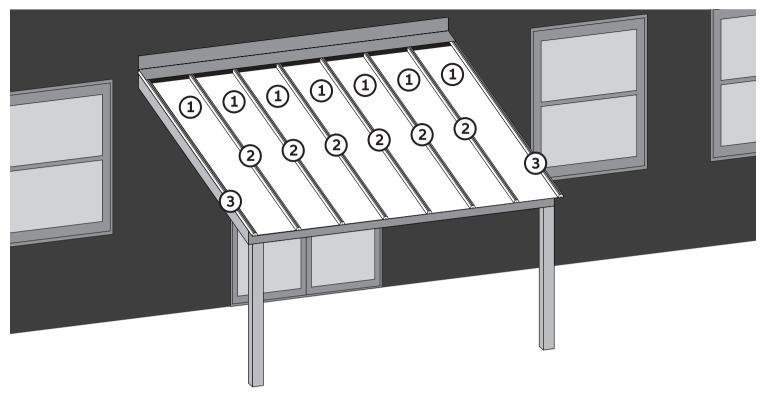
SUNSCAPE® ROOF COVERING SYSTEM INSTALLATION GUIDE





SUNSCAPE® is a three-part system that is installed on an existing roof structure. Here's how to calculate how many of each part you will need.

- SUNSCAPE® Premium Roof Panels
 QUANTITY: Width of roof in feet divided by 2
- SUNSCAPE® Inner Profile Kits
 QUANTITY: Width of roof in feet divided by 2, minus 1
- SUNSCAPE® End Profile Kits
 QUANTITY: 2 per roof

See numbers on illustration above.

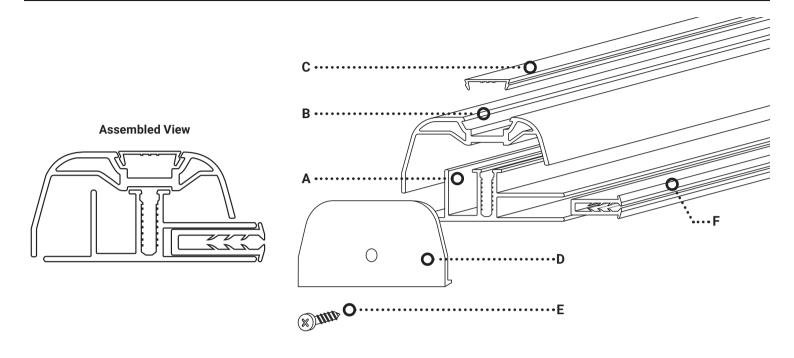
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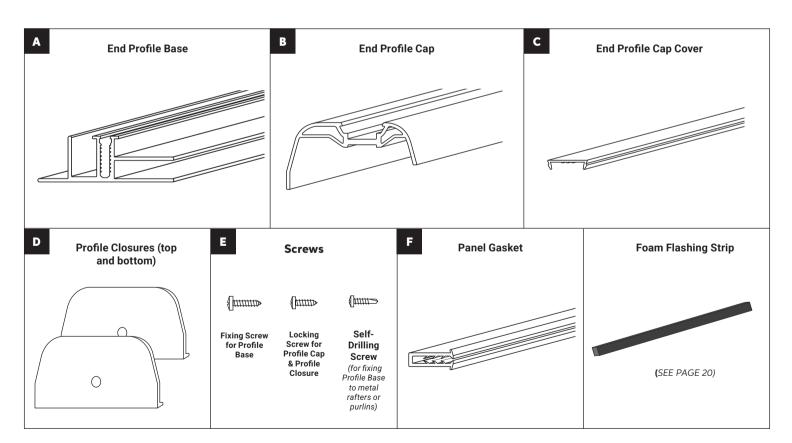
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SYSTEM COMPONENTS

