



Lamboo® Rainscreen™ w/Titan™ Clip Fastening System

Horizontal Siding Installation Guidelines using Titan™ Rain Screen Clip over Plywood or OSB

Before starting your Lamboo Rain Screen installation, check that these important items have been done properly:

Pre-Check 1 – Make sure your structural sheathing has been attached properly to the framed wall system per manufacturer’s instructions and local building codes. Plywood or Oriented Strand Board (OSB) may be used. The panel thickness should be rated for structural application and must be a minimum of 7/16” thick in non-hurricane rated zones and a minimum of 5/8” in hurricane rated zones. Plywood is typically stiffer and stronger than OSB. Thicker plywood or OSB makes a stronger wall and has greater holding strength of the screw.

Note Foam and gypsum boards are not structural panels. (Installation of the Lamboo Rain Screen System over non-structural panels is possible using alternate mounting devices such as: Z-Girts, Hat Channel, and Pressure Treated Lumber)*

Pre-Check 2 – Make sure the drainage plane material has been properly installed. Use the appropriate AWB (Air and Water Barrier) or WRB (Weather Resistant Barriers) as specified by the architect or designer. There are many products available to address requirements of the exterior wall in your climate zone.

Pre-Check 3 – All windows and exterior doors should now be installed properly. Check to ensure that the installation (and flashing) instructions from the door and window manufacturers were properly followed. *Note* Window and door manufacturer’s installation instructions always take precedent over these guidelines.*

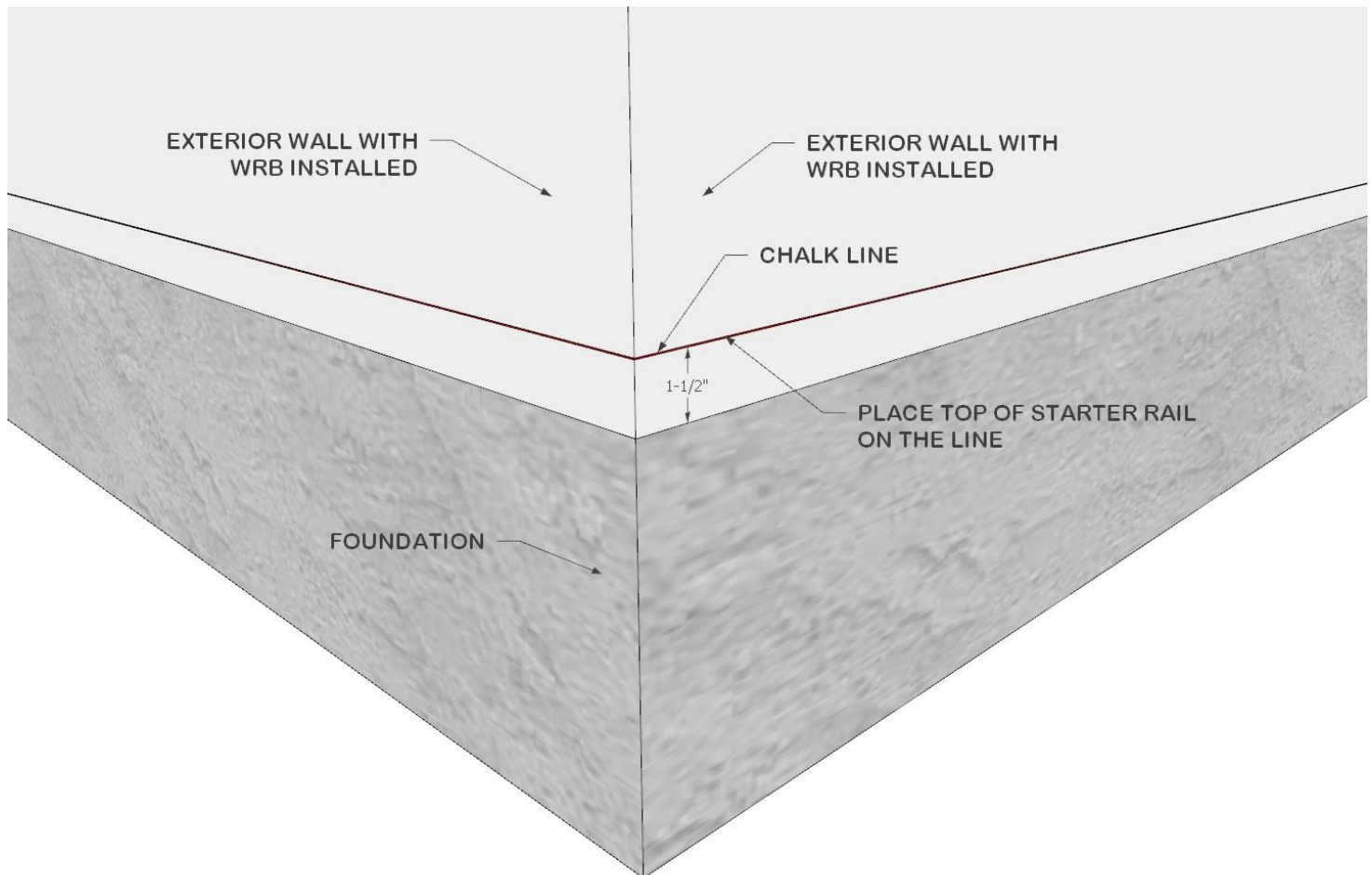
Proper acclimation is imperative. Before starting any exterior installation, *always* allow the materials to properly acclimated to local site conditions. Failure to allow proper acclimation on site could result in poor or undesired results. Typical acclimation time for Lamboo products is at least 48 to 72 hours prior to installation.

