16 and 20 mm thicknesses with 7 walls and 25-30 mm with 9 walls. These energy efficient sheets provide as low as 1.25 W/m²K heat transition coefficient which guarantees more than 20% energy saving over traditional twin walls.

**Thickness:** 7W 16-20 mm, 9W 25-32 mm

**Standard sizes:** 2100x6000 mm, 980x6000 mm

**Colors:** Clear, Opal, White

Multimillion dollar modern greenhouses tend to use more polycarbonate sheets in their exterior walls and they are right. Their advantages are:

- More insulation to save on heating costs
- High resistance against heavy wind and weather
- Hail resistant
- No passage to rodents

**Thickness:** 3W 14-16mm, 4W 8-10 mm

**Standard sizes:** 2100x6000, 2100x12000 mm

**Colors:** Clear, Opal, White, Bronze, Blue, Green, Turquoise, Opaque Gray, Red

Our conventional twin wall sheets are still the best sellers in our product range. They provide the largest color range.

**Thickness:** 4-6-8-10 mm

**Standard sizes:** 2100x6000, 2100x12000 mm

**Colors:** Clear, Opal, White, Bronze, Blue, Green, Turquoise, Opaque Gray, Red

In the beginning of 90's, Turkish sign makers have discovered polycarbonate multiwall sheets and the sales of thin sheets have boosted. POLICAM serves the sign industry with 4 and 6 mm thick sheets and is the market leader. Hollow structure creates perfect light diffusion and makes it cheapest and perfect material for illuminated signs.

**Thickness:** 4- 6 mm

**Standard sizes:** 2100x6000, 2100x12000 mm

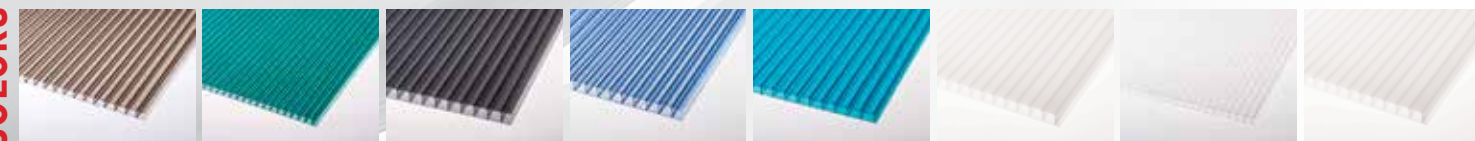
**Colors:** Clear, Opal, White,

## PRODUCTS AVAILABLE

	TWIN WALL				TRIPLE WALL		4 WALLS		7 WALLS		9 WALLS	
Thickness (mm)	4	6	8	10	14	16	8	10	16	20	25	32
Width (mm)	2100	2100	2100	2100	2100	2100	2100	2100	980/2100	980/2100	980/2100	980/2100
Weight (gr/m2)	700-850	1000-1300	1200-1500	1300-1700	2000	2400-2700	1500-1600	1700-1800	2500-2600	3000	3400	3800
Light Transmission	81	78	78	79	73	73	66	66	47	53	45	40
Heat Transfer Coefficient (w/m2K)	3,8	3,7	3,3	3,1	2,5	2,3	2,76	2,5	1,8	1,7	1,4	1,25
IR	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
UV2	-	-	-	-	-	-	-	-	✓	✓	✓	✓
AR	-	-	-	-	-	-	-	-	✓	✓	✓	✓

✓=Applicable

## AVAILABLE COLORS



Bronze Green Gray Blue Turquoise White Clear Opal

UV PROTECTED

9 WALL  
32 mm  
25 mm

U value  
(W/m²K)

1,25  
1,40

7 WALL  
20 mm  
16 mm

1,75  
1,90

3 WALL  
16 mm  
14 mm

U value  
(W/m²K)

2,40  
2,50

4 WALL  
10 mm  
8 mm

2,50  
2,76

10 mm  
8 mm  
6 mm  
4 mm

U value  
(W/m²K)

