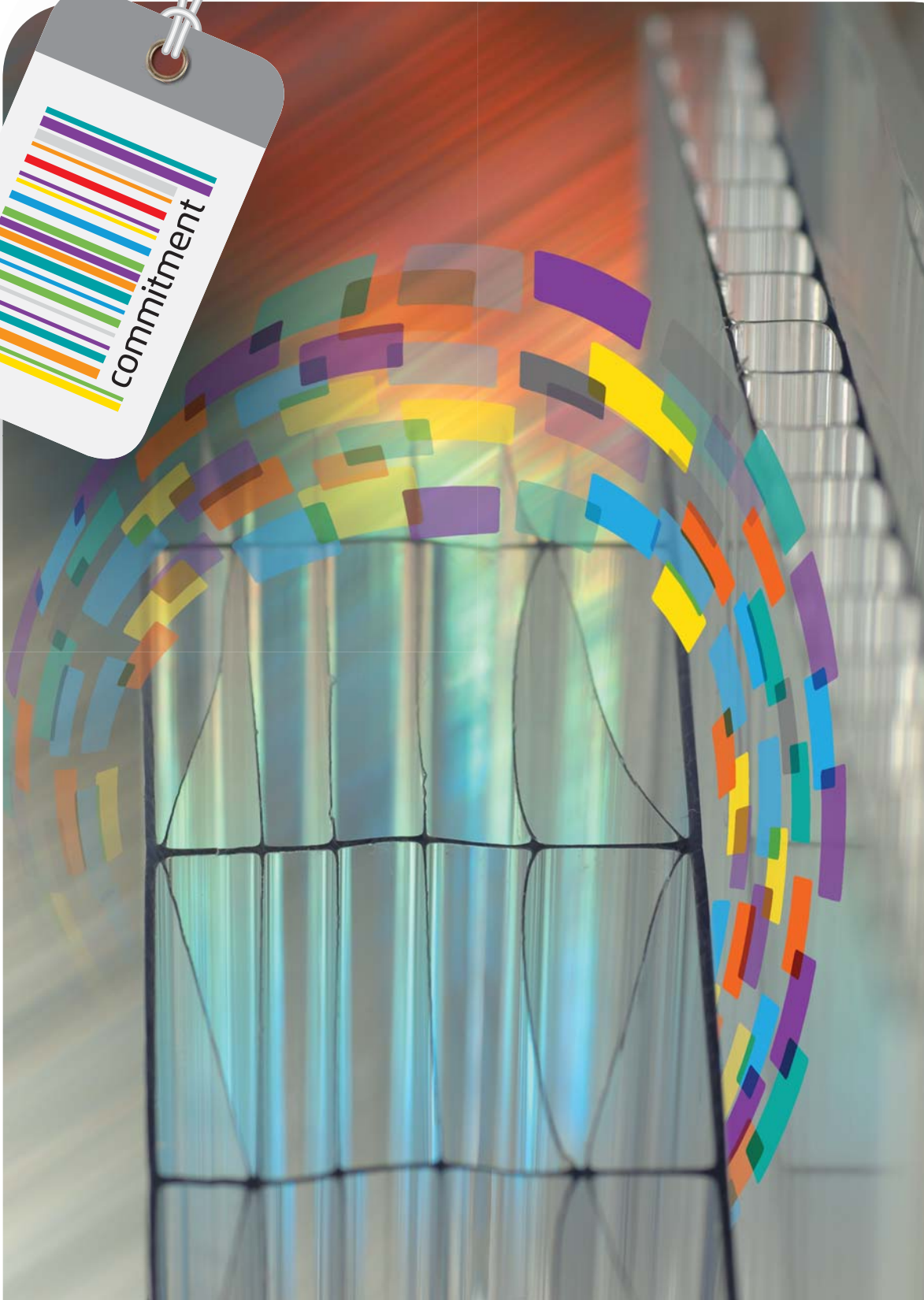




POLYGAL

Multiwall Sheets





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
- Flame retardant
- Lightweight
- UV-blocking
- Environmentally friendly