Keep Pre-finished Materials Sealed: This is required. Lamboo typically provides all exterior grade materials prefinished. For all onsite surface alterations which include but not limited to; end cuts, drilling, rip cutting, cross cutting, or any other material penetrations, it is **required** that these conditions **MUST BE SEALED!** Sealing Lamboo materials can be done with touch up stains/finishes provided by Lamboo or can be sealed with other market-based end sealers. Even exterior grade silicone can be used on end conditions. As this requirement is part of Lamboo’s installation guidelines to help maintain the integrity of the finish; failure to follow these guidelines will be at the fault of the **Installer**; not Lamboo.

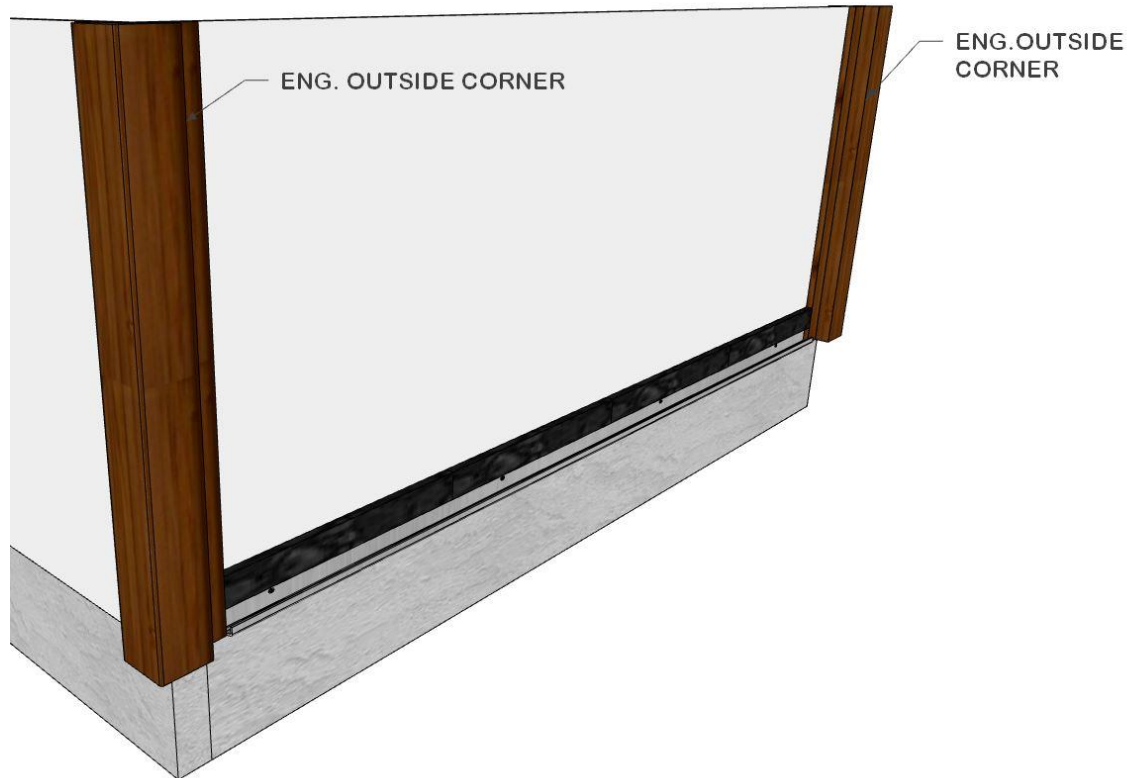
Installation Process:

