

The logo for Fiberon, featuring the word "fiberon" in a bold, lowercase, sans-serif font. The letter "i" is stylized with a dot that forms a small circle above the letter. A horizontal line is positioned above the letters "b", "e", "r", and "o". A registered trademark symbol (®) is located to the upper right of the letter "n".

fiberon[®]

**HORIZON AND SYMMETRY CLADDING
INSTALLATION INSTRUCTIONS**

GENERAL GUIDELINES

1. Only Fiberon Horizon and Symmetry products are approved for use in cladding and screen façade applications.
2. Consult local building code officials regarding applicable requirements for Rear Ventilated Façade System (RVFS) assemblies.
3. Where required, check with local officials for wind load testing requirements.
4. Consult any neighborhood associations and/or historic districts that may regulate size, placement, and type of cladding.
5. Check local building codes for additional restrictions and requirements.
6. Ensure all installations use accepted building practices and comply with local code and zoning requirements.
7. Understand that an installer with advanced DIY skills is capable of installing Fiberon Composite Cladding; however, we recommend that a trained building professional install Fiberon Composite Cladding.
8. These instructions were prepared for installers with experience in the field of siding, soffit, and cladding installation. It is assumed individuals have a working knowledge of the tools and application process.
9. Do NOT install Fiberon Composite Cladding directly in contact with sheathing that lacks sufficient and proper ventilation.
10. Fiberon Composite Cladding is a cladding component of a RVFS. These systems require the creation of a drainage plane, which can be achieved using suitable furring, entangled nets, etc., specifically designed for this application. Please note that these required materials are outside the scope of our warranty and installation instructions.
11. Extreme heat conditions, such as proximity to cooking grills and fire pits or concentrated/reflected light from glass, could result in damage to Fiberon Composite Cladding. Any concerns about potential damage and mitigation of risk should be addressed with the manufacturers of such products.
12. Fiberon Composite Cladding may not be suitable for every application. Determining the suitability for the intended use is not the responsibility of Fiberon.

PRE-CONSTRUCTION AND DESIGN CONSIDERATIONS

1. For a re-siding application, it is recommended to remove the old siding prior to installation of Fiberon Composite Cladding.
2. Always install Fiberon Composite Cladding over a flat substrate or a suitable cladding substructure. Remember, your siding installation will be only as straight and stable as the structural plane and materials behind it.
3. Fiberon Composite Cladding contracts and expands in response to temperature changes. This dynamic needs to be addressed via proper gapping and fastening in the layout of window and door openings, terminations, corners, and intersections with other cladding materials.
4. When laying out boards for optimal utilization of materials, take into account the side-to-side and end-to-end gapping instructions (TABLE 3) found on the end tag on each board.
5. Fiberon Composite Cladding has both a wood grain embossing pattern that repeats approximately every three feet and random color variations that do not repeat.6. Ensure all installations used accepted building practices and comply with local code and zoning requirements.
6. Plan your installation including lengths, furring, and color layout for best yield/finished appearance.
7. It is recommended that 12 or more boards be laid out in the shade 30 minutes prior to their installation. This will allow the boards to acclimate to ambient temperature as well as enable the installer to sort the boards for optimal aesthetics. Keep the boards out of direct sunlight.
8. Fiberon Composite Cladding is offered in two product families, each with multiple color options:
 - a. Horizon Cladding features bold multi-tonal colors and embossing. Four complementary patterns appear on each plank.
 - b. Symmetry Cladding offers a single, photo-realistic embossing with subtle multi-tonal streaking and a matte finish.
 - c. Mixing and matching colors to achieve a desired aesthetic effect is a common practice.
9. Fiberon Composite Cladding is available in two (2) widths/thicknesses. Consider the width, thickness, and color differences during design and installation:
 - a. 1" x 6" (nom) Square Edge (SE) are available in 12', 16' and 20' lengths.
 - b. 1" x 12" (nom) Square Edge (SE) are available in 12' lengths only.
 - c. Both cladding widths:
 - i. May be installed vertically, diagonally, or horizontally.
 - ii. May be installed inverted as soffit, following cladding installation instructions (refer to Soffit Addendum)
 - iii. May be installed as part of a screen facade application, upon suitably engineered and fabricated structural members, without the WRB, but with all other installation requirements being met (refer to Screening Addendum)
10. Remember:
 - a. 1" x6" (nominal) boards are capped on four (4) sides. Either face may be exposed.
 - b. 1" x 12" (nominal) boards are capped on three (3) sides. Only the capped face should be exposed.
 - c. While color names are the same, the different board widths are similar and complementary in grain and color, but not identical in either.
 - d. Fiberon advises visual inspection prior to installation to ensure the desired aesthetic may be achieved.

CLADDING SPECIFICATIONS: HORIZON AND SYMMETRY 1" x 6" (nominal) and 1" x 12" (nominal)

DRAINAGE PLANE, VENTILATION AND CLEARANCES:

As part of a RVFS application, Fiberon 1" x 6" (nominal) and 1" x 12" (nominal) Composite Cladding requires a drainage plane that will ensure adequate ventilation and uninterrupted air flow. The drainage plane can be achieved using a suitable furring material or appropriate weather-resistive barrier (WRB) with engineered drainage plane matting. Recommended ventilation is 3/4" (20 mm). Minimum ventilation of 3/8" (10mm) is required behind the entire assembly. Air intake (bottom) and exit (top) no less than 3/8" (10mm) is required. Care should be taken to ensure that minimum distances form horizontal surfaces (roofs, canopies, etc) that can hold water and that the clearance is 1" above potential high water levels. Likewise, minimum distances from hard vertical surfaces (intersecting walls, stone works, windows, doors, metal trim, etc.) must be maintained. The cladding may not be installed closer than 6" from grade. Furring materials must be exterior grade, and able to withstand direct sun and weather contact.