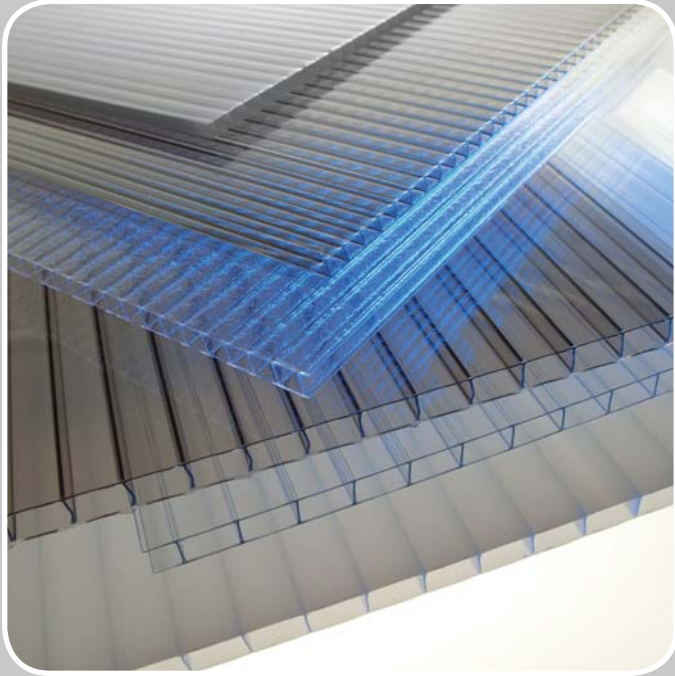
**B**

- A** Agriculture – maximizing natural light and thermo-insulation all year round.
- B** Architecture – lightweight roofing with selective layers for light management.
- C** Decorative – creative design feature with endless color and illumination options.
- D** Signage – lightweight material with optimum light diffusion for lightbox signs.



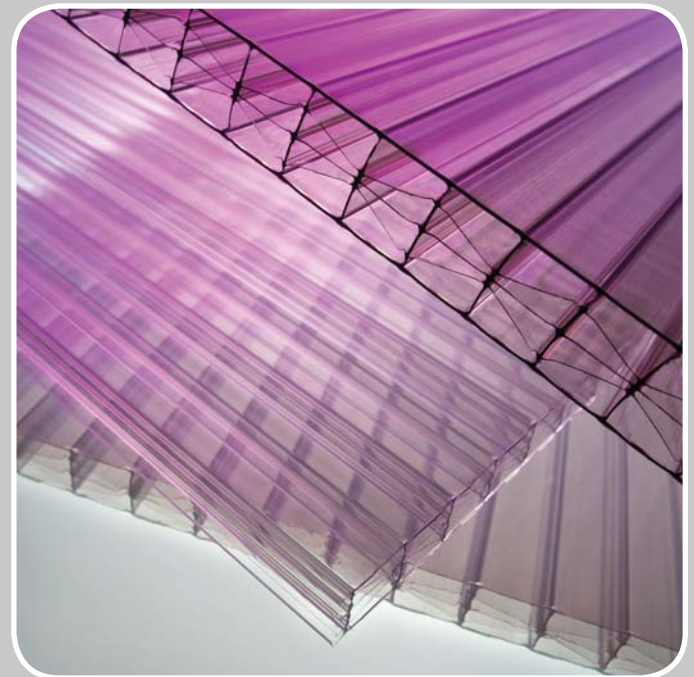
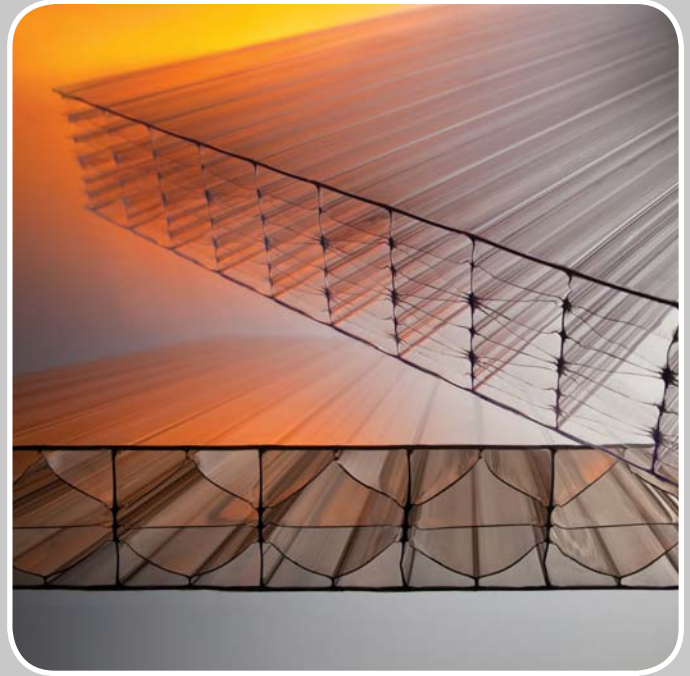
Polygal **Standard.**

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 internal cross-brace structure gives these sheets twice the strength and rigidity of equivalent standard polycarbonate sheets. Polygal Titan Sky presents an advanced solution that stands up to heavy loads.