Step 1 – Create a level line for the starter rail on all walls. This can be done with laser lines, or a snapped chalk line. We recommend that you complete this on all walls, to ensure the starter rail level line will be consistent on all sides of the building. This step is critical to a successful siding installation and should be done with accuracy. The level line should be positioned approximately 1-1/2" above the bottom of the sheathing or 1-1/2" above the top of the foundation sill.

**Take the time to do this step well, and all your next rows of siding will be properly aligned as you build.*



Step 2 - Install Engineered Corners (OPTIONAL). If desired by the customer, Lamboo can provide its Outside and Inside Engineered Corners. These provide a clean outside/inside corner and can help reduce installation time. Stainless steel or Coated Fasteners can be used to secure Engineered Corners to the wall.



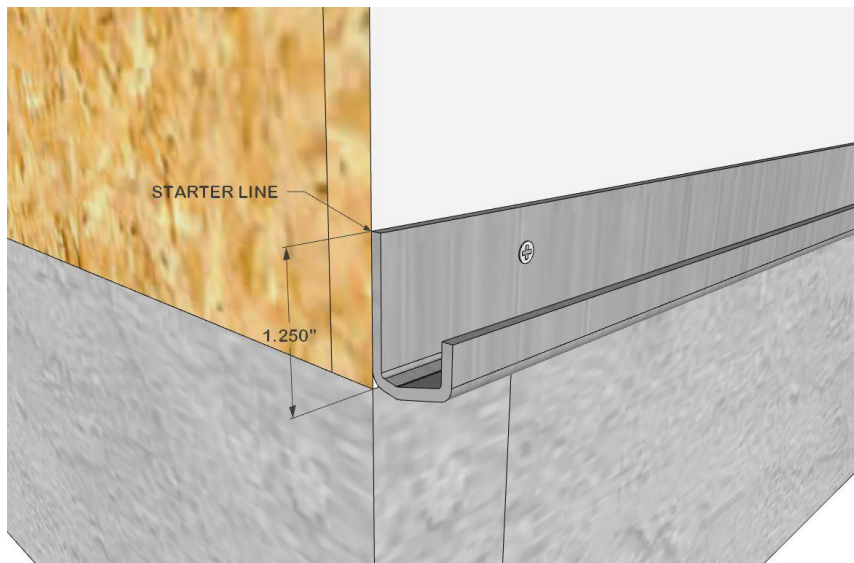
****NOTE:** When not using Engineered Corners, outside corners are typically mitered onsite. An 18-gauge brad nail can be used to help secure outside mitered corners to keep them secured. It is also recommended that Lamboo Titan Clips are positioned as close to the outside corner to help with maintaining closure and uniformity of the mitered corners.

IMPORTANT: Any end cuts **MUST** be sealed prior to final installation. Lamboo typically provides touch-up stain that can be used as end sealer for end cuts. Other end sealers and even exterior silicone can be used to end seal end cuts made on the jobsite.

Step 3 – Install your window and door trim. Now is the time to install them and put proper flashing in place. Always follow the window and door manufacturer's installation and flashing instructions.

