

TOPGAL

Polycarbonate multi wall
standing seam system





Architecture



Decorative

TOPGAL Multi Wall Panel System

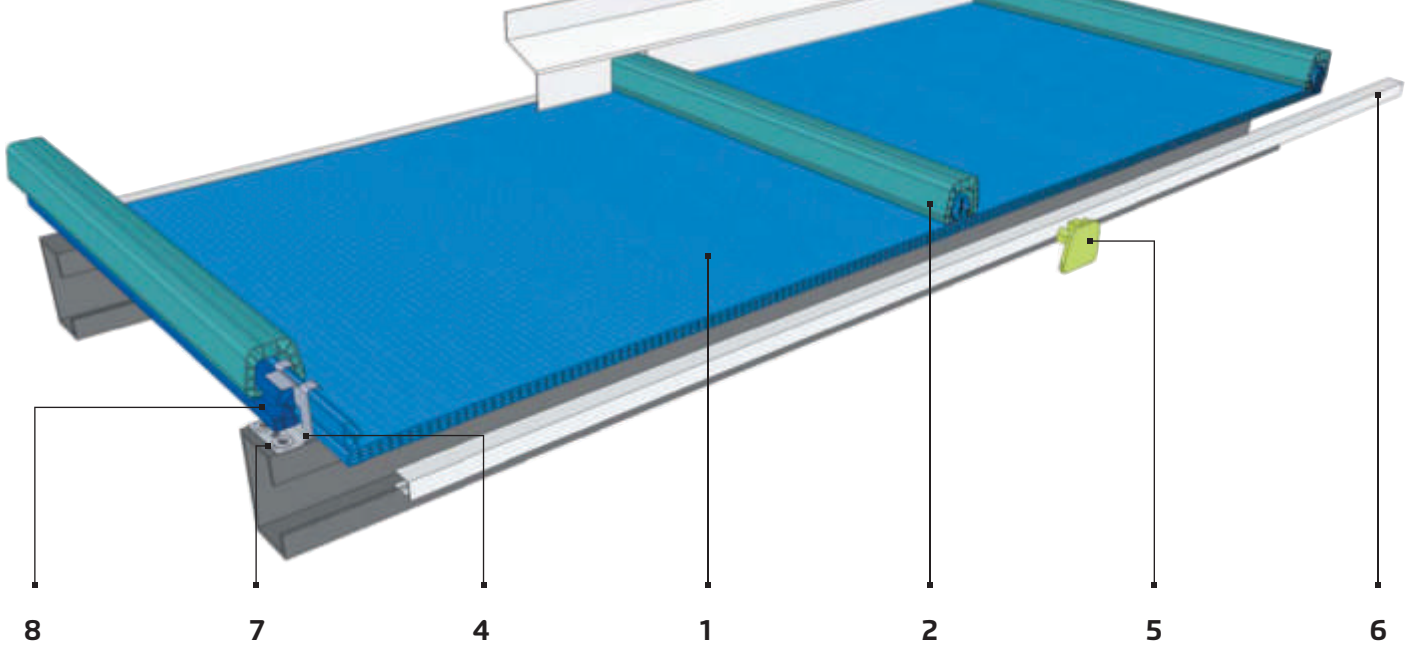
Plazit Polygal introduces the next generation of polycarbonate sheets: Polygal Topgal, the standing-seam panel system.

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.












Technical Data

Linear Expansion	0.065mm/m °C
Service Temperature	-40°C - +120°C
Fire Resistance Rating	B-s1,d0
Certification	EN-13823/EN-11925-2
Possible Expansion due to Heat & Moisture	2mm - 4mm/m



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	 #360	Length 6m
4	Fastener	 #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
7	Fastener Screw	 #430 (for metal structures) #431 (for metal structures) #436 (for wood structures)	Philips self drilling #10 / 1" Philips self drilling #10 / 5/8" 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	 #508 (8-10mm panels) #509 (16-20mm panels)	Roll length 33m
10	Al. Side Profile	 #361	Length 6m
11	Al. Frame Profile	 #364 (16mm panels)	Length 6m

Colours and Optical Properties




Colours below are standard items - additional colours are available but subject to special order conditions.

Colour	8mm Standing Seam		16mm/20mm Standing Seam	
	LT (%)	SHGC	LT (%)	SHGC
Clear	65	0.6	49	0.51
Bronze	30	0.5	20	0.39
Ice / Opal	20	0.36	20	0.32
Blue	30	0.59	20	0.43
Polychrome Silver	12	0.27	12	0.26

- UV Resistant coating on one or both sides on request.
- 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.
- Panels have UV protection on both sides or one side, upon customer request. (Standard products in stock have UV protection one side - clearly indicated on the product).

