



Siding Installation Guide



ARBOR
WOOD CO

THERMALLY MODIFIED WOOD

STORAGE & HANDLING

Arbor Wood Co. products should be stored indoors when possible and/or remain covered with a waterproof tarp until ready for installation. Boards must be stacked uniformly and elevated off the ground.

Exposure to UV can cause the boards to become lighter in tone

Always remember to handle with care. Arbor Wood has a lower moisture content and the expansion/contraction is much less than standard wood, but it is still a good practice to ensure the wood has properly acclimated to local site conditions. It is recommended to have Arbor Wood Co. Products on site for one week prior to installation to acclimatize to the moisture of the environment.

COLOR

Thermal modification changes the naturally occurring sugars in the wood resulting in beautiful, rich tones which extend through the full thickness of the material. Since Arbor Wood is still a natural product and is subject to variations in weight, density, color, and grain. In an exterior environment, unfinished Arbor Wood products will move to gray. This does not impact the performance characteristics of the wood itself. The speed of this graying process depends on the intensity of exposure to environmental elements like the sun and rain combined with the type of application. To maintain the original color we recommend applying Cutek Extreme® along with a UV Colortone as Cutek Extreme® by itself is not UV resistant. A light sanding or application of Cutek Proclean will remove the surface silvering and restore the original wood tones. Product color and factory applied finishes are not covered under the product warranty.

FINISHING

Pre-finishing all siding boards prior to assembly is the only way to ensure that all 4 sides are coated evenly. It is highly recommended to coat all wood siding with Cutek Extreme® along with a UV Colortone prior to installation. This process helps the wood acclimate more slowly and minimizes surface checking and wood movement. Even if your goal is to allow the wood to naturally gray or silver out over time, finishing at this point will help protect the wood when it is most vulnerable.

GRAIN PATTERN, CHECKS, & HAIRLINE CRACKS

As Arbor Wood is a natural wood product, there may be a variance in grain from board to board. It is also possible to observe some small surface checking and/or hairline cracks in the wood. These instances are a natural occurrence and are not a reason for a claim. Regular application of Cutek Extreme® can help minimize the occurrence of surface hairline cracks.

CARE & MAINTENANCE

It is important to ensure the surface of your wood remains clean. Black surface stains can be caused by dirt, debris, pollen and other airborne and microscopic elements resting on the surface of the material. Certain environments provide exceptional growing conditions for mold and fungus, conditions that often fall within, but are not limited to shaded decks or siding. This does not impact the integrity of the wood but it does mean you should be clearing the surface of your deck more often and taking additional preventative care considering surrounding conditions. It is important to remember the same occurrence can happen on any surface, such as rocks, glass, PVC, and composite products. This staining is removable with light pressure washing and a renewing/cleaning agent.



WARRANTY

Arbor Wood Co. Products are covered under a limited 20-year Warranty. This Arbor Wood Co. warranty is made to the original purchaser of the Product(s) (the "Purchaser"); the original owner of the structure on which the Product(s) are installed; and to the next owner of that structure (together "Owner"). Arbor Wood Co. express warranties may not be assigned to any subsequent owners of the structure. Arbor Wood Co. warrants that the Product(s) will remain free from fungal degradation, buckling, structural failure, separating, and rupturing for a period of 20 years from the date the installation is completed. When the Product(s) have been stored, handled, applied, finished and maintained in accordance with Arbor Wood Co.'s installation, application, finishing and maintenance instructions in effect at the time of application. Color and applied finishes are not warranted. These warranties apply only to above-ground installations made in accordance with the instructions. Be sure to consult full product warranty for specific questions.

**FOR MORE INFORMATION, INCLUDING FULL WARRANTY,
HOW-TO VIDEOS & MORE, FOLLOW THE QR CODE BELOW**



Siding Installation

DISCLAIMER

Consult your local building code to ensure your project is installed in accordance with local requirements and consult your local building office to understand permitting requirements. Drawings and schematics used to show where to place screws and nails are for reference purposes only. Safety glasses and a dust mask should always be worn when working with Arbor Wood. Drilling, sawing, sanding or machining wood products generates wood dust. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. Arbor Wood Co. recommends end-sealing cut boards with a clear, water-resistant penetrating oil such as Cutek Extreme®.

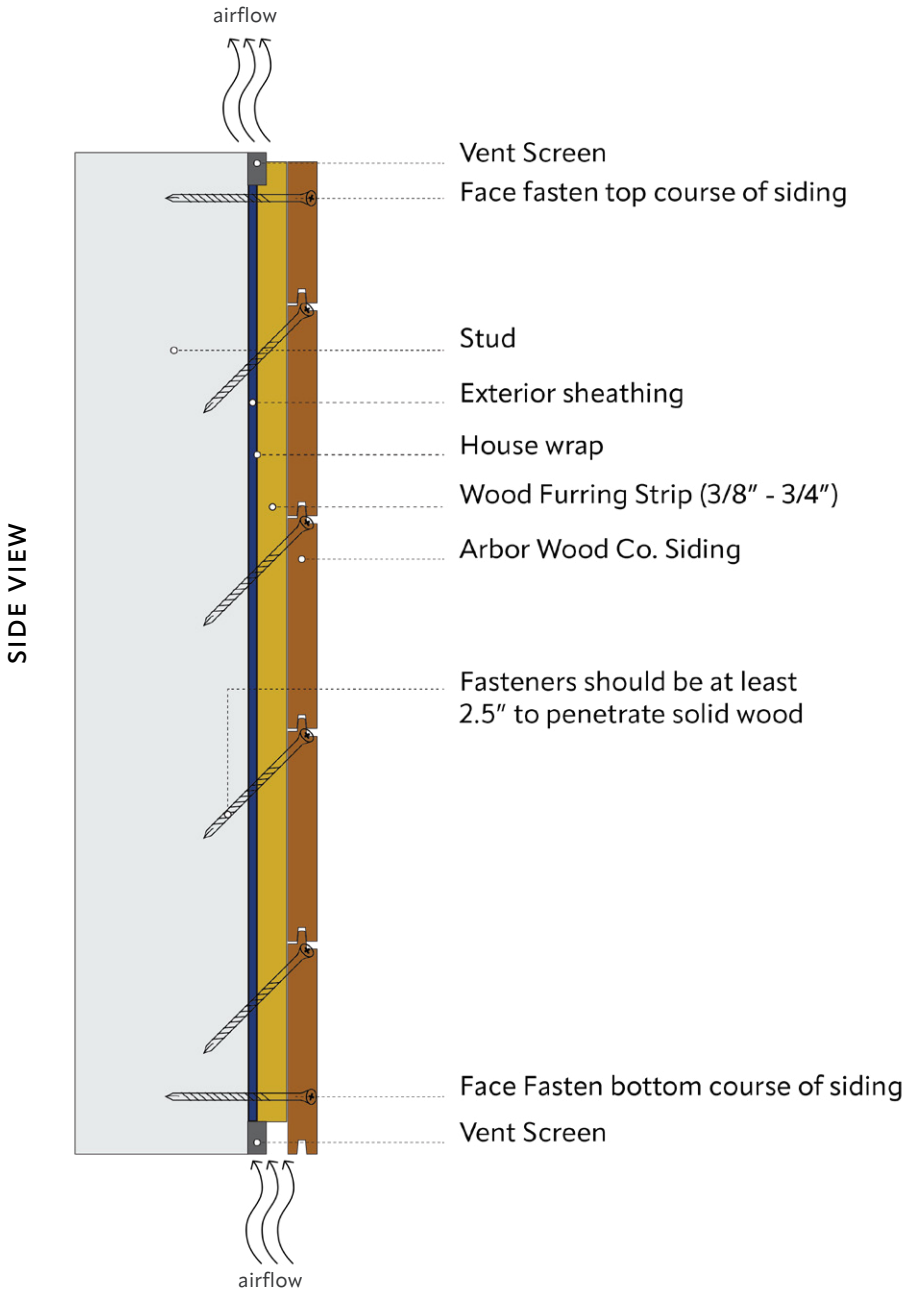
Warning: Do not use a mallet or hammer to install Arbor Wood Co. siding products, doing so will void the warranty. Arbor Wood Co. siding is designed to have an expansion gap to allow the product to acclimate to the installation location.