3,10  
3,30  
3,70  
2,10

4 mm  
6 mm

10 YEAR  
GUARANTEE

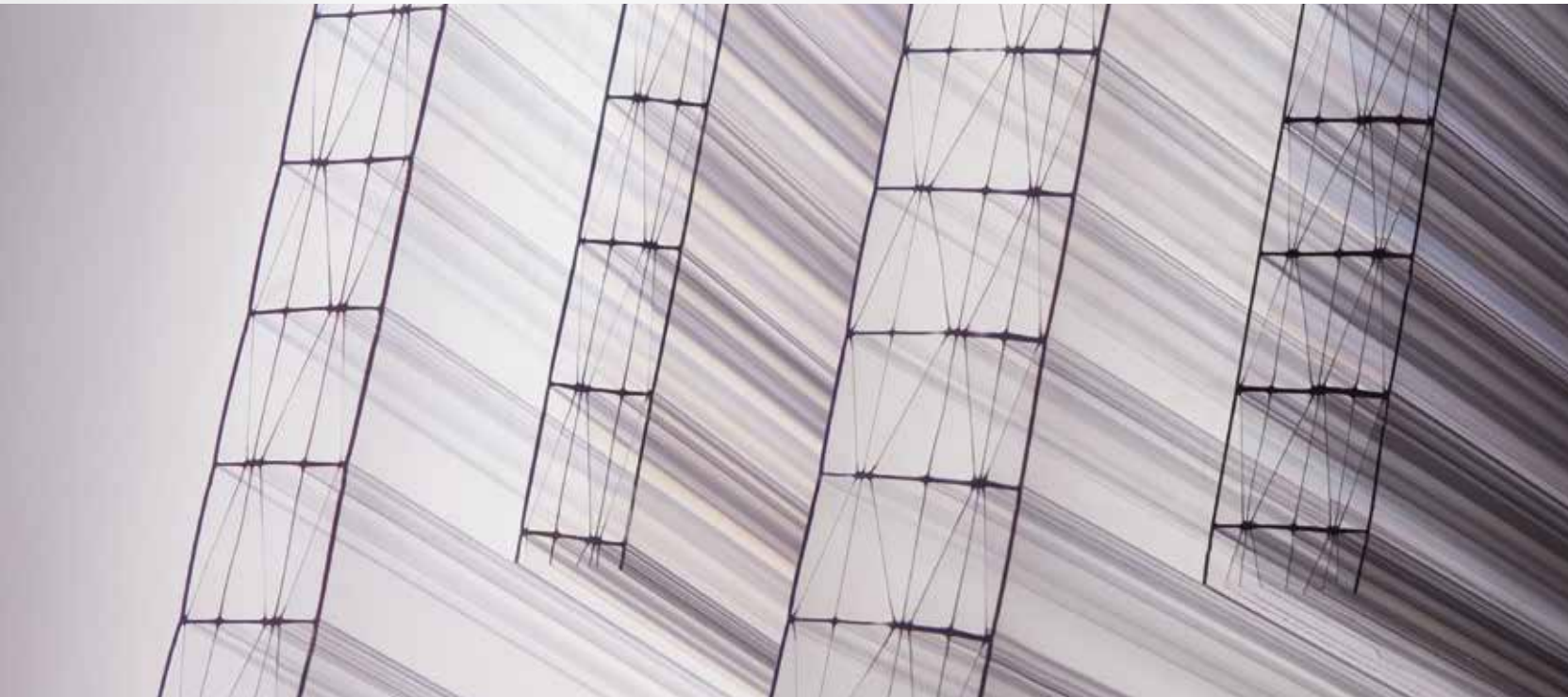
CLIMAX

3-4 WALL

TWIN WALL

TWIN WALL

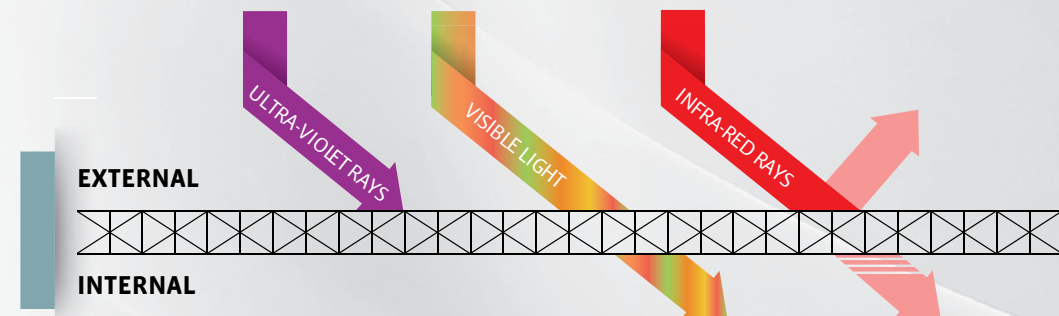




## Infrared coating (IR)

The heat-insulating, infrared-reflective coating contributes towards a pleasant interior climate. POLICAM IR coated products absorb the part of the light relative to the infra-red rays (from 780 to 1400nm), blocking effectively the solar heat, while letting the visible light through. This reduces heat build-up inside the buildings and promotes the comfort of the occupants. This selective control of the solar light spectrum is especially critical in hot climates and helps reduce the energy required to cool down the interior to the desired temperature thus cutting energy costs.

Based on the tests run, it can be evaluated that the products with a protective infra-red ray filter, retain 30% of the solar energy. This represents a great advantage for building applications.



## 10 year guarantee

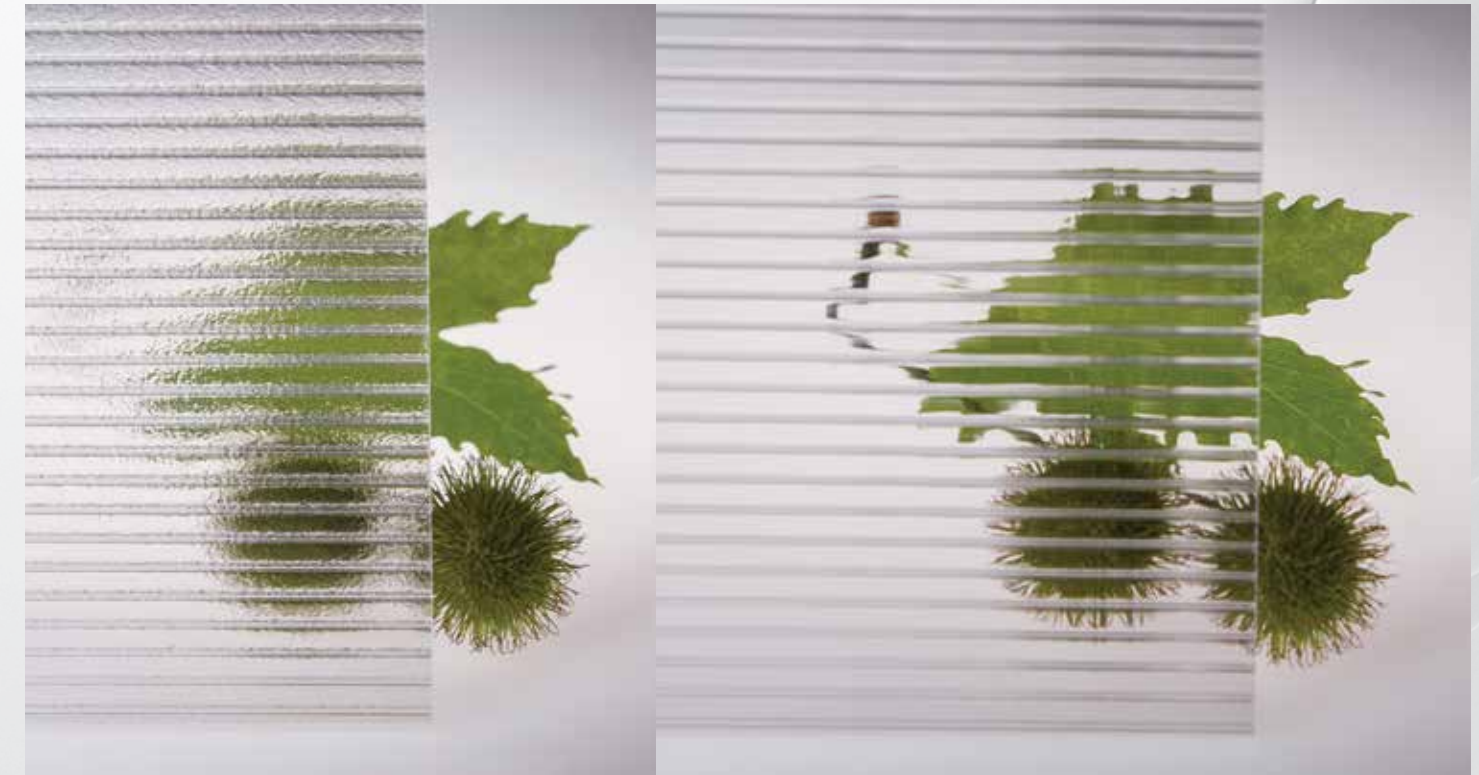
POLICAM polycarbonate sheets are protected with a co-extruded layer of UV to give a limited warranty of 10 years against, excessive yellowing, and loss of light transmission.