TABLE 1	MIN	RECOMMENDED	HARD SURFACE CLEARANCE	GROUND CLEARANCE
DRAINAGE PLANE	3/8" (10mm)	3/4" (20mm)	1" HORIZONTAL SURFACES 1/4" VERTICAL SURFACES	MIN 6" ABOVE GRADE

STRUCTURAL ATTACHMENT:

Fiberon 1" x 6" (nominal) and 1" x 12" (nominal) Composite Cladding must be securely fastened to an approved structural substrate. The maximum spacing of the fasteners that secure the cladding to the structural members is 16" OC for 1" x 6" or 12" OC for 1" x 12".

TABLE 2	MAX SPACING	RECOMMENDED SPACING	CAUTION
1" x 6" STRUCTURAL ATTACHMENT	16" OC	16" OC	NEVER > 16" OC
1" x 12" STRUCTURAL ATTACHMENT	12" OC	12" OC	NEVER > 12" OC

GAPPING:

Fiberon Composite Cladding must be gapped in accordance with TABLE 3.

TABLE 3	If <30°F	If >31°F AND < 50°F	If > 51°F AND < 70°F	If >71°F AND < 90°F	If > 91°F
GAPPING: BUTT	1/4"	3/16"	1/8"	1/16"	1/32"
GAPPING EDGE TO EDGE	3/16"	3/16"	3/16"	3/16"	3/16"
AGAINST WALL OR POST	1/4"	1/4"	1/4"	1/4"	1/4"
FROM ROOF SURFACE	1"	1"	1"	1"	1"
FROM FINISHED GRADE	6"	6"	6"	6"	6"

FASTENERS:

Different face fasteners produce varying aesthetics. Testing fasteners for desired appearance is recommended. Because of their unique engineering, only fasteners specifically designed for composite decking should be used. If a composite deck screw is not used, pre-drilling is required and testing for aesthetic is recommended. Note that pre-drilling will always produce the best results, regardless of the type of screw used.

When installing in an area in which salt water or salt spray could result in rust the use of 316 stainless steel-grade fasteners is recommended. Note that rust stains resulting from fasteners are not covered by stain and fade warranty.

TABLE 4	QTY	MIN DISTANCE FROM EDGE	MIN DISTANCE FROM END
1" x 6" FASTENERS (#9MIN SIZE)	2 EVERY 16" OC	NOT LESS THAN 1"	NOT LESS THAN 1 1/2"
1" x 12" FASTENERS (#9MIN SIZE)	3 EVERY 12" OC	NOT LESS THAN 1"	NOT LESS THAN 1 1/2"
FASTENER LENGTH	TESTING FOR HIGH VELOCITY HURRICANE ZONES WAS DONE WITH 2 1/2" FASTENERS		

CLADDING INSTALLATION INSTRUCTIONS: HORIZON AND SYMMETRY 1"x6" (nominal) and 1"x12" (nominal)

TOOLS REQUIRED

- Power drill
- Countersinking drill bit
- Protective eyewear
- Tape measure
- Torpedo level
- Speed square
- Miter saw
- Carpenters pencil
- Square
- Level (minimum 4 ft.)
- Scaffolding
- 3/16 spacers (lengths of aluminum bar stock are effective in maintaining consistent side-to-side gapping)

BEFORE YOU BEGIN THIS INSTALLATION

Fiberon Composite Cladding is a low-maintenance replacement for wood cladding in RVFS applications. The layout, workability, and installation will be similar but not identical to wood.

1. Upon delivery, ensure that the order is complete and product has arrived in good condition.
2. Fiberon is not responsible for the installation of blemished or damaged product.
3. Store Fiberon Composite Cladding flat and supported every 2 ft. on center. Keep the product covered until staging and installation. Improper storage will result in longitudinal distortions that mirror the storage plane.
4. Protect boards from mineral dust, cement, and mortar exposure during storage, transport, and installation.
5. Fiberon Composite Cladding is a finished material. Reasonable care, as with any prefinished product, will result in a premium quality installation.
6. Pay attention to fastener type and spacing, as well as side-to-side and end-to-end gapping.

