

# Polygal Sheets

Creating an atmosphere is an art form. Choosing the right product for the atmosphere is professionalism! If you are looking for a product that creates the ultimate atmosphere, gives a sense of openness and maximizes advantages of nature while protecting from its elements... Polygal! Polygal produces a line of sheets that provide you with a broad range of excellent solutions for uses such as skylights roofing and covering buildings, swimming pools and glazing.

- Excellent Insulation
- Controlled Daylight Transmission
- Virtually Unbreakable
- Flame Retardant
- Flexible and Easy to Install
- Lightweight
- UV Blocking Layer
- Environmentally Friendly



**Polygal Standard Sheets** double and triple layered, manufactured in various colors and degrees of transparency, are designed for use in most conventional roofing and glazing applications.

**Polygal Titan Sky's** internal cross-brace structure gives these sheets twice the strength and rigidity of equivalent standard polycarbonate sheets. Polygal Titan Sky provides a quality solution that is both intelligent and advanced for use where withstanding heavy loads is required.

**Polygal Thermogal** unique inner X-brace structure provides extra-strength, rigidity and outstanding insulation. Available in different thicknesses, widths and colors. Ideal for low-pitched roofs and for glazing in closed structures with large-span openings.

**Polygal Selectogal (RFX)** An exclusive Polygal patent that enables the controlled penetration of heat and the transmission of pleasant daylight into buildings, while reducing heating and lighting costs. Selectogal's sophisticated prismatic structure enables it to reflect most of the sun's heat in the summer, yet allows increased penetration of solar heat in the winter.

## SPECIAL LAYERS

**Polygal PolyShade** designed for warm climates. PolyShade effectively reflects sunlight and prevents excess heat build-up, combines effective solar heating control with a highly attractive, metallic look.

**Polygal Primalite** - Novel sheet selectively reflects a large portion of the Near Infra-Red solar radiation, while transmitting more of the visible light radiation.

**Polygal Silhouette** with its sophisticated and lustrous exterior surface, radiates elegance and good taste, available in a variety of formats, the Silhouette sheet features outstanding reflective qualities, making it an excellent choice and suitable for all daylight coverings.

**Polygal Primavert (Polycoolite)** sheet is specifically designed to supply plants natural solar light needs for photosynthesis. It blocks the UV, supplies high blue and red, and reflects heat from the unused green. It reflects undesirable excess heat from the infrared range.

**Anti-Fog coating** - factory applied inner coating combines long lasting anti-fogging properties with excellent adhesion and stability in environmental chemicals. Very good rub-off and wash off resistance.



The data in this advertisement are provided in good faith and constitute general information without commitment, and no warranty is given or implied. Polycarbonate is a combustible thermoplastic that complies with various international standards, as customary in each country. Avoid exposure to excessive heat or aromatic cleaning solvents. Normal fire precautions should be taken to protect against combustion.

## Mechanical and Thermal Properties

Full Technical Information at: [www.polygal.com](http://www.polygal.com)

Product	Structure	Thickness (mm)	Weight (g/m <sup>2</sup> )	Standard width (mm)	Minimum radius for cold bending arches(m)	U-Factor ASTM C177 TNO(W/m <sup>2</sup> ·C)
Polygal Standard Sheets		4	800	980	0.70	3.9
		6	1300	1050	1.05	3.6
		8	1500	1200	1.4	3.3
		10	1700	1220	1.75	3.0
		1250				
		16	2700	2100	2.8	2.3
Triple-Clear		8	1650	1830	-	2.85
		10	1750	2100	-	2.6
Titan		10	1700	980	1.75	2.5
		16	2700	1050 1200 2100	2.8	2.2
Titan Sky		16	2500	1050 1200	2.8	2.08
Selectogal		16	3000	1050 1200	2.8	2.3
Thermogal		25	3500	1200 2100	4.37	1.7
		32	3800	980	5.6	1.4
		35	4000	1200	6.1	1.36
Thermogal Sky		32	3800	1200 1230	5.6	1.22
		40	4200	1250	-	1.1

Available standard colors: Clear, Ice, Bronze, Nonglare, Blue, Green, Turquoise, Grey.  
 Standard panel length: 3m, 4m, 6m.  
 Maximum length: in accordance with handling restrictions.  
 Thermal expansion: 2.5 mm/m for Clear and Ice panel, 4.5 mm/m for dark colors like Bronze, Blue, Green, Grey etc. panel.  
 Service temperature range: -40 to +120 °C.



## Optical Properties

Product	Thickness (mm)	Light Transmission ASTM D 1003 (%)			
		clear	NGL	ice	bronze
Polygal Standard Sheets	4	82	-	-	-
	6	80	-	-	-
	8	80	25	32	42
	10	79	35	-	-
Polygal Triple-Clear	8	77	-	-	-
	10	76	-	-	-
Polygal Titan	10	62	25	32	42
	16	-	-	-	-
Polygal Selectogal	16	34	32	-	42
Polygal Thermogal	25	55	-	20	-
	32	50	15	51*	16*
	35	-	-	47*	14*
	40	71	-	-	-

\*By ASTM D 1494

## Special Layers Optical Properties

Product	Structure	Thickness (mm)	Light Transmission (%)		Shading Coefficient	
			ASTM D 1003	ASTM D 1494		
PolyShade	Standard	8-10	18	-	0.33	
		16	-	-	0.26	
Primalite	Standard	8-10	45	-	0.45	
		16	32	-	0.31	
	Thermogal	16	18	-	0.27	
		25	-	-	0.34	
Silhouette Pearl	Standard	8	40	-	0.58	
		16	18	-	0.35	
	Thermogal	32	10	45	0.39	
		32	15	-	0.28	
Silhouette Gold	Standard	8-10	35	61	0.42	
		16	18	47	0.29	
	Thermogal	32	10	43	0.31	
Polycolite	Standard	8	45	63	0.50	
		8	70	-	0.61	
Spring	Standard	32	44	47	0.42	
		32	44	47	0.42	
	Rainbow	Standard	8	15	-	0.60

These products are available from

**AP**  
**Aetna Plastics**  
 800.634.3074 - [www.aetnaplastics.com](http://www.aetnaplastics.com)



Always look for the original sign



Polygal is the leading manufacturer of structured Polycarbonate panels, and is known throughout the world for the outstanding quality of its products. Polygal was the first manufacturer in the world to create structured Polycarbonate panels, and over the last 30 years has developed and produced a broad spectrum of these products, which are successfully covering a full array of structures worldwide.