Radiation from the sun, especially in the UV portion of the spectrum, degrades the properties of polycarbonate. The addition of UV absorber allows the material to sustain exposure to the sun for a longer period of time. Polycarbonate for outdoor applications has to be stabilized against the detrimental effects of UV radiation.



## Try our frosted colors

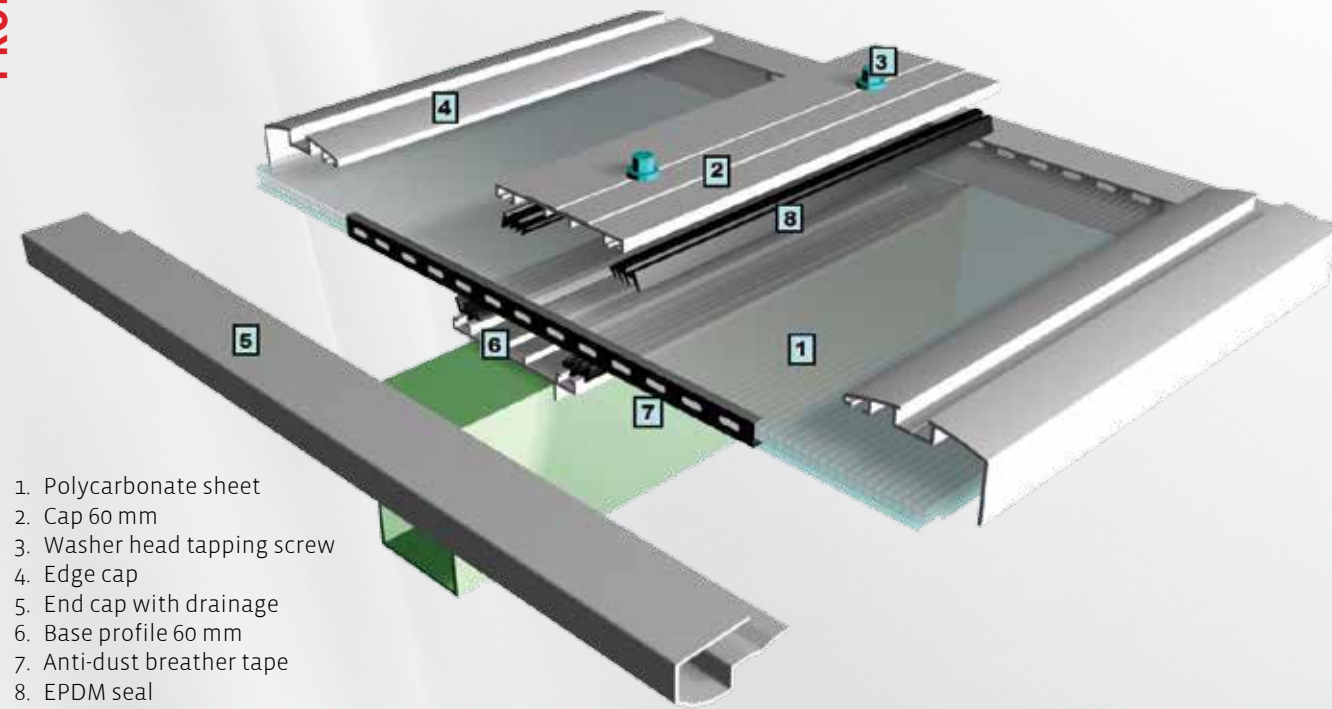
Our glass fiber filled polycarbonate sheets, provide added light diffusion providing more blurry back ground, which is preferred in outer fence applications of military compounds, consulates, houses where more privacy is required. Glass fiber particles diffuse light without much affecting light transmission. Frost effect is available for our whole color range and custom colors can be ordered with min order quantity