INSTALLATION CHECKLIST

1. Install drainage plane a minimum of 6" above grade. (TABLE 1)
2. Fiberon Composite Cladding should be installed to start ¼" – ½" lower than drainage plane materials.
3. Corner boards should extend a minimum of ½" lower than the siding courses.
4. Secure fasteners starting at the centermost furring strip, and working outward toward the board ends every 16" or 12" OC or less. (TABLE 2)
5. Check the board often for level/plumb.
6. Secure the end of the board using appropriate quantity of approved fasteners, never closer than 1-½" from the board end and 1 in. from the board edge. (TABLE 4)
7. Pre-drill end fasteners to prevent stress cracking. Pre-drilling will always produce the best results for all types of screws.
8. When butting ends, ensure a sufficient gap is left for thermal expansion/contraction. (TABLE 3)
9. Using 3/16" spacers, secure the next course starting from the approximate center of the board and working outward. (TABLE 3)
10. Continue checking to ensure courses are level/plumb.
11. Adjustments may be necessary to accommodate board width variation.
12. As courses are added, maintain proper butt-gapping. Stagger butt joints in a consistent "stair step" fashion for a traditional look or stack the butt joints for a more modern or industrial look.
13. Never allow a butt joint directly over or under an opening in the wall.
14. Fasteners must always be installed perpendicular to the board.
15. Angling fasteners is not permitted, as this will result in cracking due to thermal expansion/contraction.
16. Notch boards around openings in the wall and always allow required gapping. (TABLE 3)
17. Always pre-drill holes in boards 3" wide or narrower.
18. At the top of the wall, it may be necessary to rip the board to the required width.
19. Move to adjoining walls, ensuring courses are level with the previous wall.
20. Frequently check courses for level at the corners to ensure all boards are aligned.
21. When installing corner boards and framing out windows, additional furring may be required to provide sufficient fastening surface.
22. Build out the corner boards and window/door trim at least ¼" beyond the cladding.
23. Ensure proper gapping at corners and at all intersections with different planes or materials. (TABLE 3)

BEST PRACTICES:

1. Prior to installation, rack or lay out twelve or more boards in shade or indirect sunlight. This will assist in achieving an optimal aesthetic outcome. Avoid racking in direct sunlight
2. Prior to installation, Fiberon products must be stored in a level manner, properly supported, every 2' OC.
3. Allow materials to acclimate to ambient temperature in shade prior to cutting and use. This will facilitate consistent and proper gapping.
4. To reduce temperature acclimation time, store the product in a location in which the temperature is comparable to the installation environment. Improper product storage may result in distortions visible after installation.
5. Frequently check that the courses remain level. Adjust for slight fluctuations in board width as you go.
6. When laying out the installation, take appropriate steps to avoid the need to rip boards into very narrow profiles, such as when cutting around windows and doors.
7. Never use less than the minimum-sized fastener.
8. Always use a fastener that is suitable for the job, especially in salt water and salt spray environments.
9. Never use fewer than the minimum required number of fasteners.
10. Never angle fasteners, and always install perpendicular to the cladding.
11. Failure to gap properly will create consequences that may not be easily remedied. Always follow the gapping requirements. (TABLE 3)
12. Never exceed maximum spans between furring strips (or their engineered equal). Inconsistencies in the construction of the structural wall may be reflected on the cladding surface.
13. Ensure the fastening surfaces are flat and true prior to starting board installation.
14. Never use Fiberon boards as structural elements.
15. Furring materials must be exterior grade, and able to withstand direct sun and weather contact.

WHAT NOT TO DO:

1. Do not use Fiberon grooved (GV) boards. Only square edge (SE) boards are warranted as cladding.
2. Do not install without minimum 3/8" (10mm) drainage plane. (3/4" (20 mm) preferred) (TABLE 1)
3. Do not install fewer than the required amount of fasteners per structural attachment.
4. Do not attach Fiberon Composite Cladding to structural members that are rotted, damaged, or otherwise insufficiently strong.
5. Do not install fasteners without first testing the aesthetic and deeming it acceptable.
6. Do not install fasteners closer than 1" from board edges. (TABLE 4)
7. Do not install fasteners closer than 1.5" from any board end. (TABLE 4)
8. Do not install boards around hard penetrations or intersecting surfaces without proper setback spacing.
9. Do not drive fasteners in any angle other than 90 degrees.
10. Do not install structural attachments more than the required amount on center.
11. Do not use Fiberon Composite Cladding in any structural capacity.
12. Do not caulk joints at board ends or between boards, as this effectively removes the gap.

OTHER RVFS COMPONENTS:

FASTENERS:

Use the fastener best designed for your aesthetic outcome and framing components. Consider: Do you want a completely concealed head, an almost invisible color-matched head, or a highly visible head that serves as an architectural element? Or, will you mix all three for dramatic effect?

Fiberon is brand-agnostic regarding fasteners; however, the fastener must be no smaller than a #9 screw and of sufficient quality and material specification for the application*. Consult with the fastener manufacturer for compatibility and any special considerations.

* A minimum #9 x 2 1/2" fastener is required in area of high winds, i.e. jurisdictions under Miami-Dade County FL regulation.

WATER-RESISTIVE BARRIERS:

Fiberon is brand-agnostic regarding the WRB used, provided the WRB is of sufficient quality and material specification for the application. Water-Resistive Barriers (WRBs) are the first line of defense in a RVFS application. Choosing the correct WRB is an important decision with regard to water resistance, air and moisture infiltration and exfiltration, and long term UV-resistance. Consult with the WRB manufacturer for compatibility and any special considerations.

DRAINAGE PLANE:

Fiberon does not provide products to create drainage planes and is brand-agnostic. However, any products chosen must of sufficient quality and material specification for the application. The drainage plane can be created by use of proper furring materials built into, or installed separately, from the chosen water-resistive barrier product. Porous furring is always recommended.