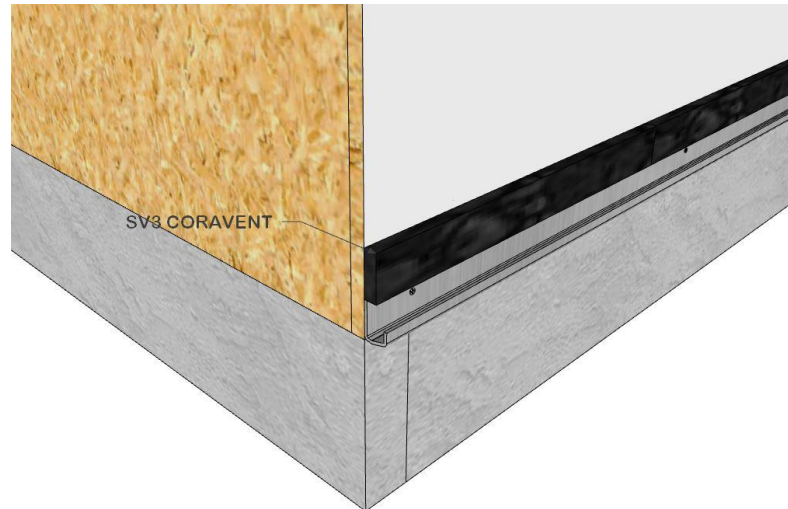
Note Window and door manufacturer's installation instructions always take precedent over these guidelines.*

Step 4 – Installing the Starter Rail. To speed up your installation and help provide *the critical level line* to start your horizontal siding installation, use the Lamboo 8' Starter Rail. The Starter Rail provides a continuous strip at your bottom course of siding. The marine-grade aluminum starter rail has pre-drilled holes for mounting to the walls and weep holes on the bottom of the rail to allow water drainage.



Step 5 – Install Siding Vent. We recommend installing a siding vent system to prevent insects from entering the wall cavity from the ground and it also allows for proper drainage of water that may penetrate behind the rainscreen system. The Cor-A-Vent SV3 siding vent system is 7/16" thick and fills the rain screen wall cavity between the drainage plane created by the Lamboo Titan™ rain screen clips.

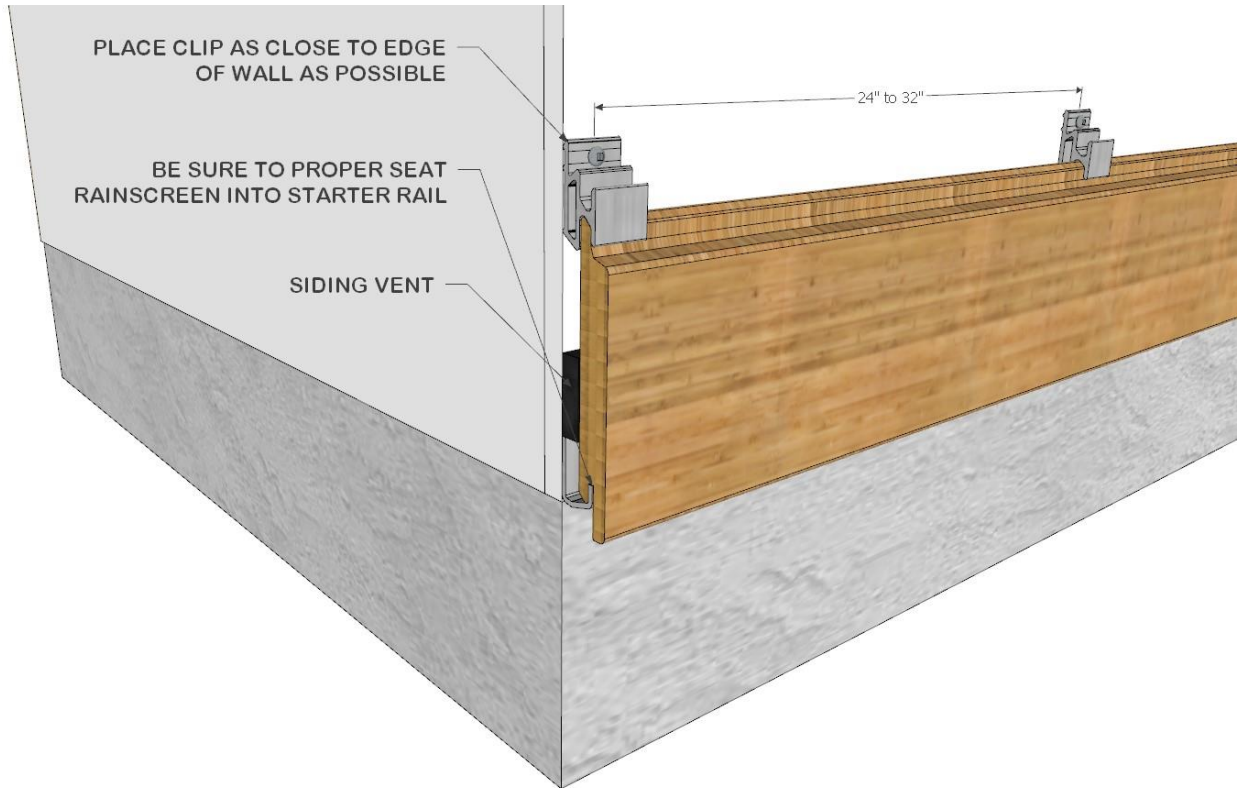
**Note It is also suggested to install the siding vent at the soffit, above door openings, and above/below window openings to use as blocking when attached the final piece of rainscreen on the top of a run.*



