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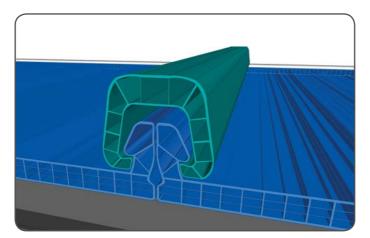
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BRINGS NATURE IN

# TOPGAL MULTI WALL PANEL SYSTEM

## **Topgal Multiwall Panel System**

A new generation of Polygal products: the "Topgal" standingseam panel system, a system that brings to the customer nearly 35 years of experience that began with the development by Polygal of the world's first multiwall polycarbonate sheet. The panels and components of the "Topgal" system combine to insure maximum strength and complete sealing, the unique multi-walled structure of the panels provides superior rigidity and thermal insulation. The "Topgal" system is manufactured in 600mm and 998mm widths with thicknesses from 8mm to 20mm; traditional colors available as well as panels with special color layers that selectively reflect specific spectra of solar radiation.



### **Applications:**

#### Decoration





Architecture



### **Product Specifications**

### Mechanical and Thermal Properties

Panel	Thickness Wic (mm) (mr		U-Value (W/m²•°C)	Min. radius for cold bending (m)	
	8		2.4	1.8	
	10	600	2.1	2.0	
	16	998	1.8	3.2	
	20	778	1.5	4.0	

Topgal panels are available in thicknesses of 8mm, 10mm, 16mm and 20mm. Standard Topgal panels have UV protection on both sides (specific orders can be produced with UV protection on one side only). Maximum panel length is 11.90m.

### **Colors and Optical Properties**

Color	8 - 10 mm		16 mm		20 mm	
	LT (%)	SHGC	LT (%)	SHGC	LT (%)	SHGC
Clear	65	0.6	49	0.51	49	0.51
Bronze	30	0.5	20	0.39	20	0.39
Ice	20	0.36	20	0.32	20	0.32
Polyshade Silver	12	0.27	12	0.26	12	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.

PolyShade is designed for warm climates. PolyShade effectively reflects sunlight and prevents excess heat build-up, combining effective solar heating control with a highly attractive, metallic look. Silhouette, with it's sophisticated and lustrous exterior surface, radiates elegance and good taste and is available in a variety of formats. The Silhouette sheet features outstanding reflective qualities and selectivity making it an excellent choice and suitable for all daylight coverings.

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

**Spring** - a transparent sheet with a special co-extrusion layer on the external side of the sheet under the UV protective layer "Spring" blocks the invisible IR solar radiation & heat. The result - Lower temperatures (less heat enters the structure), while still allowing maximum light to enter the structure.



### Load Bearing Capacity

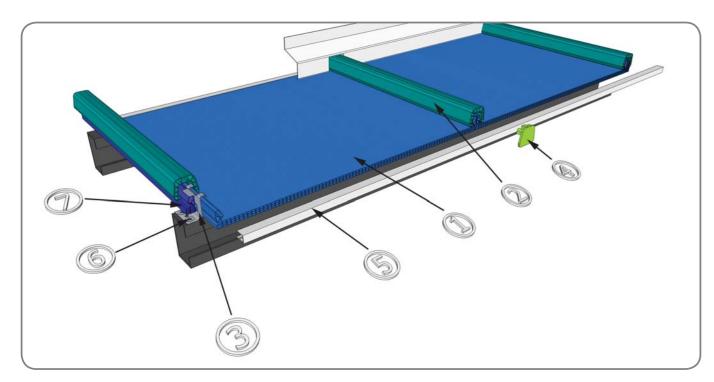
"Topgal" coverings are highly resistant to the forces of nature (conditional upon correct structure design and panel installation).

Thickness	Load Type	75 kg/m²	100 kg/m²	125 kg/m²	150 kg/m²	175 kg/m²	200 kg/m²
8 mm (600 mm width)	<b>♦</b> Up Load	1.3	1.2	1.1	1	0.9	0.8
	♥ Down Load	1.1	1.0	0.9	0.8	0.7	0.6
10 mm (600 mm width)	<b>▲</b> Up Load	1.2	1.2	1.1	1.0	0.9	0.8
	♥ Down Load	1.2	1.1	1.0	0.9	0.8	0.7
16 mm (998 mm width)	<b>♦</b> Up Load	1.0	0.9	0.8	0.7	0.6	0.5
	♥ Down Load	1.5	1.4	1.3	1.2	1.1	1.0
20 mm (998 mm width)	<b>↑</b> Up Load	1.0	0.9	0.8	0.7	0.6	0.5
	♥ Down Load	1.7	1.6	1.5	1.4	1.3	1.2

#### Maximum Span Between Purlins in Flat Structures

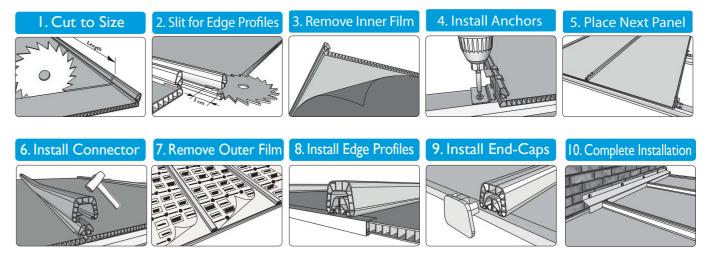
### **Installation Accessories**

The panel system "Topgal" is fully equipped with all the necessary components for quality and reliable coverage. All component parts have passed a full cycle of tests for quality and compatability with polycarbonat.



