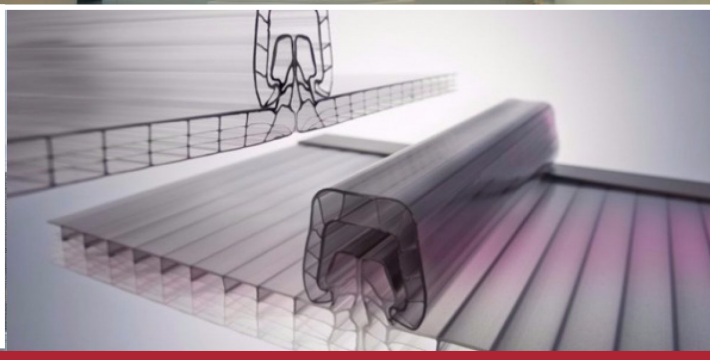
Multiwall Polycarbonate Standing Seam System

Technical & Install Guide



EASY BUILDING PRODUCTS

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About Easy Building Products

Family operated and Canadian owned. Easy Building Products is a leading metal roofing manufacturer in rural Ontario with 40 plus years of experience in high quality roll-formed steel roofing and siding products.

Established by Mr. John Beimers in 1990 with one thought in mind, “To make metal roofing products easy, strong and life lasting”. In the beginning John brought his years of experience with corrugated pipe, metal roofing sales and coupled that with his entrepreneurial love for business and strong work ethic to bring Easy Building Products from a simple “run from home” business to a full-fledged multi-line company with all your metal roofing needs.

In 2017 Mr. John Beimers passed the reins on to Colin Wielinga, and Dan Vanderlaan. Committed to maintaining the same values, and customer appreciation we are striving to have Easy Building Products be your main supplier for metal sheeting for years to come.

For over two decades our customers have found commitment, quality and dedication are more than just words at Easy Building Products. They are key factors in our service based thinking that spell success for our customers. Including our family values with our industry leading advice, competitive pricing, quality products and prompt service will always be our goal.

Multiwall Standing Seam System

Backed by 35 years of product development experience, this standing seam panel system integrates the high-performance characteristics of the multiwall polycarbonate sheet with top quality components, giving architects and builders the flexibility to design creative yet sustainable glazing and roofing elements.

The unique properties of this polycarbonate multiwall standing seam panel system provide superior rigidity, excellent thermal insulation, and long-term weatherability, ensuring maximum strength and complete sealing. More natural light can be brought into a building without added structural complexity or loss of insulation.

Key Product Features:

- **Flexible & Easy to Install**
- **Purlin Based Installation**
- **Minimum 5% Slope**
- **Highly Resistant to Wind & Snow Load**
- **Watertight Leak Proof System**

Product Specifications & Performance

UV Protection

The light and radiant energy from the sun has a harmful effect on polycarbonate. Standard Topgal multiwall polycarbonate panels features UV protectant on both sides of the panel. This UV protection prevents ultraviolet rays from deteriorating the polycarbonate, ensuring the panel will not crack, yellow, or weaken from intense sun exposure.

Light Transmission & Solar Heat Gain

Light Transmission in % according to ASTM D-1003, measured between ribs. 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.

Note: * The lower this number, the more solar heat is being blocked.

Product Specifications

Panel	Thickness	Width	Weight (lbs./ft²)	U-Value	Min. Radius for Cold Bending	Color & LT%	SHGC*
	8mm	23.62″	0.39	0.42	70″	Clear: 65% Ice: 20 % Bronze: 30 % Blue: 30%	0.6 0.36 0.5 0.59
	10mm	23.62″	0.45	0.37	78″	Clear: 65% Ice: 20 % Bronze: 30 % Blue: 30%	0.6 0.36 0.5 0.59
	16mm	39.29″	0.61	0.32	125″	Clear: 49% Ice: 14 % Bronze: 30 % Blue: 30%	0.51 0.32 0.39 0.43
	20mm	39.29″	0.66	0.26	157″	Clear: 49% Ice: 14 % Bronze: 30 % Blue: 30%	0.51 0.32 0.39 0.43

Before you Start

Safety Tips

For safe installation of panels, use ladders, protective goggles, and other necessary safety equipment. If you must walk or kneel on sheets during installation, use a sturdy board long enough to span three structural supports. Never walk on installed sheets or leave unfastened sheets unattended. Make sure to read all install instructions before starting.

