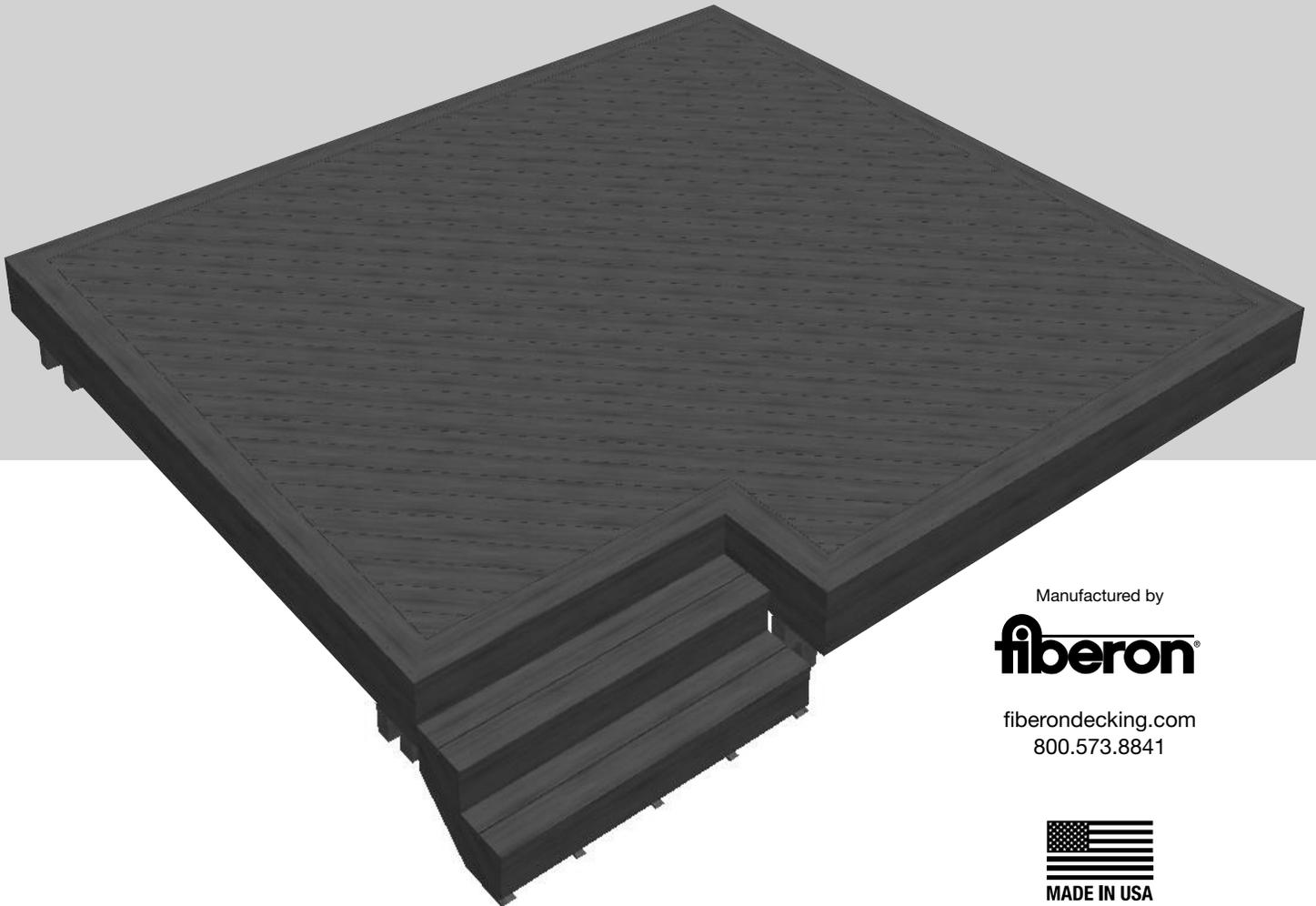


fiberon® Decking

2017 Installation Instructions

Updated 12/16 for: Horizon, Symmetry, Paramount,
Protect Advantage, Good Life, Relax, and Sanctuary



Manufactured by

fiberon®

fiberondecking.com
800.573.8841



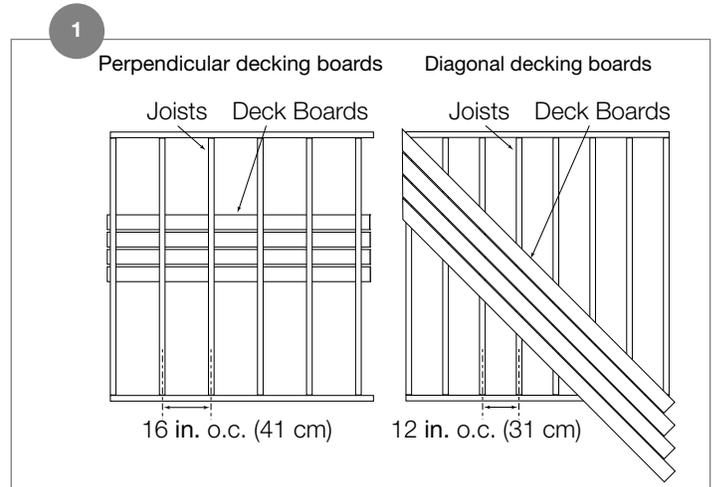
MADE IN USA

Getting started

Follow local approved building codes. Careful planning of the finished deck layout will result in better looking finished projects. Failure to follow installation guidelines could void warranty.

