

10' x 10' TOPGAL Pergola Roofing Panel Kit

Technical & Install Guide



Whether you already own a pergola or plan on putting up a new structure, adding a translucent polycarbonate roof is a great way to enjoy your outdoor living space no matter the weather!

The superior design of the TOPGAL standing seam system integrates the high-performance characteristics of multiwall polycarbonate with top quality components. The 'turned-up edges' of these polycarbonate panels are linked together with special polycarbonate connectors. This creates a strong mechanical lock between the roof panels, ensuring the TOPGAL standing seam system will remain sealed and watertight for many years.

PERGOLA STRUCTURE NOT INCLUDED IN TOPGAL PANEL KIT

Please read the following installation instructions **BEFORE** installing TOPGAL standing seam panels. Installing the panels incorrectly may result in poor product performance and/or void the manufacturer's warranty. The components supplied with this kit are for a wood structure installation. Additional fasteners will need to be purchased separately if your structure is metal. For any product or installation questions, please call 888-602-4441 or send an email to info@amerilux.com.

Note: TOPGAL Pergola Roofing Kit is designed to fit a 10'x10' structure. If you would like to customize your installation we recommend the following options:

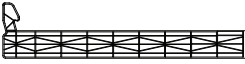







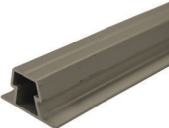

1. Use multiple TOPGAL Pergola Panel Kits to cover an area larger than 10'x10'.
2. Cut TOPGAL panels and components to meet your specific size requirements.

Before You Start

- **Handling & Storage:** To avoid unnecessary scratches, pick up and carry TOPGAL panels. Do not drag on ground. Store panels flat on a raised surface in a cool, dry place. Cover loosely with an opaque material.
- **Safety Tips:** Always wear safety glasses and gloves when using cutting tools. Do not walk or kneel on TOPGAL standing seam panels during installation.
- **Install Tools:** Common tools needed include a Table or Circular Saw w/Fine-Tooth Blade, Oscillating or Jig Saw, Clamps, Tape Measure, Scissors, Marking Pencil, Drill w/Hex & Phillips Bits, Rubber Mallet, Sawhorses, and a Ladder.

Structural Design Guidelines

- **Pitch:** TOPGAL standing seam panels are intended to be installed on a sloped roof. Manufacturers guidelines recommend a minimum slope of 5% for proper runoff and roof drainage.
- **Purlins (or Slats):** Horizontal roofing supports. Minimum recommended size of purlins is 1-1/4" x 1-1/4". Maximum recommended purlin span is 24". (Always follow local building code guidelines.)

Install Components Chart			
 		TOPGAL Panel Length: 10' Width: 23.62" Thickness: 8mm Weight: 0.39 lbs./ft2 Color: Bronze 30% LT	
	Polycarbonate (PC) Panel Connector Length: 10' Color: Bronze		Anti-Dust Tape Tape Length: 21'
	Polycarbonate (PC) End Cap Color: Clear		T-Clips Aluminum
	Aluminum End U-Profile Length: 10'		1" Fasteners Regular Wood Screws
	Aluminum Side Profile Length: 10'		2" Fasteners Self-Tapping Wood Screws

In the TOPGAL system, the side of the panel with the connector teeth is called the 'tooth side' and the side opposite is the 'flat side'. (Install the tooth side of the panel up or facing the sun.)

Pergola Roof Installation

Step 1: Confirm Components: Open box. Remove TOPGAL install components.

Confirm kit includes the following items:

- Five (5) TOPGAL Standing Seam Panels
- Six (6) Polycarbonate (PC) Panel Connectors
- Twelve (12) Polycarbonate (PC) End Caps
- Two (2) Aluminum End U-Profiles
- Two (2) Aluminum Side Profiles
- One (1) Roll of Anti-Dust (Vent) Tape
- Twenty-four (24) Aluminum T-Clips
- One Hundred (100) Regular Wood Screws
- Sixteen (16) Self-Tapping Wood Screws



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for Install Video

Note: Inspect all components for any damage or missing parts. If needed, contact 800-602-4441 to request a replacement or new part.

Step 2: Cut To Size

Provided TOPGAL panels are 10 feet long. Depending on your structure dimensions, panel length may need to be cut to size prior to installation. Recommended panel overhang is 3 to 4 inches.

