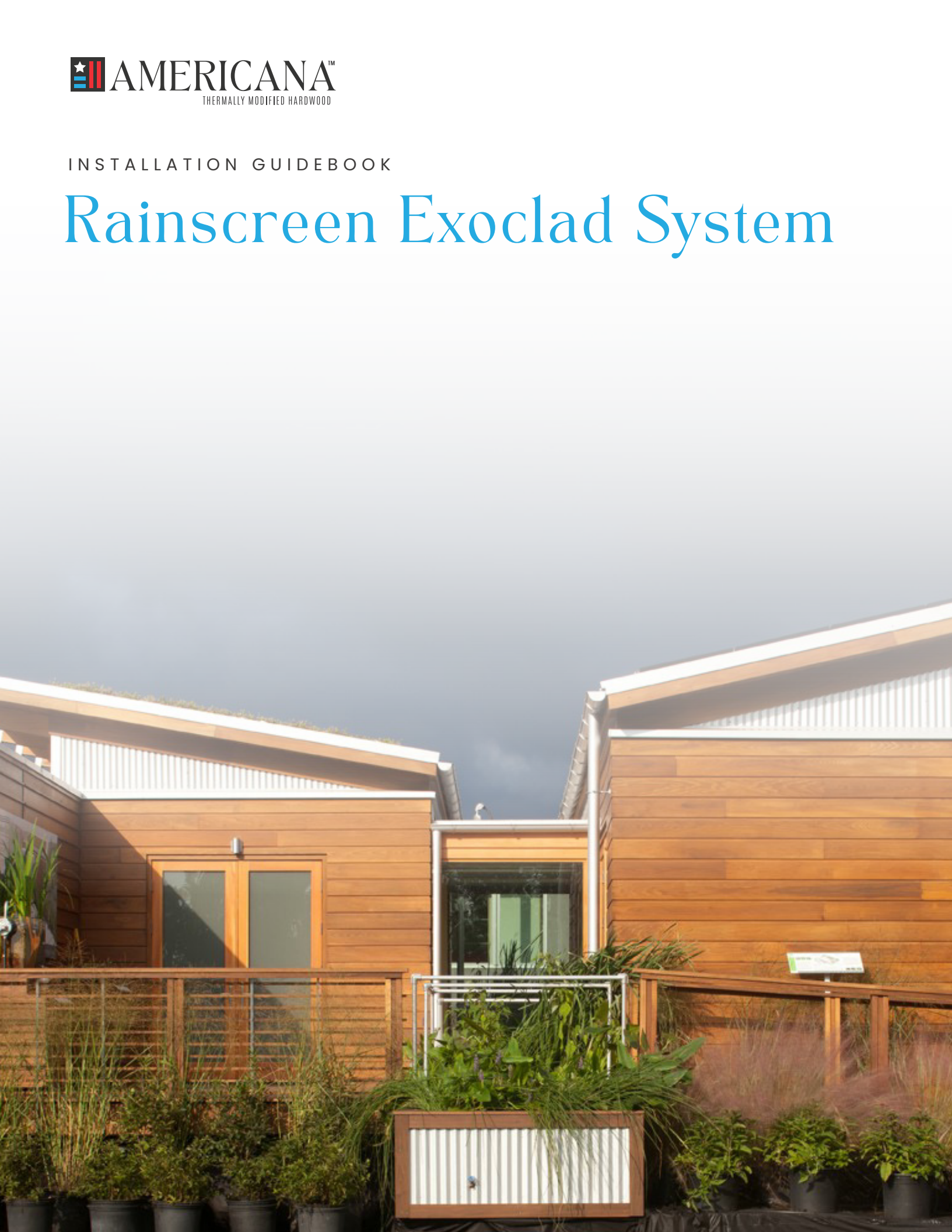
AMERICANA™
THERMALLY MODIFIED HARDWOOD

INSTALLATION GUIDEBOOK

# Rainscreen Exoclad System



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# Rainscreen Introduction

Americana™ Thermally Modified Wood Siding & Rainscreen is 100% grown, harvested, and manufactured in Pennsylvania, the heart of the American hardwood forests. We offer a variety of profiles to get the look you want, whether it's vertical or horizontal. Go with Ash for a bold, pronounced grain, or Poplar for the smooth look. We are the manufacturer, so it can be totally your call.

# Acclimation

For optimal wood performance we recommend allowing the wood to fully acclimate to your local environment. This acclimation period, which varies in length based on the relative humidity in your area and the season, allows the wood to achieve its Equilibrium Moisture Content (EMC) and thereby minimize any moisture absorption after installation. To properly acclimate, remove the packaging from the wood and store it elevated it off the ground, out of the weather and direct sunlight. Acclimation can be further expedited by placing sticks in between each row of boards.

# Thermally Modified Exoclad Rainscreen

## Profiles

**Example: R-46-000**

**“R” = Rainscreen**

**“46” = Thickness in quarters of an inch, Width in whole inch**

**“000” = SKU (ExoClad Rainscreen Profile)**

| **Americana Code** | SKU Description | Reveal |
|---|---|---|
| R-46-000 | ExoClad Rainscreen | Nominal minus 1.000” |

## Species

- Thermally Modified Appalachian Ash*

  ***Subject to availability, check with Americana***

- Thermally Modified Pennsylvania Oak
- Thermaly Modified Pennsylvania Poplar

## Fasteners

Use stainless fasteners, ONLY. **Do NOT use galvanized**. Galvanized fasteners will create permanent black stains.