A.) *If you are using 5" and 7" rain screen siding*, align the Cor-A-Vent siding ventilation across the top of the starter rail and fasten them to the sheathing. Roofing nails work well. The assembly will be covered by the siding board in the next step.

B.) *If you are using 3" rain screen siding*, you will find it easier to install the Cor-A-Vent on top of the starter rail and cut it to length to fit between the rain screen clips at the top of the first course of siding. This assembly will be covered by the second course of siding as shown on the right.

Step 6 – Insert Bottom Start Piece of Lamboo Rain Screen Siding board into the Starter Rail. Place the bottom groove of the Lamboo Rainscreen material into the starter rail lip. Occasionally you may need to use a rubber mallet to seat the board properly into the clip. Seating each board properly gives the best alignment for your wall.



Important Note If your board does not seat properly, don't install it. NEVER 'force' a board into place. You may cut out any bow or bend (defect cutting) and install only the usable portion of the siding board.*

Now begin attaching the rain screen clips to the top of the siding board. Typical spacing for the rain screen clips is 24" up to 32" on center using 1 screw per clip. **Note: final on-center clip spacing will be determined at time of quoting and approved order.**

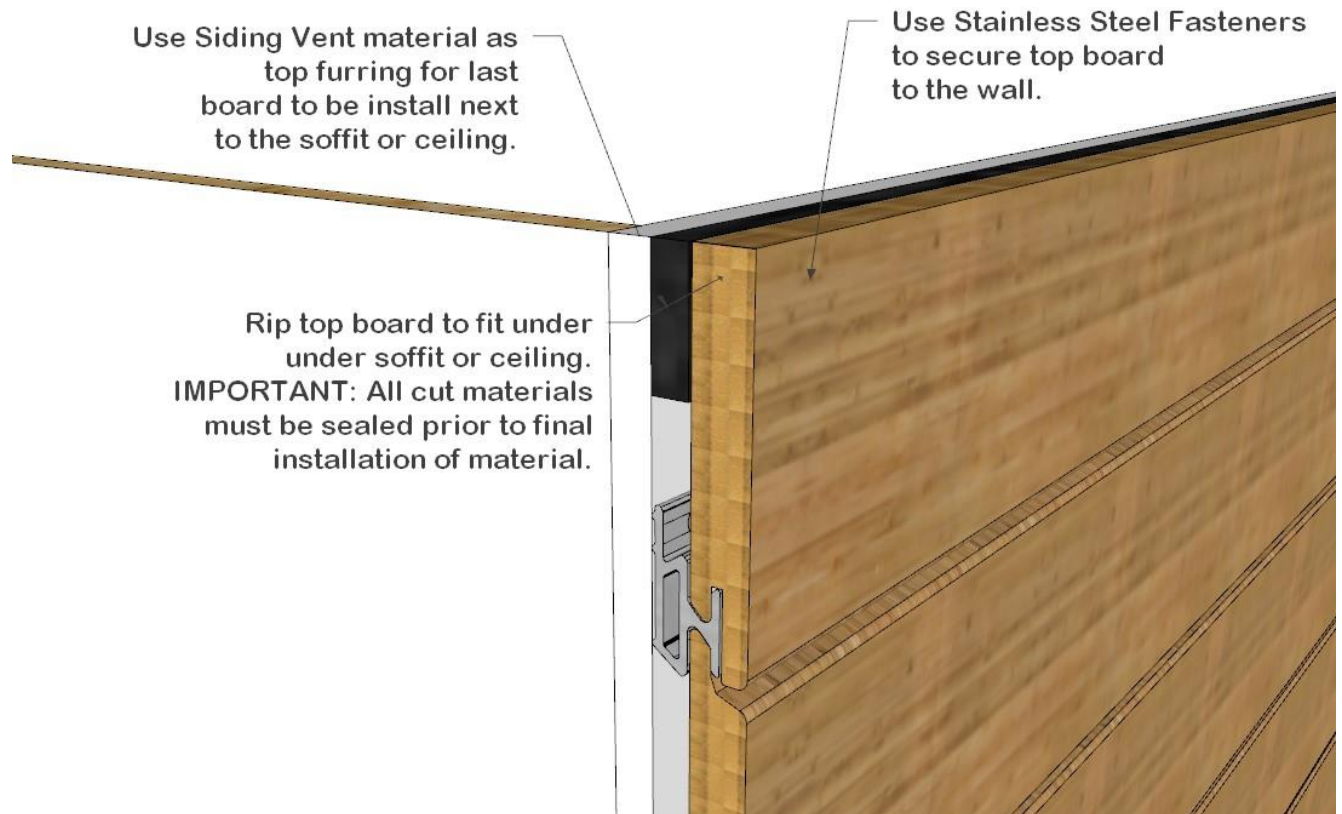
IMPORTANT: When two boards butt together, be sure to use a clip on each end of the butt-jointed boards. Using one (1) clip to support 2 boards is not recommended.

Step 7 – Repeat the clip installation process for each row of siding. A major benefit of this system is that you can use full length siding boards. Wherever you need to make a joint in the length of siding, simply use a rain screen clip at the bottom and top of the joint and straddle the two boards. You will automatically get proper alignment of the two boards. Always use two clips to secure the ends of siding boards.

