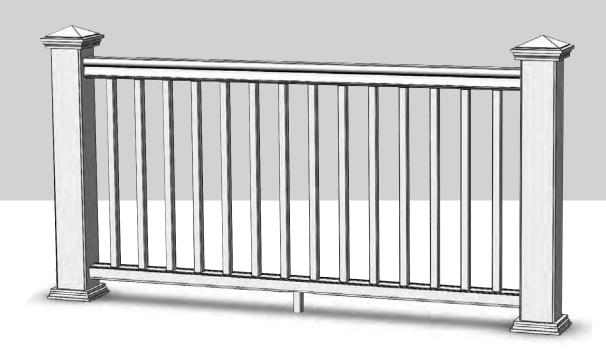
fiberon Symmetry Market 19 1

Low Maintenance Composite Railing

6-ft. and 8-ft. INSTALLATION INSTRUCTIONS



Manufactured by

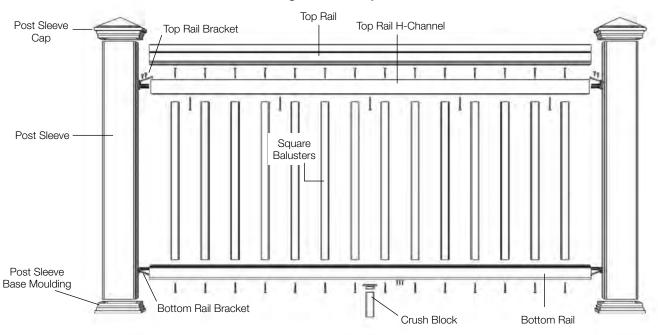


fiberondecking.com 800.573.8841



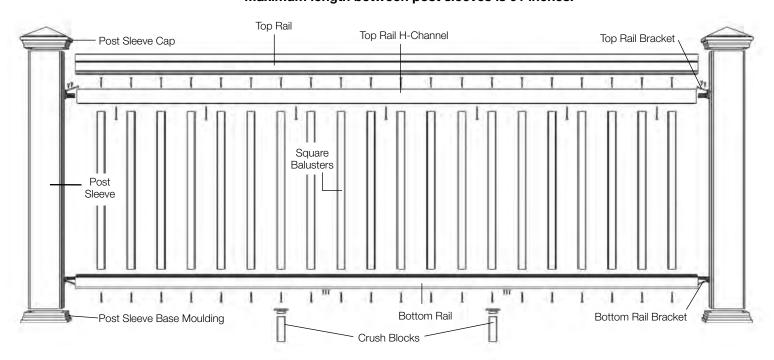
Railing component list for 6-ft. section:

Maximum length between post sleeves is 67 inches.



Railing component list for 8-ft. section:

Maximum length between post sleeves is 91 inches.



Note: Rail lengths will vary slightly due to manufacturing processes. Ensure rails are cut to correct length with hole pattern centered between posts before securing.

Symmetry Railing Installation Instructions - 6-ft. and 8-ft. Line





Required Tools and Supplies:

- Power Drill
- Protective Eye Wear
- Tape Measure
- Level
- Speed Square
- Miter Saw

- Pencil
- Adjustable Square

Prior to installing railing: Please consult local zoning laws in regard to load requirements and bottom space requirements for rails. All supporting structures must be in accordance with applicable building codes. Neighborhood associations and/or historic districts may regulate size, placement and type of railing. Apply for permits if required by local authorities and codes. Ensure compliance prior to installation. Local building code requirements will always supersede any and all suggested procedures and measurements in the following installation. The following installation instructions are intended as a general guideline based on common building practices used in railing installation.

When top and bottom rail length is greater than the distance between posts, trim both top and bottom rail ends to maintain uniform baluster spacing. Slide post sleeve base moulding over each post prior to installing bottom rails and press securely into place.



1-1/2-in, minimum from rail end to baluster

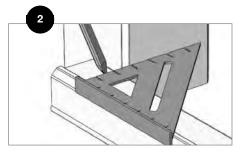


Rail Installation: Trim both ends of rail to maintain uniform baluster spacing. It is critical to ensure the trim mark does not interfere with the balusters once installed. Adjust trim lines to maintain uniform baluster spacing.



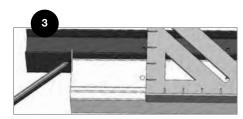
Note: Make sure posts are plumb and level prior to installing the railing.