## Storage

Ideally, Americana™ thermally modified wood should be stored inside, away from the weather and sun. If storing outside, it is important that Americana™ wood products are not subjected to weather or sun, because the UV Rays will fade the material. The products should be elevated off the ground, uniformly stacked, and completely covered with a waterproof tarp. Make sure the ends of the tarp are open so moisture is not trapped inside.

# Horizontal Exoclad Installation

This installation guide is adapted from the Nova Exoclad Quick Clip guide.
Any detailed questions about using the clip should be directed to Keaton Smith
keaton@novausawood.com

# Exoclad Clip

300 ExoClad ® QuickClips ® covers 100 SF of siding with 1x6 rainscreen boards.

***Custom quantities of any amount are also available for purchase***

## Tools and Materials Needed

- Cor-A-Vent Siding Vent (3" or 4" wide)
- GRK R4 screw #9x2" or longer
- Cordless drill
- Weather Resistive Barrier-House Wrap-Tyvek Equivalent
- Level
- Angle grinder
- Rubber mallet
- Chalk line
- Furring strips (just a few for finishing purposes)

## Hardwood Siding Installation

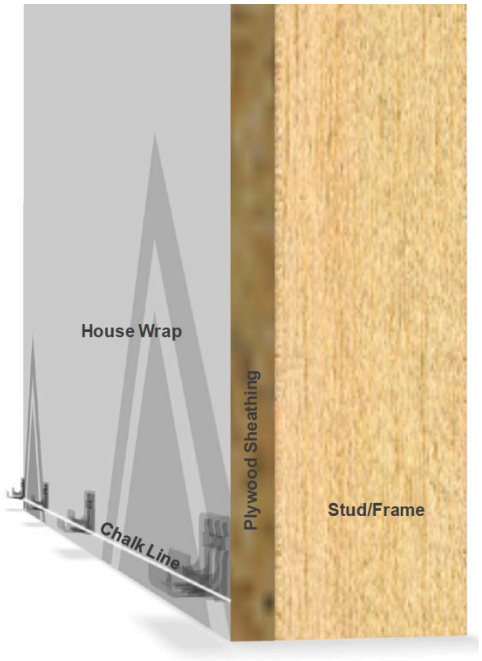
*****IMPORTANT***** Ensure that wood siding has properly acclimated to the environment and is at an appropriate moisture content.

# Proper Preparation and Alignment

## Step 1

Install house wrap over Plywood sheathing to prevent moisture intrusion.

(Always follow the vapor barrier manufacturer's instructions.)

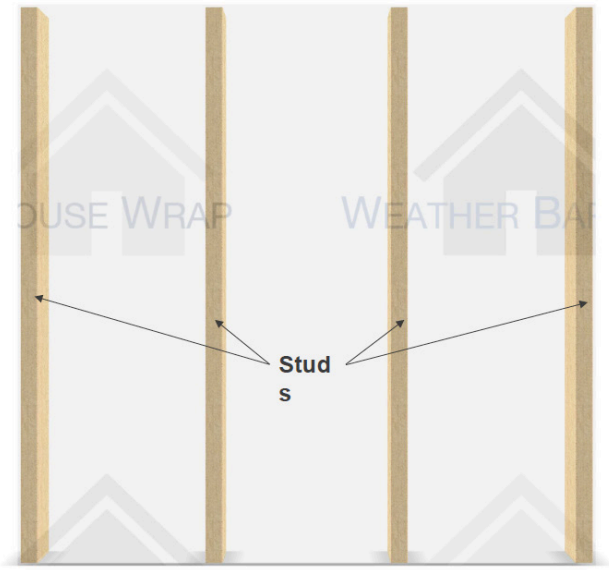


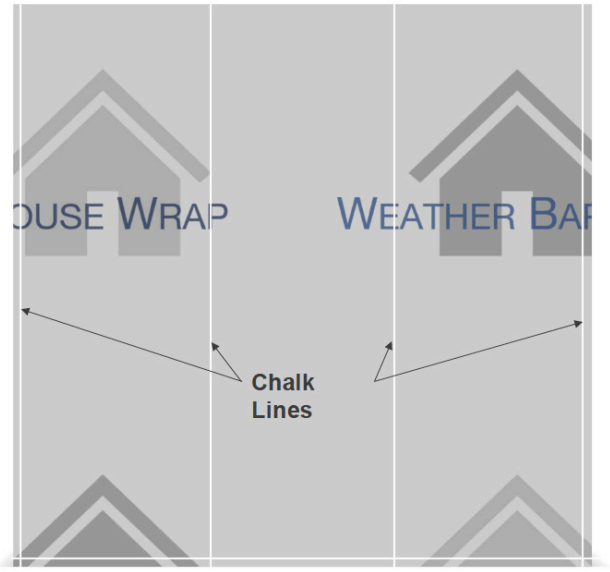

## Step 2

Using a chalk line, mark a level horizontal line at the point where the base of the Rainscreen siding will align. This is your baseline. It is recommended your first board sits a minimum of 6"above the ground.