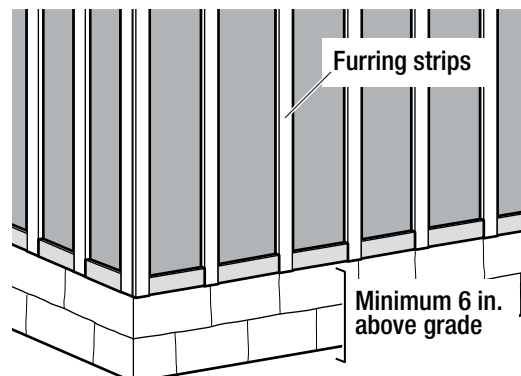
TRIM:

Trim is an important consideration from both an aesthetic and performance perspective. Fiberon materials may be used to create trim systems. We provide shop drawings as illustration of prescriptive methods for installing trim components using common materials and methodologies. Since new trim materials are entering the market, we recommend you check our website for updated shop drawings. There are a number of engineered trim solutions on the market that are suitable when installed correctly. Fiberon does not provide engineered trim products and is brand-agnostic, provided the brand used is of sufficient quality and material specification for the application. Consult the engineered trim manufacturer for compatibility and any special considerations.

Horizontal Installation

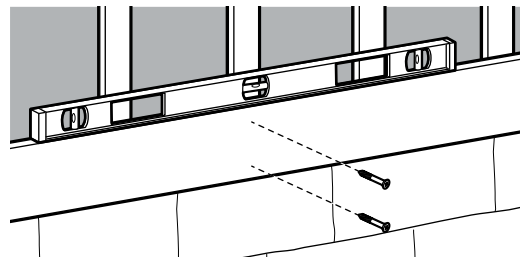
1 Chalking a level line

- Chalk a level line based on the lowest corner of the structure, or lowest point where siding will be installed, particularly in regard to remodels.
- The line must be a minimum of 6 in. above grade. Where boards are installed above a roof system (as in a turn gable), allow a minimum of 1 in. space between the roof surface and the bottom of the board. Refer to the Gapping Requirements and Specifications table.
- Secure the furring strips with the bottom of the furring strip starting at the chalk line, and secured no more than 16 in. OC.



2 Installing the first course

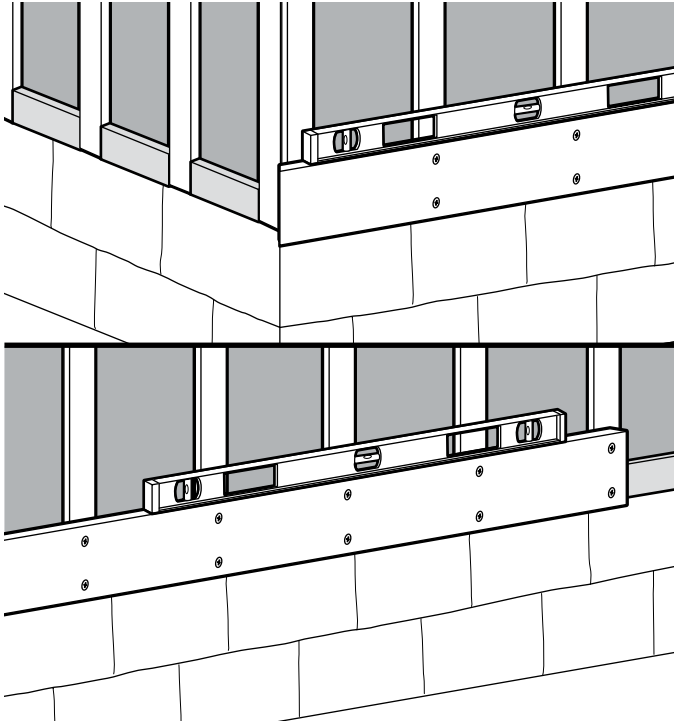
- Measure and cut board to length, allowing for butt joints on shared 1x4 minimum furring strips.
- Ensure the board is level and secure it to the approximate middle furring strip using two #9 gauge x 2-1/2 in. composite decking screws and allowing 1 in. clearance from board edges. Refer to the Furring, Fastener, and Gapping Specifications sections.



Horizontal Installation (continued)

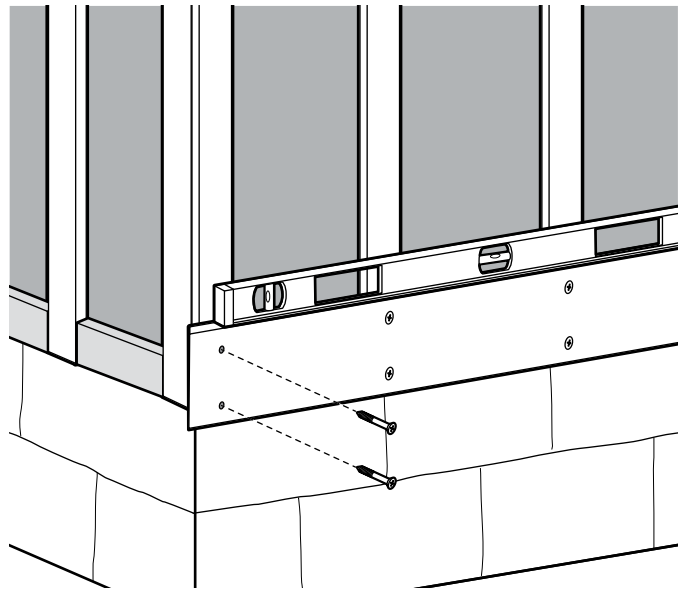
3 Securing the first boards

- Secure the boards outward toward the board ends using two screws per furring strip. Check often to ensure the boards remain level.