STANDARD TONGUE AND GROOVE INSTALLATION

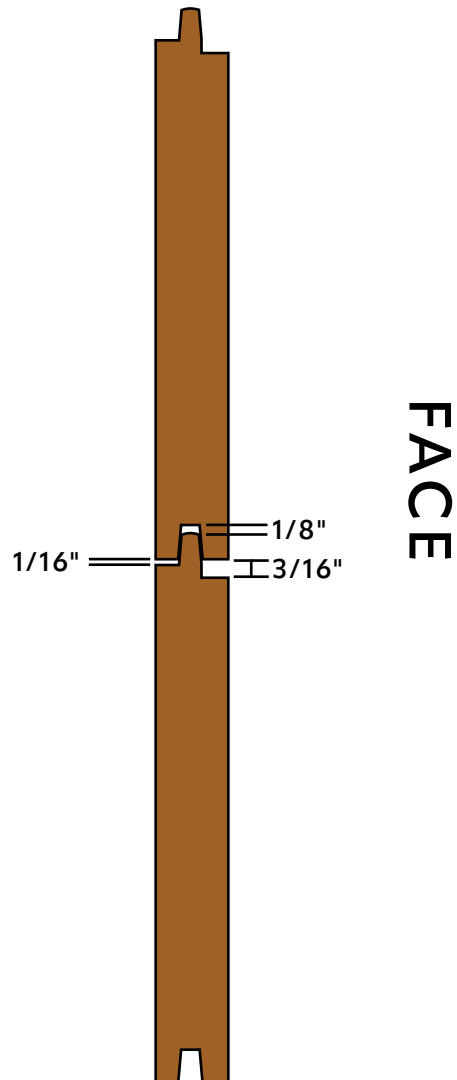
- Arbor Wood Co. recommends siding products to be installed with proper furring strips and rain screen to allow for necessary airflow. **NOTE:** *Arbor Wood tongue & groove siding not secured to proper furring will void the warranty.*
- Arbor Wood can provide the furring strips (3/4" x 2" random length), though it is not required to use Arbor Wood as furring. General plywood or OSB lumber is commonly recommended.
- The furring should be hung in a way that the siding can be fastened every 16" OC and the seams break on furring. Seams may require a double furring to ensure there is enough to fasten both pieces of siding properly.
- Thermally Modified Siding will expand slightly in the width as it adapts to your specific climate and location. This is a one-time event. Once adapted, the boards will remain stable, but care must be taken during installation to allow for this expansion. A 3/16" reveal gap should be provided between each board along with a 1/16" gap on the back side to allow for proper expansion and contraction during acclimation.
- A minimum 2-1/2" #8 stainless steel trim head screw is recommended to be driven at an angle at the base of the tongue so that it passes through the full thickness of the siding. This is not a completely blind fastening, the head of the screw may be slightly visible in the 1/8" groove of the board. This is a very subtle detail. **NOTE:** Even if using self tapping screws, Arbor Wood recommends predrilling to greatly reduce the chance of splitting.
- Vertical installation calls for a counter-batten furring method -OR- Quarrix ProTect Furring Strips. This allows for convection airflow and water drainage to occur behind the siding.
- Arbor Wood Co. recommends ground clearance of at least 12" for all cladding projects. At the very least the ventilation gap behind the cladding must stay open from below to ensure air circulation.
- Top and bottom must not be obstructed, leave at least 1/4" of gap from soffit on top or water table on bottom.
- In order to avoid splitting, secure fastener a minimum of 3/4" of space from edge of the board.



Standard Horizontal Tongue & Groove Installation - Side View



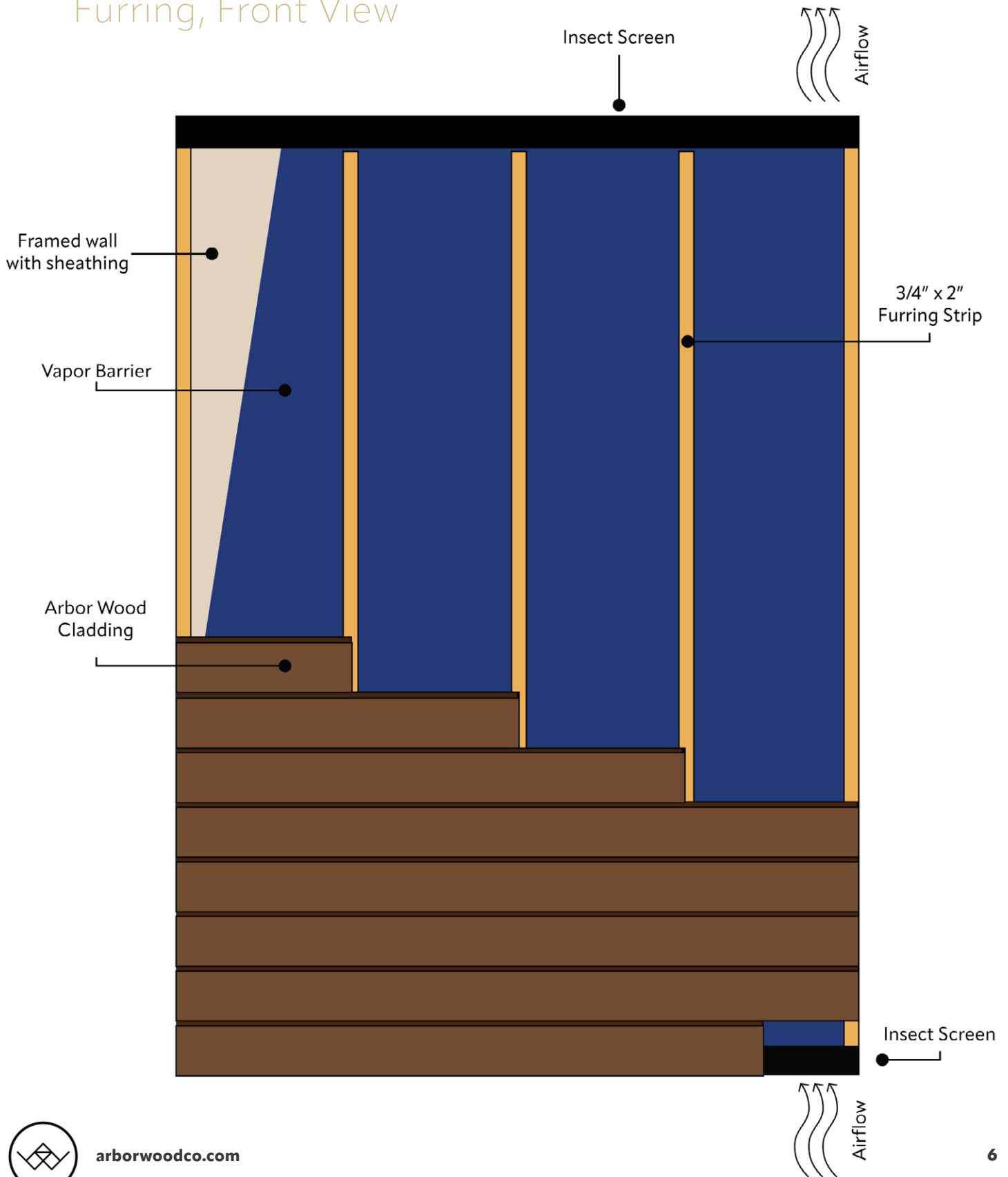
Cladding Spacing



Thermally Modified Siding will expand slightly in the width as it adapts to your specific climate and location. This is a one-time event. Once adapted, the boards will remain stable, but care must be taken during installation to allow for this expansion. A 3/16" reveal gap should be provided between each board along with a 1/16" gap on the back side to allow for proper expansion and contraction during acclimation. Do not use a mallet or hammer to force boards into place. Failure to install with proper gaps may cause siding to buckle during expansion.