1. Before cutting, secure panel to work surface with clamps and mark a straight line.
2. Panels can be cut to desired length with a circular saw or table saw.
3. Use a fine-tooth blade with at least 10 teeth per inch. A plywood blade is a good choice.
4. To avoid melting the plastic, cut at a high speed but a low advance rate.

Note: For a 10'x 10' structure, the width of the two outside edge panels will also need to be ripped (cut to size).



Step 3: Slit Edge Profiles

In order to attach the aluminum end u-profile to the top and bottom edge of the TOPGAL panels, a horizontal slit needs to be cut right under the base of the connecting teeth (the turned-up edge or lip) of every panel.

1. Before cutting, pull back film on tooth side (top) of panel about 2 inches.
2. Use an oscillating or jig saw with a fine-tooth blade designed to cut plastic.
3. Secure panel to work surface. Cut slits to a depth of approximately 1 inch.
4. Slits need to be cut at the base of the connecting teeth on both ends of panel

Note: To achieve correct slit depth, place a 1 inch cutting mark on either the panel edge or saw blade.



Step 4: Edge Sealing

The top and bottom edge of every TOPGAL panel must be sealed to prevent dust, debris, and excess moisture from entering the flutes (channels or ribs). This can be done using sealing tape and aluminum U-profiles.

1. Before taping, pull back film on bottom side of panel about 2 inches.
2. Measure panel width (check twice) and cut anti-dust (vent) tape to size.
3. Apply tape the long way, evenly covering the open edge of panel.
4. Wrap and press extra tape width onto top and bottom sides of panel.
5. Wait to seal ends of two outside panels until after cutting panel width to size.

Note: Before applying tape, the panel's flutes (channels or ribs) should be blown free of any dust or debris. Confirm panel edges are smooth and free of any sharp points.



Step 5: Remove Inner Films

TOPGAL panels come with a protective film on the 'tooth side' (outer film) and the 'flat side' (inner film).

1. After edge sealing, remove film from flat side of all panels except the two outside panels.
2. Starting at one end of panel, pull film off at a 45-degree diagonal and in line with panel.

Note: *The film protects the panel from scratches while handling and provides important product information.*



Step 6: Position First Panel

Position the first TOPGAL panel in the middle (center) of your pergola structure. Make sure the panel is aligned properly with frame. If your pergola is attached to your house, the direction of panels is determined for you.

1. Panel flutes (channels or ribs) should run parallel (same direction) to roof's slope.
2. Panel should extend 3 to 4 inches beyond both ends of pergola frame.
3. Do not step or kneel on panel. This is dangerous and may damage panel.

Note: *To check to see if the panel is centered, simply measure from corner to corner (panel to structure) with a tape measure. If the distances are equal, your panel should be square.*



Step 7: Install Fasteners

Once centered and squared, start by fastening the four corners of the first TOPGAL panel to the support purlins (or slats) using the provided aluminum T-clips and regular wood screws.

1. Slide an aluminum T-clip onto panel's connecting tooth (edge profile or lip with the screw holes facing outward).
2. Firmly fix T-clip to support the purlin using two wood screw fasteners.
3. After panel ends are secured, attach both sides of panel to underlying structure.
4. Fasten at every other purlin (or max distance 24") using aluminum T-clips and wood screws.
5. Once fastened, remove outer film from 'tooth side' of panel.

Note: *Make sure to drill fasteners perpendicular to the panel. Do not overtighten.*



Step 8: Install Next Panels

Working from the middle, position a TOPGAL panel to the right of the first one. Make sure this second panel is squared and aligned with the first panel.

1. Per previous step 7, attach opposite side of second panel to underlying structure using aluminum T-clips and regular wood screws.
2. Once second panel is securely fastened, remove the second panel's outer film.
3. Starting at one end of the two adjoining panels, install first polycarbonate (PC) connector.
4. Slide PC connector over the connecting teeth (edge or lip) of the two panels.
5. Snap PC connector firmly into place using palm of your hand and a rubber mallet.
6. Install third TOPGAL panel to the left of the first one, attaching T-clips and connectors in same sequence as second panel.



Figure A

Note: TOPGAL panels should be installed in the sequence shown in figure A.