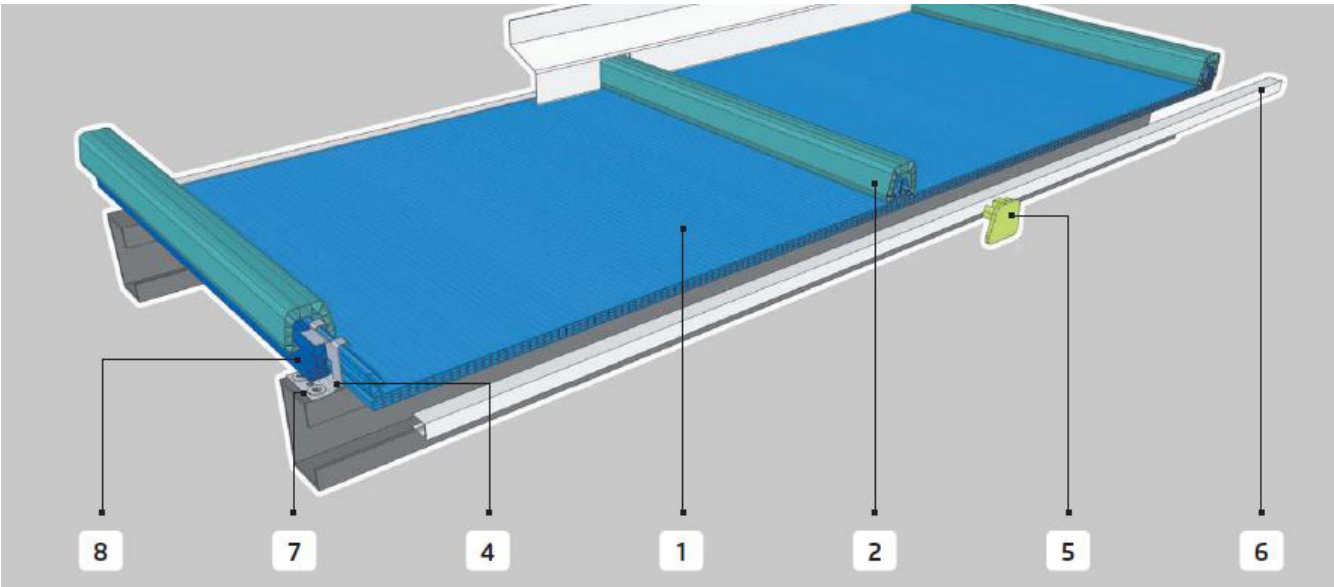
Install Tools

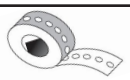
Lightweight and easy to handle, multiwall sheets can be fabricated on site and require no special tools to install. Common tools needed include: table or circular saw with a fine-tooth blade, clamps, drill with a ¼″ bit, tape measure, safety glasses, utility knife, straight edge, sawhorses, and a ladder.

Install Components

The Topgal panel system includes all the necessary components for quality and reliable coverage. All the systems components have passed compatibility tests with the multiwall standing seam polycarbonate roof panel.

Install Components Chart



Part		Description
1. TOPGAL Panel		Max. Panel length is 39 ft.
2. PC Connector		Length: 39 ft.
3. Aluminum Connector		Length: 236 in.
4. Fastener		Aluminum
6. Connector End Cap		Clear
7. Al. Edge Profile		Length: 236 in.
8. Fastener Screw		Phillips Self Drilling #10 / 1" (for metal structures) Phillips #10/1" (for wood structures)
9. PC Side Profile		
10. Anti Dust Tape		Roll Length: 108 ft
11. Al. Side Profile		Length:236 in.
12. Compressible Foam Spacer		Length: 78.7 in.