End Profile Kits

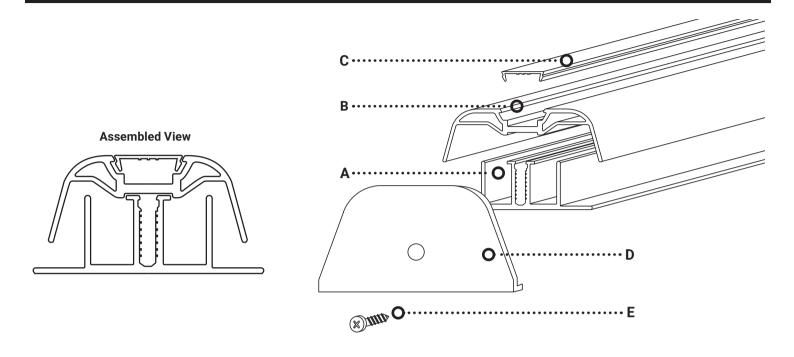


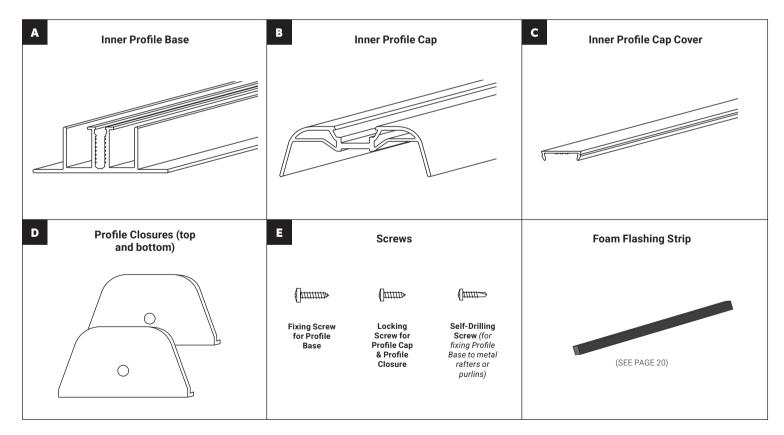


^{*} Roof Flashing Not Included – see page 20

SYSTEM COMPONENTS

Inner Profile Kits



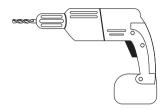


^{*} Roof Flashing Not Included – see page 20

REQUIRED TOOLS



Although the SUNSCAPE® Roof Covering System can be installed by one person, it is much easier to install with a second person to assist.



Drill



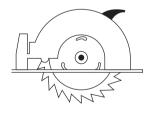
Screw Gun



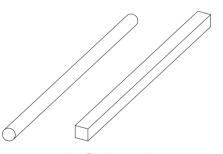
Angle Grinder with Cutting Disk for Aluminum



Rubber Mallet



Circular Saw with Fine-Tooth Carbide-Tipped Blade



Profile Spacer Bar (SEE PAGE 6)



Hearing Protection



Eye Protection

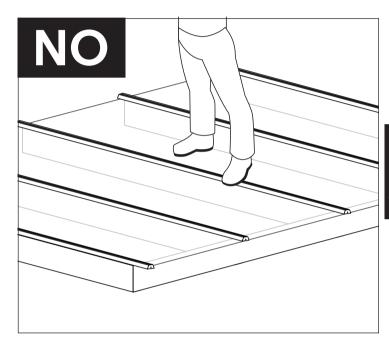


Gloves

IMPORTANT SAFETY NOTICE

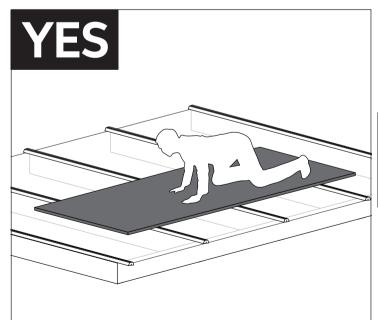


Always use hearing protection and protective eyewear. Gloves are important, because parts of the SUNSCAPE® Roof Covering System may have sharp edges.





NEVER STEP DIRECTLY ON THE PANELS — before, during or after installation. Injury and/or damage to the panels could result.





If you must access the panel surface during installation, ALWAYS use a slip-resistant crawl board that is fully supported by at least THREE roof structural elements under the panels.

- Snow/Wind Load Table
- Determining Roof Measurements

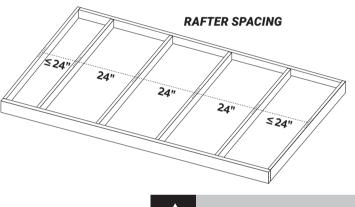
Snow, wind and weather loads should be considered when designing the slope degree of your structure (Min. 1½" in 12"). Before installation, check local building codes for relevant specifications and recommendations. Follow local codes at all times

Purlin Over Rafter Installation						
Snow/Wind Load (psf)	74	62	50	37	25	
Max Purlin Distance (Inches)	24	30	36	42	48	

For a rafter only installation, the maximum load is 40 psf.

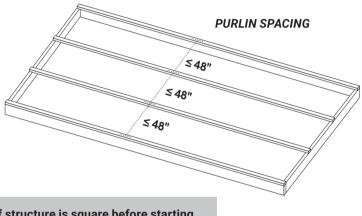
1a Measure rafter spacing.

- To install SUNSCAPE® directly on rafters, the inner rafters must be 24" on center.
- If end rafters are less than 24" on center, then the end Roof Panels must be cut to proper width before installation. SEE PAGE 14.





- To install SUNSCAPE® directly on purlins, the purlins must be the same distance apart from each other.
- \bullet The $\underline{maximum}$ distance between purlins for SUNSCAPE® is 48".





Ensure that the underlying roof structure is square before starting installation of the SUNSCAPE $^{\rm @}$ Roof Covering System.

3



If your rafters are not 24" on center, you have several options.

