

# TOPGAL









# **TOPGAL**Multi Wall Panel System

Plazit Polygal introduces the next generation of polycarbonate sheets: Polygal Topgal, the standing-seam panel system.

Backed by 35 years of experience that began with the world's first multi wall polycarbonate sheet, the Polygal Topgal panels and components integrate the unique properties of the multi wall structure to produce superior rigidity and thermal insulation that ensure maximum strength and complete sealing.

Manufactured in 600mm and 1000mm widths (center to center) and in thicknesses from 8mm to 20mm. Available in standard colors as well as special color layers that selectively reflect solar radiation.



# Colors and Optical Properties

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

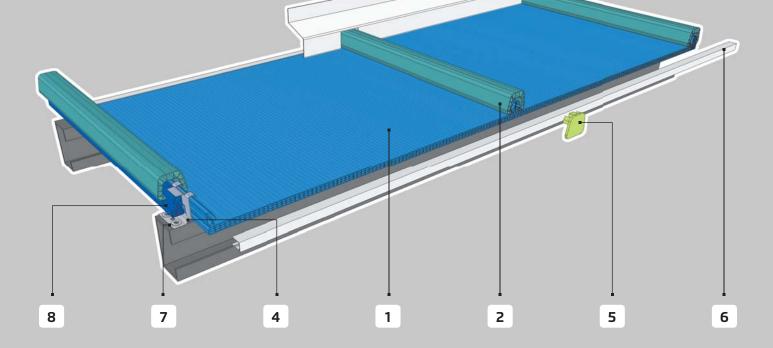
# **Product Specifications**

Panel	Thickness (mm)	width (mm)	Dead Load (kg/m²)	U-Value (W/m² x °C)	Minimum Radius for Cold Bending Arches (m)
	8	600	2.2	2.4	1.8
	10	600	2.5	2.1	2.0
	16	1000	3.3	1.8	3.2
	20	1000	3.5	1.5	4.0

- Dead Load is a weight of 1m<sup>2</sup> of Topgal system, includes installation accessories
- Standard Topgal panels have UV protection on both sides or on tooth side, upon customer request







# **TOPGAL** 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 polycarbonate.

	Item		Cat N°		Description
1	Topgal Panel				Maximum panel length is 11.90m
2	PC Connector		#240		Length 12m Color: panels matched
3	Al. Connector	a	#360		Length 6m
4	Fastener	I	#530 (8mm panels) #531 (10mm panels)	#532 (16mm panels) #533 (20mm panels)	Stainless Steel
5	Connector End Cap		#525		Color: panels matched
6	Al. Edge Profile		#311 (8mm panels) #313 (16mm panels)	#312 (10mm panels) #328 (20mm panels)	Length 6m
			#430 (for metal structu	res)	Philips self drilling #10 / 1"
7	Fastener Screw	7	#431 (for metal structu	es)	Philips self drilling #10 / 5/8"
			#436 (for wood structu	res)	Philips #10 / 1"
8	PC Side Profile		#241 (8mm panels) #243 (16mm panels)	#242 (10mm panels) #244 (20mm panels)	Color: panels matched
9	Anti Dust Tape	00000	#508 (8-10mm panels) #509 (16-20mm panels	)	Roll length 33m
10	Al. Side Profile	A	#361		Length 6m
11	Al. Frame Profile		#364 (16mm panels)		Length 6m



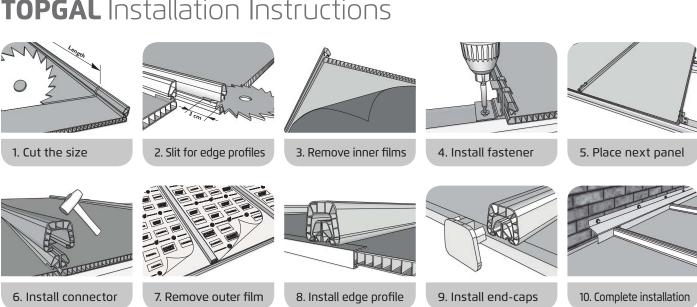
## **TOPGAL** Load Bearing Capacity

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

#### Recommended Span Between Purlins in Flat Structures (m)

Thick./Width	Direction	750Pa	1000Pa	1250Pa	1500Pa	1750Pa	2000Pa
8/600	Uplift load	1.10	0.95	0.80	0.70	0.60	0.50
8/600	Gravity load	1.15	1.00	0.90	0.75	0.65	0.60
10/600	Uplift load	1.25	1.10	0.95	0.85	0.75	0.65
10/600	Gravity load	1.30	1.15	1.05	0.95	0.85	0.75
16/1000	Uplift load	1.35	1.20	1.10	1.00	0.90	0.80
16/1000	Gravity load	1.40	1.30	1.20	1.05	0.95	0.90
20/1000	Uplift load	1.50	1.35	1.25	1.10	1.00	0.95
20/1000	Gravity load	1.55	1.45	1.30	1.20	1.10	1.00