- Before starting, material should be stored on a flat surface, supported every 24 in. (61 cm) and covered if original packaging is removed.
- Read the instructions for both the decking and railing systems planned for the project. Thoroughly reading all instructions first will make for more profitable projects. Failure to do so may result in more difficult installation and may void warranty.
- This decking is for deck surface use only, not structural application.
- Make sure there is adequate and unobstructed air flow under 50% of the deck. Allow a minimum of 1.5 in (4 cm) between bottom of joist and the ground. Water must be able to flow away from under the deck. Improve drainage or grade flat areas where standing water may gather. Do not install decking directly to an existing or solid surface.
- Sleeper installation: Minimum joist height is 1.5 in, installed level, in direction of water runoff and directly to a solid sub-structure. Create adequate ventilation for the deck by widening side-to-side spacing between boards to ¼ in. with a maximum of 3/8 in. gap. The deck design must allow unrestricted air flow under the deck at the open joist ends for ventilation and drainage.
- Under-deck waterproofing systems, properly installed, can provide additional living or storage space. Improper installations are those that restrict air flow and result in buildup of heat and/or humidity, which can result in unwanted consequences.
- When using a ladder on composite decking, it is mandatory to lay down a sheet of plywood over the deck surface to disperse the load of the ladder's feet to nearby underlying joists. Drill fasteners downward through the top of the plywood sheet to keep it from slipping. Position fasteners so they adequately protrude and rest firmly in the gaps between the deck boards and into the joists. This will avoid leaving holes in your decking once the plywood sheet is removed. Always follow the ladder manufacturer's instructions and safety tips.
- Exercise caution if walking barefoot. Fire and unusual sources of heat and heat buildup can potentially damage Fiberon decking surfaces. Examples would include fire, reflected light from different types of glass (ex. low-e glass), fire features, and under-deck waterproofing installations that do not provide the 1.5 in. (4 cm) of unobstructed net free ventilation.
- Dry or windy environments may create a temporary condition of static electricity, which will vary depending on climate and site conditions. In the case of excessive static buildup on an installed PVC or capped PE deck, Fiberon recommends the following procedure: 1. Remove loose debris from the deck surface. 2. Dilute ACL Staticide® Concentrate 1 part to 39 parts water (1:39). 3. Spray or mop entire surface of the deck. Allow to air dry. Do not attempt to wipe the surface dry as wiping will reduce the effectiveness of the anti-static coating (*Although very safe in diluted form, ACL Staticide® Concentrate is considered a hazardous chemical non-diluted. DO NOT use ACL Staticide® Concentrate non-diluted.)

Note: Using joist tape can lengthen the life of the decking substructure.



Joist location is important for the safety of the deck and will affect the layout, cost, and ease of installation for the railing system. If railing will be installed, determine rail post placement prior to joist construction. See page 9 for information about planning post placement for rail installations. Joists used in deck frame construction should be 2 in. x 8 in. (5 cm x 20 cm) or larger.

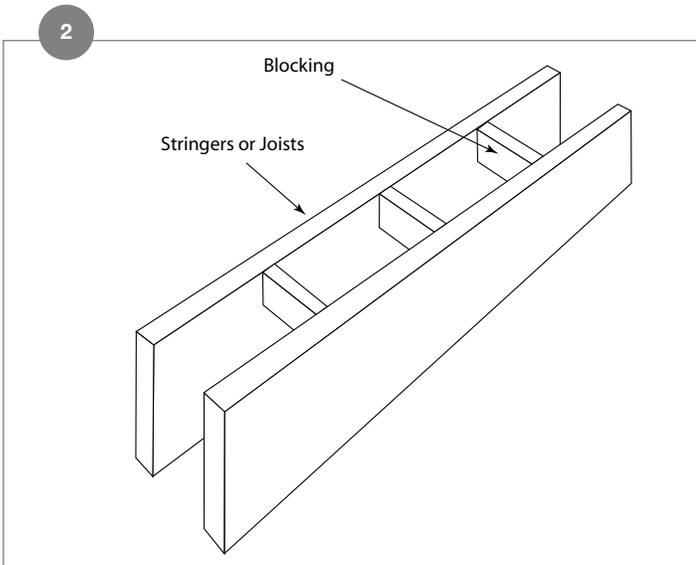
Note: For decks using metal joists, specialized surface fasteners are required. Do not use Phantom Hidden Fasteners. Only fasteners for metal that install at a 90 degree angle are required.

When installing heavy loads on top of your decking project (for example, a hot tub) it is important to also understand the requirements of the manufacturer as they may have specific framing and support requirements for their warranty coverage.

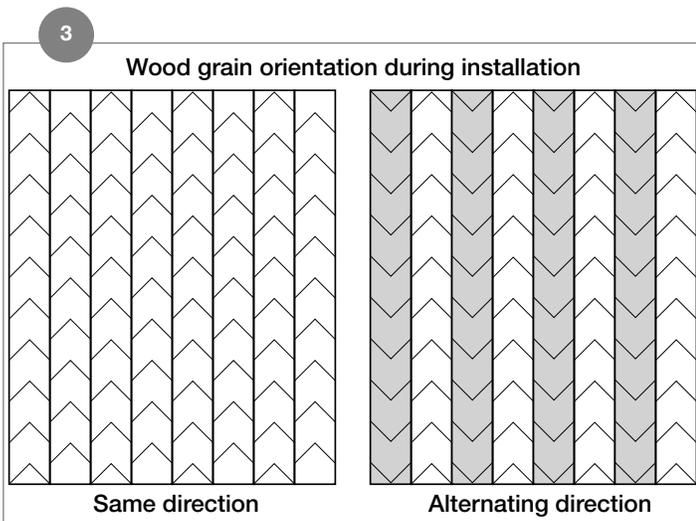
Joist/Stringer spacing						
	Residential			Commercial		
Brand	Perpendicular	Diagonal	Stairs	Perpendicular	Diagonal	Stairs
Paramount	16 in.	12 in.	*24 in.	12 in.	8 in.	*12 in.
Horizon	16 in.	12 in.	9 in.	12 in.	8 in.	9 in.
Sanctuary	16 in.	12 in.	9 in.	12 in.	8 in.	9 in.
ProTect Advantage	16 in.	12 in.	8 in.	12 in.	8 in.	8 in.
Good Life	16 in.	12 in.	7 in.	12 in.	8 in.	7 in.
Relax	16 in.	12 in.	9 in.	12 in.	8 in.	9 in.