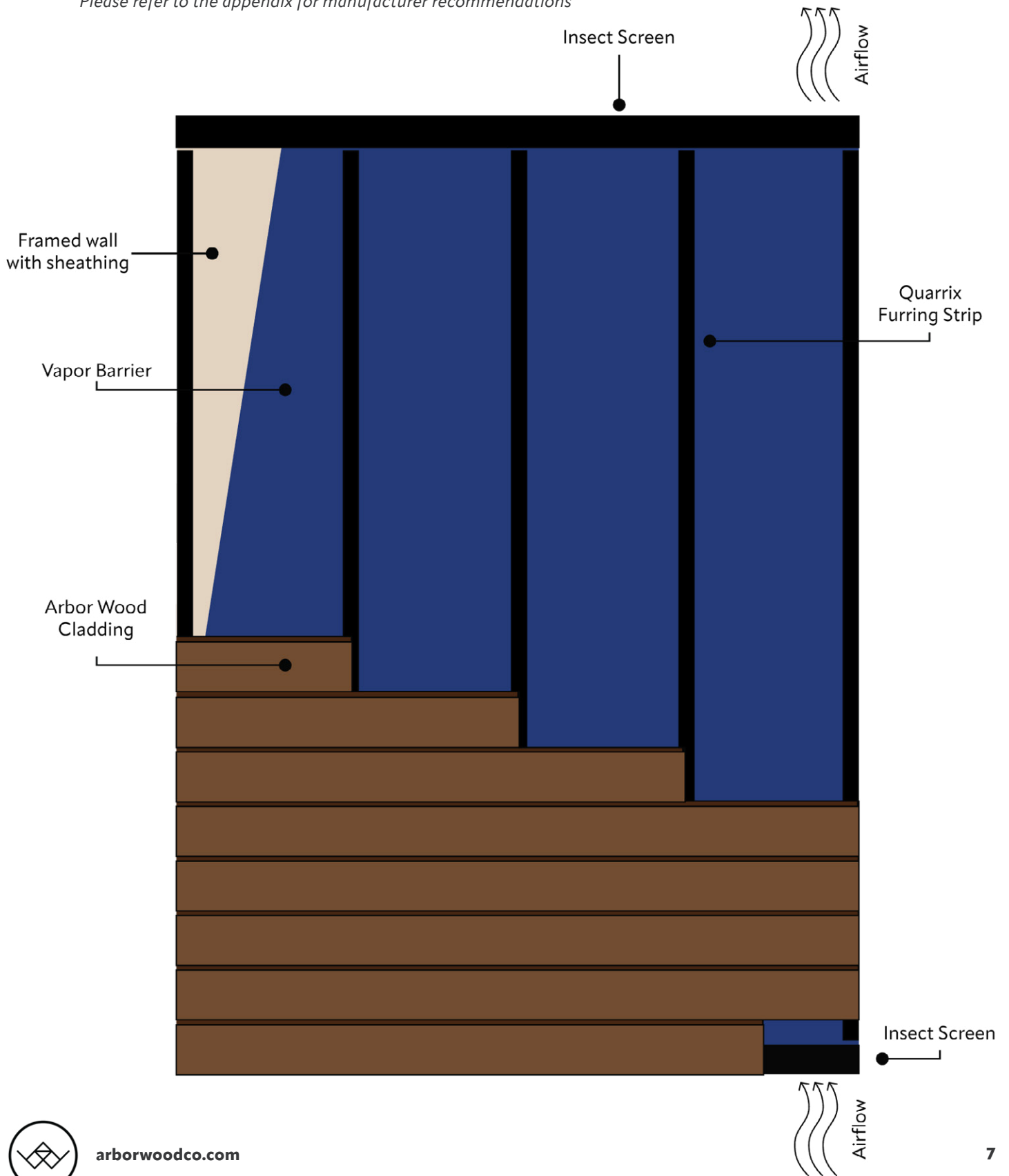


Standard Tongue & Groove Horizontal Installation - Wood Furring, Front View



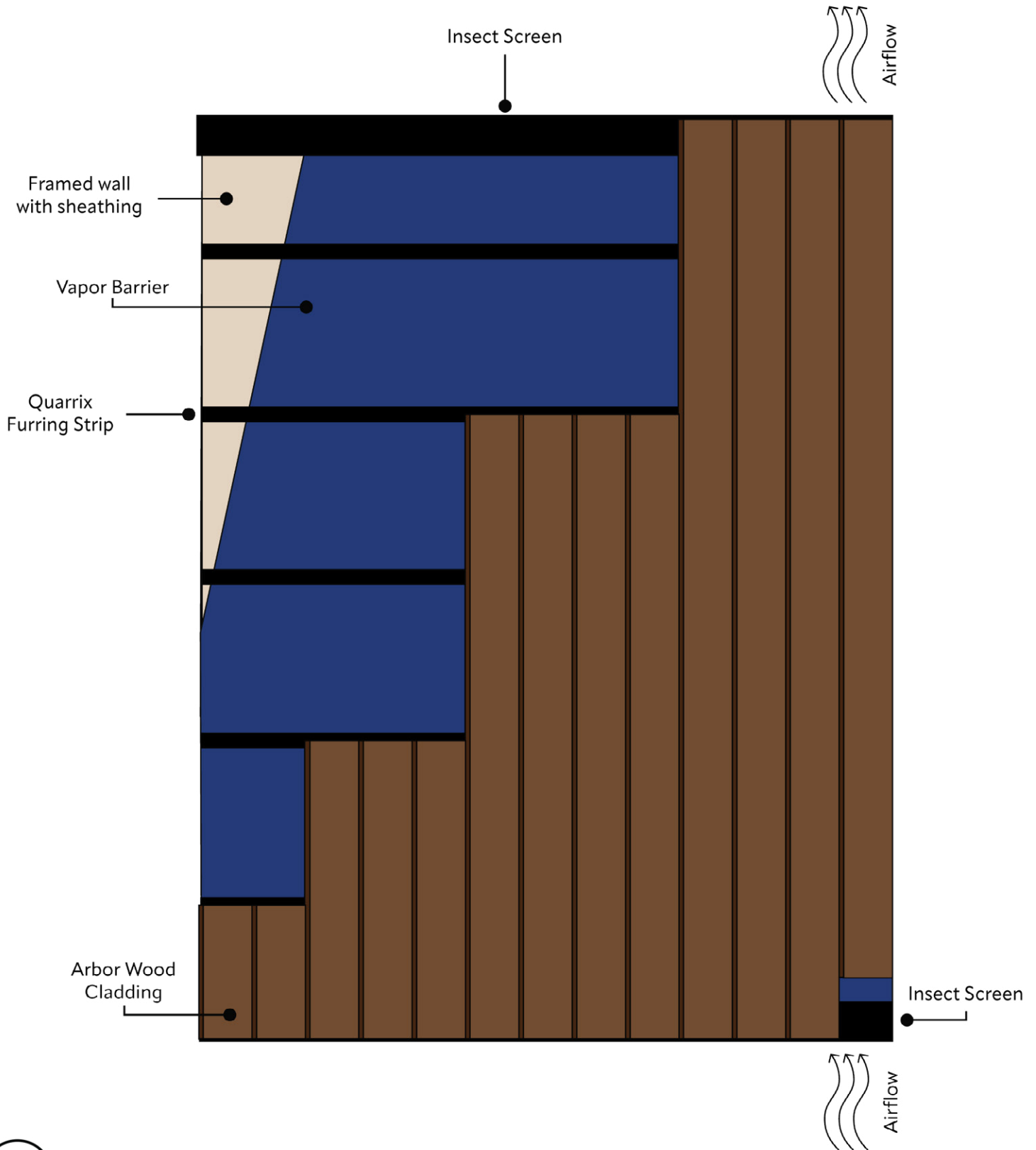
Standard Tongue & Groove Horizontal Installation - Quarrix ProTect, Front View

