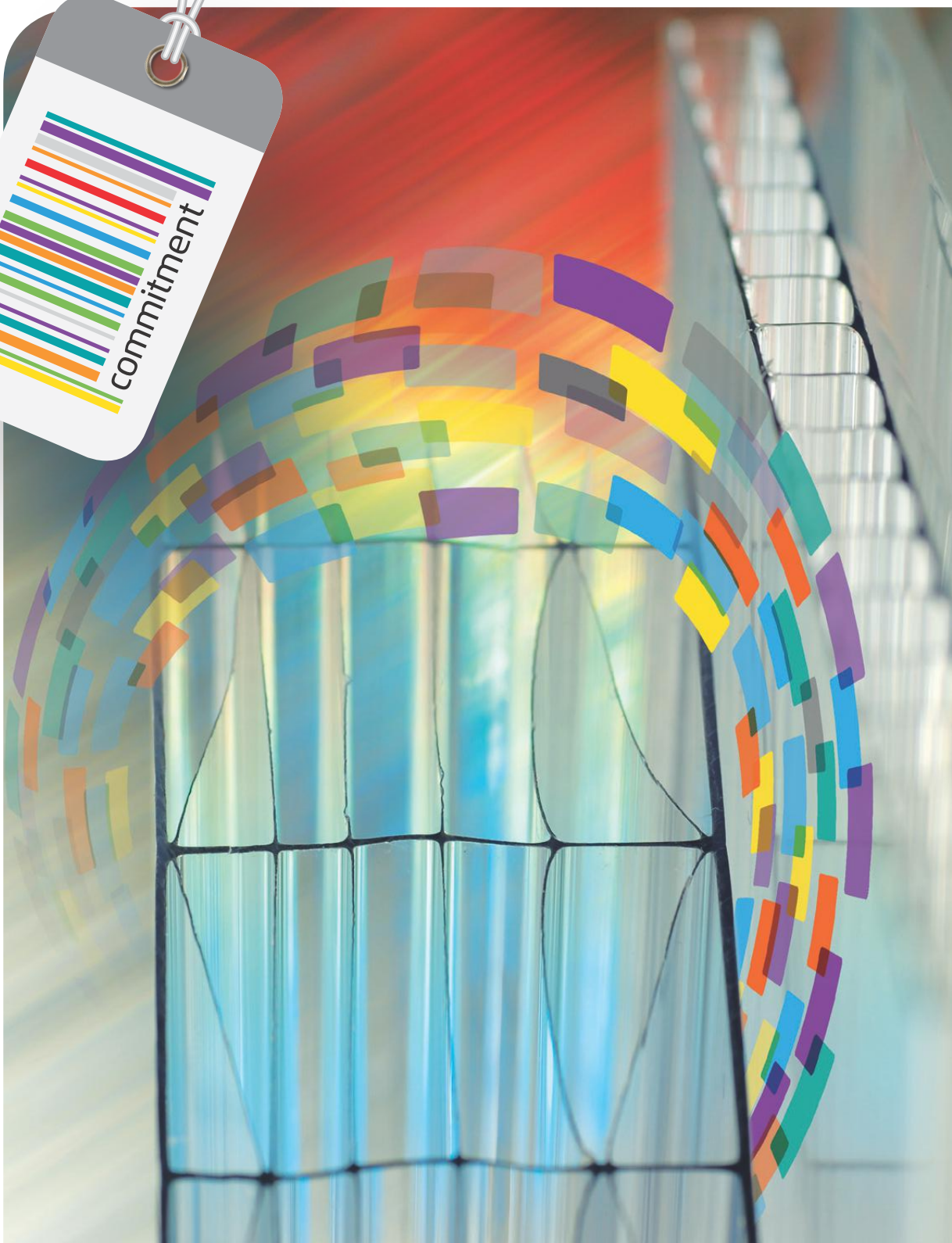


# POLYGAL

Multi-Wall Polycarbonate Sheets







A



B



C

# Polycarbonate Multi Wall Sheets

## The Art of Light Management

Great artists know how to work with light. Great architects and designers look for the best materials to bring the light into each space so as to create the right atmosphere. Plazit-Polygal produces a range of flexible multi wall thermoplastic sheets that are ideal for many roofing, glazing, skylights, signage and interior design projects. They enable you to manage the available light and provide insulation and UV-protection, as well as adding texture and color to your project.