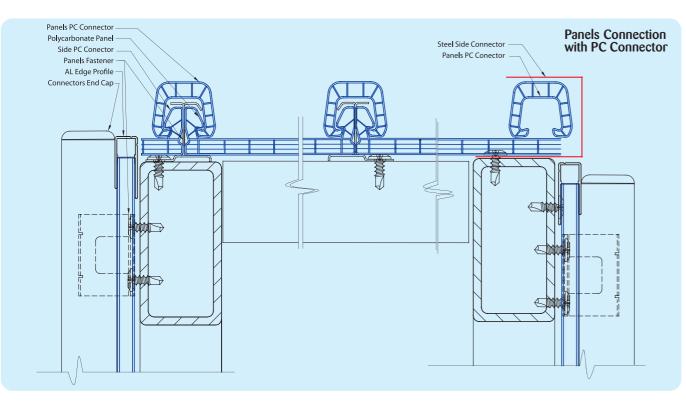
Topgal Installation Accessories					
1	Topgal Panel				
2	PC Connector		#240	Length 12 m Color: panels matched	
	AL. Connector	2	#360	Length 6 m Color: RAL	
3	Fastener	Ĩ	#530 (8 mm panels) #531 (10 mm panels) #532 (16 mm panels) #533 (20 mm panels)	Stainless Steel	
4	Connector End Cap		#525	Color: panels matched	
5	Al. Edge Profile		#311 (8 mm panels) #312 (10 mm panels) #313 (16 mm panels) #328 (20 mm panels)	Length 6 m Color: RAL	
6	Fastener Screw		#430 (for steel structures)	Philips self drilling #10 / 7/8"	
			#431 (for steel structures)	Philips self drilling #10 / 5/8"	
			#436 (for wood structures)	Philips #10 / 7/8"	
7	PC Side Connector		#241 (8 mm panels) #242 (10 mm panels) #243 (16 mm panels) #244 (20 mm panels)	Color: panels matched	
8	Anti Dust Tape	Co og	#508 (8-10 mm panels) #509 (16-20 mm panels)	33 m rolls	
9	Finish Profile	2	#361	Length 6 m not colored	

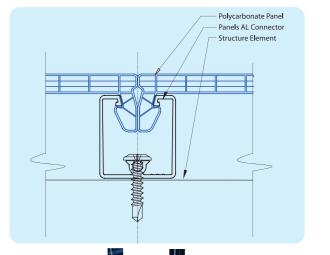
### **Installation Instructions**





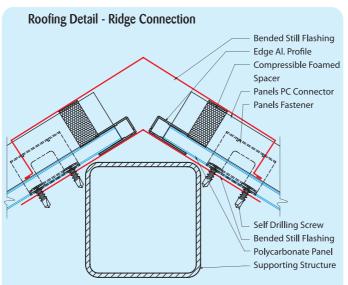
### **Connection Details**

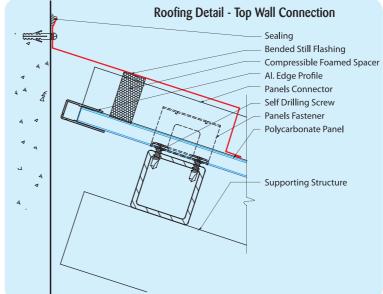


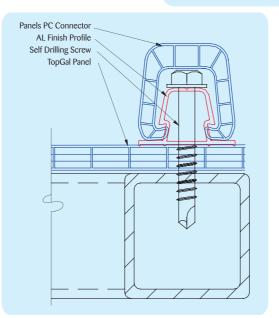


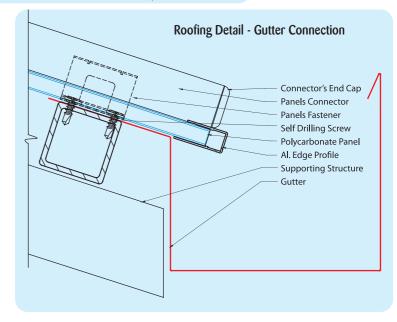
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Connector's End Cap Al. Edge Profile Compressible Foamed Spacer

Bended Still Flashing Panels Connector Self Drilling Screw Panels Fastener Polycarbonate Panel - Supporting Structure Element



#### POLYGAL

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Polygal is the leading manufacturer of structured polycarbonate sheets, 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 sheets, 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.