Note: *When installing Paramount decking, secure stair treads over and in contact with a treated pine 2x6, installed flat, not on edge, as under support, and secured with Simpson A23 approved connectors and 10d x 1-1/2 in. hot galvanized nails.

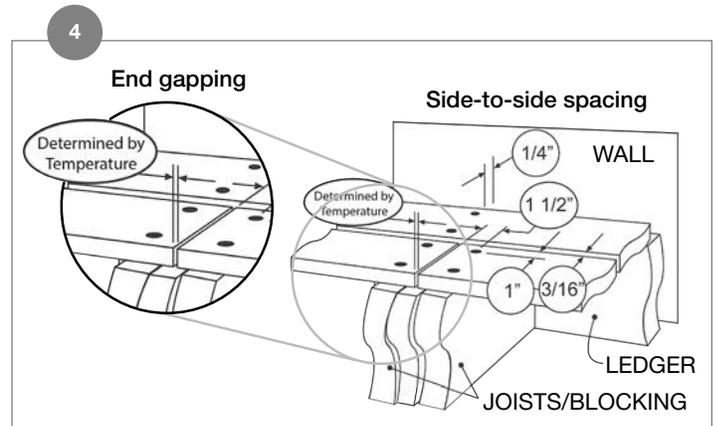
Decking installation instructions



When installing blocking for more intricate decking patterns, remember that solid blocking (blocking laid on the flat) will inhibit water flow and result in buildup of organic materials over time, which will make cleaning more difficult. When blocking is required, install ladder style for best results.



Achieve different looks by laying the decking in the same or alternating directions. There are several different wood grain patterns to provide a less repetitive and more natural wood appearance. The graining pattern repeats approximately every 44 in. (1.12 m) along the board length. During the planning phase of any deck project, arrange decking before installation to achieve the desired pattern and color effect. This is also important if different lengths/bundles of material are used, as different wood grain patterns and color tones may need to be mixed to achieve the desired look.



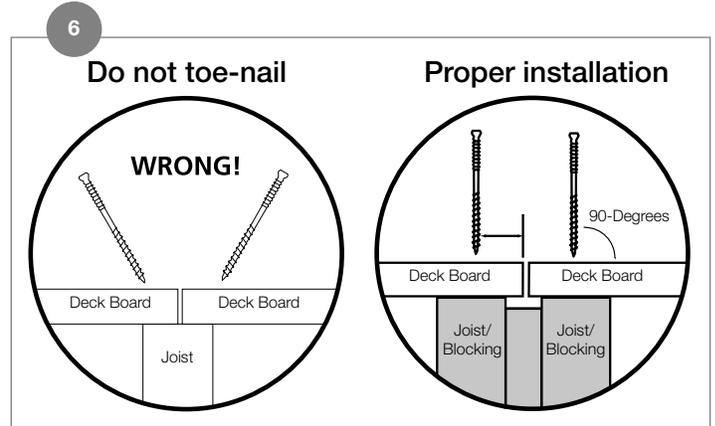
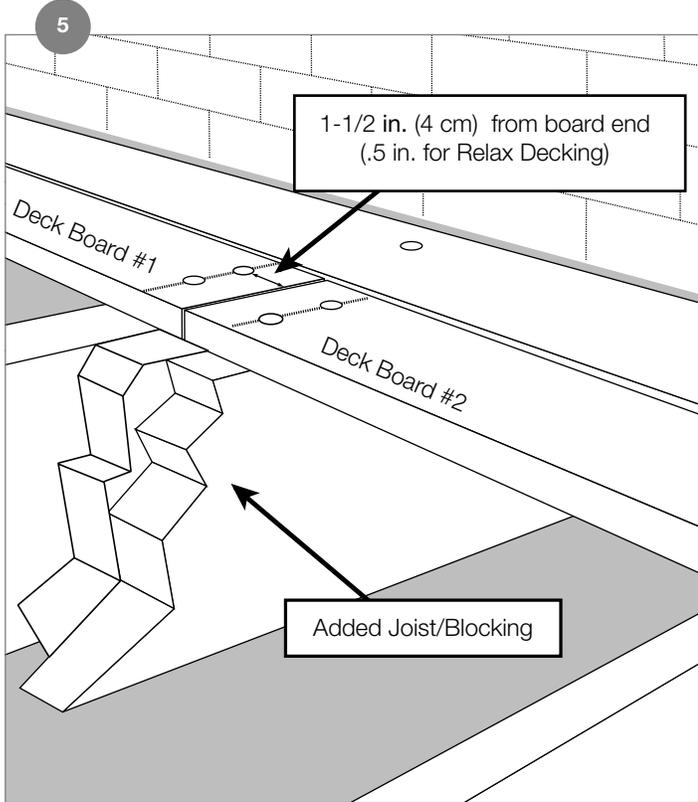
All decking materials, whether wood, composite, or metal, undergo some degree of linear expansion with the changes of weather and the seasons. For best spacing results, keep boards out of direct sun during storage and cutting processes, and throughout installation if possible. Never cut and install boards in direct sunlight. To compensate for the effects of contraction and expansion, use short boards (where possible) with splitter/divider boards between each continuous run of boards.