Our multi wall sheets are constructed from multiple layers of polycarbonate for maximum strength, with an internal cellular structure that makes them light and flexible.

## Features and Benefits

- Excellent insulation
- Controlled daylight transmission
- Virtually unbreakable
- Flexible and easy to install
- Good fire resistance
- Lightweight
- UV-blocking
- Environmentally friendly

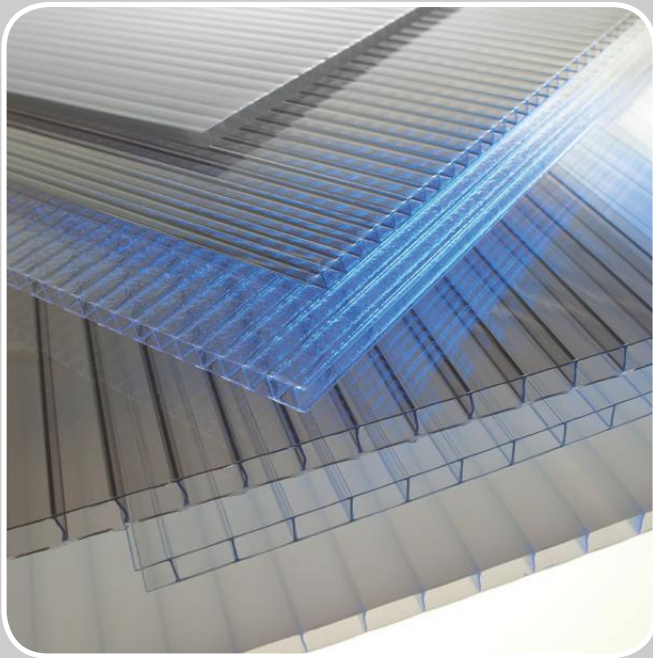
- A** Agriculture – maximizing natural light and thermal insulation all year round.
- B** Architecture – lightweight roofing with selective layers for light management.
- C** Interior Design – with endless color and illumination options.





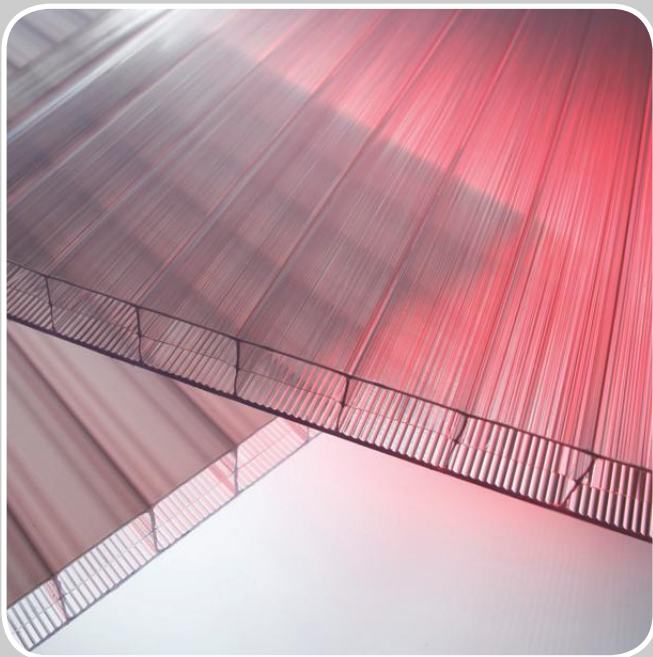
## Polygal **Standard.**

Double and triple-layered Polygal Standard sheets are manufactured in various colors and degrees of transparency. Polygal Standard is designed for use in most conventional roofing and glazing applications.