## Step 3

Using a chalk line, mark where your studs are located for ease of installation.



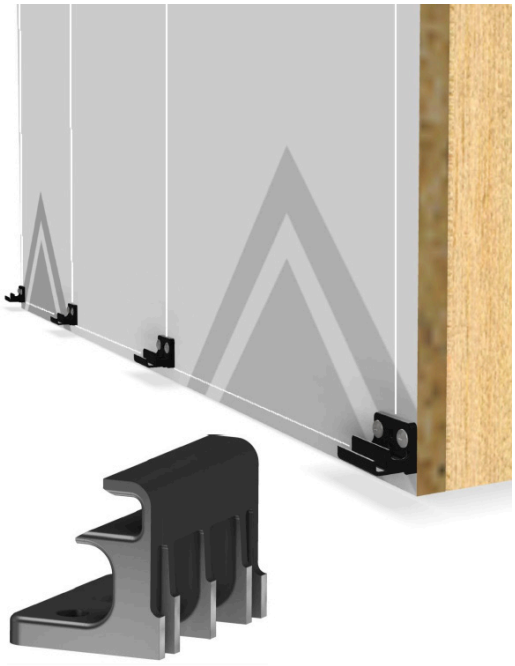



# Creating and Securing Starter Clips

## Step 4

Install your first series of clips on your baseline, screwing through the Vapor Barrier to the stud.

*You may wish to cut the clip (an angle grinder will work) to eliminate the bottom part (which will not be supporting anything).*



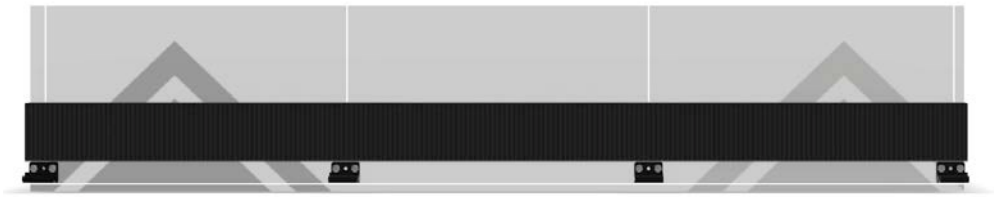
## Step 5

Align each starter clip with the studs you marked. Make sure that the clips are level and evenly spaced on the studs. You may need 2 screws for each clip for the first course of clips.

# Placing Cor-A-Vent

## Step 6

Cut strips of Cor A Vent and screw into the vapor barrier/sheathing horizontally so that it fills the space between the clips. The Cor A Vent should run along the baseline behind your siding to permit airflow and to eliminate pests.



# First Board

## Step 7

Install the first Exoclad Rainscreen Siding board on top of the starter clips.

*TIP: Use a level to ensure this first board is aligned properly.*

# Filling In

## Step 8

Fit the next course of clips over the first row of Rainscreen siding boards. Ensure that the edges are engaged use a rubber mallet **CAREFULLY** to align boards properly.

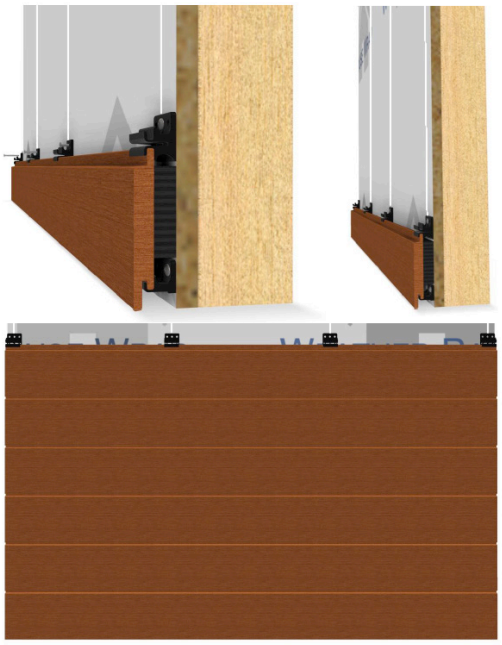
# Filling In

## Step 9

Once the clips are engaged, install the second set of clips, driving one or two screws through the siding fastener into the stud. Ensure that the clips are level, and continue to check level throughout the installation.