Step 9: Install Outside Panels

Provided TOPGAL panels are 23.62" wide. For a 10'x 10' structure, the width of the two outside panels will need to be ripped (cut to size) to fit. Because your structure might not be square, measure the 'space' at both ends of the panel before cutting. Panels should be installed flush with last purlin.

1. Measure distance (space) between second panel to outside edge of last purlin (slat) and cut fourth panel to correct width per Step 2 'Cut to Size'. If needed, blow debris out of flutes.
2. Measure distance (space) between third panel to outside edge of last purlin (slat) and cut fifth panel to correct width per Step 2 'Cut to Size'. If needed, blow debris out of flutes.
3. Seal the top and bottom edge of both panels with anti-dust (vent) tape per Step 4 'Edge Sealing'.
4. After edge sealing, remove inner film from flat side of both panels per Step 5 'Remove Inner Films'.
5. Install two outside panels, attaching panels to underlying structure using T-clips and connectors in same sequence as previously done.
6. Remove outer film from the fourth and fifth TOPGAL panels.



Note: The width of the two outside panels may be slightly different. This is fine and will not affect the aesthetics of your polycarbonate roof.

Step 10: Install Side Profiles

To cover the outer side edge of the fourth and fifth panels and attach these panels to the pergola structure, install the aluminum side profiles.

1. Slide an aluminum side profile onto the outside edge of fourth panel, confirming a snug fit.
2. Pre-drill pilot (start) holes into the aluminum so your drill bit doesn't wander off.
3. Fasten top edge of profile to panel and purlin below using self-tapping wood screws.
4. Repeat these steps to install an aluminum side profile to outside edge of fifth panel.
5. Finish sides by sliding a PC connector over 'outer edge' (lip) of both panels.

Note: Use a 1/8" drill bit to pre-drill holes. Fasten perpendicular to the panel. Do not overtighten.



Step 11: Install End Profiles

After the side profiles have been installed, add the aluminum end u-profiles to both the top and bottom edge of the TOPGAL panels.

1. Drill weep holes into one u-profile every 12" to ensure proper moisture drainage. (Weep holes are only needed in u-profile at bottom of slope. If needed, cut u-profile to length to match the structure.)
2. Slide end profile onto bottom edge of TOPGAL panels and into 'slits' made previously next to the base of each of the connecting teeth (turned up panel edge). Fit should be snug.
3. The 'shorter leg' of the end u-profile should be installed along the top of the panel. The 'longer leg' rests over the bottom of the panel, facing the interior of the structure.
4. Repeat steps 2 and 3 to install an aluminum end profile along top edge of the TOPGAL panels.

Note: Aluminum u-profiles can be cut using a variety of tools, including a circular saw or jigsaw. It is important to use a blade designed for cutting metal.



Step 12: Complete Installation

To complete your pergola roof installation, install the polycarbonate end caps (plugs). This creates a finished and professional look.

1. Insert polycarbonate caps into the open ends of all PC Connectors. Make sure the end cap is aligned with opening and push firmly in place.



Cleaning TOPGAL Panels

To maintain high light transmission, periodically clean TOPGAL panels to remove dirt, dust, and debris that might have accumulated on the surface. This will also help prolong the life of the panels.

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

Additional Information

If you have questions regarding the installation of your TOPGAL Pergola Roofing Panel Kit please contact AmeriLux International at 800-602-4441 or send an email to info@amerilux.com.

If additional technical, loading, or system information is needed, please contact AmeriLux if you have a specific question about requirements in your region, contact your local code office or building inspector. Drawings and technical reports are provided for reference only. Drawings are not project-specific and are for product representation only. Actual products may vary. These drawings are the property of AmeriLux and are to be used solely as a representation of AmeriLux products. These designs may not be recreated or produced without the expressed, written consent of AmeriLux. All information, recommendations, or advice given by AmeriLux employees or partners, written or oral, is given in good faith and is thought to be accurate and current. It is the responsibility of each product user to ensure the product is used in compliance with current environmental and legal requirements specific to each product application. AmeriLux and its partners will not be held liable for incorrect or improper use of its products. AMERILUX HEREBY DISCLAIMS ANY WARRANTIES, EXPRESS OR IMPLIED, INCLUDING IMPLIED WARRANTY OF MERCHANTABILITY AND/OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. AMERLUX SHALL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, OR PUNITIVE DAMAGES.