- Add purlins on top of the rafters (simplest option)
- Move the rafters so they are 24" on center
- Replace the rafters with purlins

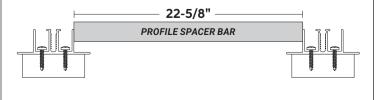
2 Ensure Minimum Roof Pitch.

- Confirm that the roof pitch is at least 0.6/12.
- That's a 6" rise for every 10' run (2.9° or 5% slope).
- This minimum pitch will ensure proper water runoff and help keep the Roof Panels clean.

0.6/12 PITCH 6"

Make a Profile Spacer Bar.

- Create a spacer bar as a jig to easily measure the distance between aluminum profiles during installation.
- The spacer bar should be 22-5/8" long.
- · Make sure the edges are perfectly square cut.
- Use a dowel, a 1x2, or similar.
- SEE PAGE 10 for spacer bar use.



Measuring & Cutting Aluminum Profiles

Measure and cut all aluminum Profile Bases, Profile Caps and Profile Cap Covers with an angle grinder to the correct length, if required.

Here's how to measure the correct length for Profile pieces:

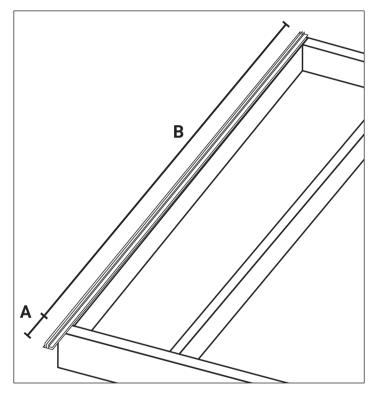
A – Roof overhang (2" min, 8" max)

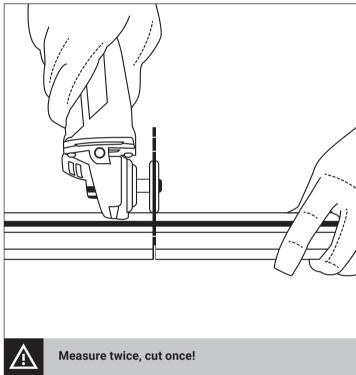
B - PLUS Length of roof run

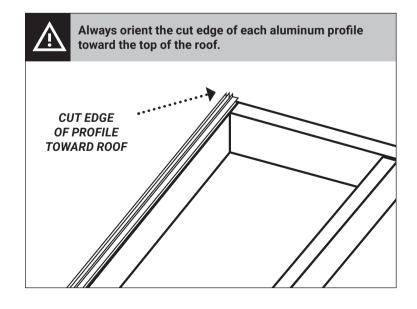
EQUALS – Total length of each Profile Base, Profile Cap and Profile Cap Cover

Use an angle grinder to cut each profile component to the exact length required.

- Make sure your cuts are straight (exactly perpendicular to the profile).
- · Smooth rough edges with a metal file as needed.





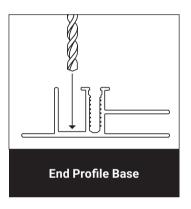


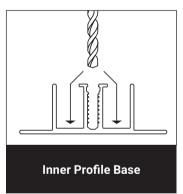
- Drilling Holes in the Profiles
- Adding Profile Closures

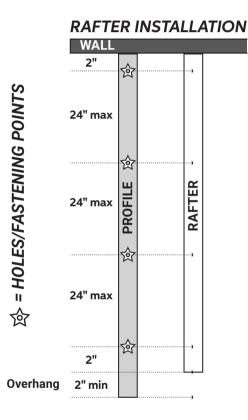


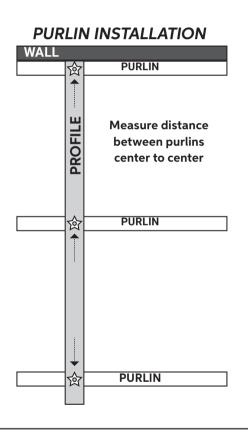
Before drilling holes, place the End Profile Base over a strip of wood. This will protect the end of the drill bit as it penetrates the End Profile Base.

- 5 Measure, mark and pre-drill 1/4" screw holes in each End Profile Base and Inner Profile Base.
 - Follow the hole spacing guidelines below for rafter or purlin installation to match your roof support structure.
 - Make sure all holes are centered along the notch in the middle of each Profile channel.

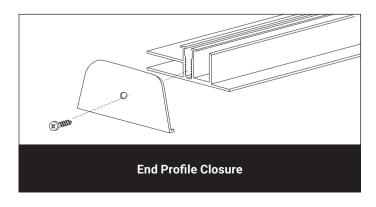


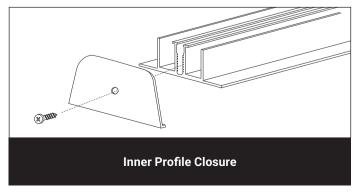






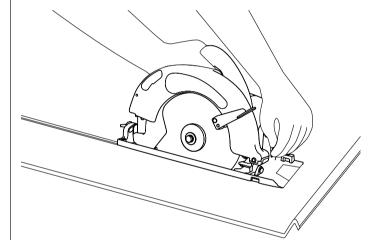
- Fasten a Profile Closure to the TOP and BOTTOM end of every End Profile Base and Inner Profile Base.
 - The Profile Closure will prevent the Roof Panel from sliding off when the Roof Panel is being installed.