Please refer to the appendix for manufacturer recommendations

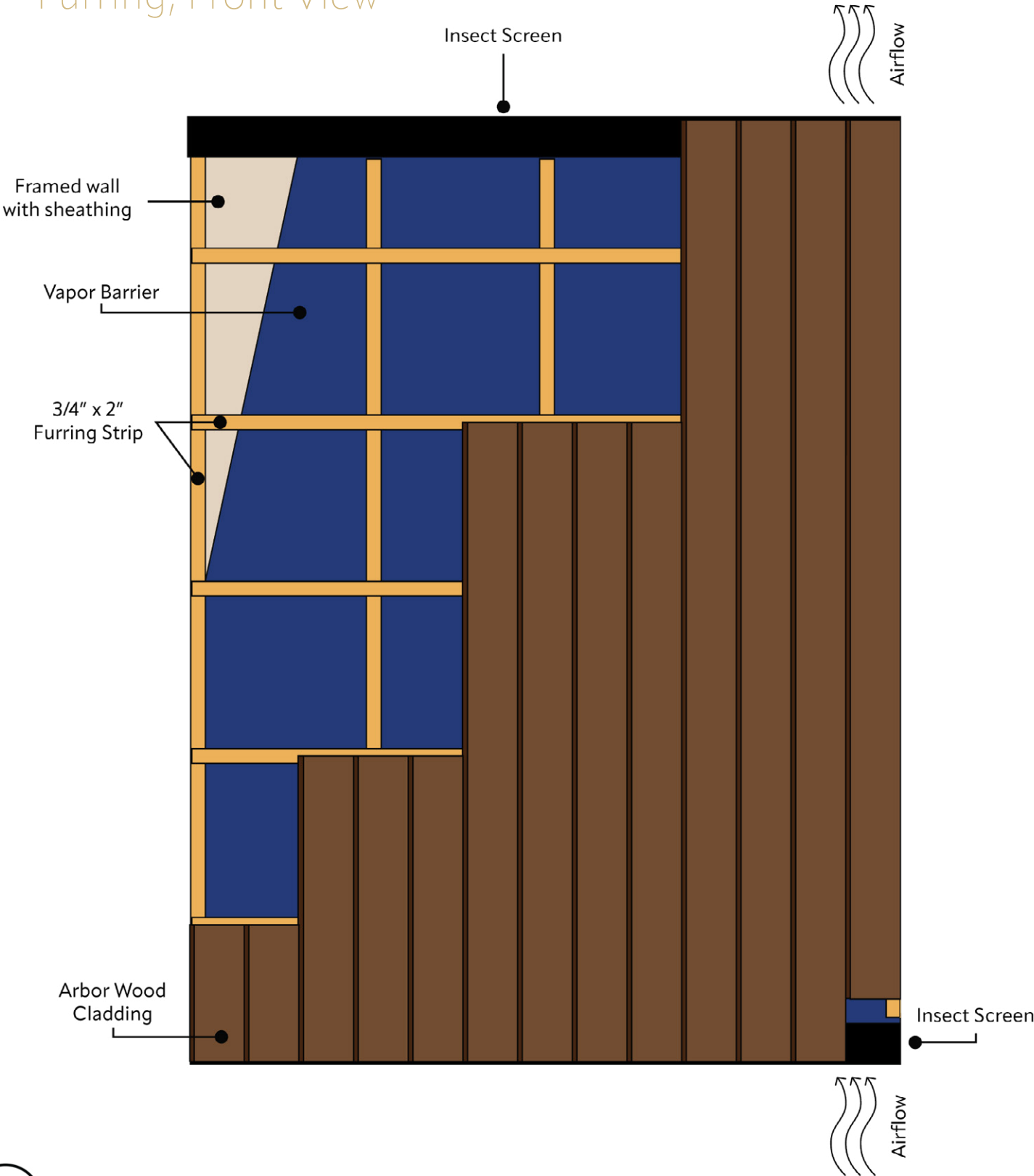


Standard Tongue & Groove Vertical Installation - Quarrix ProTect, Front View

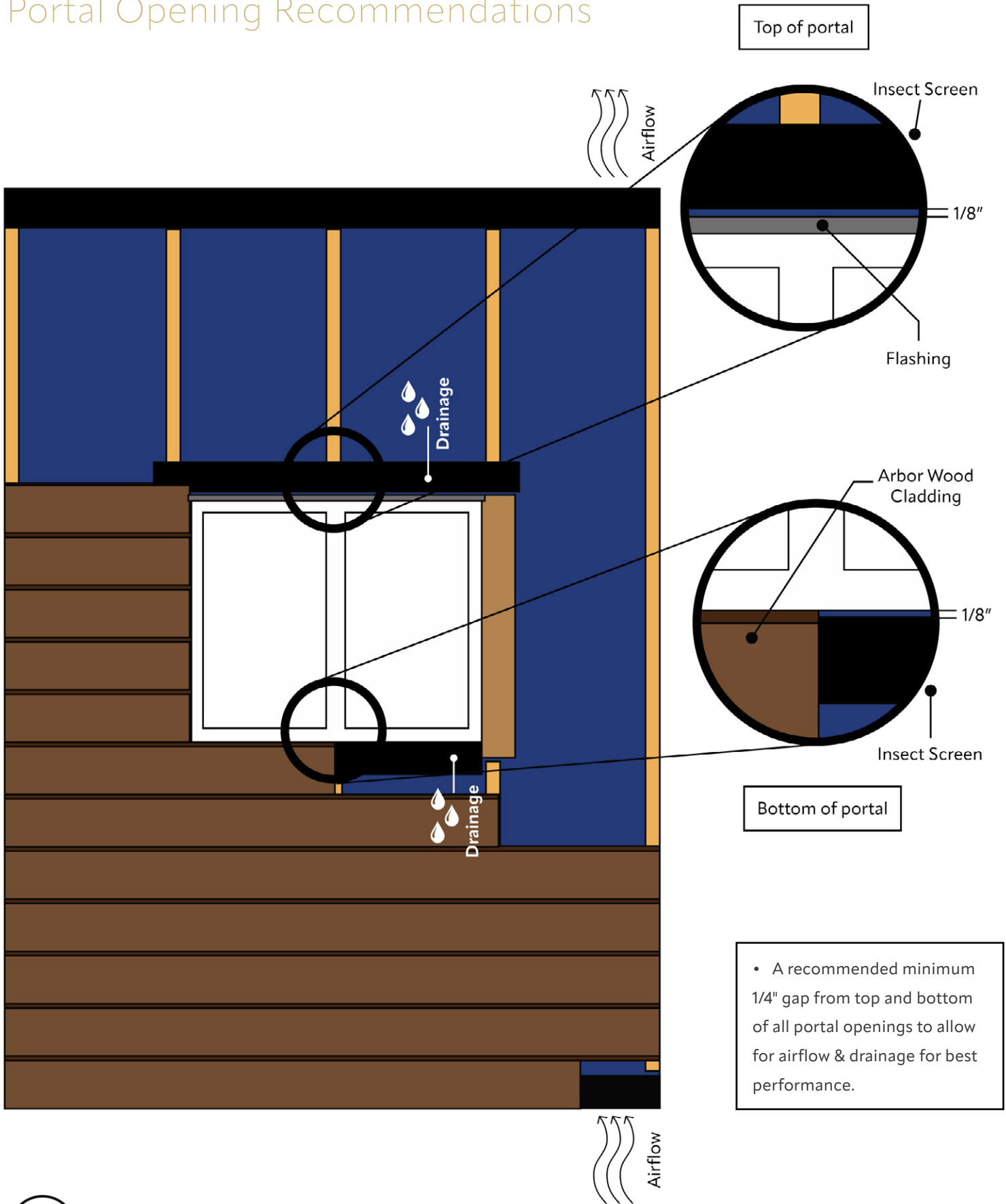
Please refer to the appendix for manufacturer recommendations