Mechanical and Thermal Properties

Product	Structure	Thickness (mm)	Weight (g/m ²)	Standard Width (mm)	Minimum Radius for Cold Bending Arches (m)	U-Factor* (W/m ² x °C)	Light Transmission (%)**			
							Clear	NGL	Ice	Bronze
Polygal Standard		4	800	980 1050 1200 1220 1250 2100	0.7	3.9	82	-	32	41
		6	1300		1.05	3.6	80	-	32	41
		8	1500		1.4	3.3	80	25	32	41
		10	1700		1.75	3.0	79	25	32	41
		16	2700		2.8	2.3	72	35	32	41
Polygal Titan Sky		10	1750	1050 1200	1.75	2.4	62	25	32	42
		16	2500	2100	2.8	2.1	62	25	32	42
Polygal Selectogal		16	3000	1050 1200	2.8	2.3	68	32	-	42
Polygal Thermogal		20	3000	1200 2100	3.6	1.9	55	20	20	20
		25	3500	4.4	1.7	55	20	20	20	
		32	3800	980 1200	5.6	1.3	50	15	*** 51	*** 16
Thermogal Super		32	4000	980 1200	5.6	1.06	37	10	-	-

| * ASTM C177 TNO | ** ASTM D1003 | ***ASTM D1494

Available In Standard Colors

Clear, Ice, Nonglare (NGL), Blue, Bronze, Gray, Green, Turquoise

Standard Sheet Length

3 m, 4 m, 6 m
Max. length: in accordance with handling restrictions

Thermal Expansion

2.5 mm/m: Clear, Ice and NGL
4.5 mm/m: dark colors

Service Temp. Range

-40 - +120 °C



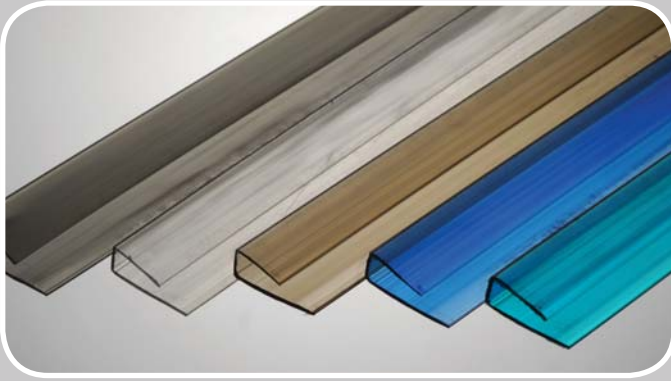
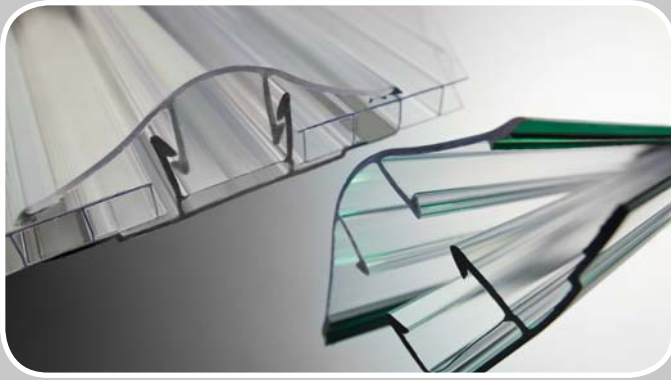
Polygal Systems

Connection Systems and Accessories

Our interconnecting polycarbonate or aluminum profiles connect multiple multiwall sheets to cover large areas. They add no weight and lie flush with the sheets. They are UV-resistant and provide excellent sealing for roofs and inclined walls, because they do not obstruct light at connection points. Our profiles are available in unlimited lengths, are easy to handle and install, and suit most roofing, curtain wall and cladding applications

Recommended Uses

Our profiles suit most roofing, curtain wall, and cladding applications.



ECP 2G Polygal System

Connection system for polycarbonate profiles designed to connect multiwall polycarbonate sheets with thicknesses between 4 mm to 10 mm. Profiles can easily be connected together to form reliable joints. Manufactured in all standard colors, in lengths of 6 m or 12 m..