Adequate board spacing of a minimum 3/16 in. between board sides will provide proper drainage and ventilation and assist with the removal of small organic debris. Allow a minimum of 1/4 in. spacing between boards and any permanent structure. Spacing requirements must be met for full Fiberon warranty coverage.

Note: Special consideration should be taken when working with dark colors, as they will experience larger temperature swings during normal use. To help control end-to-end spacing, darker-colored decking should be kept at ambient temperature and shaded from direct sun prior to cutting and immediate securing. To create less visible gapping, use lighter-colored boards in the field of the deck with darker-colored boards as design accents.

End-to-end spacing by temperature					
Brand	35° & Under	36° - 69°	70° - 89°	90° - 109°	110° & Up
Paramount	1/16 in.	1/32 in.	1/32 in.	0 in.	0 in.
Horizon	1/4 in.	3/16 in.	1/8 in.	1/16 in.	1/32 in.
Sanctuary	1/4 in.	3/16 in.	1/8 in.	1/16 in.	1/32 in.
ProTect Advantage	1/4 in.	3/16 in.	1/8 in.	1/16 in.	1/32 in.
Good Life	1/4 in.	3/16 in.	1/8 in.	1/16 in.	1/32 in.
Docking	1/4 in.	3/16 in.	1/8 in.	1/16 in.	1/32 in.
Relax	3/8 in.	1/8 in.	3/32 in.	1/16 in.	1/32 in.

Note: In areas where extreme temperature swings are prevalent, adding 2X blocking at butt joints is recommended.

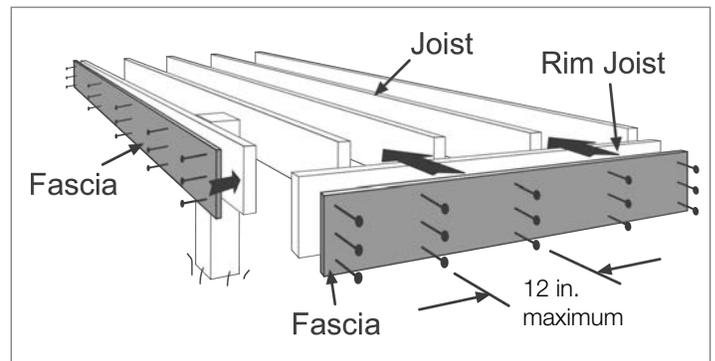


Always drive in surface fasteners at a 90° angle to the decking surface with two fasteners at every joist location. Do not toe-nail screws into the joist. Instead, place blocking/sister joists to allow perpendicular installation of surface fasteners at board ends.

Fasteners recommended for use with Fiberon grooved deck boards include Phantom Hidden Fasteners and Phantom End Clip Hidden Fasteners.

Check fiberondecking.com for the most up-to-date fastener recommendations, including specific instructions for square edge and grooved Paramount deck boards.

Installing fascia board



Fascia is intended as a non-structural covering for rim joists, risers, and stringers. Install screws at a maximum 12 in. (30 cm) interval, with three screws across the face at each interval. For Paramount Decking, also apply a zigzag bead of high quality exterior adhesive to the entire length of the back (smooth side) of the board, within 2 in. (5 cm) of the edges and ends. Do not overtighten screws, as buckling and cracking may result. In temperatures about 50° F (10° C), install with 1/8 in. (3 mm) spacing between the edges and ends. In temperatures below 50° F (10° C), leave 3/16 in. (5 mm) space between edges and ends.

All brands of Fiberon decking may be surface fastened. Sufficiently long annular thread, ring shank, and spiral shank nails, all have excellent holding power and produce good results; however, screws have superior holding power. Use only screws designed for composite decking. Plain, galvanized surface fasteners are not recommended. Do not use traditional bugle-head screws. Relax decking can be fastened using common deck screws or pneumatic nails.

For best results, use either stainless steel composite deck screws, color-matched stainless steel decking screws, or the Cortex® hidden fastener system. These screws are engineered specifically to work with composite decking and prevent mushrooming, resulting in better looking finished projects. Screw heads must be flush with board surface or countersunk for color matched Cortex plugs. Pre-drilling is recommended for all surface fasteners, and is necessary for end of board screw holes and cold climates to prevent immediate or eventual end splitting. Pre-drilling all holes will result in better looking finished projects. Use caution to avoid overtightening fasteners, or it will induce cracking at board ends and could lead to eventual cracking around other fasteners. Do not surface fasten within 1-1/2 in. (4 cm) of the end of a board or 1 in. (3 cm) from the side of the board. Relax deck boards can be fastened at 1/2 in. on ends and sides.



Tip: Straight rows of fasteners look cleaner and less noticeable than uneven rows. White chalk, straight boards, or string lines can be used as guides for installing fasteners.

Cortex hidden face-fastening instructions - square edge surface fastening system

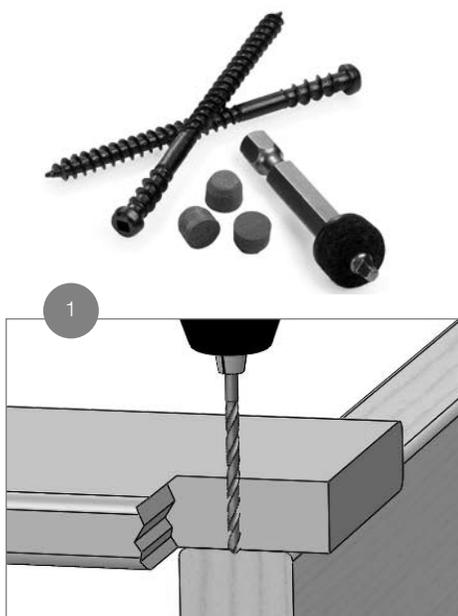
The Fiberon Cortex® hidden face fastening system is the fastest, easiest way to hide deck screw heads on stairs or perimeter boards. It is also the ideal fastener to use when replacing a deck board. The Cortex plugs are available in a variety of colors to match Fiberon deck boards (not available for Good Life or Relax Decking).