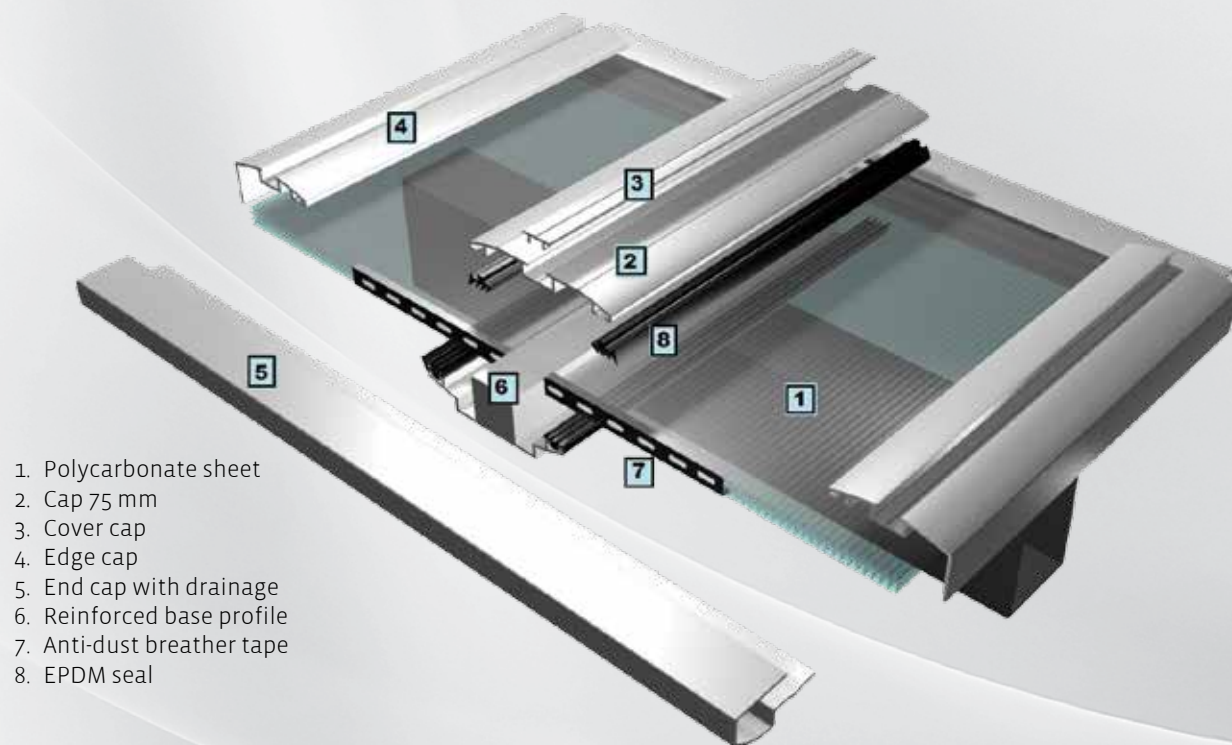


## ALUMINUM AND POLYCARBONATE PROFILES AND SEALS

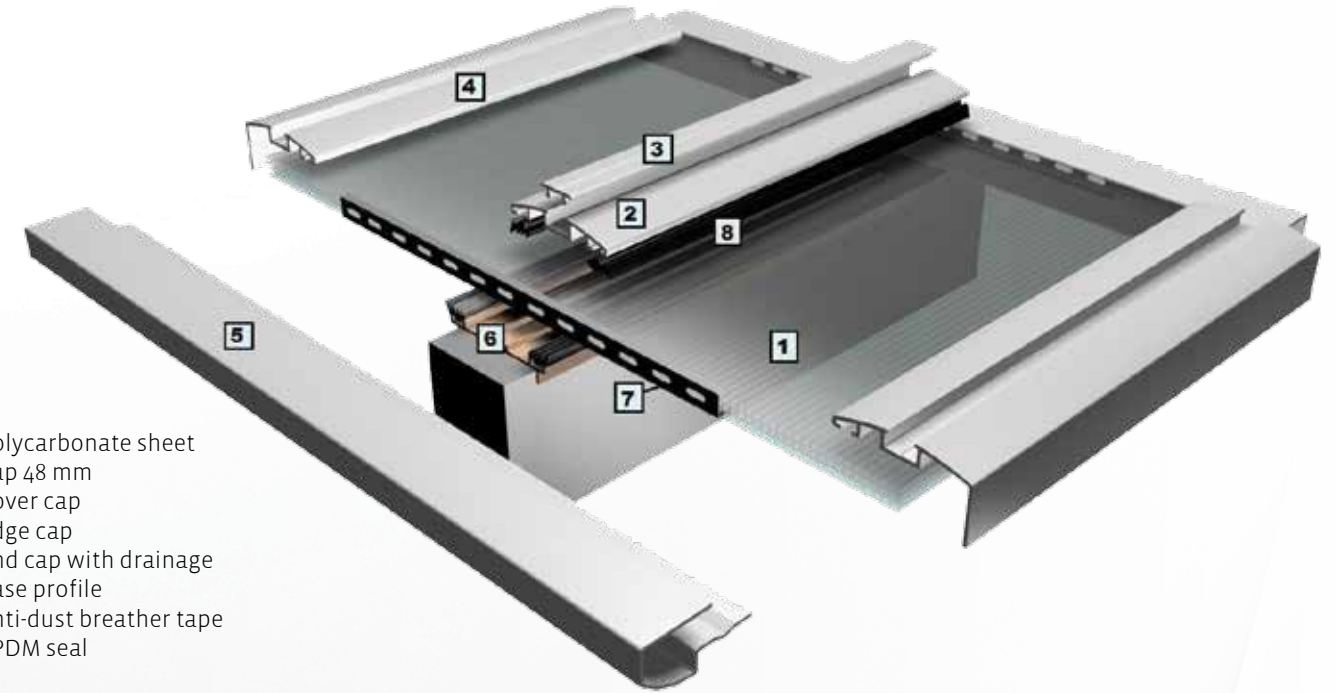
We provide a wide range of aluminum (natural or painted), steel and polycarbonate profiles and EPDM seals to be used with our sheets.