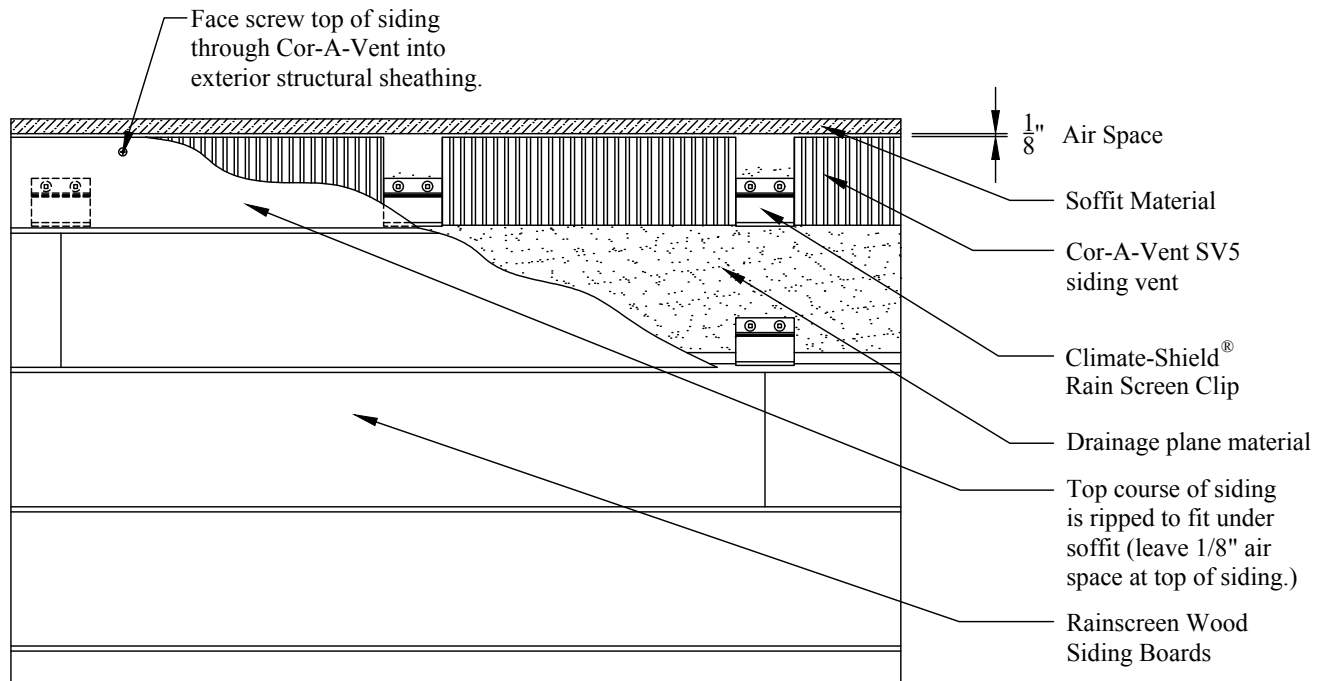
Standard Tongue & Groove Vertical Installation – Counter-Batten Wood Furring, Front View



Portal Opening Recommendations



Climate-Shield™ Rainscreen Installation



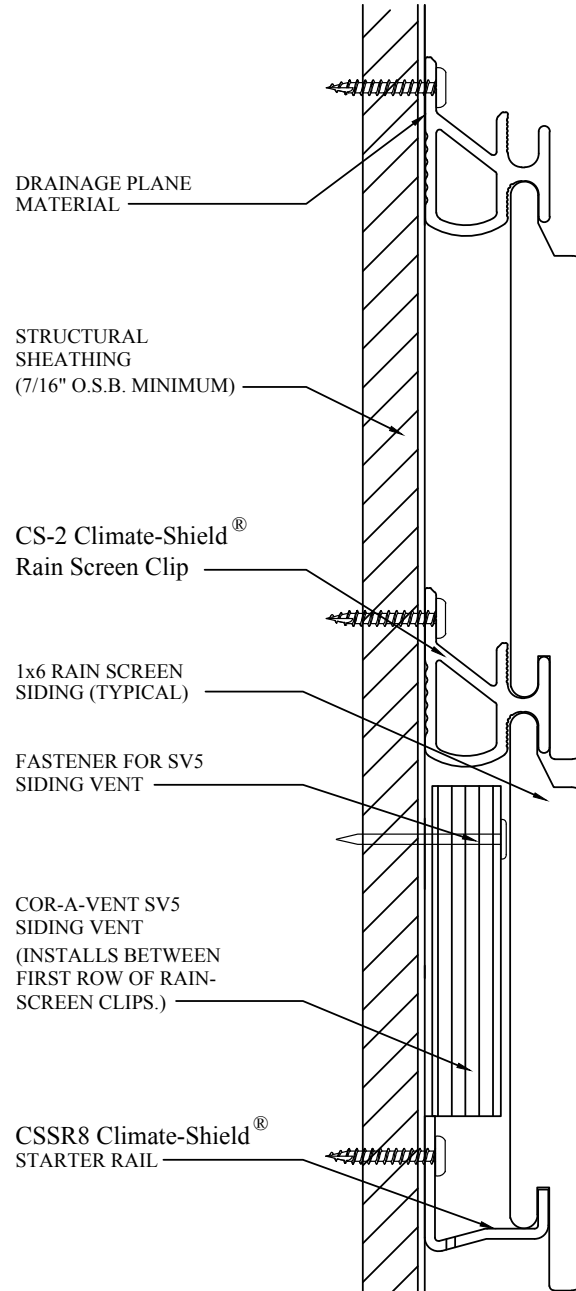
FRONT VIEW

Arbor Wood Co. Provides finished profiles in ash siding for use with the Climate-Shield™ Rainscreen System. The rainscreen clips, starter rail and other genuine Climate-Shield components are made from extruded marine grade aluminum and the rainscreen system includes stainless steel screws for the ultimate in strength, durability and long life. The Climate-Shield® Rainscreen System is designed to provide your building or home with a superior siding envelope to protect and shelter you from whatever type of weather attacks.