Product Specifications

Detailed installation & accessory brochures are available in soft copy on request.

Panel	Thickness (mm)	Width (mm)	Dead Load (kg/m ²)	Purlin Spacing (mm) ave.	R-Value	Minimum Radius for Cold Bending Arches (m)
Standing Seam 10mm 	10	600	2.5	750	0.476	2.0
Standing Seam 16mm 	16	600	3.3	900	0.555	3.2
Standing Seam 20mm 	20	1000	3.5	1000	0.666	4.0

- Dead Load is a weight of 1m² of Topgal system, includes installation accessories

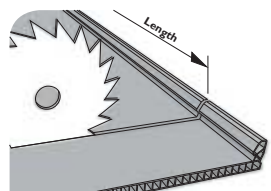
TOPGAL Load Bearing Capacity

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

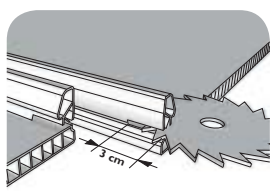
Recommended Span Between Purlins in Flat Structures (m)

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

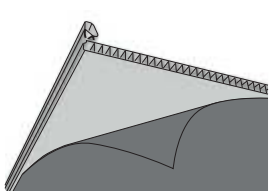
TOPGAL Installation Instructions



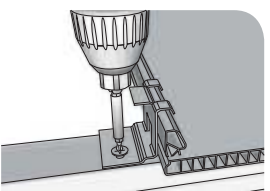
1. Cut the size



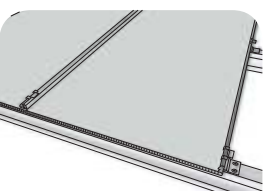
2. Slit for edge profiles



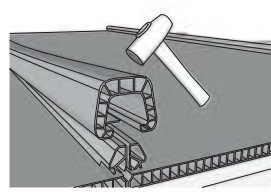
3. Remove inner films



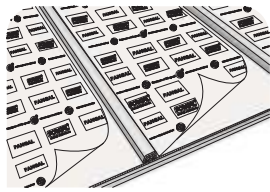
4. Install fastener



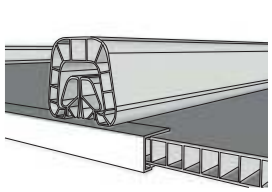
5. Place next panel



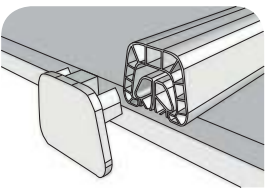
6. Install connector



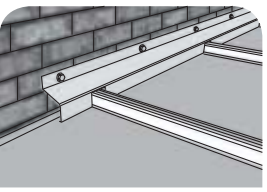
7. Remove outer film



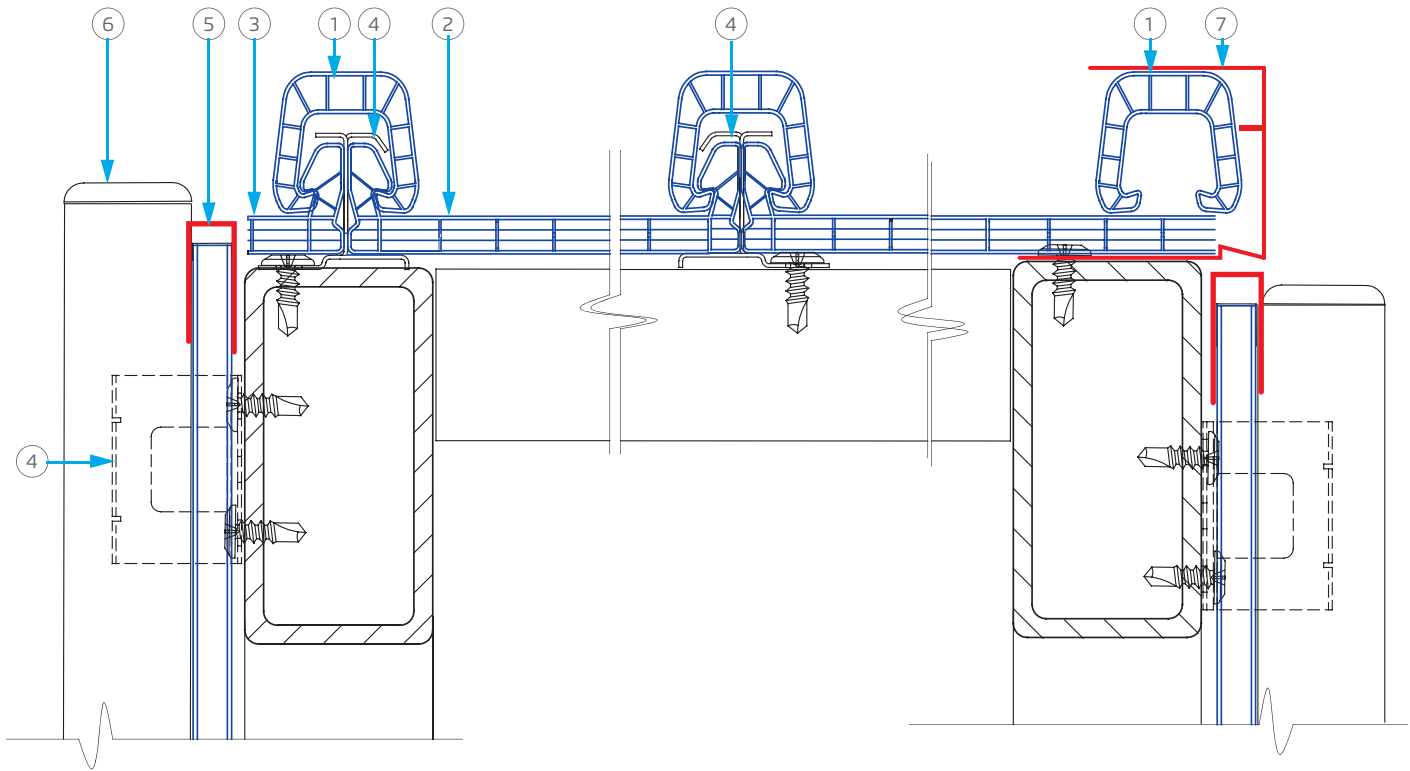
8. Install edge profile



9. Install end-caps

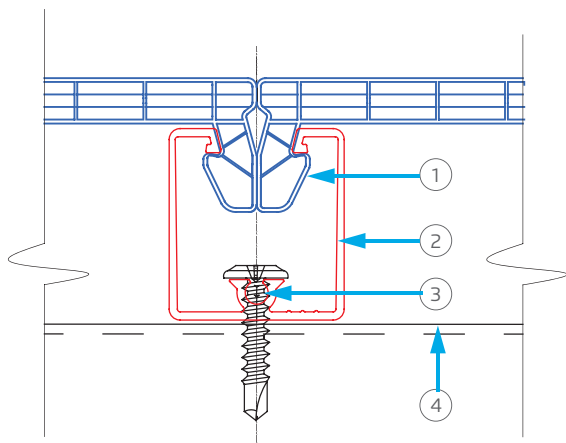


10. Complete installation



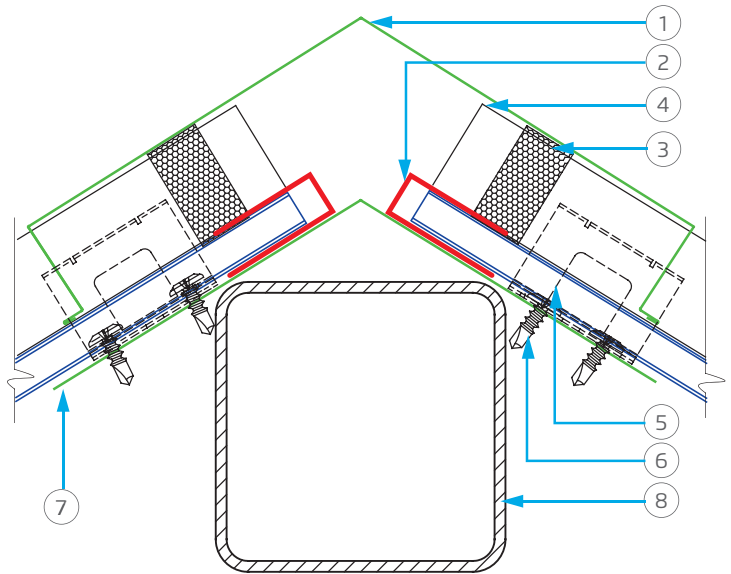
Panels Connection with PC Connector

- | | | | |
|---|---------------------|---|-------------------|
| 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 | | |