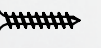
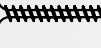










1. Polycarbonate sheet
2. Cap 60 mm
3. Washer head tapping screw
4. Edge cap
5. End cap with drainage
6. Base profile 60 mm
7. Anti-dust breather tape
8. EPDM seal



1. Polycarbonate sheet
2. Cap 75 mm
3. Cover cap
4. Edge cap
5. End cap with drainage
6. Reinforced base profile
7. Anti-dust breather tape
8. EPDM seal



1. Polycarbonate sheet
2. Cap 48 mm
3. Cover cap
4. Edge cap
5. End cap with drainage
6. Base profile
7. Anti-dust breather tape
8. EPDM seal

POLYCARBONATE PROFILES		
DFT-1		EPDM glazing seal
DFT-2		EPDM plugged-in seal
DBANT		Anti-dust breather tape
DVD-1		Screw 19 mm
DVD-2		Screw 42 mm
ALUMINUM PROFILES		
DPR-1		Cover cap
DPR-2		Cap 48 mm
DPR-3		Base profile 48 mm
DPR-4		End cap with drainage 10 mm
DPR-5		End cap U trim with drainage 16 mm
DPR-6		H profile with drainage
DPR-7		Cap 75 mm
DPR-8		Reinforced base profile 75 mm
DPR-9		Cap 60 mm
DPR-10		Base profile 60 mm





## Unmatched quality

World's leading refrigerator manufacturers confirm our quality. Our top quality HIPS sheets are not only demanded by their plants in Turkey but also by the plants overseas.

Işık is not only a sheet producer. Our R&D team working in close cooperation with factories' production departments, offers the solutions they need. Our extensive material and processing knowledge ensures to meet our customers' demanding specifications and provide a trouble free run in the assembly lines.

For refrigerator inner liner production, we only use selected ESCR (Environmental Stress Crack Resistance) material, designed specifically for large appliance extrusion/thermoforming applications. This advanced polystyrene resin allows production of thinner refrigerator liners with more homogeneous thickness distribution and improved environmental stress crack resistance compared with conventional high-impact polystyrene (HIPS) resins. In addition, ESCR resins enable significant cost reductions via processing and productivity advantages, and increased rigidity with reduced scrap levels.

IŞIK PLASTİK delivers over 3000 tons of HIPS annually to the world's leading refrigerator manufacturers.

## Go Cheap, Go HIPS

HIPS (high-impact polystyrene) is the most versatile plastic sheet to guarantee trouble-free processing, giving flexibility of forming, offering enhanced impact resistance as well as enormous cost efficiency.

It is preferred material for vacuum formers and screen printers who need to turn out high quality work on limited budgets. HIPS finds its way in a wide variety of applications, from bathroom cabinet door lamination to bath tub and shower trays front panels, from point of sale displays to car roof cargo boxes and to furniture parts.

## Just name it

Our product development team is ready to listen your needs and to offer the solutions you need:

- Multilayer production options
- Anti-bacterial surface treatment
- Matt- gloss finishes
- Corona treatment
- UV treatment
- Custom colours
- Desired degree of impact strength
- and many more...

### PROPERTIES:

- Low cost
- High impact strength even in low temperatures
- Outstanding thermoforming characteristics for deep drawn forming
- Higher chemical resistance
- Good machinability
- Easy to paint or print on
- Easy to assemble with adhesives or solvents
- Available in a wide variety of colors

### WHITE GOODS

Refrigerators and freezers have become more complex in their internal design resulting in the need of complex shapes, deep draws and sharp corners. Our high impact polystyrene (HIPS) sheets are manufactured with enhanced ESCR (Environmental Stress Crack Resistance) resins to meet manufacturers demanding needs. With their superior mechanical performance our sheets provide high impact strength, good elongation and heat distortion properties as well as improved chemical resistance, especially against PU foam.

**Thickness:** 1 mm – 6 mm  
**Width:** Max. 1500 mm  
**Sizes&Colors:** Customer specific



### FURNITURE

To complete their designs, furniture industry need thermoformable, paintable, impact and chemical resistant and yet economically reasonable materials. High impact polystyrene sheets fill in the gap. Our custom coloured sheets can be ordered cut-to-size to customer specifications.

**Thickness:** 1 mm – 6 mm  
**Width:** Max. 1500 mm  
**Sizes&Colors:** Customer specific



We serve to snap frame market with our specially textured gray polystyrene back panels. They are:

- Easy to machine
- Break resistant
- Easy to clean
- Weather proof

### SNAP FRAME

**Thickness:** 1,0 mm - 1,3 mm  
**Sizes:** Customer specific  
**Colors:** Gray



### SANITARY WARE

HIPS is also a popular choice in the sanitary ware industry to make bath panels and basins, where the physical properties and aesthetic qualities of the material are best exhibited.

Their excellent chemical resistance protects them against most detergents.

**Thickness:** 2 mm – 5 mm  
**Width:** Max. 1500 mm  
**Sizes&Colors:** Customer specific



High impact grades of PS find a wide range of use in automotive industry because of their superior characteristics:

- Roof and ski boxes with high demands in respect of colour fastness
- Heavy goods vehicle parts, such as spoilers, coverings, pick-ups
- Parts of agricultural machines (tractor roofs, motor coverings, mud-guards)

### AUTOMOTIVE

**Thickness:** 2 mm – 6 mm  
**Width:** Max. 1500 mm  
**Sizes&Colors:** Customer specific







## Low Cost, High Versatility

Like all our transparent sheets, our POLICAM PS sheets are produced in “clean room” environment, with tight tolerances and therefore meeting the highest standards of the industry in purity, light transmission and mechanical properties. Polystyrene sheets are characterised by an appealing crystal clear appearance, very good light transmission, light weight and good resistance to breakage.

## Applications

- Bath and shower screens
- Glazing
- Interior design
- Lighting fixtures
- POP displays
- Painting, poster and photo frames

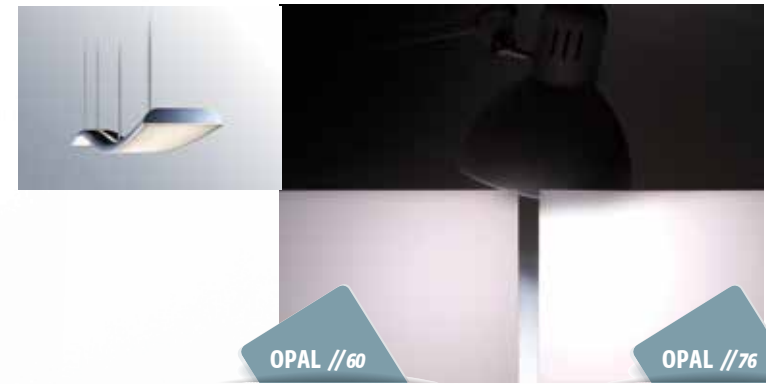
### PROPERTIES

- 89% light transmission
- Good electrical insulation
- Good optical properties
- Reasonable chemical resistance.
- Good mouldability.
- Low cost.
- Excellent transparency
- Good surface hardness
- Low moisture absorption.
- Colourability.
- Max continuous operating temperature 65 C
- Max intermittent operating temperature 95 C

POLICAM specifically develops polystyrene sheets for lighting fixtures and solutions. They provide maximum light transmission (89%) and optimum light diffusion. Although this field is ruled by the acrylics, polystyrene is steadily gaining ground as an excellent means of light control, and through its excellent electrical and optical properties.