Note: The use of non-Cortex screw or non-Cortex plug will nullify the warranty. For a full written warranty, additional information, or technical assistance please contact Fiberon at 800-573-8841 or visit fiberondecking.com.

The Fiberon Cortex hidden face-fastening system is designed for traditional elevated deck surfaces.

The following applications require a different fastening method or further instructions and will nullify the Cortex fastener warranty:

- Sleeper systems: Framing rests directly on the ground or roof deck
- Over solid wood surfaces (i.e. fascia boards, handrails, benches)
- Docks or decks with framing members in constant contact with water
- Restricted airspace where there is less than 1-1/2 in. of clearance on two sides of the deck
- “Tear-offs” that utilize old framing as support for new decking.
- Deck materials other than 1 in. standard thickness

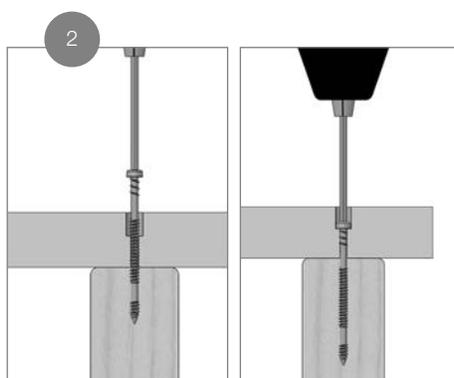


Locate all fastener holes at least 1-1/2 in. from board ends and 1 in. from board sides. To prevent cracking at fastener locations, pre-drill all holes with a 1/8 in. or 9/64 in. drill bit perpendicular to the deck surface to create the proper pilot hole and remove excess material.

Note: Pre-drilling is required at board ends and where temperatures are below 40° F.

Note: Double joists are required at end-to-end seams.

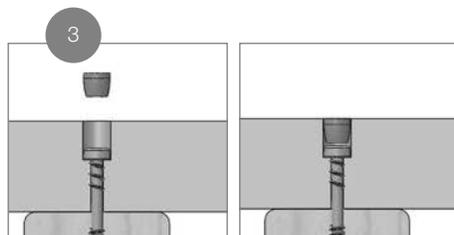
Note: Use a high torque drill, either corded or battery-powered, with a 1/2 in. chuck of at least 18 volts for best results. Do not use any speed higher than 1800 rpm. Turn any torque setting to the infinite setting. An impact driver may also be used with PVC decking only.



Using the Cortex setting tool, drive the fastener to the preset level below the deck surface, ensuring the fastener remains perpendicular to the deck surface. Install two fasteners at every joist and/or stair stringer. Overtightening will induce cracking at fastener locations.

Note: Periodically (at least every 125 screws) change a worn driver bit for a fresh bit.

Note: If damage occurs to the screw while it is being driven in, do not continue. Follow the instructions on how to remove damaged screws.



Ensure the cored hole is free of debris or moisture. Place the Cortex plug into the cored hole and gently tap with a smooth hammer head until it is flush with the deck surface.

Removing damaged plugs or screws

To prevent damage to the decking surface, mask off around the screw or plug being removed. Immediately clean off any debris left behind after the work is completed.

Existing plugs can be removed by tapping into the plug center with a trim screw (#7 or smaller) until it reaches the screw head below the plug. Remove the plug. Using a standard #1 driver bit (not the Cortex setting tool), engage driver bit into screw recess prior to backing out. On slow speed, centering weight over the drill, reverse the screw out of the deck. When removing a fastener, an impact drill offers best results.

If the head of a damaged screw is above the deck surface, remove the driver bit from your drill and open the chuck wide enough to capture the head of the screw. Tighten the chuck firmly around the head and set the drill in reverse. Then, on low speed, slowly draw the fastener out of the deck.

Note: If you prefer to use Vise-Grips, grasp the screw head but be sure to protect the deck surface from tool marks by providing enough clearance between the tool and the deck surface.

If the head of the damaged screw is at or slightly below the deck surface, use these options in this order: (1) an impact driver with a new standard #1 square drive. Set the tool on reverse, centering weight over the drill, and slowly remove the screw; (2) use a #2 square drive bit and drive the bit into the head of the screw with a few firm hits of a hammer. Using a sleeve or extension preinstalled on the drill, carefully slide the open end onto the #2 bit. Then, on low speed, reverse out the screw.

Installing Paramount PVC decking

All approved face fasteners and hidden fastener systems are listed on the fiberondecking.com website, including specific instructions for Paramount PVC grooved deck boards. These fasteners are designed to accommodate normal dimensional changes without material fracture or change in holding capability.

The use of hidden fasteners is not recommended for installations above elevations of 6,500 feet.

Fibron recommends the Tiger Claw TC-G® hidden fastener, used in combination with Fibron Cortex® fasteners as the only approved system for installing hidden fasteners in grooved Fibron Paramount deck boards. The combination of fasteners will ensure equal expansion and contraction in both directions.

Secure boards using two Tiger Claw TC-G hidden fasteners at each joist. Center-pin the board at the centermost joist with two Cortex fasteners.

Note: Fastener parts have sharp edges. Use proper care when handling.



TC-G line fastener

Tiger Claw TC-G fasteners should be secured to each joist with an impact driver.



Cortex screw, plugs and bit

Use two Cortex screw per deck board to limit the movement of the deck board against the joist. The Cortex screws should be placed into the joist closest to the mid-point of each deck board. This helps to ensure the deck board stays positioned as the board expands and contracts with temperature changes.