## Polygal **Thermogal.**

Thermogal's unique interior X-brace combines extra strength and rigidity with outstanding insulation. Ideal for low-pitched roofs and for glazing closed structures with large-span openings. Thermogal is available in different thicknesses, widths and colors.




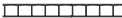



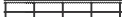

## Polygal **Selectogal.**

An exclusive Polygal patent lets Selectogal (RFX) control the penetration of heat and the transmission of natural daylight into buildings, reducing heating and lighting costs. Selectogal's sophisticated prismatic structure reflects most of the sun's heat in the summer and allows increased penetration of solar heat in the winter.

## Polygal **Titan Sky.**

Titan Sky's 5-wall internal rib structure gives these sheets greater thermal insulation, increased rigidity and more light diffusion than equivalent standard polycarbonate sheets.

## Mechanical and Thermal Properties

Product	Structure	Thickness (mm)	Weight (lbs./Sq. Ft)	Length (in)	Width (in)	Minimum Radius for Cold Bending Arches (in)	U-Value (BTU/h/Ft2/F)	Light Transmission % <small>per ASTM D 1003</small>		
								Clear	Ice	Bronze
Polygal Standard		6	0.27	288	48/72	41	0.63	82	32	42
		8	0.31	288	48/72	55	0.58	81	32	42
		10	0.35	288	48/72	69	0.53	80	32	42
		16	0.55	288	48/72	110	0.41	74	32	42
Polygal Titan Sky		16	0.52	432	47.25	110	0.37	61	32	42
Polygal Selectogal		16	0.62	432	47.25	110	0.41	75	32*	47
Thermogal Super 32		32	0.78	432	47.25	173	0.18	38	10	

\*NGL

### Available In Standard Colors

Call Customer Service at  
800-537-0095 for more  
information regarding color  
availability.

### Thermal Expansion

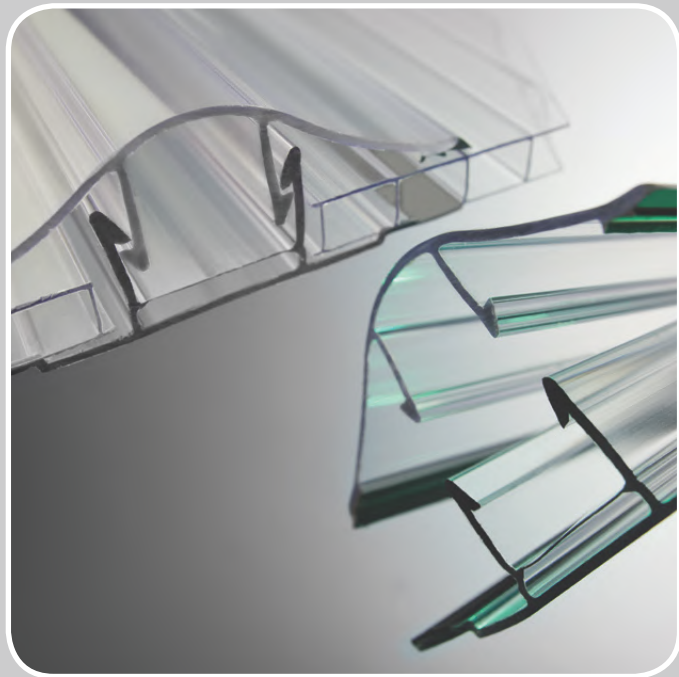
0.177 in / 3.28 Ft.: All colors

### Service Temp. Range

-40 F. to 248 F.





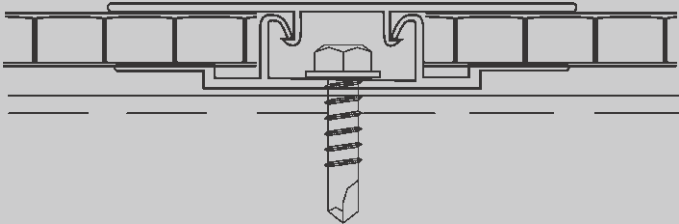


## Polycarbonate Profiles

Our interconnecting polycarbonate profiles connect consecutive multi-wall sheets to cover large areas. They are UV-resistant, unobtrusive and offer secure snap-fit connections. Polycarbonate profiles are available in 12 foot and 24 foot lengths.