APC 301 Polygal System

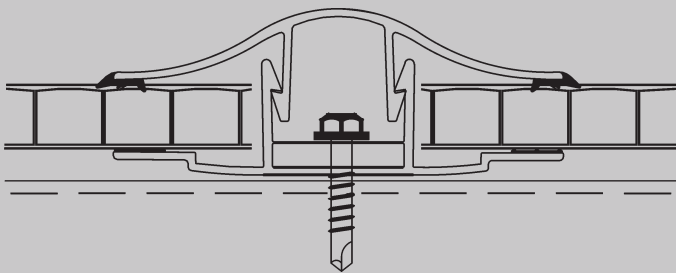
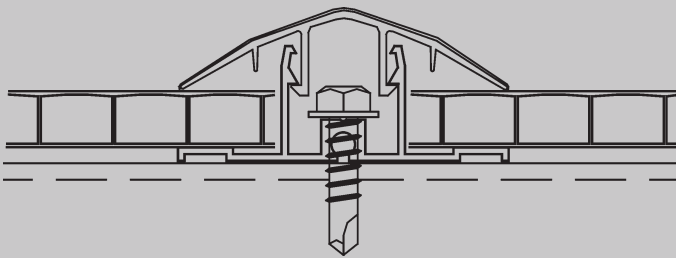
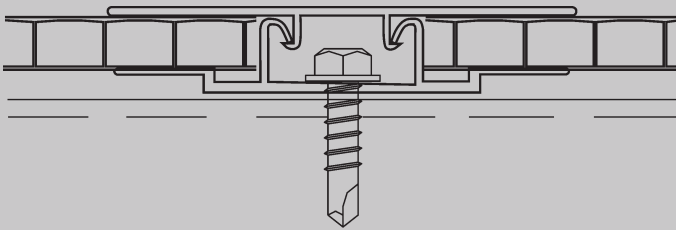
Combined connection system consisting of an aluminum base and polycarbonate cap profiles. Designed to connect multiwall polycarbonate sheets with a thicknesses between 6 mm to 16 mm. Provides a rigid connection. Manufactured in all standard colors. Length up to 6 m.

| NEW | GCP Polygal System

Connection system for polycarbonate profiles with integrated co-extruded gaskets, designed to connect multiwall polycarbonate sheets with thicknesses between 6 mm to 16 mm. Provides a very well sealed connection, manufactured in all standard colors, in lengths of 6 m or 12 m.

MGL Polygal System

Aluminium glazing system designed to connect multiwall polycarbonate sheets with thicknesses between 6 mm to 16 mm. Provides a rigid and sealed connection. Length up to 6 m.

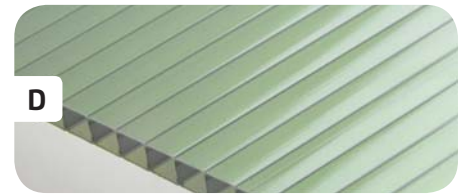
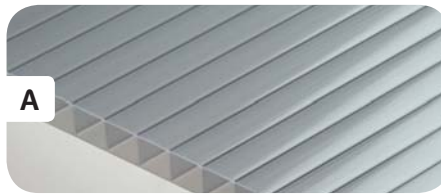




Selective Layers

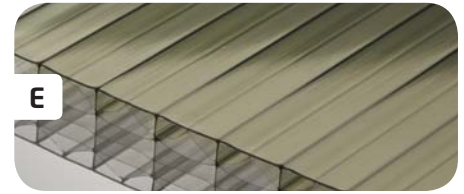
POLYSHADE A

Designed for warm climates, Polyshade reflects sunlight to prevent excess heat build up for effective control of solar heat.



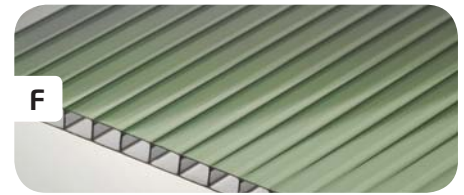
PRIMALITE B

These unique sheets selectively reflect most of the near-IR solar radiation and transmit more visible light. Available in various colors and degrees of transparency.



SILHOUETTE C

Silhouette, with its sophisticated and lustrous exterior surface, radiates elegance and style and features outstanding reflective qualities and light selectivity. Available in Pearl and Gold.



POLYCOOLITE D

Specifically designed to let in natural light for photosynthesis, Polycoolite blocks harmful UV rays, supplies high blues and reds, and reflects heat from the unused green.

SPRING E

Spring, a transparent sheet with a special co-extrusion layer on the exterior side (under its UV protective layer), blocks invisible IR solar radiation and heat.

RAINBOW F

Special optical effects in Rainbow sheets combine with the angle of light to change the sheet color (for example, from red to green) to harmonize with any setting.

Optical Properties of Selective Layers

Selective Layer	Structure	Thickness (mm)	Light Trans. (%)		Shading Coefficient
			ASTM D1003	ASTM D1494	
Polychrome	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
Spring	Standard	8	70	-	0.61
	Thermogal	32	44	47	0.42
Rainbow	Standard	8	15	-	0.60



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. Polygal became few years later a pioneer in the production 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 meeting the needs of our customers and guaranteeing high quality, flexibility and swift response – these commitments are the 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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