Climate-Shield™ Rainscreen Installation

Please refer to the appendix for manufacturer recommendations



CROSS SECTION

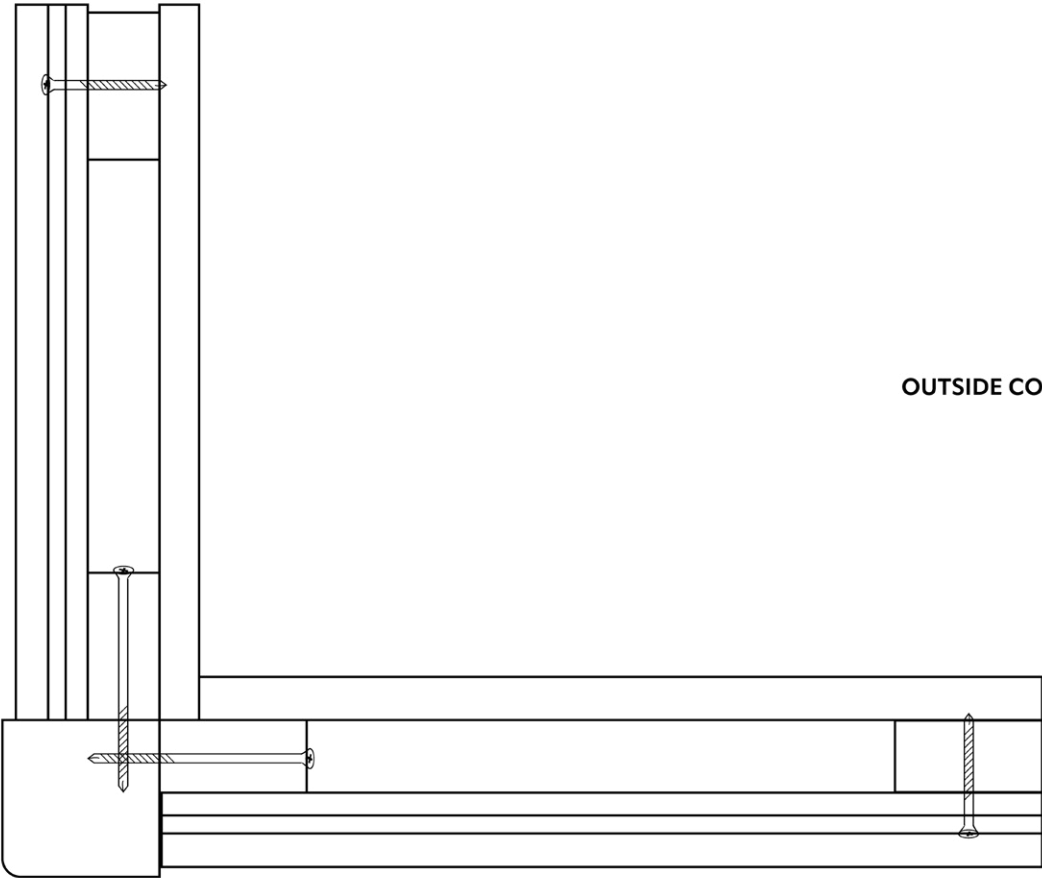


Corner Detail Installation

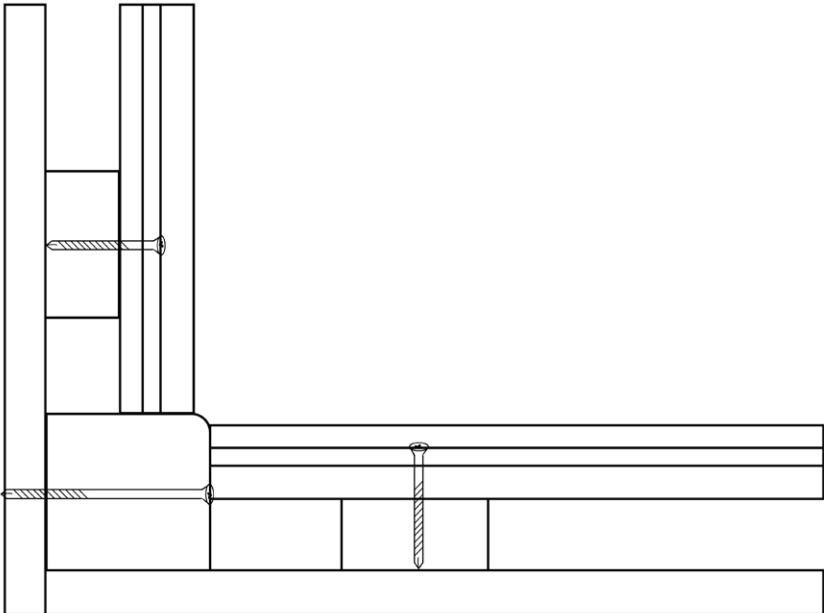
Arbor Wood Co. provides a variety of potential options for corner detailing during installation of our siding products. The following options are not an exhaustive list, rather, a guide to the potential options available for your consideration.



Corner Detail – Butting with 5/4 & 2x Material



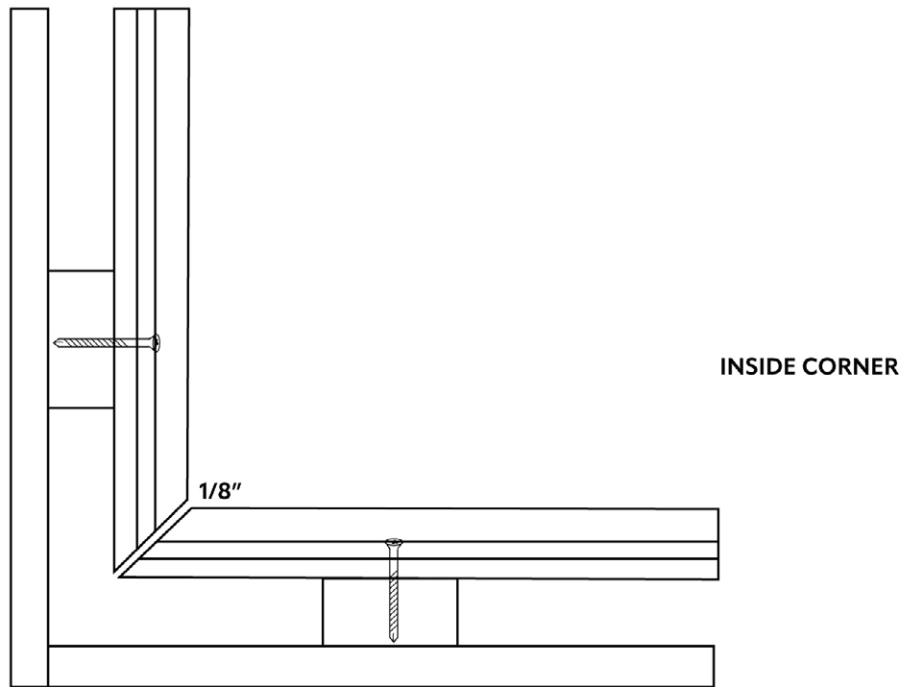
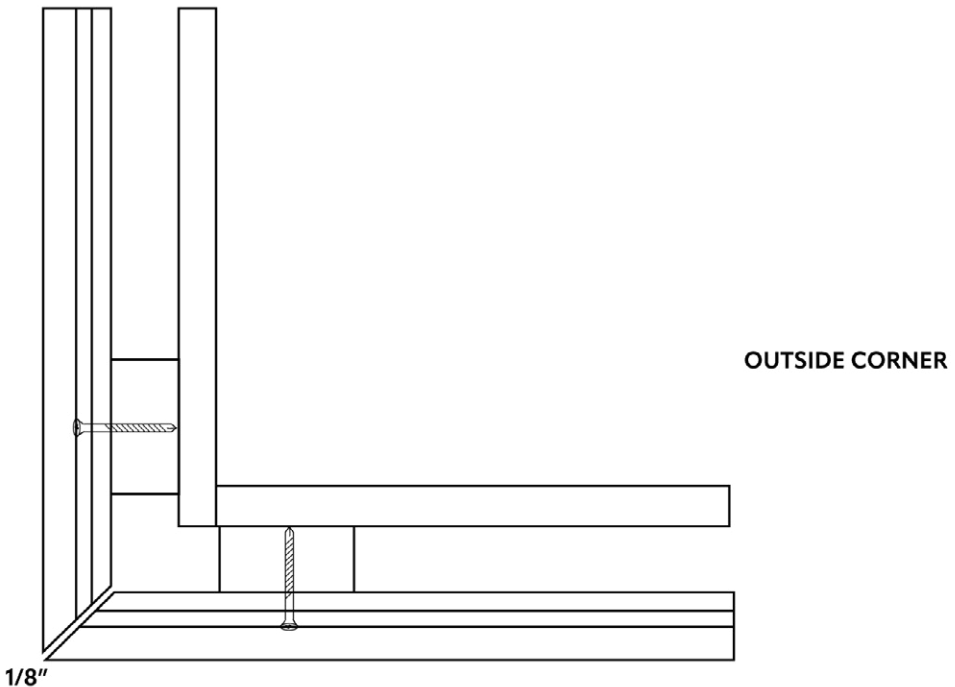
OUTSIDE CORNER