## Step 10

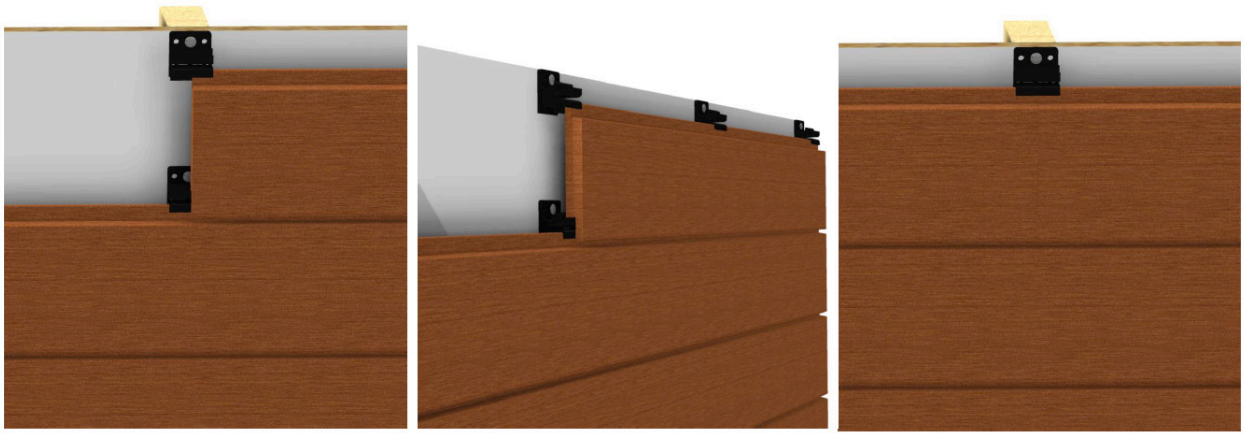
Set the proceeding Rainscreen siding boards on top of the installed siding fasteners. Continue to install clips and Rainscreen boards until you have reached the top of your installation area. Clips will usually require only one screw at this point of installation.



# Properly Butting Two Boards Together

## Step 11

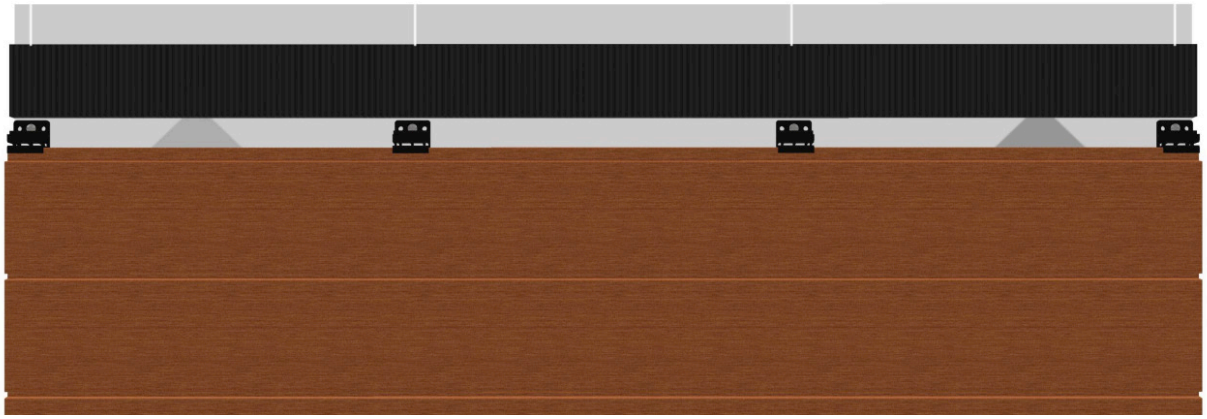
When using multiple boards to span the length of the wall, ensure that the rainscreen boards butt together properly. If the boards are not end matched, the boards should meet in the middle of the stud, with a single clip centered between the two boards. If the boards are end-matched, they can be joined together at random anywhere between clips. No trimming or extra clips are necessary.



# Placing Cor-A-Vent

## Step 12

Cut strips of Cor-A-Vent and screw into the vapor barrier/sheathing horizontally so that it fills the space between the clips. The Cor A Vent should run along the baseline behind your rainscreen to permit airflow and to eliminate pests.



# Securing & Fitting Your Last Board

## Step 13

To install your final board, first measure the remaining span that needs covered. Trim (rip) your rainscreen board to the appropriate width. Makesure you are trimming the correct side of the board off and leaving the correct side intact to fit into the clips.

*(Optional) Create a beautiful finish by installing trim pieces of the same material as your rain-screen boards along your corners and edges.*

# Securing & Fitting Your Last Board

## Step 14

Fasten a 1 x 2 furring strip across the length of the wall through the particle board and into the framing.

## Step 15

Insert the adjusted board into the last row of clips. Fasten the rainscreen board to the furring strips.

# Vertical Exoclad Clip Installation

*****IMPORTANT***** Ensure that your sheathing is rated for structural use and installed according the manufactures guidelines and local building codes. Structural sheathing is the only safe way to install vertical rainscreen without adding additional framing or use of furring strips.

This installation guide is adapted from the Nova Exoclad Quick Clip guide.
Any detailed questions about using the clip should be directed to Keaton Smith
keaton@novausawood.com

(Horizontal Trim Board Method)

# Proper Preparation and Alignment

## Step 1

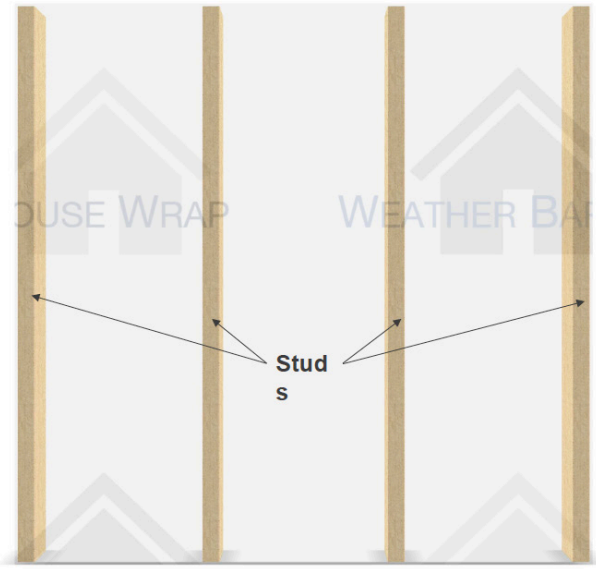
Install house wrap over Plywood sheathing to prevent moisture intrusion. (Always follow the vapor barrier manufacturer's instructions.)