When butting two siding boards together it is a best practice to use the "scarf joint" technique. A 45-degree mitered angle at each end of cut boards work best. Master craftsmen prefer this method for best results and a quality installation you will be proud of for years. (If you use standard butt joints with 90-degree cuts, over time, the joints may open with weather exposure.)

**Note – It is required to use an end sealer, stain/finish, paint, or even exterior grade silicone after cutting any Lamboo boards. This will help minimize potential end-checking of your siding boards as well as help protect any water from penetrating under the finish through the end of the board.*

Step 8 - Installing the top row of siding. When you reach the soffit, ceiling or areas below window openings, it is typically necessary to rip the top of the siding to fit next to these areas.



Note If you trim the width ¼" narrower than required, it will be easier to install the siding and allows for better ventilation at the top of the rain screen wall cavity.*

The bottom edge of the top row of siding will seat in the rain screen clip. The top edge of the siding will need to be pre-drilled and face fastened to blocking behind the siding. We suggest using the Coravent siding vent system or short pieces of solid wood blocking behind where you will be screwing and placing siding vent between the blocking to allow continuous uninterrupted ventilation at the top of your rain screen wall system.

If you are able to run the rainscreen past the soffit, this will provide a clean look as the soffit butts against the rainscreen. If you need to butt up against the soffit, a trim piece might be needed to hide any exposed fasteners.

For any questions about the Lamboo® Rainscreen™ System, please contact us via email at sales@lamboo.us or directly by phone at 866-966-2999. We are here to support you when using our products.