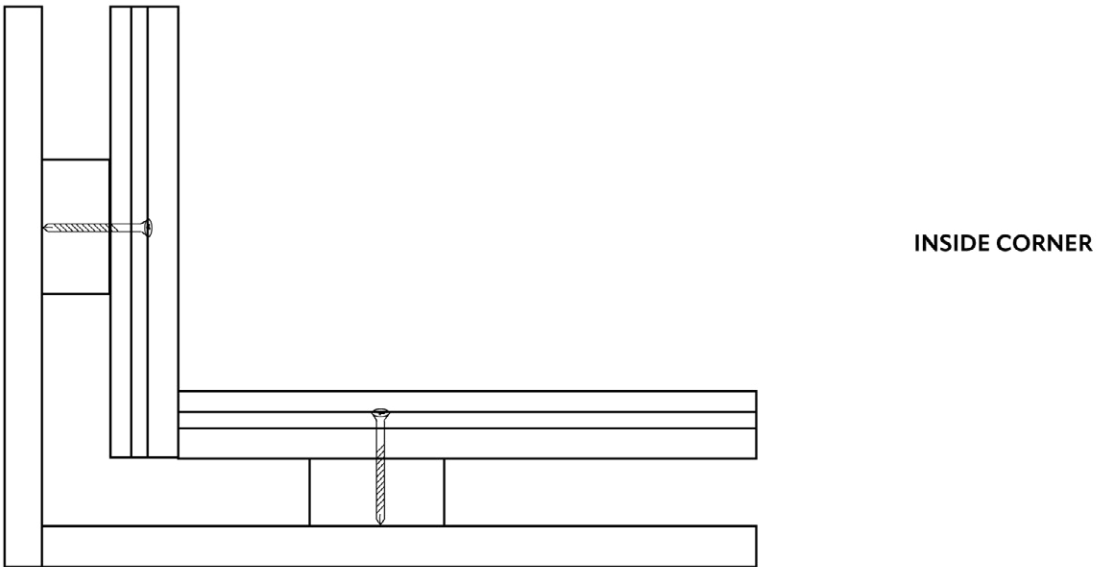
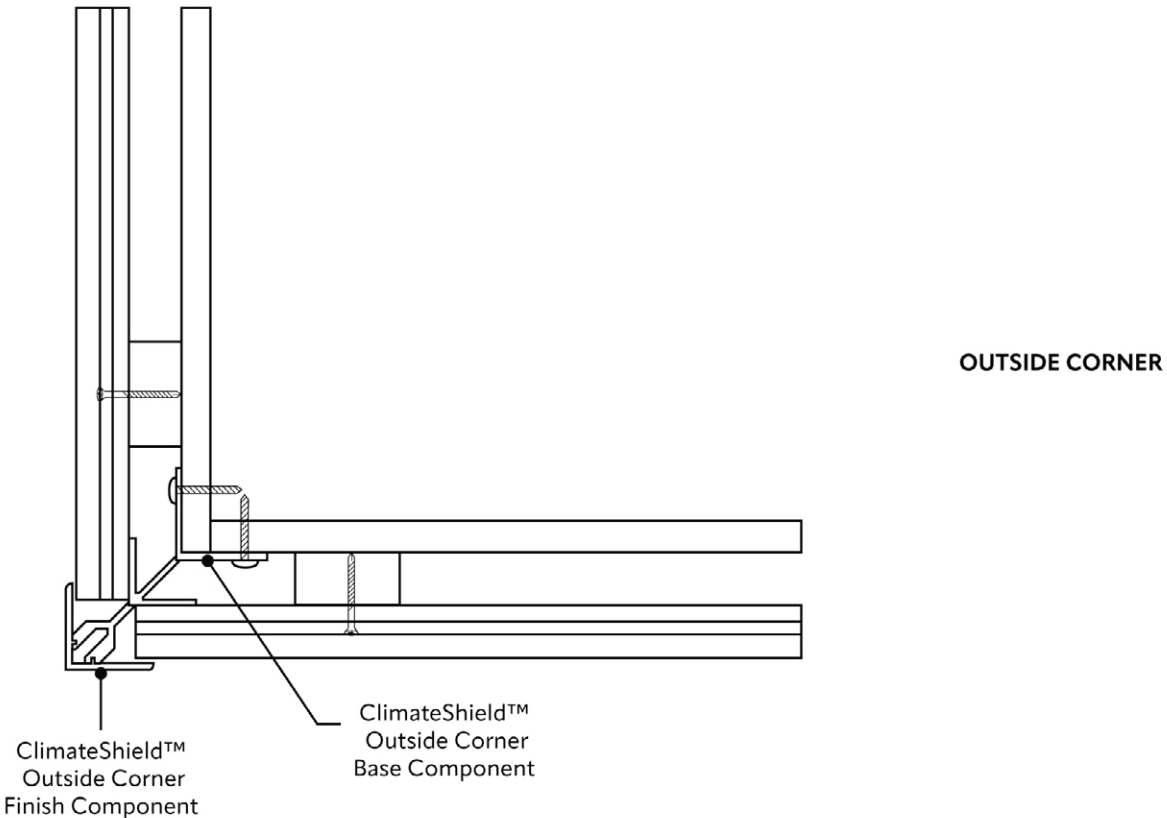
INSIDE CORNER



Corner Detail – Miter Gap



Corner Detail – Climate –Shield™ Corner System



Climate-Shield™ Rain Screen Wood Siding System Installation Guidelines

Step 1 - Install structural sheathing to the framed wall system. Plywood or Oriented Strand Board (OSB) may be used. The panel thickness should be rated for structural application and be a minimum of ½” thick. Refer to local code requirements, but ½”, 5/8” and ¾” are standard sizes, obviously the thicker the board ... the stronger the wall. Install per manufacturer instructions and local building codes. Please allow an expansion gap of 1/16” in between panel ends and 1/8” between panel edges. Foam and gypsum boards are not structural panels.

Step 2 - Install the drainage plane material. There are two basic categories:

Building Paper - Also known as felt paper, tarpaper, roofing paper or roofing underlayment. Building paper is an asphalt-impregnated paper that comes in different weights. For example, 15-lb. paper is typically used for most roofing and wall applications. For most builders, felt paper is the drainage plane of choice for roofing, and many builders use it to provide a drainage plane for the walls as well. Building paper resists air and water getting into the home, but allows moisture to diffuse through it. Microscopic pores in the paper allow moisture through but are so small that bulk water can't penetrate its surface.

House Wrap - House wraps are available in a wide variety of different styles, brands and types of materials. Some serve mainly as a vapor barrier that allows moisture to pass from inside the building envelope to the outside. Other more advanced designs also serve as an air barrier as well as a moisture barrier. Follow manufacturer's instructions for installation. Pay careful attention to seams and sealing around doors, windows and other openings.

Your Architect or Builder will have knowledge of local performance for these products. Regardless of the product you select, install per the manufacturer instructions and local building codes. The details of preparing the window and door areas are worth particular attention.

Step 3 – All windows and doors should now be installed. Please follow the instructions from manufacturers. (Note: When installing the siding interface to the windows and doors, we recommend leaving an 1/8” spaced gap, this will help minimize any misalignment that could be caused by potential expansion of the wood siding material.

Step 4 - Please create the base line elevation on all walls where the bottom of the siding will be installed. This can be done with laser lines, or a snapped chalk line. We recommend that you complete this on all walls, so you know you have continuity. **This step is critical to a success siding installation** and should be done with accuracy. Do this well, and everything will be perfectly aligned as you build.

Step 5 - Install the outside and interiors corners systems you have selected. The Climate Shield System offers both Aluminum Extrusions and Solid Wood components. You may also install corners crafted by your builder. Please install the Climate Shield System with the screws provided. They are the proper length and are made from stainless steel, the finest choice for your building. Make sure to attain perfect alignment of the corners. They should be installed at 90 degrees to the elevation lines you created in Step 3. Check your alignment as you move along the length of the corner attachment. If you do this with accuracy every siding board you cut will be a simple 90 degree cut and your alignment will be precise. With the Climate-Shield Aluminum Corner System, install only the outside corner base component at this time. (The outside corner finish piece installs after all the wood siding is installed)

Step 6 – Install window and door trim. Climate-Shield offers Trim packages, or you can design your own. Now is the time to install them and put flashing in place. With Climate Shield components please use the screws supplied, as they have been designed for the application.

Step 7 – Installing starter course of siding. In this step you can choose to use Climate-Shield Rain Screen Clips *or* the Climate-Shield 8' Starter Rail. The Starter Rail speeds up installation and provides a continuous strip at your bottom





course of siding. Detail drawings of these options can be viewed on <http://www.mataverdedecking.com/architectural-specifications/>

Method A.) If you are using the Climate-Shield Rain Screen Clips as a starter course, begin to install your starter row of Climate-Shield rain screen clips at the beginning elevation that you established in Step 4. Install a clip at the beginning of the wall base and then install every 16" to 24", as your plans call for, screwing into your exterior sheathing. Finish the starter row with a clip at the end of the run to hold the end of the siding board. The clips are supplied with two stainless steel screws per clip. This system provides quick installation, with amazing strength. The screws feature a #3 Square Drive head for safe secure fastening (square drive head provided in screw package). Tighten all screws securely so the clips are flush to the sheathing.

Method B.) If you choose to use the Climate-Shield Starter Rail for your starter course of siding, the installation is very similar to Step 7. A. except that you simply follow the screw pattern on the rail to securely screw the starter rail flush to the exterior sheathing. This 8' rain screen starter rail will simplify and speed up your installation process.