Phantom 20EC end clip

Fibron Phantom 20EC End Clip Fasteners may be used for hidden fastening on perimeter boards and fascia boards.



Fibron recommends the use of a quality joist flashing to ensure optimal installation and reduce potential noise caused by the boards moving against the joist. Products such as Grace Vycor Deck Protector, Tite Seal, or other comparable self-adhesive flashing products enable for a smooth and consistent contact surface between joists and Fibron Paramount decking. Paramount deck boards have a lifetime limited warranty, and joist tape will extend the life of the joists upon which the deck boards are fastened.

Paramount is approved for use over joists spaced 16 in. on center. However, Fibron recommends spacing the joists at 12 in. on center to increase stability and reduce the flexing of the deck boards.

Any use of unapproved fasteners, including biscuits or nails, may lead to product failure, and will void the product warranty.

Installing PE capped composite decking



PhantomEC end clip



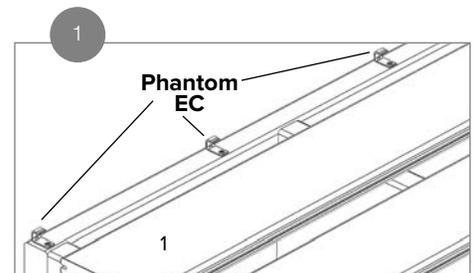
PhantomGT line fastener



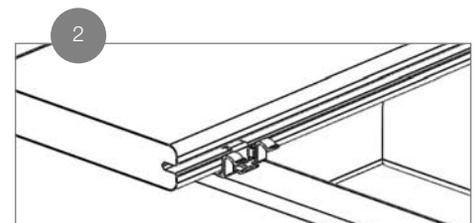
PhantomGT butt joint fastener

The PhantomEC and PhantomGT hidden fasteners are part of a deck fastening system designed specifically for grooved (GV) deck boards. These fasteners provide a fast and simple way to create a smooth deck surface, uninterrupted by visible screws or nails. All are sold separately.

Note: Fastener parts have sharp edges. Use proper care when handling.

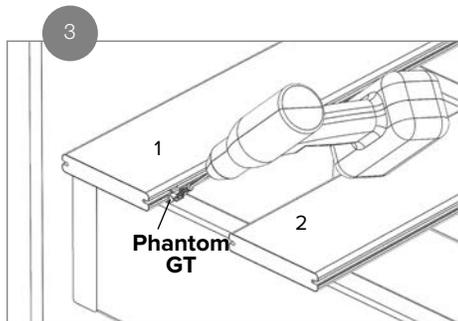


Secure Fibron PhantomEC end clips a minimum of 1/4 in. from the wall with a single screw into the joist. Space clips no greater than 12 in. apart. Position the deck board into the end clip fasteners. It may be helpful to angle the board slightly to fully seat it into the clips. Check to ensure that the board is fully inserted into the clips.

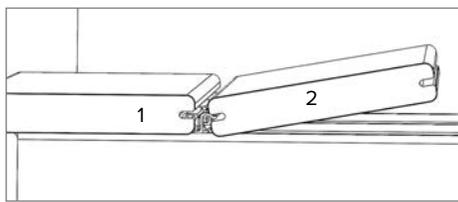
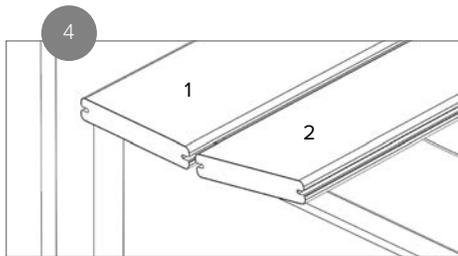


Insert a Fibron PhantomGT fastener into the groove of the board, centering on joists.

Hidden fastener instructions - grooved edge fastening systems



Secure fasteners by driving the screw fully into joist. Continue installing and securing the fasteners in the center of each joist along the remainder of the deck board.



Position the next deck board into the fasteners. It may be helpful to angle the board slightly to fully seat it into the fasteners.

Repeat installing fasteners and positioning boards to complete the deck. Use PhantomGT Butt Joint Hidden Fasteners where two boards butt together to ensure adequate end-to-end spacing.

How to finish the installation with end clips on the rim joist interior

Note: Prior to positioning the last deck board, place the end clips on the inside of the rim joist, securing them with a single screw inserted perpendicular through each clip into the joist.

Note: Use a square edge board for a smooth deck board edge on the perimeter of the deck. This requires creating a groove on the inside edge for the Phantom GT fastener. For best results, a Freud model #56-112 or Bosch model #85610M, 1/4 in. slot-cutting bit can be used.

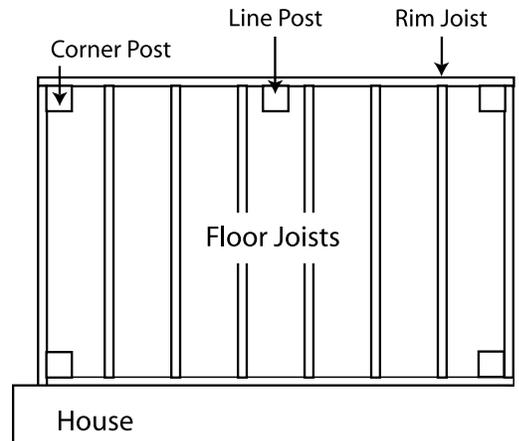


After positioning the last deck board in place, secure the deck board by angling a screw through the clip and into the board at a 30°- 45° angle. Ensure the screw inserts fully and pulls the board down (2). Space no more than 12 in. (30 cm) apart.