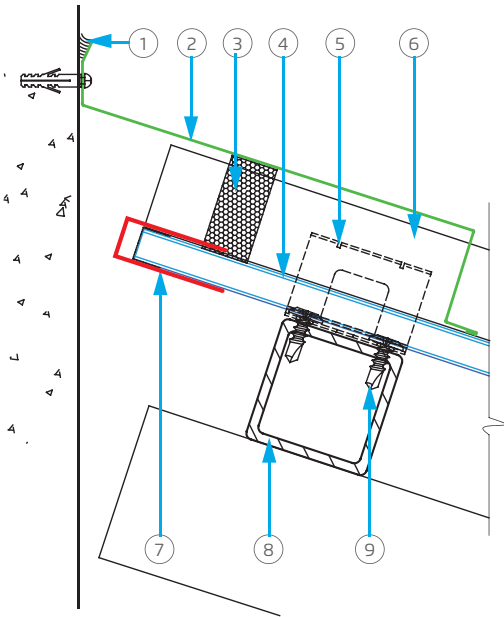
Panels Connection with Al. Connector

- | | |
|---|----------------------------|
| 1 | Polycarbonate Panel |
| 2 | Panel Al. Connector (#360) |
| 3 | Fastener Screw |
| 4 | Structure Element |



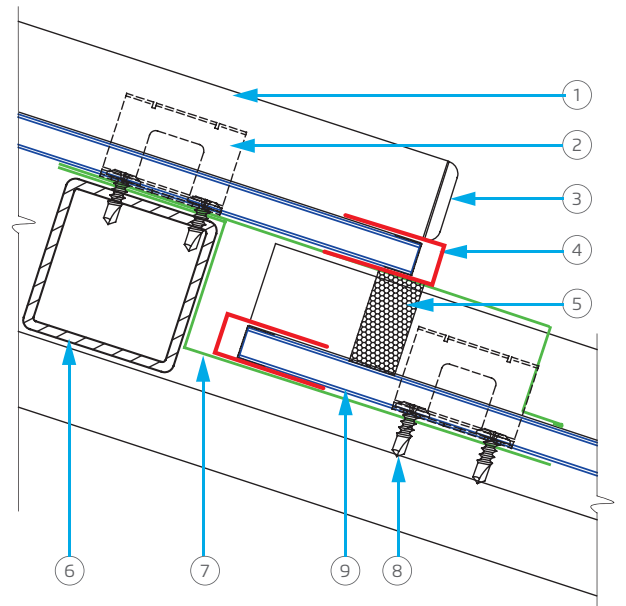
Ridge Detail with PC Connector

- | | | | |
|---|----------------------------|---|-----------------------|
| 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 Element |



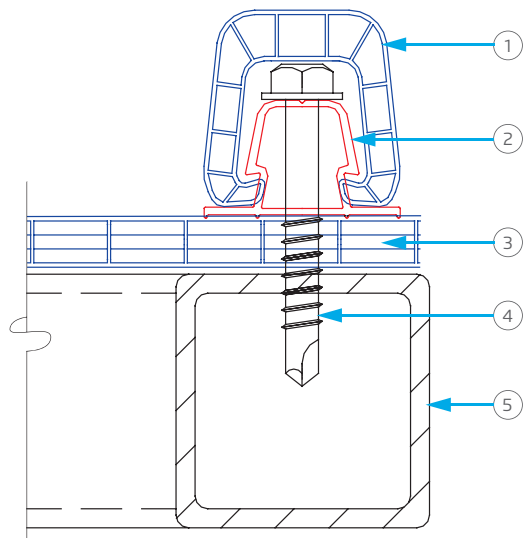
Roofing Detail - Upper Wall Connection

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	



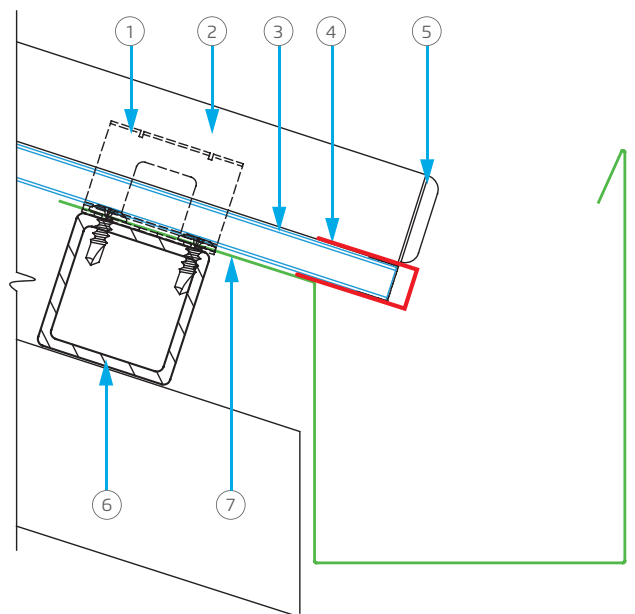
Roofing Detail - Overlap Connection

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	



End Side Connection

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



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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