Step 8 – We suggest installing a siding vent screen to prevent insects from entering the wall cavity from the ground. Follow the instructions of the manufacturer. The Cor-A-Vent SV5 siding ventilation is 3/4" thick and fills the wall cavity between the drainage plane created by the Climate Shield rain screen clips. This siding vent also allows moisture and bulk water to escape as well. It is also suggested to install the siding vent at the soffit, above door openings and above and below window openings.

A.) If you are using 6" rain screen wood siding, align the Cor-A-Vent siding ventilation across the top of the starter row of rain screen clips (or rain screen starter rail) and fasten them to the sheathing. The assembly will be covered by the siding board in the next step.

B.) If you are using 4" rain screen wood siding, you will find it helpful to cut the Cor-A-Vent SV5 strips to length and fasten it between the rain screen clips in the starter row. If you are using the Climate-Shield Starter Rail with 4" 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.

Step 9 – Insert the bottom of a Climate Shield Rain Screen Wood Siding board into the previously attached clips or starter rail. The milling is quite precise to allow for climate variations in seasons and geographic locations. Occasionally you may need to use a rubber mallet to seat the board into the clip. Seating each board gives the perfect alignment that you want for your wall. Now begin attaching the clips to the top of the siding board. Same process, spacing at up to 24" and using 2 screws per clip. (Note: You can create a staggered arrangement with your clip spacing and on 24" installs you will have support to your board every 12". This is a huge advantage over other installation systems.)

Step 10 – Repeat the assembly process for each row of siding. If you need to make a joint in the length of siding, simply use a clip at the bottom and top of the joint and straddle the two boards. You will automatically get proper alignment of the two boards. The joint can be done with 90 degree cuts, but over time the joints may open with weather exposure. We suggest that you miter the siding boards to be joined at a 45 degree angle (scarf joint), and there will be no gap showing in the future, regardless of the weather. Center the clip over the joint for maximum stability. This will give you a quality install that you will be proud of for years.

Step 11- Installing the top row of siding. When you reach the soffit (or areas below window openings), it is typically necessary to rip the top of the wood siding to the appropriate width. 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 drilled and face screwed to blocking behind the siding. We suggest 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

www.climate-shield.com



FURRING STRIPS

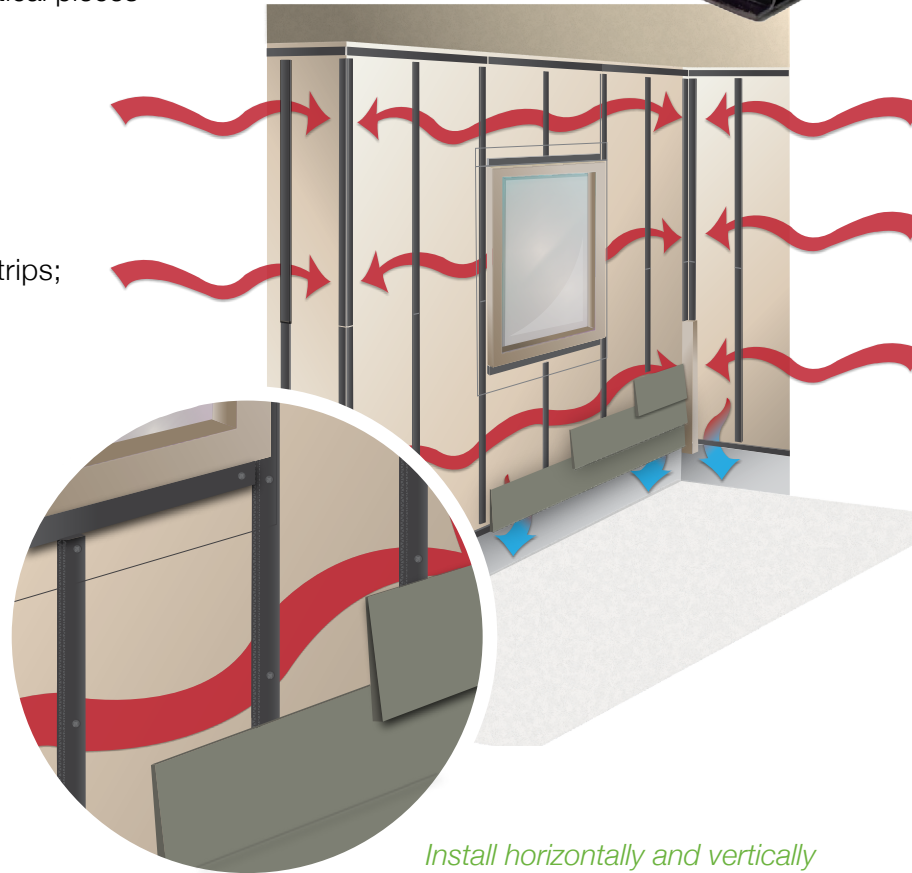
Overview

Protecting homes from trapped moisture is critical. Quarrix Furring Strips allow moisture and air to pass freely behind siding, creating a natural rain screen system. Made of plastic, Quarrix Furring Strips will not warp or split like similar wood products. They're also lighter and stronger than wood – making installation quick and easy – and are dimensionally die cut for identical pieces every time. Available in 1 1/2" wide sections.



Quarrix Furring Strips Benefits

- More durable and lighter than wood furring strips; Quarrix Furring Strips won't warp or split.
- Extend life of siding and paint by eliminating heat and moisture build-up.
- Gun-nailable for fast installation.
- Can be used as a starter course strip with no need for a bug screen.
- Compatible with wood, fiber-cement, vinyl, stucco and EIFS systems.



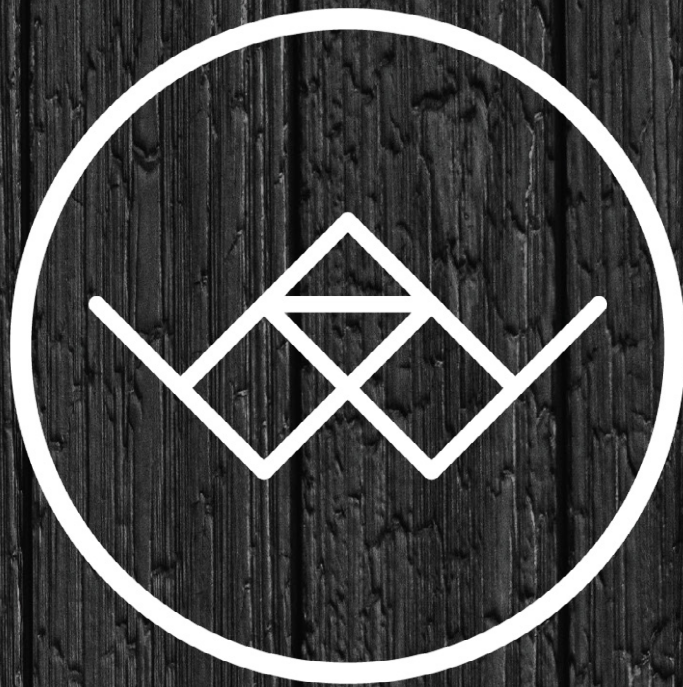
Install horizontally and vertically

FURRING STRIPS SPECIFICATIONS

| Part # | Width | Length | Profile Height | Qty/Bundle | NFA | Material | Warranty |
|--------|----------------|-----------------------------------|----------------|------------|---|----------|-------------------------|
| 61106 | 1-1/2" (38 mm) | 4' 4" Sections (1321 mm) | 3/8" (10mm) | 48 | 3.8 sq in/lineal ft (80.4 cm ² /lineal m) | Plastic | Lifetime Manufacturer's |
| 40247 | 1-1/2" (38 mm) | 8' 8" Fold-out Sections (2642 mm) | 3/4" (19mm) | 12 | 5.6 sq in/lineal ft (118.5 cm ² /lineal m) | | |

Quarrix Furring Strips Patents: 6,938,383; 7,117,649.

SS-FS13-1.10.17



Arbor Wood. **For Good.**

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**MADE IN
THE USA**