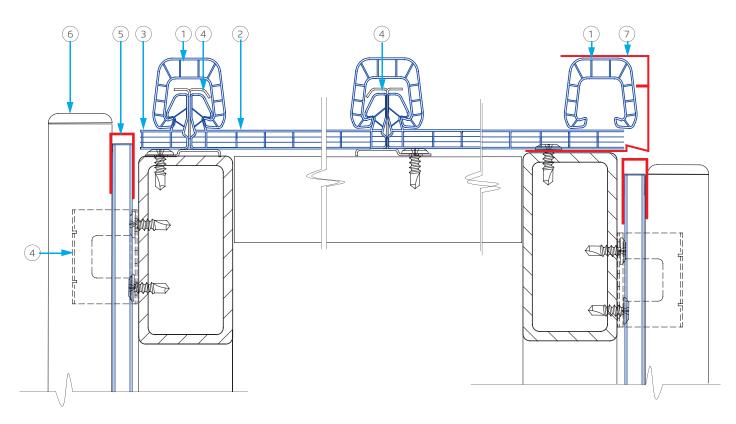
## **TOPGAL** Installation Instructions







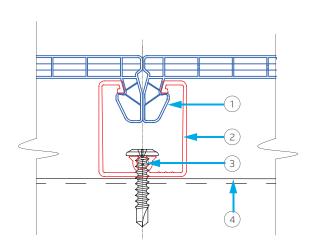
# **TOPGAL** Connection Details



### Panels Connection with PC Connector

1	Panel PC Connector	5	Al. Edge Profile
2	Polycarbonate Panel	6	Connector End Cup
3	PC Side Profile	7	Al. Frame Profile

4 Panels Fastener



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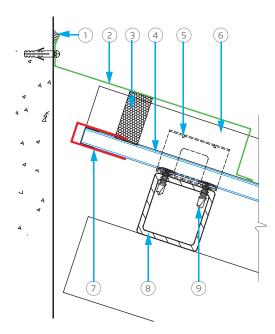
### Panels Connection with Al. Connector

1	Polycarbonate Panel
2	Panel Al. Connector (#360)
3	Fastener Screw

#### Structure Element

### Ridge Detail with PC Connector

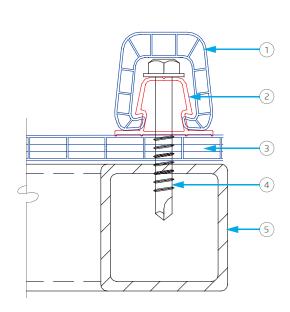
1	Bended Still Flashing	5	Panels Fastener
2	Al. Edge Profile	6	Fastener Screw
3	Compressible Foamed Spacer	7	Bended Still Flashing
4	Pannel PC Connector	8	Structure Flement



### Roofing Detail - Upper Wall Connection

1	Sealing	6	Panel PC Connector
2	Bended Steel Flashing	7	Al. Edge Profile
3	Compressible Foamed Spacer	8	Structure Element
4	Polycarbonate Panel	9	Fastener Screw

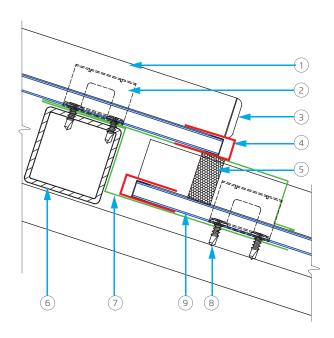
**5** Panels Fastener



### End Side Connection

1	Panel PC Connector	4	Self Drilling Screw
2	Al. Side Profile (#361)	5	Structure Element

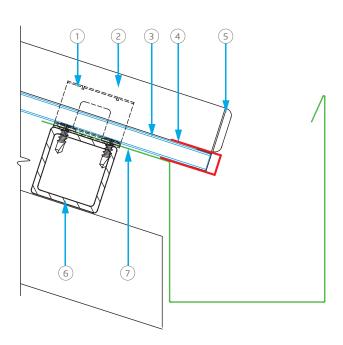
**3** Polycarbonate Panel



### Roofing Detail - Overlap Connection

1	Panel PC connector	6	Supporting Structure
2	Panels Fastener	7	Bended Still Flashing
3	Connector's End Cup	8	Fastener Screw
4	Al. Edge Profile	9	Polycarbonate Panel

**5** Compressible Foamed Spacer



### Roofing Detail - Gutter Connection

1	Panels Fastener	5	Connector's End Cup
2	Panel PC Connector	6	Structure Element
3	Polycarbonate Panel	7	Gutter

4 Al. Edge Profile



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# 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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