Note: When thickness of rim joist exceeds 1 1/2 in. (4 cm), end clips should be secured to the outer edge of the joist.



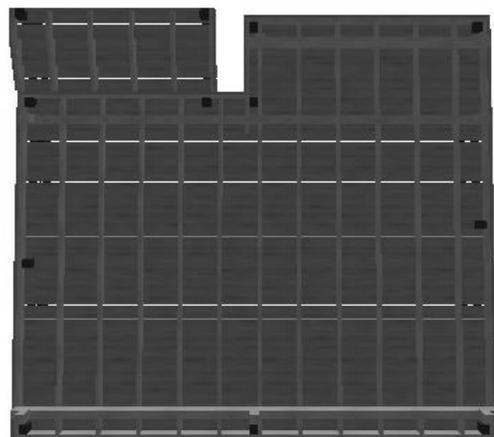
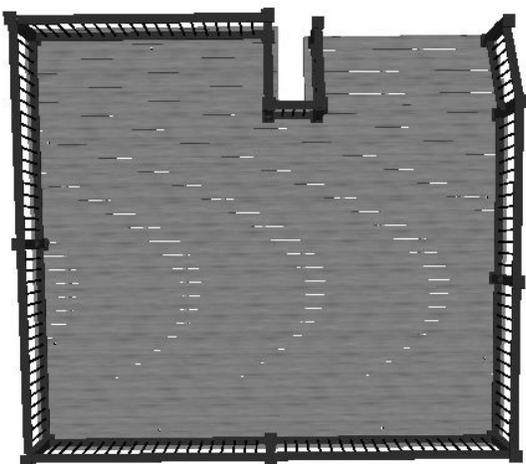
Post sleeve installation



Fiberon composite railing systems are designed to work with a number of different decking materials and surfaces. Before initiating any project, be sure you fully understand all local building codes. Local building code requirements will always supersede any and all suggested procedures and measurements in the following guidelines.

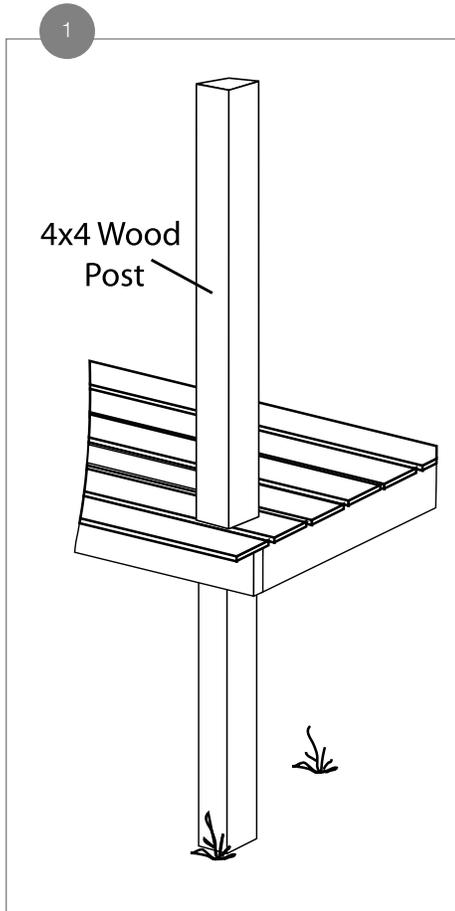
Rail posts may be installed by using the structural posts that support the joists, or by using a surface mount bracket. The Fiberon Surface Mount Bracket requires that the thickness of the decking and reinforcement boards underneath the deck be a minimum of 4-1/2 in. (three treated and structurally sound 2 in. x 8 in. lumber under the deck board), unless otherwise specified by local building codes. To optimize post placement, additional joists, blocking, or alternative locations may be required. Determine post placement and install reinforcement boards and/or additional support joists prior to installing the deck surface. Use a scaled drawing of your project or the Fiberon Deck Designer Tool to determine where posts will be installed. For proper aesthetics, divide the perimeter dimensions evenly so that posts are spaced equally. Composite guardrail systems should be secured only to code compliant posts.

For post sleeve or post cap lighting, cut or rout a channel in the structural wood post to allow for wire thickness. Then slip post sleeve covers and base molding over post and install the rails.



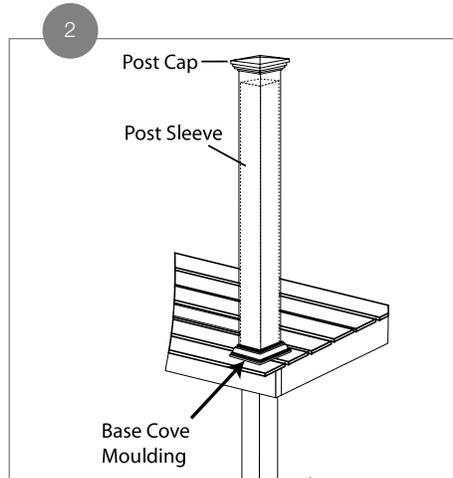
Post sleeve installation to structural posts

Guardrails can be secured to structural 4 in. X 4 in. posts, or to 4 in. X 4 in. posts secured to the support framing in a code-approved manner. Always check to ensure posts are plumb and true. Check maximum and minimum distance requirements for the railing that is being installed to ensure a snug fit and proper baluster spacing.



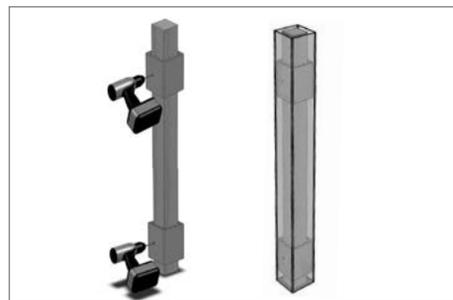
Ensure 4 in. x 4 in. (10 cm x 10 cm) wooden posts are secured in a code-compliant manner, and, where possible, spaced equally for the best looking application.