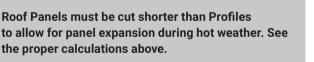


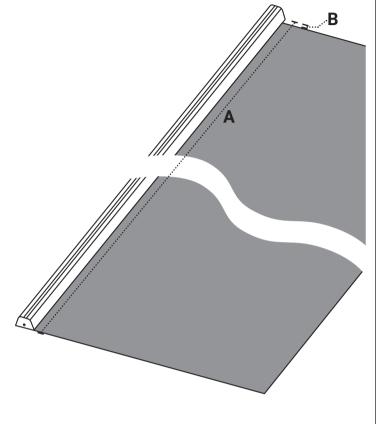


- Cutting Roof Panels to Length
- Removing the Protective Film
- 7 Measure and cut all Roof Panels to the correct length, if required.
- Out of the box, the Roof Panels and Profile parts are already cut to the proper size to fit together.
- If cutting Roof Panels is required, here's how to measure the proper Roof Panel length:
 - A Length of aluminum Profile
 - **B** MINUS 1/8" for every 3' of aluminum Profile
 - **EQUALS** Total length of each Roof Panel

For example, if your aluminum Profile is 9 feet long, then your Roof Panel will be 8 feet, 11-5/8 inch long.







A-B=Roof Panel Length



Measure twice, cut once!

Remove the protective film from the BOTTOM of the Roof Panel BEFORE installation.

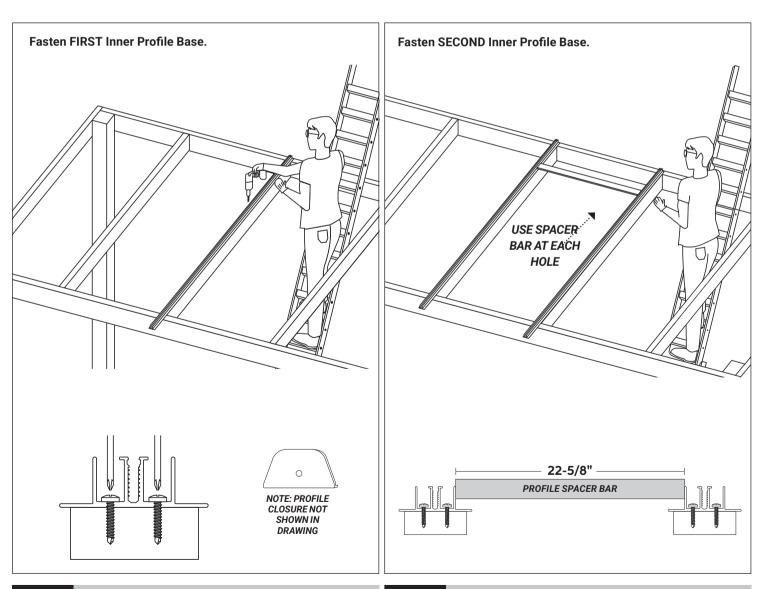
• Leave the protective film on TOP of the Roof Panel until AFTER installation. SEE PAGE 13.

Installing Inner Profile Bases



DO NOT INSTALL MORE THAN TWO INNER PROFILE BASES AT A TIME. Otherwise, you risk accumulated measurement deviations across the roof.

- 1 Fasten two Inner Profile Bases at or near the center of the roof.
- Stand between rafters and start at top of roofline.
- · Center the profile in the middle of the rafter.
- Fasten screws in pre-drilled holes along the length of the first Inner Profile Base.
- Using the spacer bar at every hole, fasten screws through the pre-drilled holes along the second Inner Profile Base.





If your rafters or purlins are made of metal instead of wood, use the included self-drilling screws to attach the Profiles.