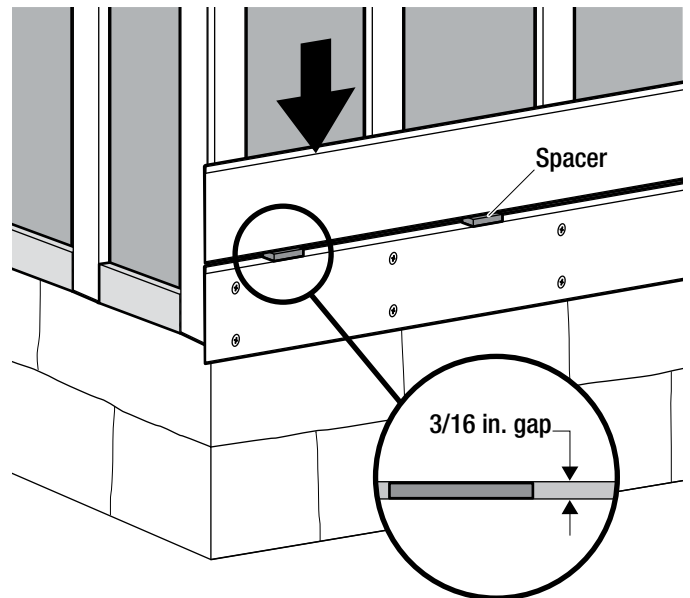
4 Securing the board ends

- Secure the end of the board using two #9 gauge x 2-1/2 in. composite decking screws, not closer than 1-1/2 in. from the board end and not closer than 1 in. from the board edge.
- Pre-drill end fasteners to prevent stress cracking.
- In courses requiring more than one board, butt the next board to the previous, using the table in the Gapping Requirements and Specifications section.



5 Installing the second course

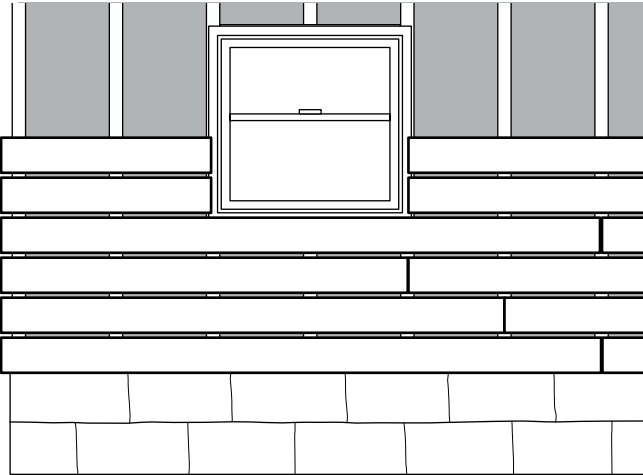
- Using maximum 3/16 in. spacers, secure the next course, starting from the approximate center of the board and working outward.
- Continue checking to ensure courses are level. Adjustments may be necessary to accommodate board width variation.



Horizontal Installation (continued)

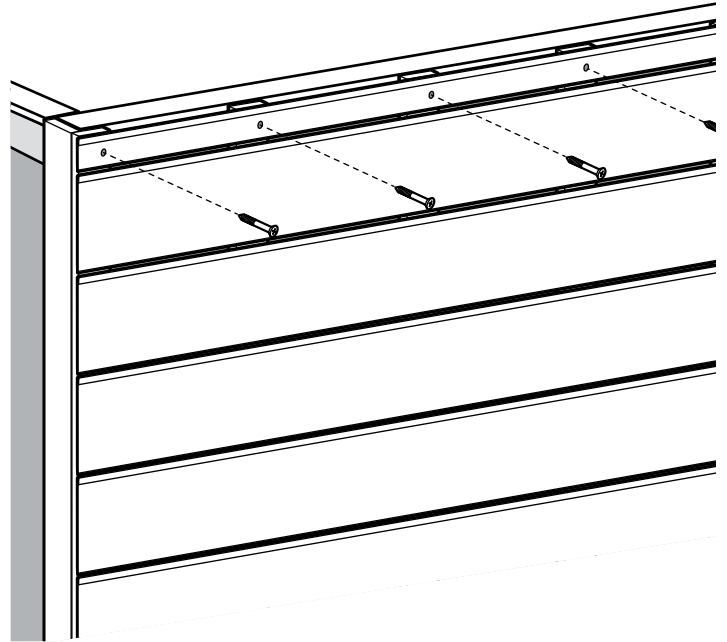
6 Installing the remaining courses

- As courses are added, stagger butt joints in a consistent “stair step” fashion for best results. **Never allow a butt joint directly over or under an opening in the wall.** Stacked butt joints are permitted, but require special care in gapping.
- At butt joints, you must install fasteners perpendicular to the board. Do not angle fasteners. This may require sistering of furring strips.
- If possible, do not use boards that do not span the length of three furring strips at a minimum (approximately 32 in.). Notch boards around openings in the wall. Always pre-drill holes in boards 3 in. wide or less.



7 Ensuring the top of the wall is proper width

- At the top of the wall, it may be necessary to rip the board to the required width. Always pre-drill boards 3 in. wide or less.