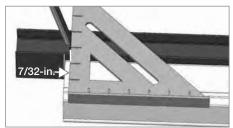
Cover 4x4 posts or Fiberon surface mount bracket with post sleeve and verify spacing. Posts should be plumb in both directions. Place post sleeve base moulding over post sleeve and slide it down to the deck surface.



Measure the distance between the posts for the bottom rail. Center the hole pattern, then mark the cutting points. Check for fit.

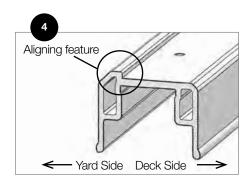
Center the bottom rail with the top rail. Mark and cut to length.





Align the H-bar and the cut bottom rail hole patterns. Mark the length of the bottom rail on the H-bar then subtract 7/32-in. from that measurement on each end of the H-bar (7/16-in. total to allow for top bracket thickness) and mark. Cut the H-bar and set aside for step 7.

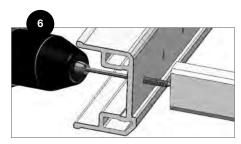
fiberon° Symmetry Railing Installation Instructions - 6-ft. and 8-ft. Line



Note: Make sure that the bottom rail is positioned correctly prior to installation. The bottom rail has an aligning feature on the top, which should be on the yard side of the rail, opposite to the deck side.



Measure and cut all balusters to the required length. Remove the baluster guide from the railing box. Place on a flat surface and insert the balusters into the precut slots.



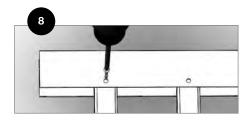


Align the bottom rail with the balusters on the same end as the baluster guide.

Starting from one end, hold each baluster securely against the aligning feature on the bottom rail and secure the balusters to the bottom rail with the supplied #10 x 1-1/2-in. screws. Do not over tighten.



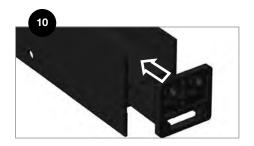
Slide the baluster guide to the opposite end of the balusters. Insert the top of the balusters fully into the channel of the aluminum H-bar rail.



Position the top of the balusters tightly against the inside of the top H-bar. Center the balusters under the side-mounting screw holes. Working from one end to the other, secure each baluster using the supplied #8 x 1-1/2-in. flat head screws. Do not over tighten.



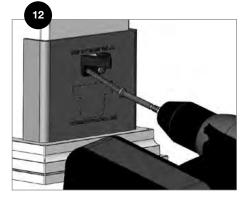
Note: The brackets indicate which side will be facing the decking.



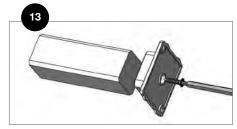
Insert top brackets into the cavity of the aluminum H-bar, noting the directional arrows.

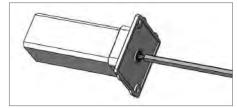


Using integrated screw template, secure with the supplied #10 x 5/8-in. self-drilling screws.



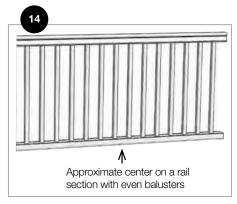
Locate the Symmetry bottom line bracket template (included on the post sleeve carton and inside the rail kit box). Position and secure the bottom brackets using the bottom bracket template making sure the long side of the bracket is on the deck side of the post. The template will create a 3-in. gap under the bottom rail.

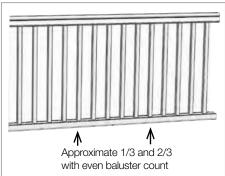




If needed, measure and trim crush block to the required final length. Secure crush block to holder using supplied flat head screw.

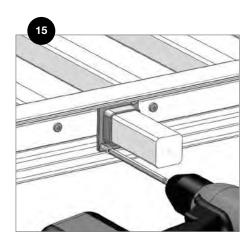
Symmetry Railing Installation Instructions - 6-ft. and 8-ft. Line



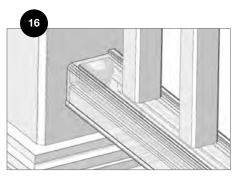


For 6-ft. rails sections, position the crush block and holder inside the bottom rail at the approximate center point.