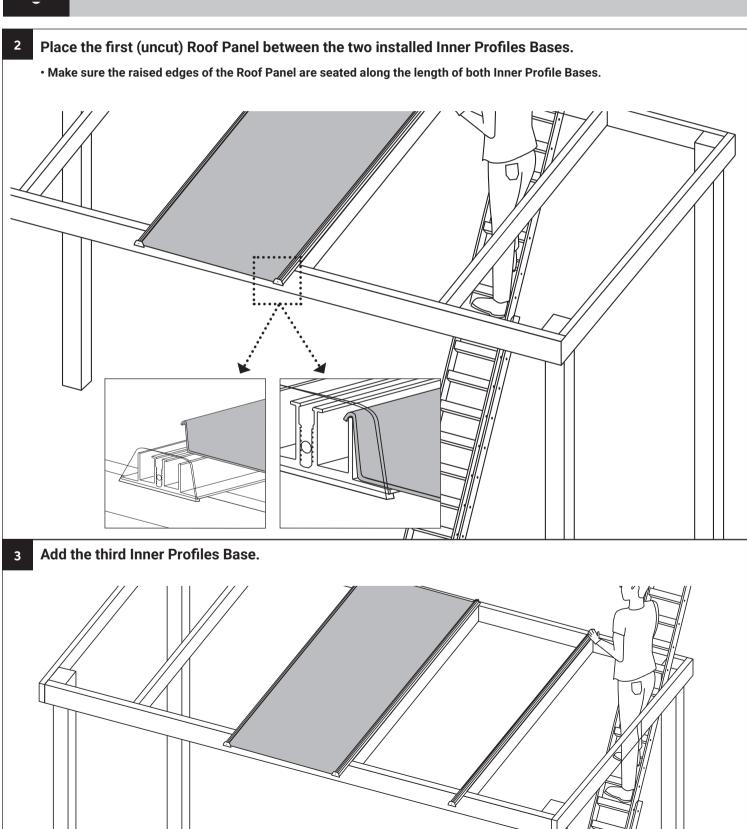


Be sure that the overhang length is exactly the same for all Profile Bases.

Installing the First Roof Panel



After the first two Inner Profile Bases are attached, it is time to install the first Roof Panel.

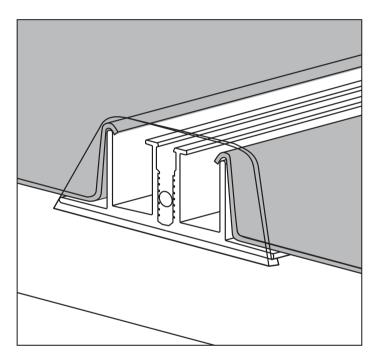


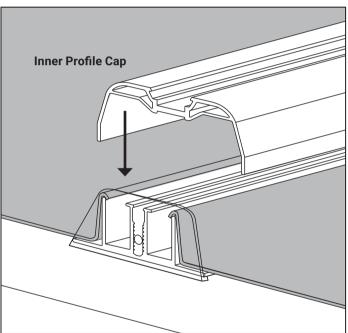
Installing Inner Profile Caps

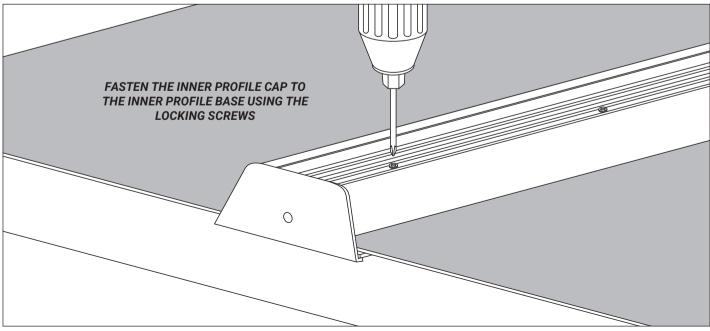


Before fastening, align the Inner Profile Cap with end End Closure.

- After two adjacent Roof Panels are in place, install an Inner Profile Cap over the Inner Profile Base between them. This will secure down two adjacent Roof Panel edges.
- Start fastening the Inner Profile Cap at the bottom of the roof line, and work toward the top.
- Add another Inner Profile Cap in between every two new panels.





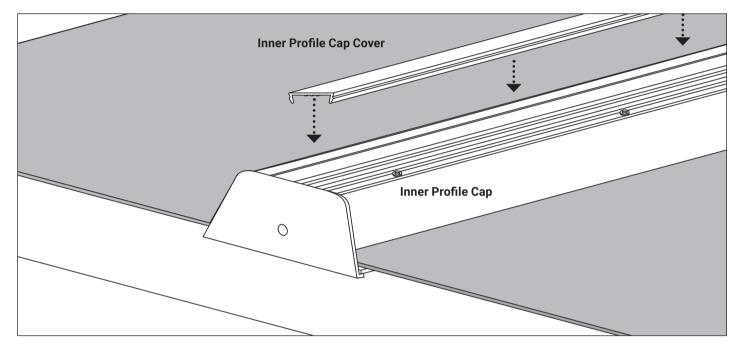


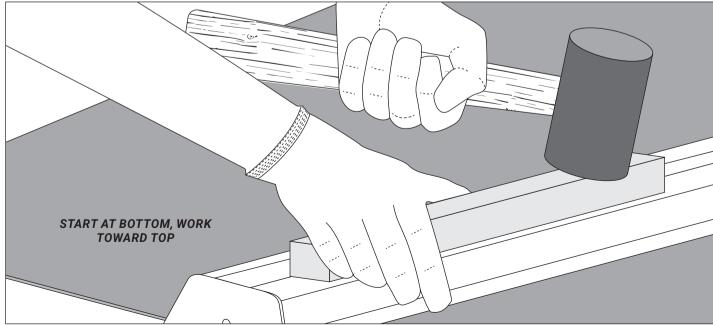
Installing Inner Profile Cap Covers



THE INNER PROFILE CAP MUST BE FULLY FASTENED BEFORE ADDING THE CAP COVER. It is very difficult to remove the Inner Profile Cap Cover after installation.