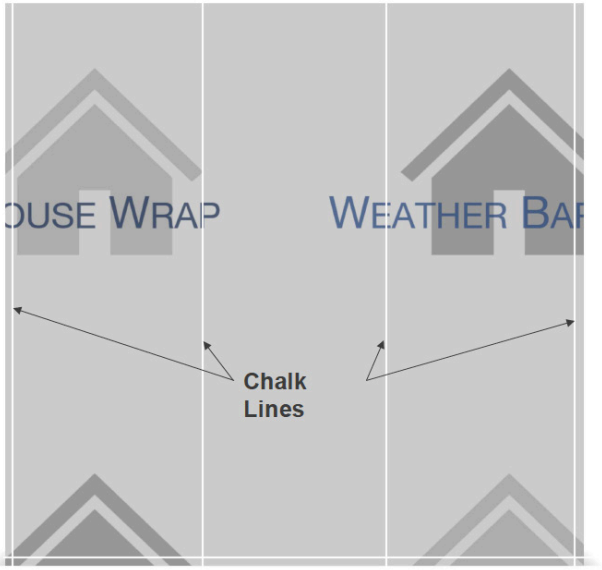
## Step 2

Using a chalk line, mark a level horizontal line at the point where the base of the Rainscreen siding will align. This is your baseline. It is recommended that your boards sit a minimum of 6" above the ground.

## Step 3

Using a chalk line, mark where your studs are located for ease of installation.



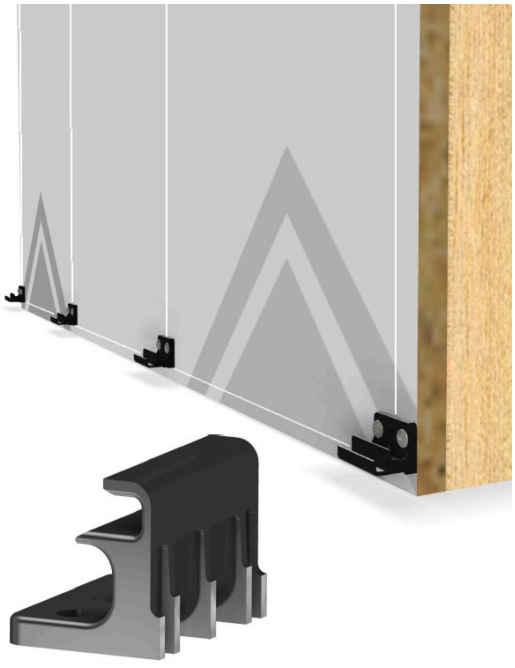



# Creating and Securing Starter Clips

## Step 4

Install your first series of clips on your baseline, screwing through the Vapor Barrier to the stud.

*You may wish to cut the clip (an angle grinder will work) to eliminate the bottom part (which will not be supporting anything).*



## Step 5

Align each starter clip with the studs you marked. Make sure that the clips are level and evenly spaced on the studs. You may need 2 screws for each clip for the first course of clips.

# Creating and Securing Trim Board

## Step 6

Rip/trim the top groove off of however many rainscreen boards are needed to cover the length of the wall.

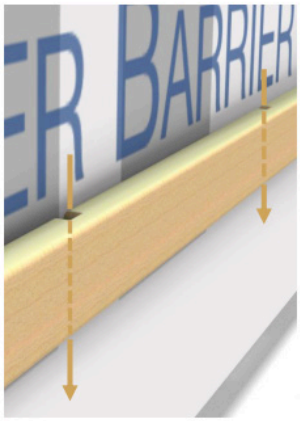
## Step 7

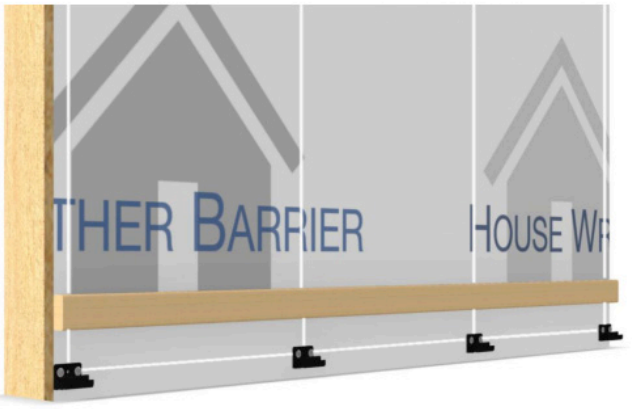
Obtain enough length of 1 x 2" furring strips to cover the entire length of the wall. Cut small vertical channels (weep holes) into the furring strip approximately 12 inches apart. These are required to allow for drainage through the furring strip. These channels will face the wall.