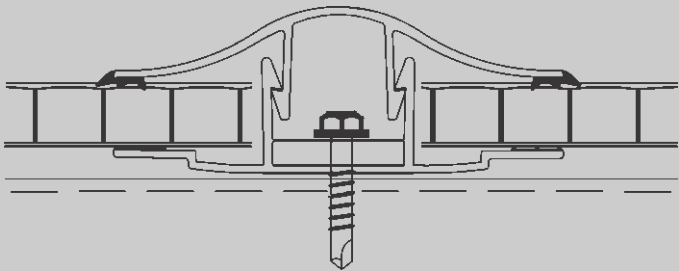
### Recommended Uses

Polycarbonate profiles are suitable for basic roofing applications and interior design.



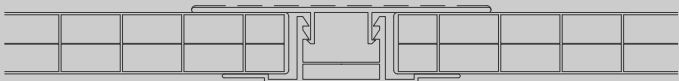
### ECP 2G (Easy Clip)

Polycarbonate connection system designed to connect multi-wall polycarbonate sheets with thicknesses between 8 mm to 10 mm. Profiles can easily be connected together to form reliable joints. Manufactured in clear, bronze and ice at lengths of 12 ft. or 24 ft.



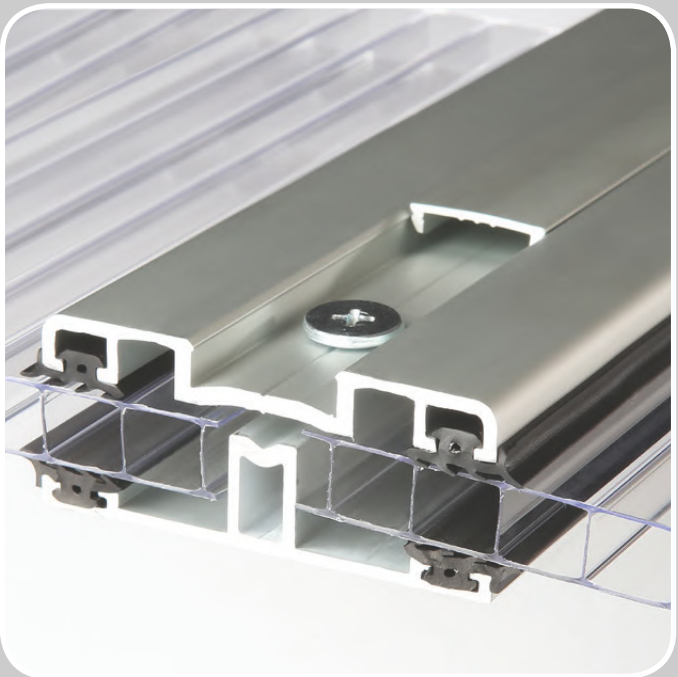
### GCP (Gasket Clip)

**First and only in the market.** A connection system for polycarbonate profiles with integrated co-extruded gaskets. This profile is designed to connect multi-wall polycarbonate sheets with thicknesses between 6 mm to 16 mm. Provides a gasket sealed connection which is manufactured in clear, ice and bronze colors, in lengths of 12 ft. or 24 ft.



### HCP (H-Clip)

The original polycarbonate connection system designed to connect 16 mm multi-wall polycarbonate sheets. These profiles can easily be connected together to form reliable joints. Manufactured in clear, ice and bronze colors in lengths of 12 ft. or 24 ft.