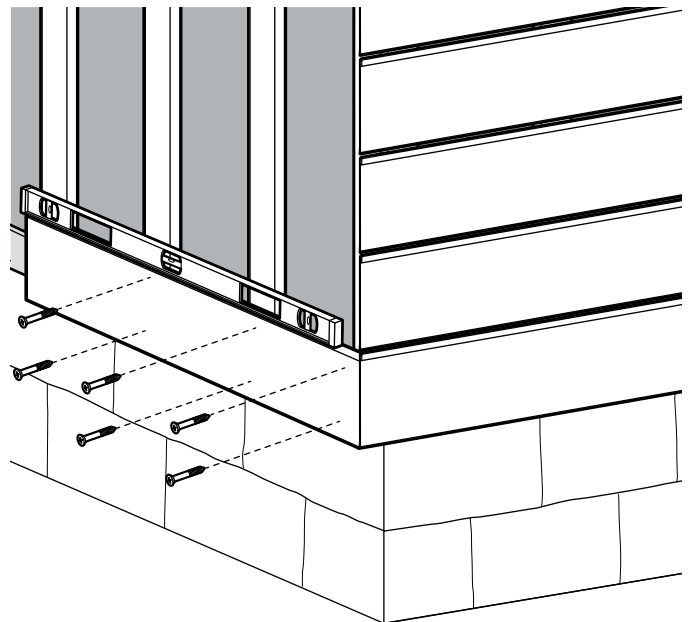
8 Continuing the installation to adjoining walls

- Move to adjoining walls, ensuring courses are level with the previous wall. Frequently ensure courses are level at the corners to ensure boards are all aligned.



NOTE: When installing corner boards and framing out windows, additional furring may be required to provide sufficient fastening surface. Build out the corner boards and window/door trim at least 1/4 in. beyond the cladding. Corner boards should extend 1/2 in. – 1 in. lower than the siding courses.

- At corners and all intersections with different planes or materials, ensure proper gapping, fasteners, and fastener placement. Refer to the Furring, Fastener, and Gapping Specifications sections.



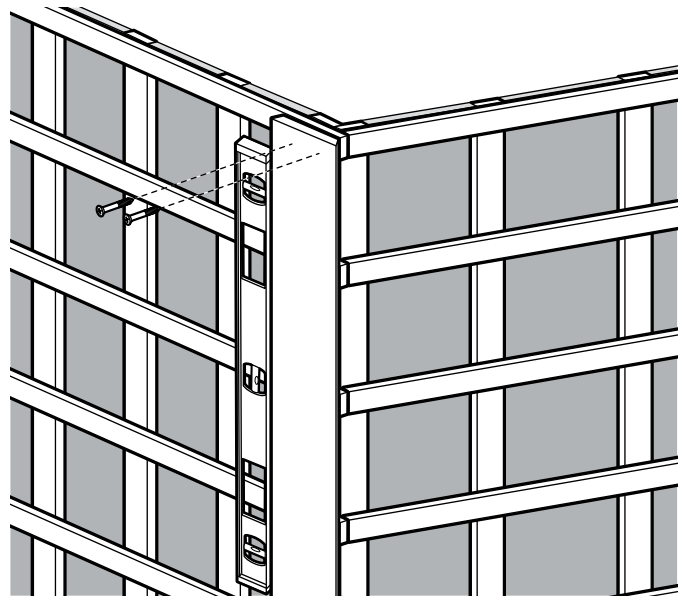
Vertical Installation

1 Installing the first course



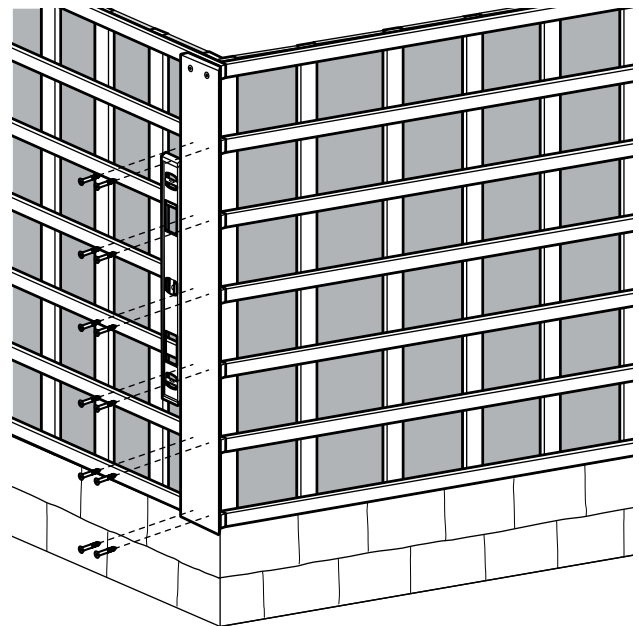
NOTE: For a centered appearance, you may need to rip two equal boards.

- Measure and cut the first board. The board should extend 1/2 in. – 1 in. below the furring/strapping, and be 1/4 in. clear from the soffit. Starting from the top and working downward, secure using two #9 gauge x 2-1/2 in. composite deck screws placed a maximum of 16 in. O.C., not closer than 1 in. from board edges, and 1-1/2 in. from board ends.