For 8-ft. rail sections, position the two crush blocks and holders inside the bottom rail at the approximate 1/3 and 2/3 points.



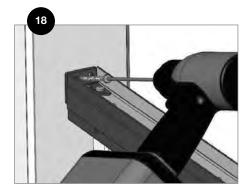
Predrill the two holes with a 1/8-in. bit, taking care not to drill through the top of the bottom rail. Secure with the supplied flat head screws. Do not over tighten.



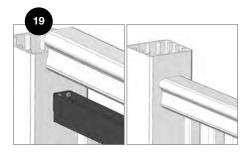
Carefully position the pre-assembled railing infill between the posts, then slowly lower over the bottom brackets until fully seated.



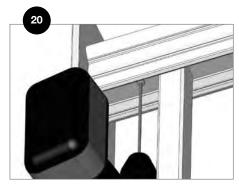
Center the H-bar on the post and check rail for plumb.



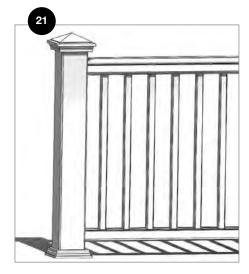
Secure the top brackets with the supplied #10 x 2-1/2-in. screws.



Position the top rail over the infill assembly, and carefully lower into place.



Starting at one end of the rail, secure the top rail with supplied 1-7/8-in. screws between the post and first baluster (if there's room), at the center of the top rail, and approximately between every second and third baluster in the infill.



Complete the assembly by gluing the post caps in place with a quality exterior grade adhesive.



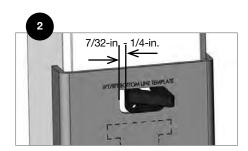
fiberon° Symmetry Railing Installation Instructions - Angled Line





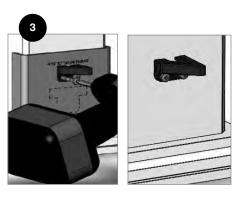
For angled line installation, the line brackets will need to be installed with the angled edge on the deck side of the railing.

Note: This is opposite of what is indicated on the line bracket for basic line railing installation.

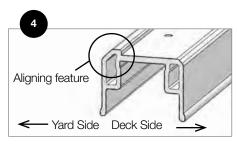


The template can still be used to locate the height of the line bracket. The side-to-side alignment needs to be approximately 7/32-in. - 1/4-in. off-centered from the deck side of the railing for a full 45 degree installation.

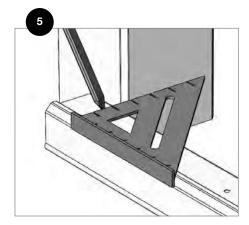
Note: If the bracket is not offset slightly, the top rail may overhang the corner post face and extend into the corner chamfer.



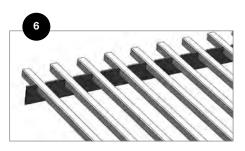
Secure with supplied #10 x 2-1/2-in. selfdrilling screws. Do not over tighten.



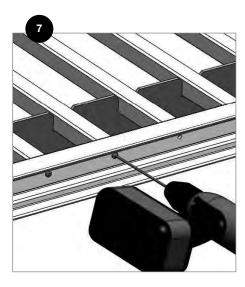
Note: Make sure that the bottom rail is positioned correctly prior to cutting the bottom rail angle for installation. The bottom rail has an aligning feature on the top, which should be on the yard side of the rail, opposite to the deck side.



Center the hole pattern in the bottom rail between the posts. Measure, transfer the length and cut angles. Transfer length and angle to the top rail and cut. When transferring length and cutting angles to the H-bar, remember to subtract 7/32-in. from each end to allow for top brackets.



Measure and cut all balusters to the required length. Remove the baluster guide from the rail box. Place on a flat surface and insert the balusters into the precut slots.



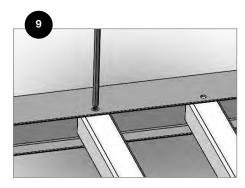
Assemble infill by aligning the bottom rail with the balusters on the same end as the baluster guide.

Starting at one end, hold each baluster securely against the aligning feature on the bottom rail and secure the balusters to the bottom rail with the supplied #10 x 1-1/2-in. screws. Do not over tighten.



Slide the baluster guide to the opposite end of the balusters. Insert the top of the balusters fully into the channel of the aluminum H-bar rail.