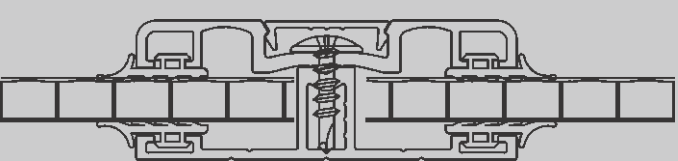


## Aluminum Profiles

Our interconnecting aluminum profiles offer all the benefits of PC profiles while increasing the structural integrity of the connection itself. Our profiles are easy to install, durable and aesthetically pleasing. Our aluminum profiles offer a commercial grade glazing option complete with a Base, Cap, Cover and Gasket. With color options in White (painted) and Clear Anodized, we can offer an aluminum glazing option for all multi-wall polycarbonate sheet options within our family of products. Our aluminum profiles are available in lengths of 24' only.

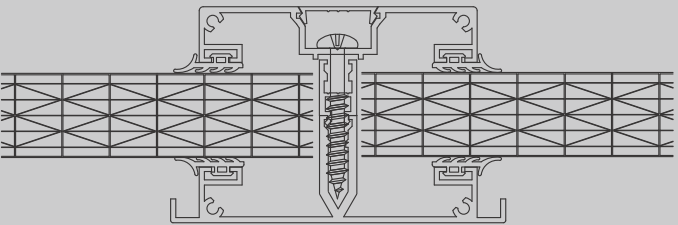
### Recommended Uses

Aluminum profiles are suitable for basic, intermediate and .advanced roofing applications



### Aluminum Mega-Lock

The economical choice in aluminum glazing complete with gaskets and a concealed connection. This profile option offers a more effective connection of multi-wall polycarbonate sheets when compared to our standard PC profiles. Mega-Lock also offers an edge engagement of 1" which enhances the boundary conditions decreasing the chances of pop-out or other glazing failures due to wind and snow load conditions. Mega-Lock will accommodate any gauge up to 16 mm.



### Aluminum 6-35

The advanced choice in Polygal aluminum glazing which offers a clamped boundary condition. This profile option features increased structural performance, an edge engagement of 1.18" and can accommodate any gauge up to 35mm. This profile is commonly used when high wind or snow load requirements are necessary and or self-supporting spans are desired.

# TOPGAL

## Multi Wall Panel System

Backed by 35 years of experience that began with the world’s first multi wall polycarbonate sheet, our Topgal panels and components combine to offer more rigidity, thermal insulation, strength and solar heat control than our standard sheets and profiles

Manufactured in 23.62 and 39.29 inch widths (center to center) and in thicknesses from 8 mm (5/16 in.) to 20mm (3/4 in.)

Available in standard colors as well as special color layers that selectively reflect solar radiation.



### Product Specifications

Panel	Thickness (mm)	Width	Weight	U-Value	Minimum Radius for Cold
	8	23.62	0.39	0.42	70
	10	23.62	0.45	0.37	78
	16	39.29	0.61	0.32	125
	20	39.29	0.66	0.26	157

■ Standard Topgal panels have UV protection on both sides.

### Colors and Optical Properties

Color	8 mm,		16 mm, 20mm	
	LT	SHGC*	LT	SHGC*
Clear	65	0.6	49	0.51
Ice	20	0.36	14	0.32
Bronze	30	0.5	30	0.39
Blue	30	0.59	30	0.43
Polyshade Silver	12	0.27	10	0.26

■ LT - Light Transmission in % according to ASTM D-1003, measured between ribs.

■ SHGC - Solar Heat Gain Coefficient\* is the ratio of solar heat gain through the sheet and the incident solar radiation. It takes into account all conduction, convection and radiation effects involved.

\* The lower this number, the more solar heat is being blocked.

## Selective Layers

### POLYSHADE A

This layer offers the most protection from unwanted solar heat. Polyshade reflects sunlight in order to prevent excess heat build-up, therefore successfully preventing solar heat from penetrating through the sheets. Polyshade is available in our 20 mm ToPgal Standing Seam panel.