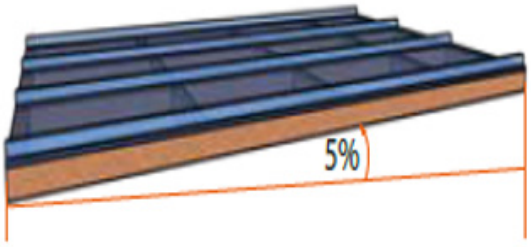
Structural Design Guidelines

When designed and installed correctly, Topgal polycarbonate coverings are highly resistant to the forces of nature and weather.

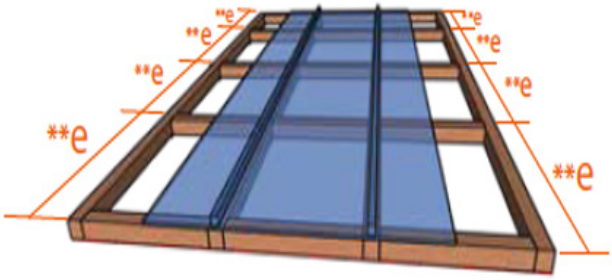
Recommended Span Between Purlins

Sheet Thickness	Pressure Direction	16 PSF	21 PSF	27 PSF	32 PSF	37 PSF	42 PSF
8mm	Uplift Load	43.3″	37.4″	31.5″	27.6″	23.6″	19.7″
8mm	Gravity Load	45.3″	39.37″	35.4″	29.5″	25.6″	23.6″
20mm	Uplift Load	56.1″	53.2″	49.2″	43.3″	39.37″	37.4″
20mm	Gravity Load	61″	57.1″	51.2″	47.24″	43.3″	39.37″

Minimum Slope 5%

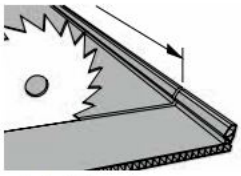


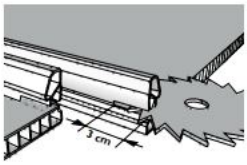
****e:** Profile Spacing**



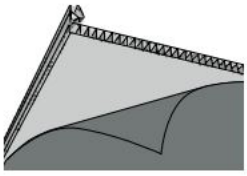
Topgal Multiwall Standing Seam Installation

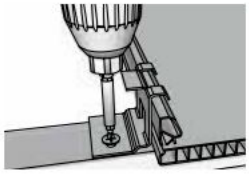
Basic Install Steps


1. Cut the size

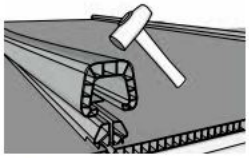


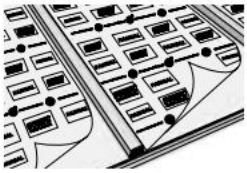
2. Slit for edge profiles

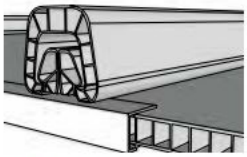

3. Remove inner films.

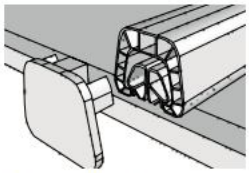

4. Install fastener.

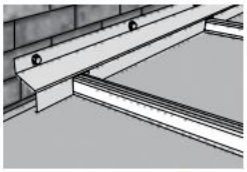
5. Place next panel.