# Creating and Securing Trim Board

## Step 8

Fasten the furring strip across the length of the wall above the installed starter clips to the appropriate height that matches the width of the trim board. Ensure the furring strip is installed into the framing.






## Step 9

Insert the trimmed rainscreen board into the row of starter clips. Gently tap board with rubber mallet if need to insert the board fully into the clips.

## Step 10

Fasten the rainscreen board to the furring strips. You will need to predrill the rainscreen board in order to face screw and avoid any splitting. We recommend using a screw and plug system for a seamless look.

# Marking Clip Placement and Installing Cor-A-Vent

## Step 11

Create horizontal chalk lines marking every 16 inches. These are the lines is where your clips will be placed.

## Step 12

Fasten your first column of clips. Depending on the wall you are building on, you may wish to cut the clip like from Step 4, to eliminate the side of the clip that would be on the outside.

## Step 13

Install Cor-A-Vent appropriately at the top and bottom of your wall across the entire width.

# First Vertical Board

## Step 14

Insert your first vertical board into the column of clips, gently tapping with rubber mallet if necessary.

*TIP: Use a level to ensure this first board is aligned properly.*

# First Vertical Board

## Step 15

Fasten your next column of clips using 1-2 screws on each clip and ensuring that they are lined up on your horizontal chalk lines.

# Filling In

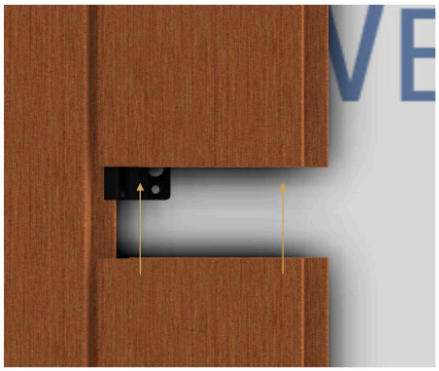
## Step 16

Continue to install clips and Rainscreen boards until you havecovered the span of your installation area. Clips will usually require only one screw each at this point of installation.

# Properly Butting Two Boards Together

## Step 17

When using multiple boards to span the height of the wall, ensure that the rainscreen boards butt together properly. If boards are not end matched the boards should meet with a single clip centered between the two boards. If the boards are end-matched, they can be joined together at random anywhere between clips. No trimming or extra clips are necessary.



# Securing & Fitting Your Last Board

## Step 18

To install your final board, first measure the remaining span that needs covered. Trim (rip) your rainscreen board to the appropriate width. Make sure you are trimming the correct side of the board off and leaving the correct side intact to fit into the clips.


## Step 19

Fasten a 1 x 2 furring strip up the height the length of the wall through the particle board and into the framing.

## Step 20

Insert the adjusted board into the last column of clips. Fasten the rainscreen board to the furring strips.

## Step 21

*(Optional) Create a beautiful finish by installing trim pieces of the same material as your rainscreen boards along your corners and edges.*

(No Horizontal Trim Board Method)

# Proper Preparation and Alignment

## Step 1

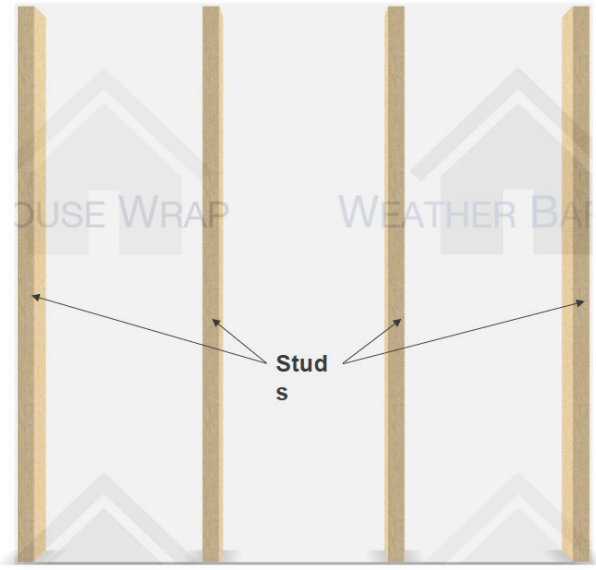
Install house wrap over Plywood sheathing to prevent moisture intrusion. (Always follow the vapor barrier manufacturer's instructions.)

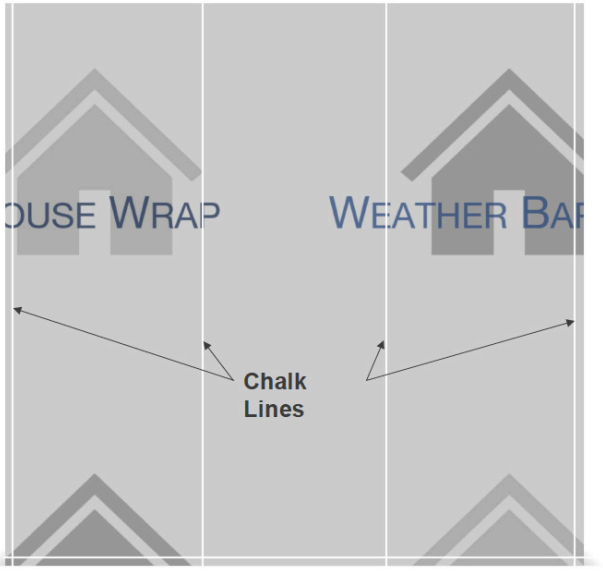
## Step 2

Using a chalk line, mark a level horizontal line at the point where the base of the Rainscreen siding will align. This is your baseline. It is recommended that your boards sit a minimum of 6" above the ground.