- Install the Inner Profile Cap Cover by GENTLY tapping it into place with a rubber mallet.
 - Use a piece of wood to disperse the impact of the mallet and avoid damage to the Profile pieces.
 - Start at the bottom of the roof line and work toward the top.
 - Remove the protective film after each Roof Panel is fully installed and secured.



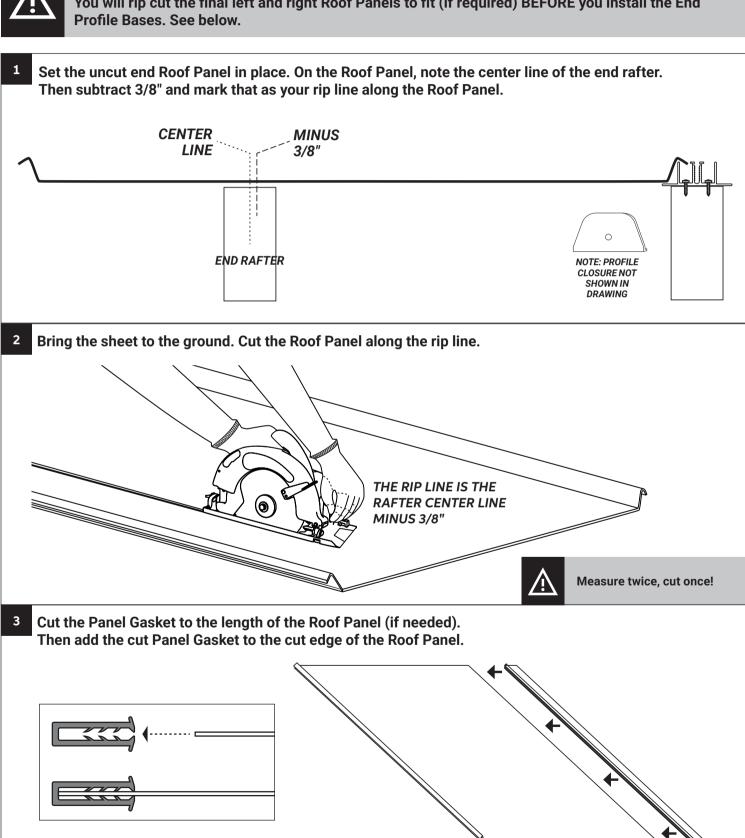


Measuring/Cutting Roof Panels for Left/Right Side of Roof



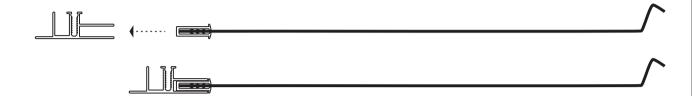
IF YOU <u>DO NOT</u> NEED TO RIP CUT YOUR FINAL TWO ROOF PANELS, SKIP TO PAGE 17.

You will rip cut the final left and right Roof Panels to fit (if required) BEFORE you install the End Profile Bases. See below



Installing End Profile Bases with CUT Roof Panels

- 4 Still on the ground, insert the Panel Gasket and Roof Panel into the End Profile Base.
 - Gently tap the End Profile Base with a rubber mallet to fully seat the Panel Gasket.
 - · Hammer against a length of wood to prevent damage to the End Profile Base.

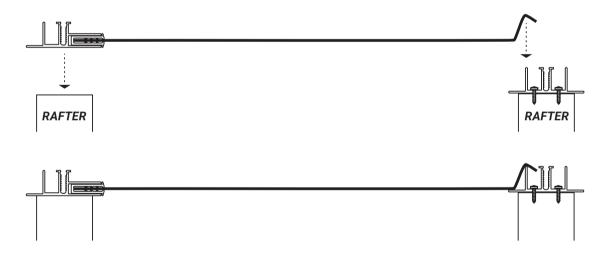




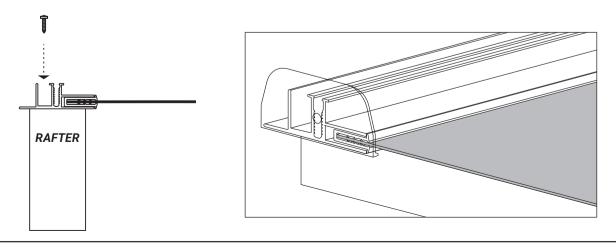
The gap behind the Panel Gasket is normal, and helps account for expansion of the Roof Panel.