### LIGHTING

- **Thickness:** 2-5 mm
- **Standard sizes:** 1350x2050, 2050x3050 mm
- **Colors:** Clear, white, Opal 60, Opal 76
- **Cut-to-size service available**



### SIGN&DISPLAY

Where there is a need for a cheaper alternative to our acrylic sheets and yet good resistance to breakage, our clear polystyrene sheets are the right choice. They can be molded, thermoformed and machined as good as acrylic.

- **Thickness:** 2-10 mm
- **Standard sizes:** 1350x2050, 2050x3050 mm
- **Colors:** Clear, white
- **Cut-to-size service available**



### SHOWER SCREENS

Safer, lighter and cheaper than glass, our polystyrene shower screens come in several designs. Produced from 100% virgin raw material these sheets are crystal clear and resist the impacts.

- **Thickness:** 1,5-3 mm
- **Standard sizes:** 1250x1770, 1250x1460 mm  
1300x1770, 1300x1460 mm
- **Colors:** Clear
- **Designs:** Bubbles, Drops, Dolphins etc.







Our polypropylene fluted sheet is lightweight, highly impact resistant versatile material that is used in many varying industries and applications. It can be seen as lining for prefab houses, in stationary, displays, crates, as separator or liner in packaging, as trunk liner for cars etc.

Polypropylene offers good resistance to chemical or acid attacks and have low moisture absorption and very good electrical insulation.

## Copolymer and Homopolymer Grades

Homopolymer is a harder and higher melt strength grade whereas copolymer grade polypropylene sheets are more flexible and have better low temperature impact performance.

### PROPERTIES

- Acid resistant
- Abrasion resistant
- Chemical resistant
- Alkalis and solvent resistant
- RoHS & REACH compliant
- Resistant to temperatures up to 180 degrees
- Impact resistant
- Moisture resistant
- Stress crack resistant
- Excellent dielectric properties
- Able to retain stiffness and flexibility
- Copolymer has higher impact strength than homopolymer at room temperature and below

## PACKAGING & HANDLING

Hygienic, lightweight, strong, waterproof, reusable, recyclable polypropylene sheets are the best and cheapest alternative to cardboards or wooden boards in packaging and handling. Their resistance to bacteria formation of these reusable and washable sheets make them ideal separators for bottle and glass manufacturers, as well as bottled water and drinks manufacturers. Manufacturers of metal parts also prefer polypropylene sheets in handling, for their high resistance to mechanical damages and to chemicals.



## CONSTRUCTION

Cheaper than timber and steel pan construction in terms of labour and material cost, our heavy duty polypropylene fluted sheets offer excellent solution for permanent formworks to construct on-site concrete ground beams and pile caps. Polypropylene sheets are highly flexible, easy to shape with a knife and don't need skilled labour. They are light weight, easy to handle and fast to install on site. Non-polluting and resistant to concrete pressure, polypropylene protect sub ground concrete from attacks by a wide variety of chemicals and materials.



Polypropylene sheets are used in automotive applications such as trunk liners and back seat liners. They are also widely used in caravans and mobile homes as floor liners because of their:

- Durability
- Versatility
- Waterproof properties
- Lightweight



## AUTOMOTIVE

Our polypropylene sheets can be screen printed, die cut, scored and folded. Direct printing onto the surface is possible for our corona treated sheets. They can be used for all indoor and outdoor signage applications and POP displays, They are:

- weatherproof
- waterproof
- impact and chemical resistant



## SIGN

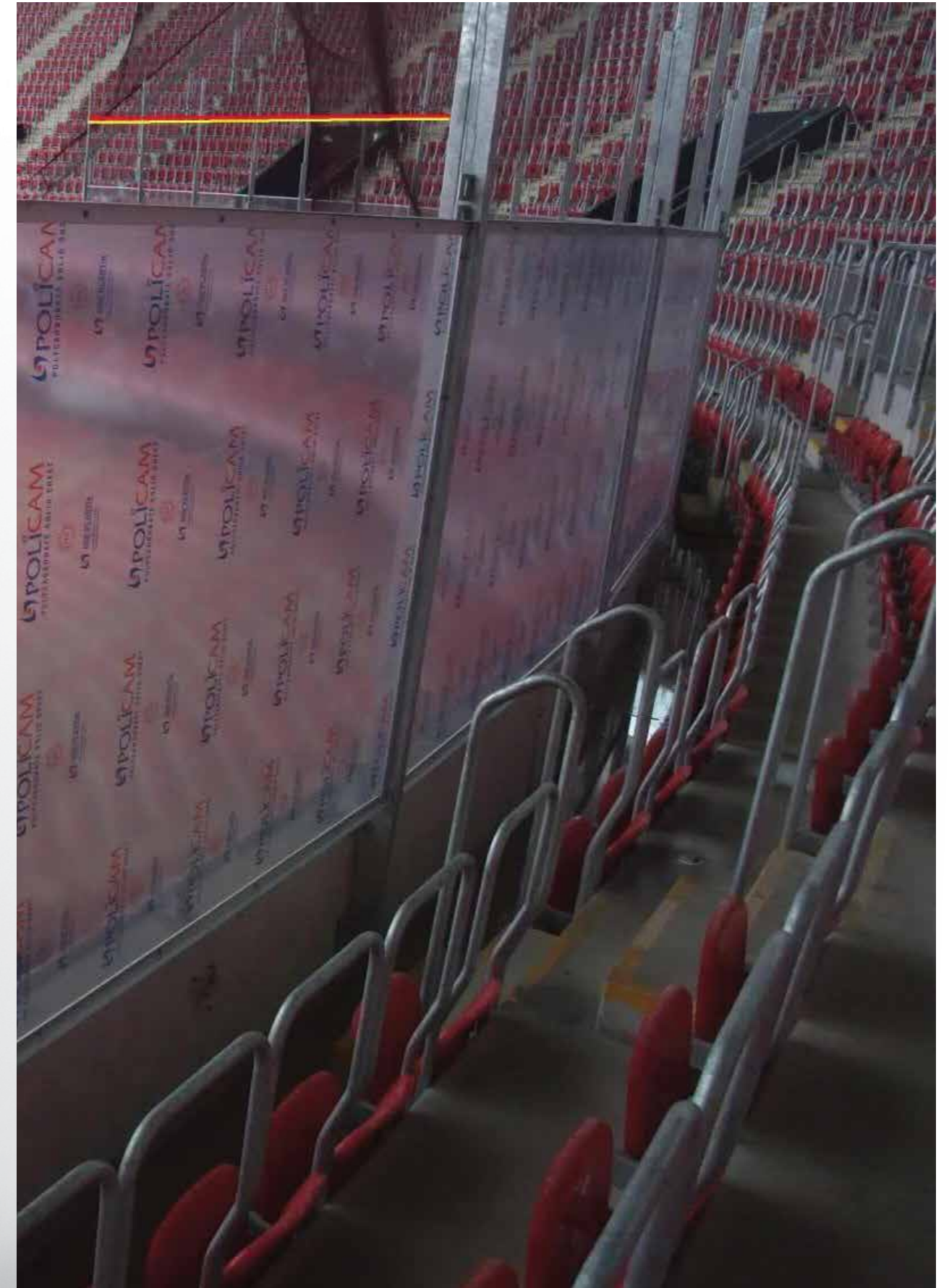
## PRODUCT RANGE

**Thickness:** 2 – 10 mm  
**Max width:** 2100 mm  
**Max length:** 12.000 mm  
**Colors:** White, Blue, Gray  
**Cut-to-size service available.**