### PRIMALITE B

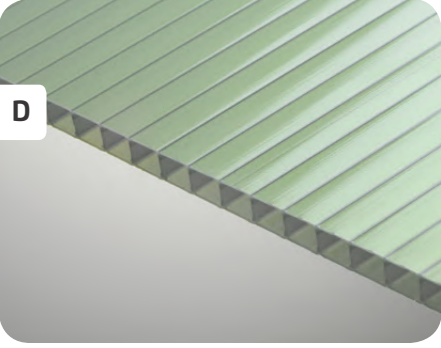
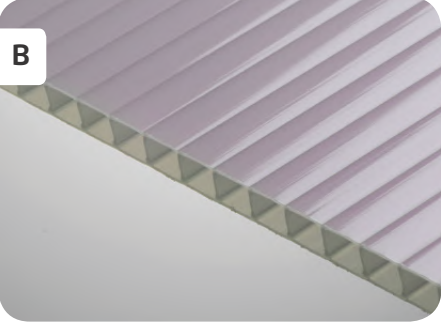
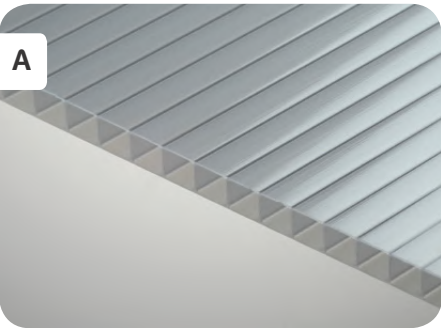
This unique layer selectively reflects most of the near-IR solar radiation while transmitting more visible light. Primalite is available in our 16 mm Titan Sky panel.

### SILHOUETTE C

This attractive layer offers a silky incandescent surface which makes this panel aesthetically pleasing. When looks and performance are in need, Silhouette Pearl or Gold may be the best design choice. \*Please contact Customer Service for questions on availability of Silhouette.

### POLYCOOLITE D

This layer manipulates PAR lighting in order to maximize photosynthesis. Photosynthesis is most active within the 400-450 nm & 600-650 nm wavelengths. Polycoolite allows maximum light transmission within these wavelengths therefore creating a healthy environment for plant life. Polycoolite is available in our 8 mm SG panel.



### Optical Properties of Selective Layers

Selective Layer	Structure	Thickness (mm)	Light Trans. (%)		Shading Coefficient
			ASTM D1003	ASTM D1494	
Polyshade	Standard	8-10	18	24	0.33
		16	18	20	0.26
Primalite	Standard	8-10	45	68	0.45
	Standard	16	32	-	0.31
	Titan Sky	16	18	-	0.27
	Thermogal	25	18	-	0.34
	Thermogal	32	15	-	0.28
Silhouette Pearl	Titan Sky	8	40	-	0.58
	Titan Sky	16	18	-	0.35
	Thermogal	32	10	45	0.39
Silhouette Gold	Standard	8-10	35	63	0.42
	Titan Sky	16	18	47	0.29
	Thermogal	32	10	43	0.31
Polycoolite	Standard	8	45	63	0.50





## About Plazit-Polygal

The Plazit Polygal Group is one of the leading international specialist manufacturers of thermoplastic sheets for various applications. Our company is respected worldwide for its innovative and high quality products and expert technical support. Our production facilities are located in Israel, USA, Chile, Bulgaria, Russia and Spain, enabling our clients to source our products close to their locations around the globe.

Both Plazit & Polygal started to manufacture extruded plastic sheets in 1973 – a landmark year for the international plastics industry. Within a short amount of time, Polygal became a pioneer in the manufacturing of Polycarbonate multi wall sheets. From modest beginnings, both companies have grown and become world leaders in the plastic sheeting market.

Plazit and Polygal merged their operations in 2011, and the Plazit Polygal Group continues to develop its products, production facilities, human resources and market presence. We are committed to providing industry leading service to our customers, guaranteeing superior quality products, flexibility and swift response times - these commitments are key to all our activities. Plazit Polygal Group facilities are certified according to ISO 9001, ISO 14001, CSTB (France), HACCP, ROHS, fire and health certifications, and other international engineering standards. Our in-house experts provide technical support and continuous product development to meet the evolving needs of our global client base.

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