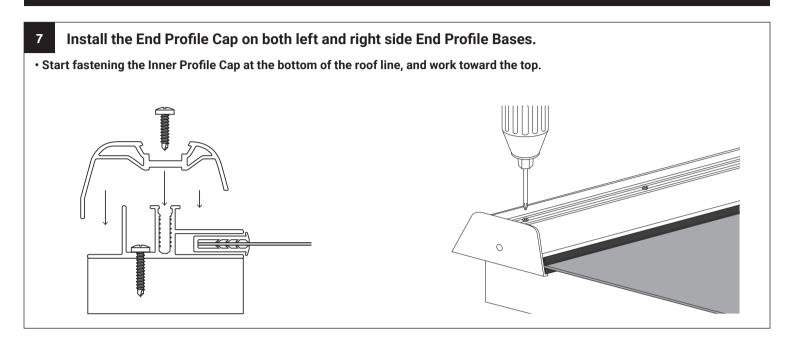
Bring the entire assembly to the roof and set it in place.

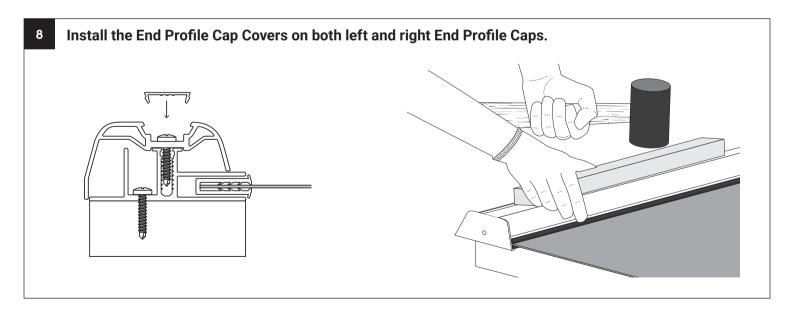


Fasten the End Profile Base to the end rafter through the holes along the length.



 Installing the End Profile Caps and End Profile Cap Covers with CUT Roof Panels

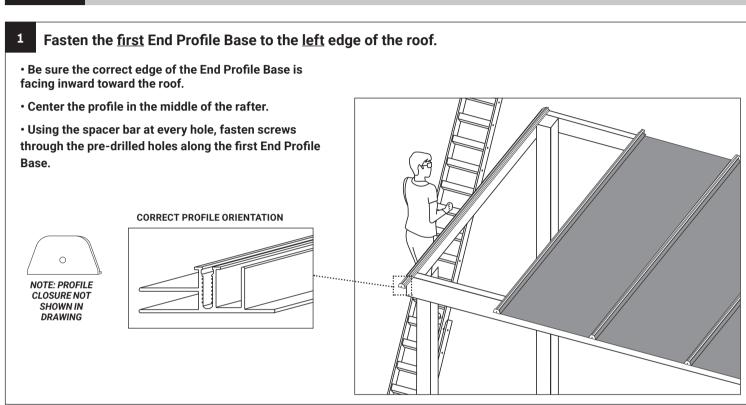




Installing End Profile Bases with UNCUT Roof Panels

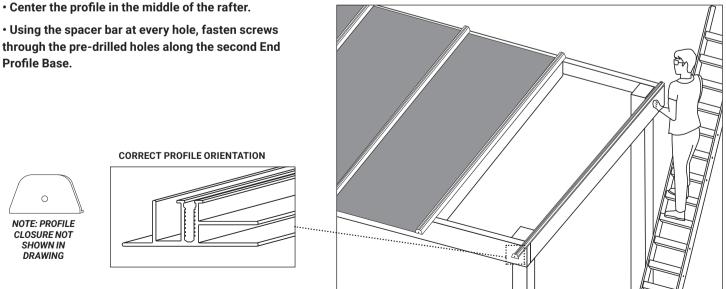


IF YOU HAVE ALREADY INSTALLED CUT ROOF PANELS, SKIP TO PAGE 19. END PROFILE BASES HAVE A DIFFERENT ORIENTATION WHEN USED WITH **UNCUT** ROOF PANELS.