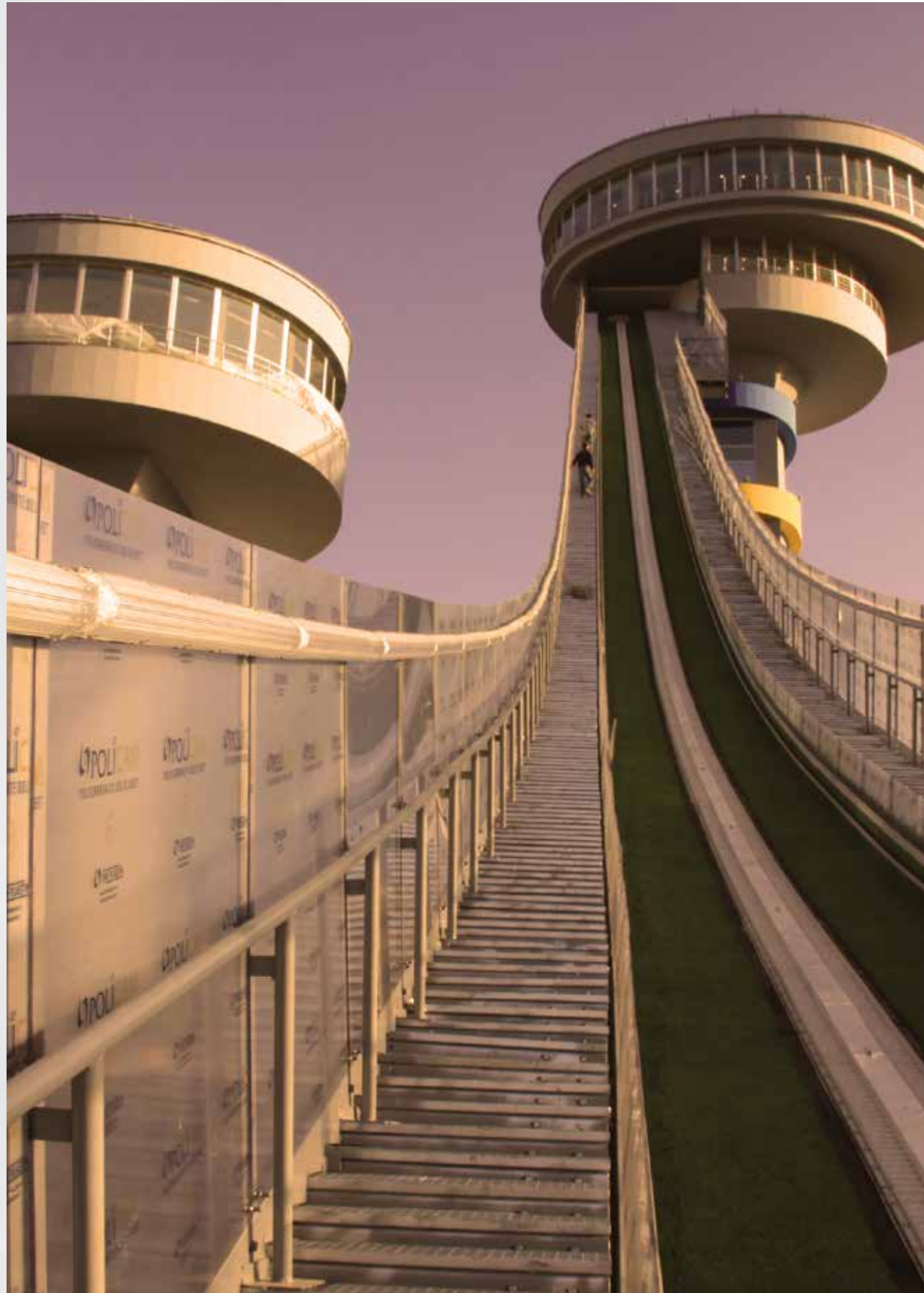


Archery Lodge, İstanbul  
Solid Polycarbonate 6 mm Clear

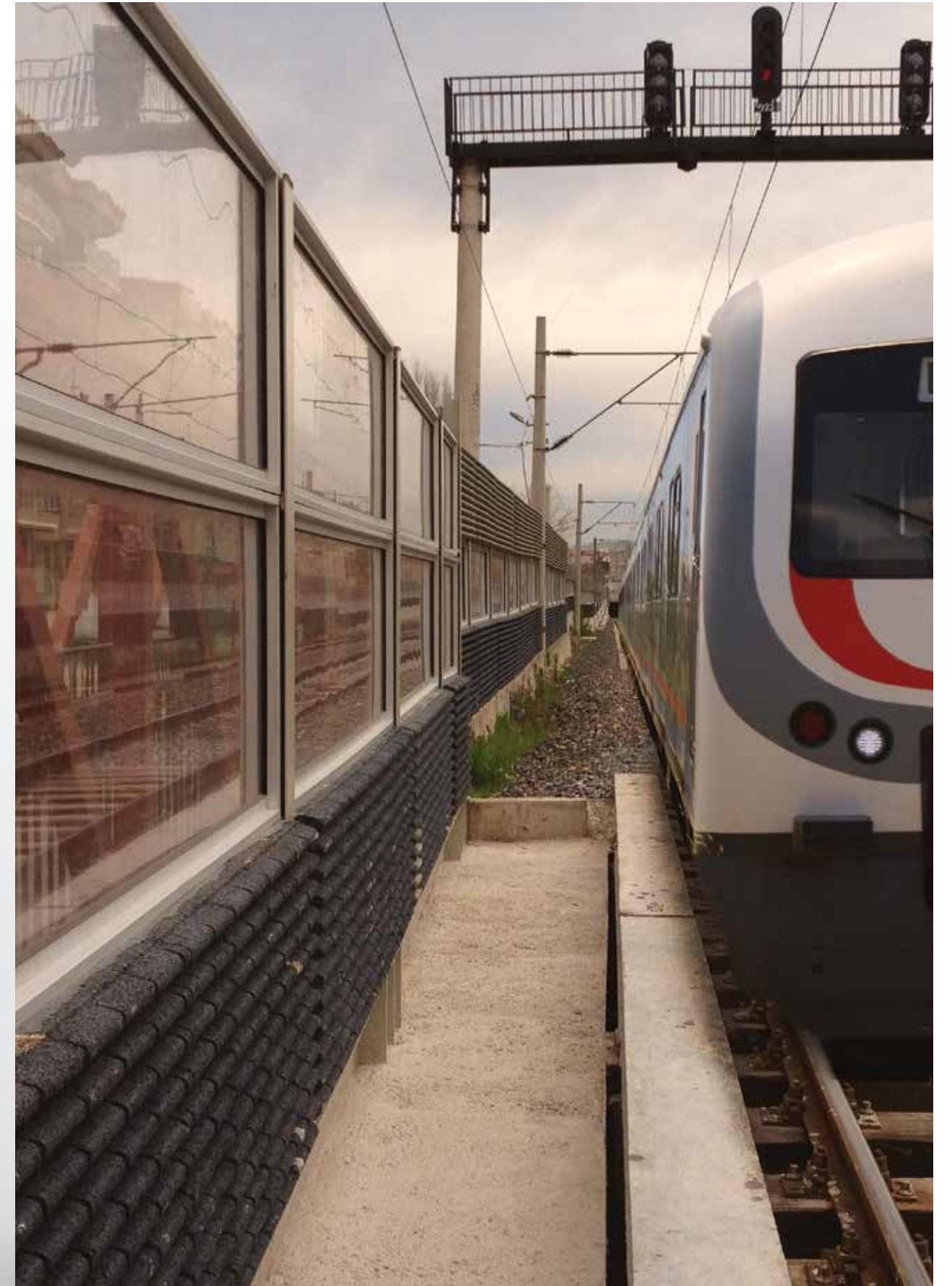


Galatasaray Türk Telekom Arena  
Solid Polycarbonate 6 mm Clear





Erzurum Winter Sports Center  
Solid Polycarbonate 8-10 mm Clear



Railway noise barrier, Izmir  
Policam SoundBlock PMMA 15 mm





Avcılar-Beylikdüzü Metrobus Stations, İstanbul  
Solid Polycarbonate 6 mm Smoke





Well known greenhouse projects in Turkey  
Multiwall polycarbonate 4 wall 8mm, 2 wall 8 mm





Various kiosks and bus stops  
in Turkey and in Europe



Mercedes-Benz Bus Factory, Turkey  
Multiwall polycarbonate 8 mm





## Disclaimer

Although the information and recommendations in this catalogue are presented in good faith and believed to be correct, Işık Plastik A.Ş. makes no representations or warranties as to the completeness or accuracy of the information.

Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Işık Plastik A.Ş. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information from this catalogue or the products to which the information refers.

Işık Plastik A.Ş. does not warrant the accuracy or timeliness of the materials on this catalogue and has no liability for any errors or omissions in the materials.

THIS CATALOGUE IS PROVIDED ON AN "AS IS" BASIS. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCTS TO WHICH INFORMATION REFERS.



MUSTAFA PAŞA MAH.  
GEBZE ORGANİZE SANAYİ BÖLGESİ  
İHSAN DEDE CAD. NO: 101  
GEBZE-KOCAELİ 41480, TURKEY  
TEL: +90 262 751 22 35  
FAX: +90 265 751 22 40  
[www.isikplastik.com.tr](http://www.isikplastik.com.tr)