Note: Wooden 4 x 4 posts will vary. Shims may be required to prevent cracking during guardrail installation.



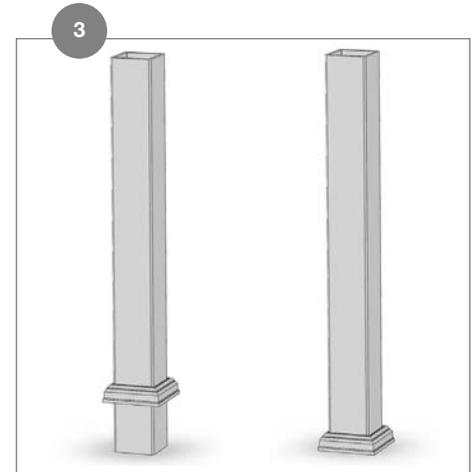
Determine the desired height of the post sleeve. Typically, the height is no less than 2 in. (5 cm) above the top of the finished guard rail system. This ensures the proper placement of the post caps that fit over the top of the post sleeve. Cut the post sleeve to the desired height.

The wood post should be approximately 1 in. (3 cm) shorter than the height of the post sleeve. Cut wood posts as necessary.



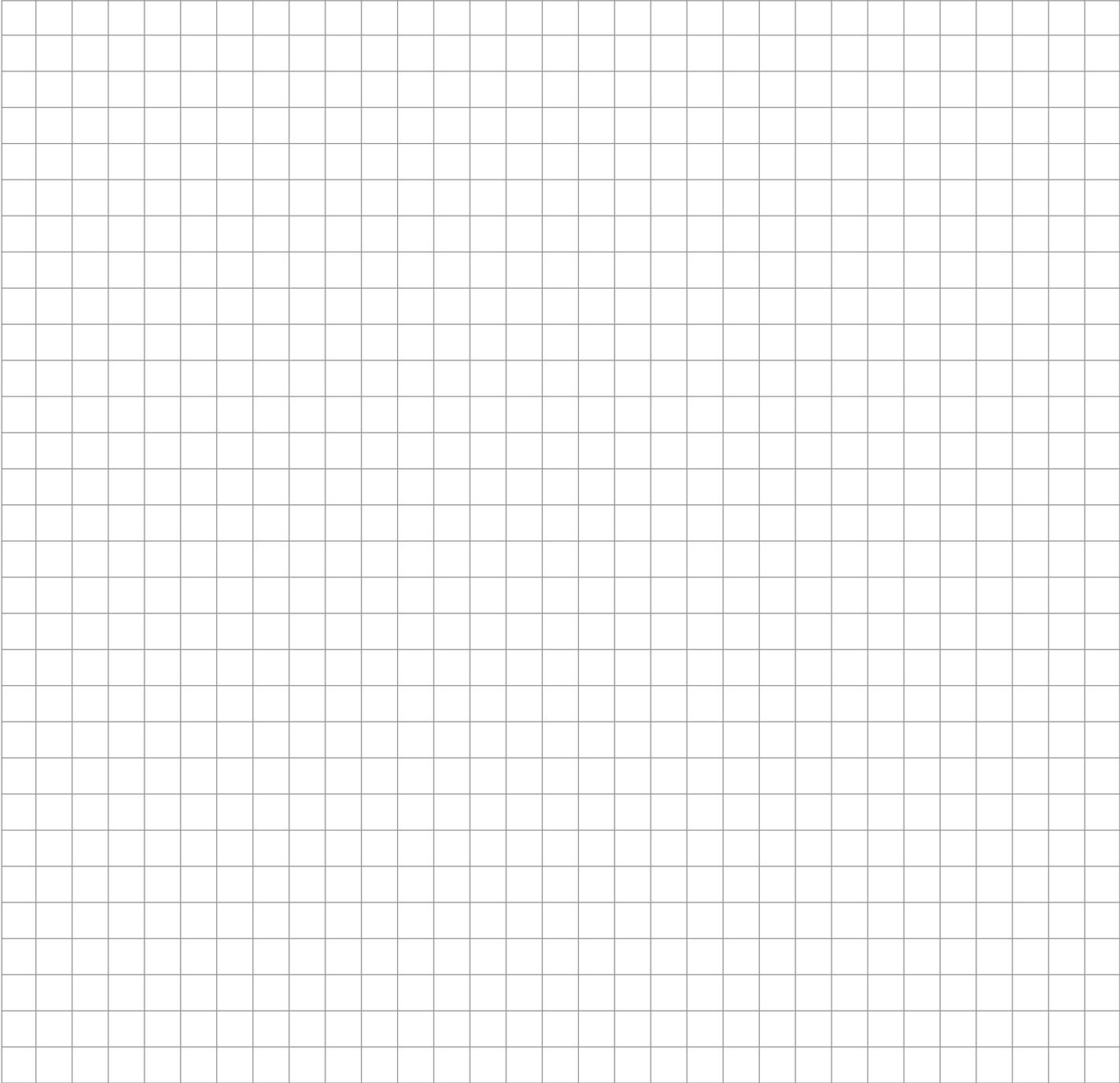
Horizon guard rail 5-3/4 in. post sleeves require adapters to be installed over the wooden 4 in. X 4 in. posts prior to installing the post sleeve.

Note: Gate installations may require specialized post requirements. Please refer to gate instructions prior to completing guardrail.



After decking is installed, slide post sleeve and moulding over the wood 4 in. x 4 in. (10 cm x 10 cm) post.

Design Grid



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