## Step 3

Using a chalk line, mark where your studs are located for ease of installation.



# Securing Furring Strip Baseline

## Step 4

Obtain enough length of 1 x 2" furring strips to cover the entire length of the wall. Cut small vertical channels (weep holes) into the furring strip approximately 12 inches apart. These are required to allow for drainage through the furring strip. These channels will face the wall.

## Step 5

Fasten the furring strip across the length of the wall. Ensure the furring strip is installed into the framing. This furring strip will act as your baseline so use a level to ensure it is perfectly horizontal.

# Marking Clip Placement and Installing Cor-A-Vent

## Step 6

Create horizontal chalk lines marking every 16 inches. These are the lines is where your clips will be placed.

## Step 7

Fasten your first column of clips. Depending on the wall you are building on, you may wish to cut the clip like from Step 4 of Horizontal Installation, to eliminate the side of the clip that would be on the outside.

## Step 8

Install Cor-A-Vent appropriately at the top and bottom of your wall across the entire width.

# First Vertical Board

## Step 9

Insert your first vertical board into the column of clips, gently tapping with rubber mallet if necessary

*TIP: Use a level to ensure this first board is aligned properly.*

# First Vertical Board

## Step 10

Gently tap the bottom of the rainscreen board until it is flush with the furring strip. Fasten the board through the face with 2 screws. You will need to predrill the rainscreen board in order to face screw and avoid any splitting. We recommend using a screw and plug system for a seamless look.

# Filling In

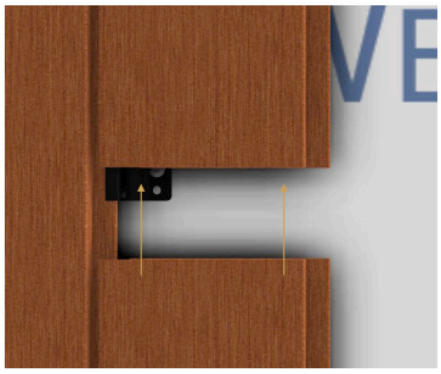
## Step 11

Continue to install clips and Rainscreen boards repeating Steps 9 & 10 until you have covered the span of your installation area. Clips will usually require only one screw each at this point of installation.

# Properly Butting Two Boards Together

## Step 12

When using multiple boards to span the height of the wall, ensure that the rainscreen boards butt together properly. If boards are not end matched the boards should meet with a single clip centered between the two boards. If the boards are end-matched, they can be joined together at random anywhere between clips. No trimming or extra clips are necessary.



# Securing & Fitting Your Last Board

## Step 13

To install your final board, first measure the remaining span that needs covered. Trim (rip) your rainscreen board to the appropriate width. Make sure you are trimming the correct side of the board off and leaving the correct side intact to fit into the clips.


## Step 14

Fasten a 1 x 2 furring strip up the height the length of the wall through the particle board and into the framing.

## Step 15

Insert the adjusted board into the last column of clips. Fasten the rainscreen board to the furring strips.

## Step 16

*(Optional) Create a beautiful finish by installing trim pieces of the same material as your rainscreen boards along your corners and edges.*

# Exoclad Notice

*****IMPORTANT*****

*You must contact your local building department before you begin designing your project. Your local building department (and/or Homeowner Association) will inform you of any zoning ordinances and buildings codes that specify where and how you can build. You are responsible for applying for and obtaining any and all required permits for your project.*