6. Install connector.


7. Remove outer film.

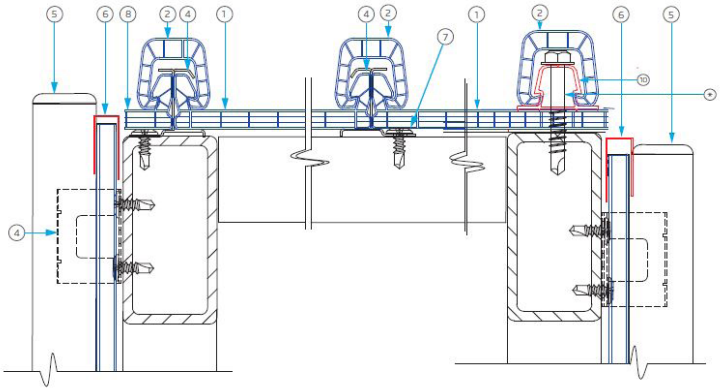

8. Install edge profile


9. Install end-caps.


10. Complete installation.

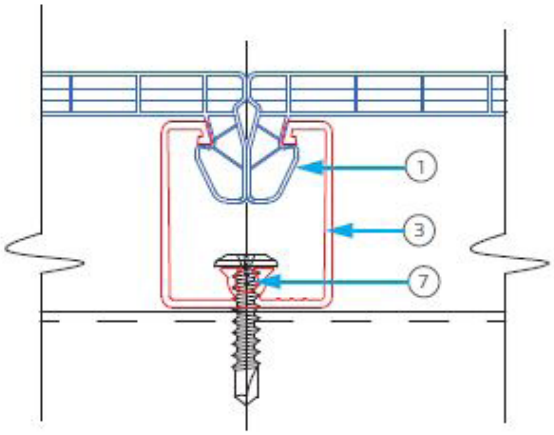
Connection Detail

Panel Connection with PC Connector



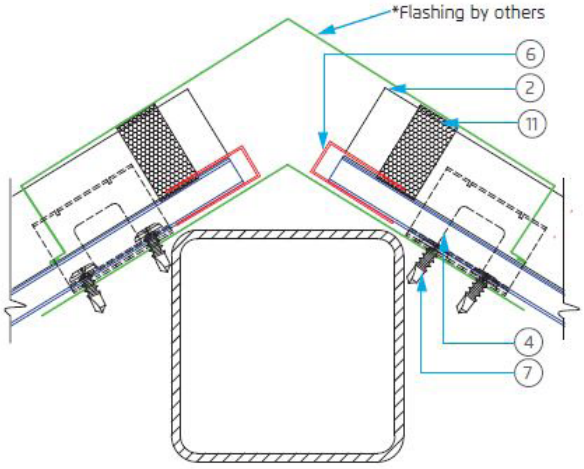
1. Topgal Panel	7. Fastener Screw
2. PC Connector	8. PC Side Profile
3. Fastener	10. Al Side Profile
5. Connector End Cap	*SDST Screw by others
6. Al Edge Profile	

Panel Connection with Al. Connector



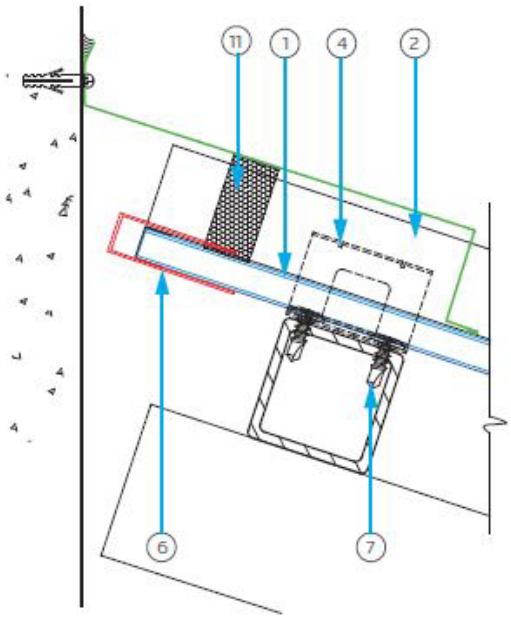
1. Topgal Panel
2. Al. Connector
7. Fastener Screw

Ridge Detail with PC Connector



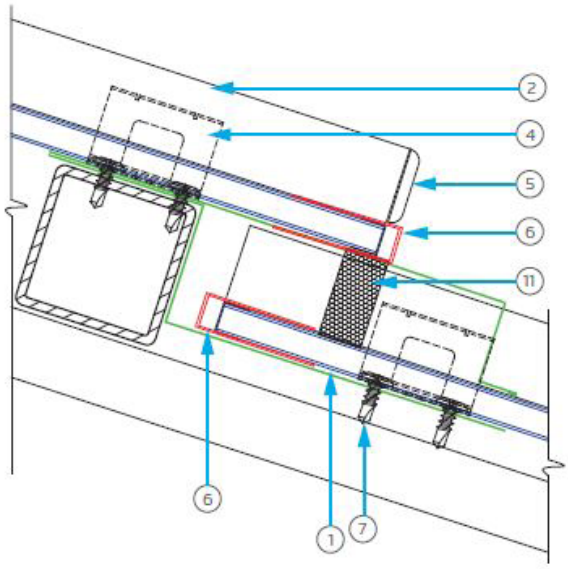
* Flashing by others	6. Al Edge Profile
2. PC Connector	7. Fastener Screw
4. Panels Fastener	11. Foam Spacer

