# PLASKOLITE POLYGAL<sup>®</sup> MULTIWALL POLYCARBONATE SHEETS AND CONNECTION SYSTEMS



# Polygal | MultiWall 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 to create the right atmosphere. PLASKOLITE produces a range of flexible multiwall thermoplastic sheets that are ideal for roofing, glazing, skylights, signage and interior design projects. They maximize the available light and provide insulation and UV-protection, as well as adding texture and color to your project.

Polygal MultiWall 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



A





В



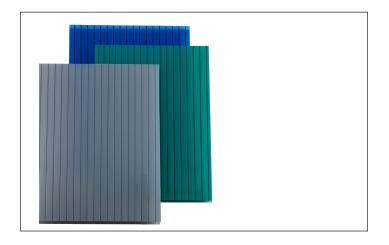


- **A** Agriculture maximizing natural light and outstanding insulation all year round.
- **B** Architecture lightweight roofing with selective layers for light management.
- **C Decorative –** creative design features with many color and illumination options.
- **D Signage –** lightweight material with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

## Double and triple layered sheets

Double and triple layered Polygal MultiWall sheets are manufactured in various colors and degrees of transparency.

The sheets are designed for use in most conventional roofing and glazing applications.



### Thermogal

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



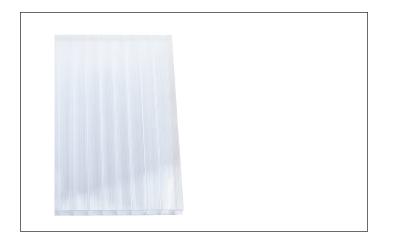
## Selectogal

An exclusive PLASKOLITE patent lets Selectogal (RFX) control heat and light transmission into buildings, thereby reducing heating and lighting costs.

Selectogal's prismatic structure reflects most of the sun's heat in the summer and allows for increase in solar heat in the winter.

## Titan Sky

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





Product Structu		Thickness (mm,in)	Weight (g/m²,	Standard Width	Minimum Radius for	U-Factor* (W/m²x°C,	Light Transmission (%)**			
			lb/ft²)	(mm, in)	Cold Bending Arches (m, ft)	BTU/hr/ ft^2x°F)	Bronze	NGL	Clear	Ice
Double and triple layered sheets		4, 0.157	800, 0.16	980, 39 1050, 41 1200, 47 1220, 48 1250, 49 2100, 83	0.7, 2.3	3.9, 0.69	42	-	82	32
		6, 0.236	1300, 0.27		1.05, 3.4	3.6, 0.63	42	-	80	32
		8, 0.315	1500, 0.31		1.4, 4.6	3.3, 0.58	42	25	80	32
		10, 0.394	1700, 0.35		1.75, 5.7	3.0, 0.53	42	25	79	32
		16, 0.625	2700, 0.55		2.8, 9.2	2.3, 0.41	42	35	72	32
Titan sky	*	10, 0.394	1750, 0.36	1050, 41 1200, 47 2100, 83	1.75, 5.7	2.4, 0.42	42	25	62	32
		16, 0.625	2500, 0.51		2.8, 9.2	2.1, 0.37	42	25	61	32
Selectogal		16, 0.625	3000, 0.61	1050, 41 1200, 47	2.8, 9.2	2.3, 0.41	42	32	68	-
Thermogal	*****	20, 0.787	3000, 0.61	1200, 47 2100, 83	3.6, 11.8	1.9, 0.33	20	20	56	20
		25, 0.984	3500. 0.72		4.4, 14.4	1.7, 0.30	20	20 (51***)	55	20 (54***)
		32, 1.26	3800, 0.78		5.6, 18.4	1.3, 0.23	15	15 (47***)	50	15
Thermogal Super		32, 1.26	3800, 0.7	980, 39 1200, 47	Not recommended	1.06, 0.19	-	10	38	-
Thermogal Premium		32, 1.26	3800, 0.78		Not recommended	1.06, 0.19	-	10	28	-
Thermogal Premium		40, .1.5	4300, 0.88	980, 39 1200, 47	5.6, 18.4	0.95		-	26	-

#### | \* ASTM C177 TNO | \*\* ASTM D1003 | \*\*\*ASTM D1494

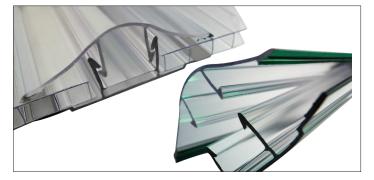
Available In	Standard Sheet	Thermal	Service Temp.
Standard Colors	Length	Expansion	Range
Clear, Ice, Nonglare (NGL), Blue, Bronze, Gray, Green, Turquoise	3m/9.8ft, 4m/13.1ft, 6m/19.7ft Max. length: in accordance with handling restrictions	2.5 mm/m (0.03in/ft): Clear, Ice and NGL 4.5 mm/m (0.054in/ft): dark colors (△T=80°C / △T=176°F)	-40°C-+120°C (-13°F to +185°F) for short time service, -25°C to +85°C (-13°F to 185°F) for prolonged service

## CONNECTION PROFILES AND ACCESSORIES

Our interconnecting polycarbonate or aluminum profiles connect multiple multiwall sheets to cover large areas. They do not add weight and lie flush with the sheets. The connectors are UV-resistant and provide excellent sealing for roofs and inclined walls, because they do not obstruct light at connection points. These profiles are available in unlimited lengths, are easy to handle and install, and suit most roofing, curtain wall and cladding applications

## **RECOMMENDED USES**

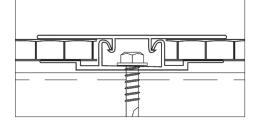
Plaskolite profiles are suitable for most roofing, curtain wall, and cladding applications.