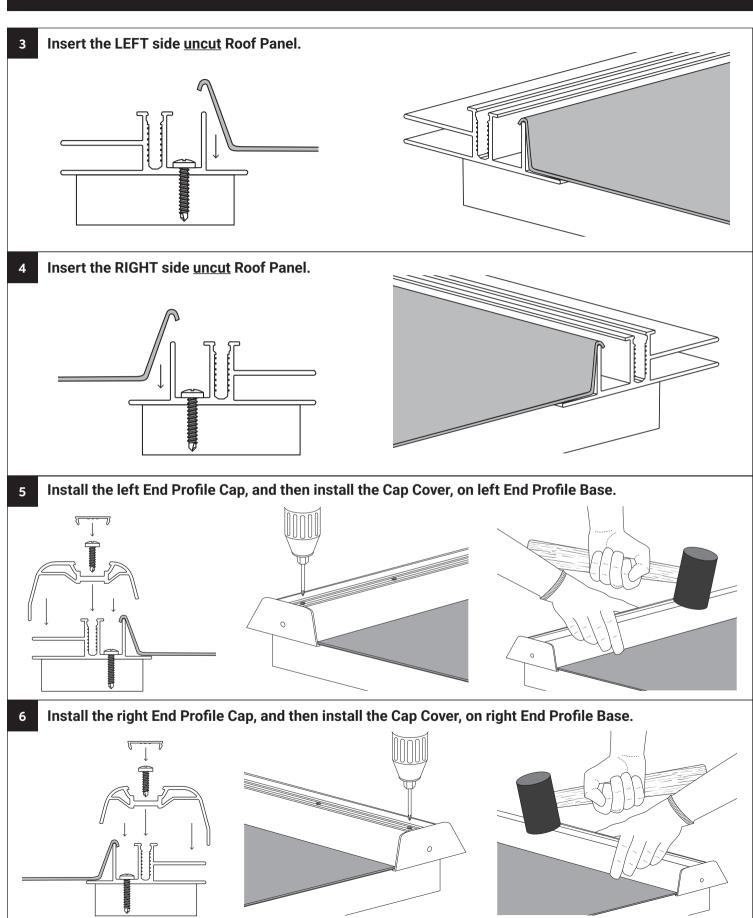


Fasten the second End Profile Base to the right edge of the roof.

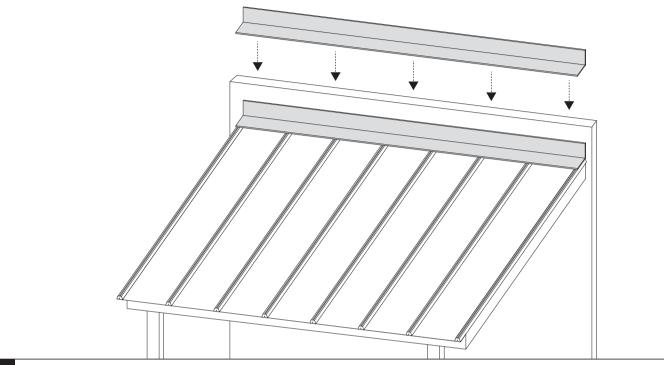
- · Be sure the correct edge of the End Profile Base is facing inward toward the roof.



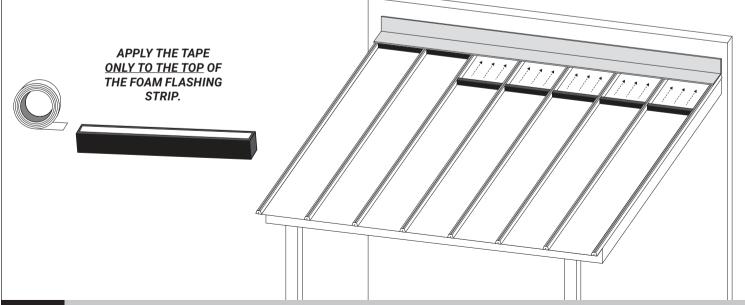
 Installing End UNCUT Roof Panels and Installing End Profile Caps and Cap Covers



- Installing Flashing (not included)Installing Foam Flashing Strips (included)
- Install flashing if required by code. Flashing is NOT included in the SUNSCAPE® Kit.



- After flashing is installed, measure, cut and insert Foam Flashing Strips (included in SUNSCAPE® Kit) under the flashing, between each aluminum Profile.
 - Add double-sided outdoor foam tape (not included) to the top of each piece of Foam Flashing Strip before inserting it under the flashing. This will adhere the foam to the underside of the flashing.
 - For a snug fit, cut Foam Flashing Strips 1/4" longer than the width between each aluminum profile.





DO NOT ADHERE THE FOAM FLASHING STRIP TO THE SUNSCAPE PANEL. Adhesives that are incompatible with polycarbonate will cause the SUNSCAPE® panel to craze and crack.

• SUNSCAPE® Cleaning Guidelines

SUNSCAPE® Roof Panels are made from high-quality polycarbonate material. To clean them:

- Use a soft, clean sponge or a soft, clean 100% cotton cloth.
- · Use lukewarm water and a mild dishwashing detergent.
- · Rinse the surfaces with cold water.
- Dry with a soft cotton cloth if desired
- To reduce the appearance of water spots, avoid washing in direct sunlight.



- · Pressure washers are not recommended.
- Do not use abrasive or high alkaline cleaners.
- · Do not use sharp objects, squeegees or razors.

PALRAM AMERICAS 9735 Commerce Circle Kutztown, PA, 19530 USA 800.999.9459 Contact Us. USA @palram.com



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EZ Outdoor Coverings sales@ezoutdoorcoverings.com 833-937-9918