2 Securing the boards

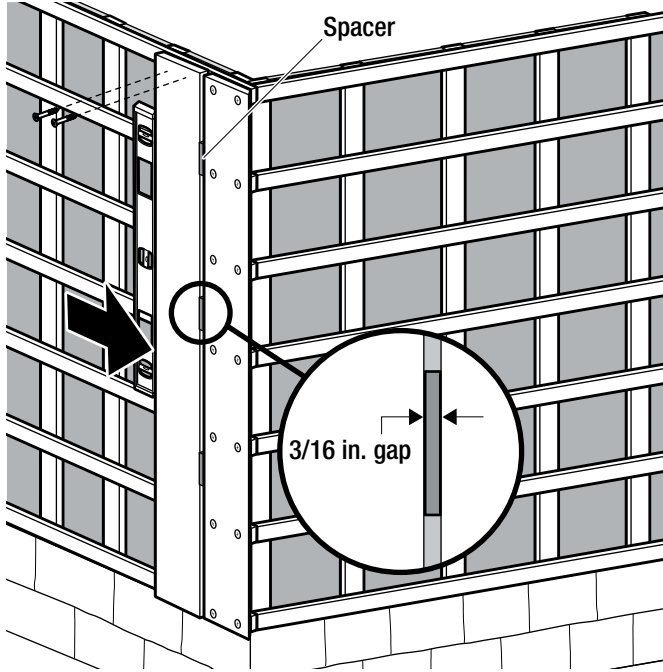
- Working downward, secure the board into each furring/strapping, using two #9 gauge x 2-1/2 in. composite decking screws. Do not exceed 16 in. O.C.. Ensure that you maintain plumb.



Vertical Installation (continued)

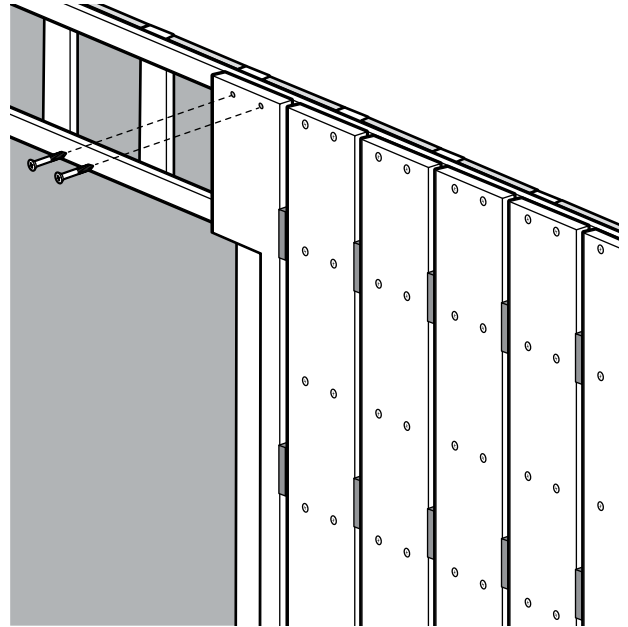
3 Installing the second course

- Using 3/16 in. spacers, secure the next course starting from the top and working downward.



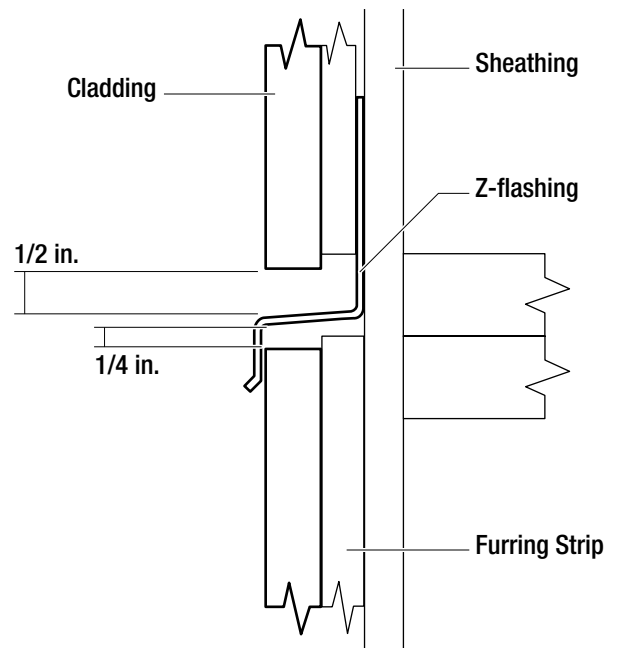
4 Continuing the installation

- Notch boards for openings in the wall. Always pre-drill holes in widths 3 in. or under, and secure with one #9 gauge x 2-1/2 in. composite deck screw.

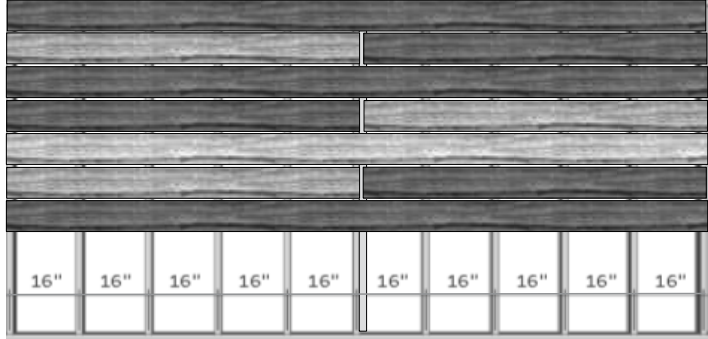
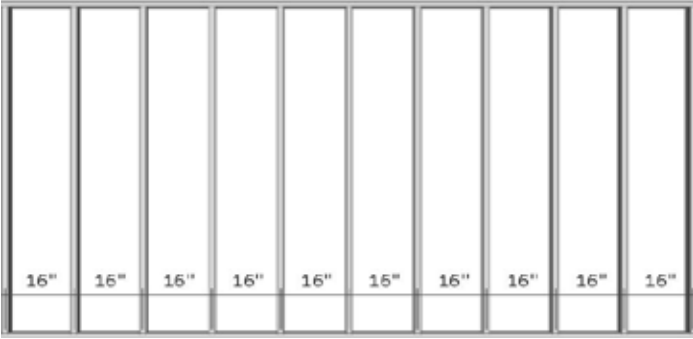