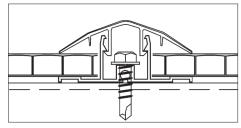
#### ECP connection system

The easy clip profile system is for polycarbonate profiles designed to connect multiwall polycarbonate sheets with thicknesses between 6mm to 10mm (0.236" to 0.394"). Profiles can easily be connected together to form reliable joints. Manufactured in standard colors, in lengths of 6m or 12m (19.7' or 39.4').



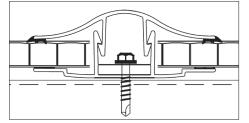
#### Combined connection System

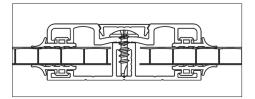
This system consists of an aluminum base and polycarbonate cap profiles. Designed to connect multiwall polycarbonate sheets with a thicknesses between 6mm to 18mm (0.236" to 0.709"), it provides a rigid connection. Manufactured in standard colors, and lengths up to 6M (19.7').



#### **GCP** System

The gasket clip profile system for polycarbonate profiles with integrated coextruded gaskets, designed to connect multiwall polycarbonate sheets with thicknesses between 6mm to 10mm (0.236" to 0.394"). It provides a well sealed connection, manufactures in standard colors and lengths of 6m as 12m (19.7' and 39.4').



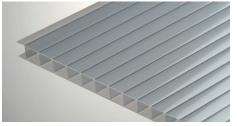


#### MGL System

The mega lock profile glazing system designed to connect multiwall polycarbonate sheets with thicknesses between 6mm to 16mm (0.236" to 0.625"). It provides a rigid and sealed connection in lengths up to 6m (19.7').

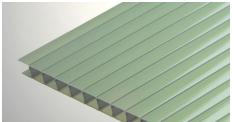
## SELECTIVE LAYERS

#### POLYSHADE



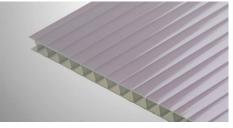
Designed for warm climates, Polyshade reflects sunlight to prevent excess heat build up for effective control of solar heat.

POLYCOOLITE



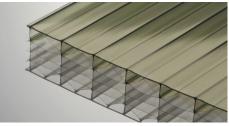
Specifically designed to let in natural light for photosynthesis, Polycoolite blocks harmful UV rays, supplies high blues and reds, and reflects heat from the unused green.

#### PRIMALITE



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.

#### SPRING



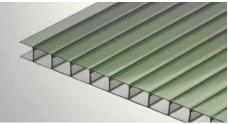
Spring, a transparent sheet with a special coextrusion layer on the exterior side (under its UV protective layer), blocks invisible IR solar radiation and heat.

#### SILHOUETTE



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

#### RAINBOW



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	Structure	Thickness	Light Tr	Shading		
Layer	Structure	(mm,in)	ASTM D1003	ASTM D1494	Coefficient	
Polyshade	Double and triple lovered sheats	8-10 (0.315-0.394)	18	24	0.33	
	Double and triple layered sheets	16 (0.625)	18	20	0.26	
Primalite	Double and triple layered sheets	8-10 (0.315-0.394)	45	68	0.45	
	Double and triple layered sheets	16 (0.625)	32	-	0.31	
	Titan Sky	16 (0.625)	18	-	0.27	
	Thermogal	25 (0.984)	18	-	0.34	
	Thermogal	32 (1.26)	15	-	0.28	
Silhouette Pearl	Titan Sky	10 (0.394)	40	-	0.58	
	Titan Sky	16 (0.625)	18	-	0.35	
	Thermogal	32 (1.26)	10	45	0.39	
	Double and triple layered sheets	8-10 (0.315-0.394)	35	63	0.42	
Silhouette Gold	Titan Sky	16 (0.625)	18	47	0.29	
	Thermogal	32 (1.26)	10	43	0.31	
Polycoolite	Double and triple layered sheets	8 (0.315)	45	63	0.50	
Spring	Double and triple layered sheets	8 (0.315)	70	-	0.61	
	Thermogal	32 (1.26)	44	47	0.42	
Rainbow	Double and triple layered sheets	8 (0.315)	15	-	0.60	

# PLASKOLITE

PERFORMANCE PLASTIC MANUFACTURING: SHEET. POLYMER. PROFILES



#### **OUR MISSION**

TO PRODUCE INNOVATIVE ENGINEERING THERMOPLASTICS THE RIGHT WAY; THROUGH LONG-LASTING CUSTOMER RELATIONSHIPS, HANDS-ON CUSTOMER SERVICE AND RESPONSIBLE MANUFACTURING

#### MANUFACTURING LOCATIONS





PRIVATELY HELD

PRODUCTION LINES



## OUR PILLARS OF SUSTAINABILITY

CONTRIBUTING TO MAKE THE WORLD A BETTER PLACE

From our founding, we strive to treat our employees, our customers, our community and the world with kindness, dignity and respect. This drives our continuing effort to perform sustainable manufacturing and create products in an environmentally-friendly manner, for generations to come. This on-going commitment is expressed in our Three Pillars of Sustainability:



be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use are beyond our control. We recommend that the prospective user determines the suitability of our materials and suggestions before adopting them on a commercial scale.

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