Roofing Detail | Upper Wall Connection



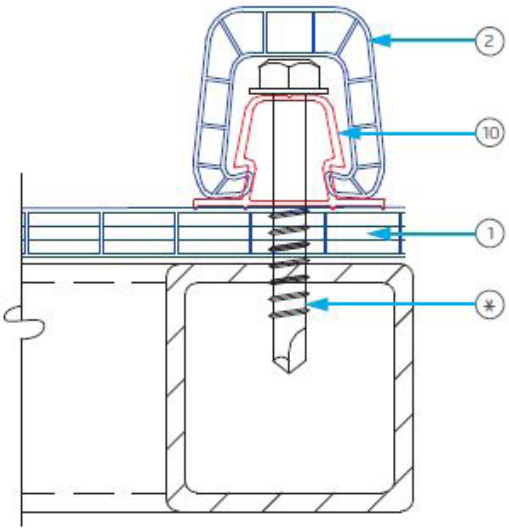
1. Topgal Panel	6. Al Edge Profile
2. PC Connector	7. Fastener Screw
4. Fastener	11. Foam Spacer

Roofing Detail | Overlap Connection



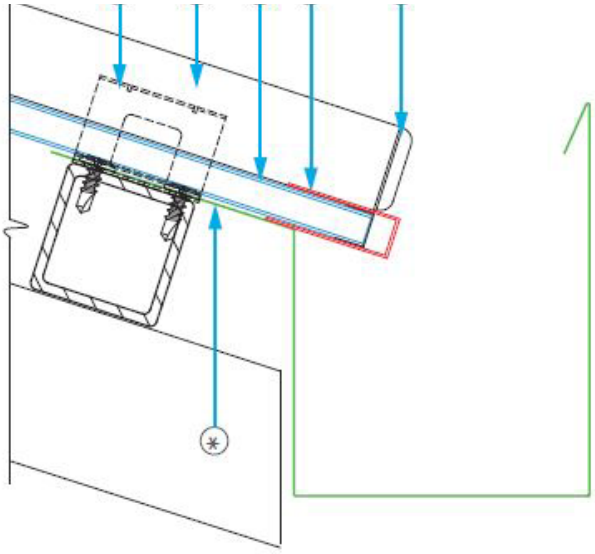
1. Topgal Panel	6. Al Edge Profile
2. PC Connector	7. Fastener Screw
4. Fastener	11. Foam Spacer
5. Connector End Cap	

End Side Connection



1. Topgal Panel	10. Al Side Profile
2. PC Connector	*SDST screw by others

Roofing Detail | Gutter Connection



1. Topgal Panel	5. Connector End Cap
2. PC Connector	6. Al Edge Profile
4. Fastener	* Gutter by others

Cleaning Standing Seam Polycarbonate Panel

Periodically cleaning in accordance with guidelines can help prolong the life of the panel. Use of incompatible cleaning products can cause structural and/or surface damage.

- Gently wash panel with mild household detergent, lukewarm water, and a soft cloth or sponge.
- Thoroughly rinse panel with clean water and dry with a soft cloth to prevent water spotting.
- Never use abrasive cleaner, corrosive chemicals, or gasoline.
- Never scrub with brushes, steel wool, or other abrasive materials.
- Don't use squeegees, razorblades, or other sharp instruments to remove deposits or spots.
- Don't clean hurricane panel in direct sunlight or at high temperatures.

Additional Information

If additional technical or installation information is needed, please contact Easy Building Products. If you have a specific question about requirements in your region, contact your local code office or building inspector.

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