*Disclaimer:*

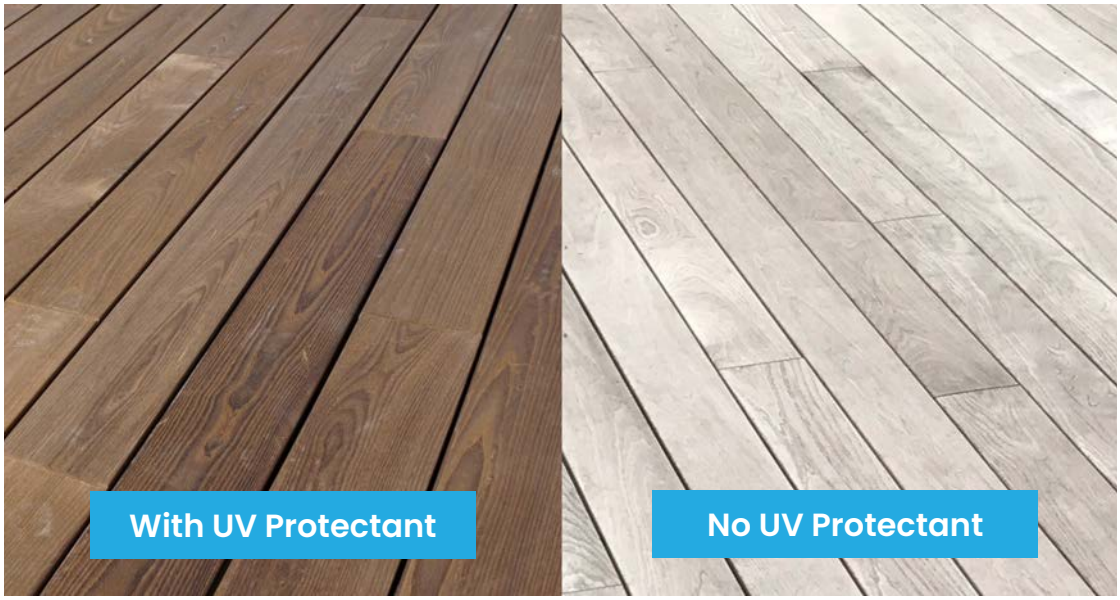
*Americana™ and Nova USA Wood Products provides this information as possible suggestions only and will not be held liable for your project's suitability or should you choose not to obtain the required permits, or if you fail to comply with all zoning ordinances and building codes. By purchasing material from Americana™ and Nova USA Wood Products, you agree to comply with our Terms & Conditions. Our siding products are carefully manufactured and inspected to ensure quality. However, these are natural wood products and are subject to variations in weight, density, color, grain and performance. Wood siding is naturally subject to dimensional changes as the moisture content in the wood fluctuates with humidity in the air. Swelling, shrinkage, checking and other movement of individual pieces are normal occurrences in wood siding.*

# After Installation

Thermally Modified wood will begin to “season” or adapt to its environment.

- *What you may see: superficial checking and occasional cracks near ends of boards. These do not get worse over time, and they do not indicate product failure. These adaptations are common to all woods. After several wet/dry cycles, many of these checks and cracks will diminish or close up altogether.*

Without UV protectant, Thermally Modified wood will lighten and eventually turn silver. This process begins immediately and may take a year to complete. This is also a very natural process for all wood products and it is superficial. The original brown color can be restored at any time by sanding and applying a UV protectant. Power washing alone does not remove the silvering.

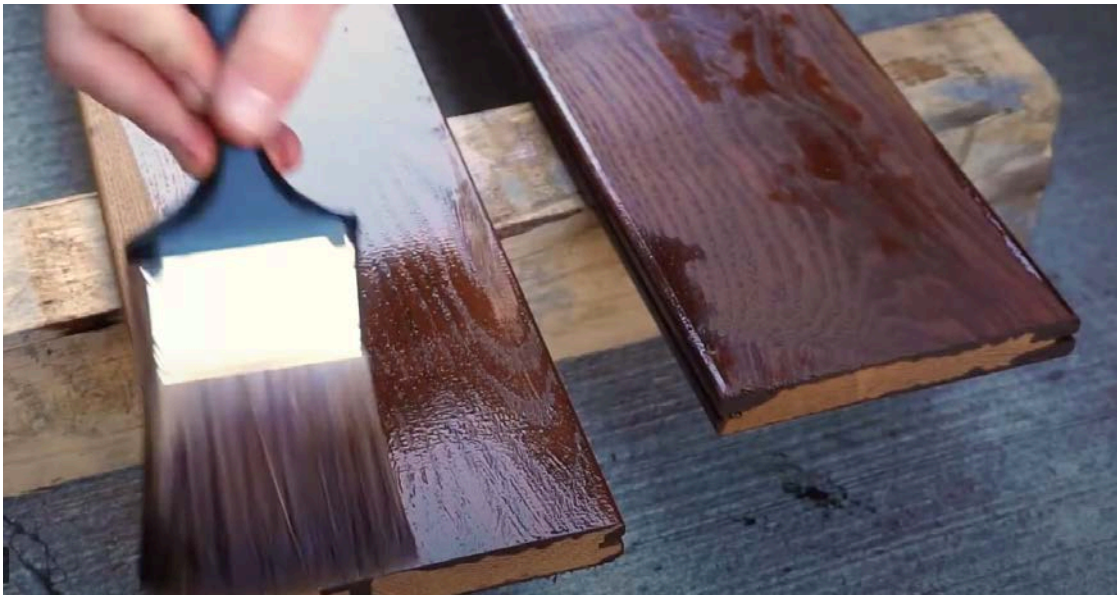



Recommended UV protectants:

- *For best results, Americana™ recommends Cutek™ Extreme (note: a pigment is required for UV protection) - https://cutekstain.com/us/, 1-833-MY-CUTEK*
- *Ask us about other finishes before using.*

# Wood Silvering

To prevent “silvering” of the wood, we recommend using a penetrating UV protectant. Most UV protectants also resist water and allow it to evaporate before penetrating the wood. This in turn reduces the incidence of checking and cracking.



Finishes - For best results, apply Cutek Clear to all sides before installation (or opt for factory-applied Cutek). To maintain or alter the color, apply another coat of Cutek + colortone of your choice on visible surfaces after installation.

***Please consult Americana before attempting to use any finishes other than those recommended.***

## Scan to watch Care and Maintenance Tips and Tricks Video