5 Using Z-flashing

- For walls exceeding the available length of the boards, separate the lower wall from the upper with a z-flashing. Allow a 1/4 in. clearance between the top of the lower boards to the underside of the z-flashing. Maintain approximately 1/2 in. clearance between the z-flashing and the start of the upper boards.



ADDENDUM: SCREEN FAÇADES



SCREEN-FAÇADE DEFINITION:

Non-structural facade disguising the realities of form, size, and structure of a building behind

**A Dictionary of Architecture and Landscape Architecture 2000,*

SCREEN FAÇADE APPLICATIONS

Installation of Fiberon Composite Cladding as a Screen-Façade* is permitted when Installation is consistent with Fiberon's Installation Instructions. Fabrication of the structural plane, the appropriateness of materials used in its construction, and the attachment of the structural plane to other structures, whether on grade or above grade, is outside the scope of our instructions and warranty.

STRUCTURAL PLANE

- **STRUCTURE** Designed, fabricated, fastened with materials appropriate to the application
- **MATERIALS** Outside the scope of Fiberon specifications, instructions and warranty
- **SPACING** Structural members spaced 16" OC (or less)

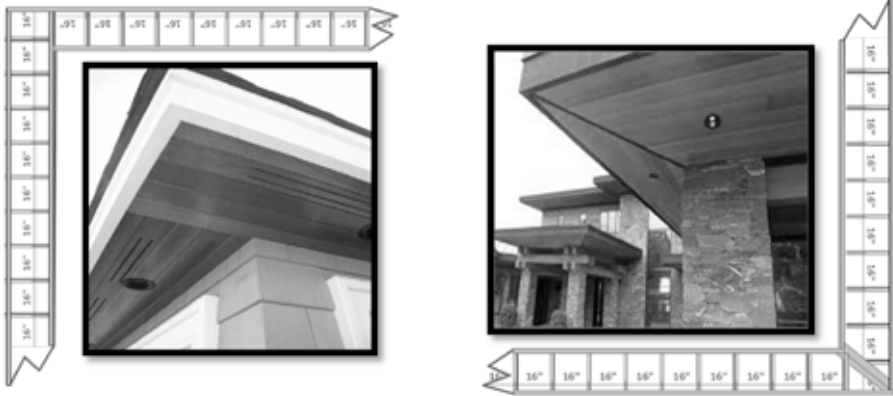
BOARD ATTACHMENT

- **INSTALLATION** Refer to our website for Composite Cladding Installation Instructions
<https://www.fiberondecking.com/assets/downloadable-resources/Fiberon-cladding-installation.pdf>

WARRANTY

- **RESIDENTIAL** Applies only to those products made by Fiberon and covered by its warranty
<https://www.fiberondecking.com/assets/downloadable-resources/fiberon-residential-warranty-fib-0291-lit.pdf>
- **COMMERCIAL** Applies only to those products made by Fiberon and covered by its warranty
<https://www.fiberondecking.com/assets/downloadable-resources/fiberon-residential-warranty-fib-0291-lit.pdf>

ADDENDUM: SOFFIT



SOFFIT DEFINITION:

Visible underside of an arch, balcony , beam , corona , cornice , vault , or any exposed architectural element

**The Oxford Dictionary of Architecture (3 ed.)*

SOFFIT APPLICATIONS

Installation of Fiberon Composite Cladding is permitted as a decorative component in soffit type applications when Installation is consistent with Fiberon's installation instructions for cladding. Fabrication of the structural plane of attachment, the appropriateness of the materials used in its construction, and the ventilation requirements for the particular installation are outside the scope of our instructions and warranty.

STRUCTURAL PLANE

- **STRUCTURE** Designed, fabricated, fastened with materials appropriate to the application
- **MATERIALS** Outside the scope of Fiberon specifications, instructions and warranty
- **SPACING** Structural members spaced 16" OC (or less)

BOARD ATTACHMENT

- **INSTALLATION** Refer to our website for Composite Cladding Installation Instructions
<https://www.fiberondecking.com/assets/downloadable-resources/Fiberon-cladding-installation.pdf>

WARRANTY

- **RESIDENTIAL** Applies only to those products made by Fiberon and covered by its warranty
<https://www.fiberondecking.com/assets/downloadable-resources/fiberon-residential-warranty-fib-0291-lit.pdf>
- **COMMERCIAL** Applies only to those products made by Fiberon and covered by its warranty
<https://www.fiberondecking.com/assets/downloadable-resources/fiberon-residential-warranty-fib-0291-lit.pdf>

(PAGE INTENTIONALLY LEFT BLANK)

fiberon[®]

1-800-573-8841 | FIBERONCLADDING.COM

Please refer to our website at fiberoncladding.com
for the latest information and installation instructions.

MADE IN THE USA