Symmetry Railing Installation Instructions - Angled Line

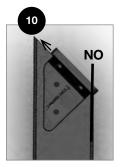


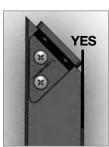
Position the top of the balusters tightly against the inside of the top H-bar. Center the balusters under the side-mounting screw holes. Working from one end to the other, secure each baluster using the supplied #8 x 1-1/2-in. flat head screws. Do not over tighten.



Assemble and attach the crush block following standard line railing instructions.

Position the assembled bottom rail, balusters, and H-bar over the bottom brackets and carefully lower into place and secure the top brackets with the supplied #10 x 2-1/2-in. screws.

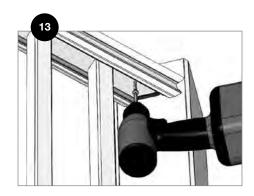




Insert top brackets into the cavity of the aluminum H-bar making sure that the top bracket is located within the boundaries of the H-bar. If the bracket is outside of the boundaries, the top rail will not fit over the H-bar and bracket. Secure with the supplied $\#10 \times 5/8$ -in. self-drilling screws.



Position the top rail over the infill assembly, and carefully lower into place.



Starting at one end of the rail, secure the top rail with supplied 1-7/8-in. screws between the post and first baluster (if there's room), at the center of the top rail, and approximately between every second and third baluster in the infill.

Complete the assembly by gluing the post caps in place with a quality exterior grade adhesive.

fiberon° Symmetry Railing Installation Instructions - 6-ft. and 8-ft. Stair

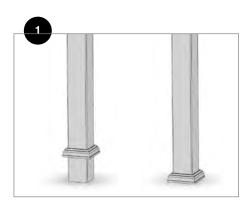
Maximum length between post sleeves is 67 inches for even baluster spacing with 6-ft. rails and 91 inches for 8-ft. rails.



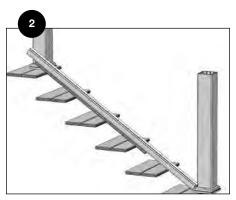
Building codes are very specific on allowable angles and widths. It is very important to consult with your local building code officials and plan your stair layout accordingly. Leave adequate space for graspable hand rail if applicable.

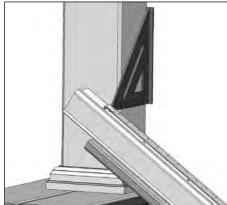
Note: The slope of the stairs can be 30 to 37 degrees.

Note: Rail lengths will vary slightly due to manufacturing processes. Make sure rails are cut to correct length.

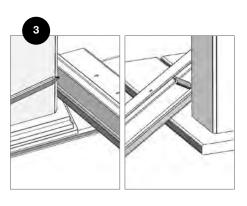


Install 4x4 posts in the pre-determined locations, cover with post sleeve and verify spacing. Posts should be plumb in both directions. Place post sleeve base moulding over post sleeve and slide it down to the deck surface.

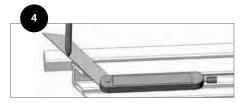




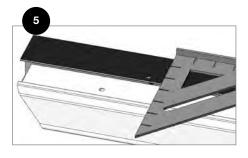
Use a 1x4 or similar support to bridge at least three stairs to establish the stair angle. Place the bottom rail between the stair posts. Center the hole pattern between the posts allowing a minimum 1-5/8-in. from rail end to routed baluster holes.

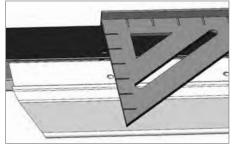


Transfer the stair angle to the both ends of the bottom rail and cut the bottom rail to the required length and angle. Test for a snug fit and make corrections as needed.



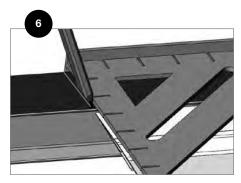
Transfer the stair angle to the balusters, and cut the balusters to desired length.



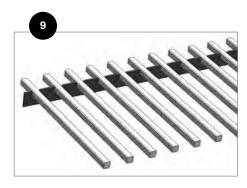


To cut the H-bar, first place the H-bar on its side with the holes nearest to the cut bottom rail. The bottom rail should be top side up. Align the hole pattern with the cut bottom rail.

Symmetry Railing Installation Instructions - 6-ft. and 8-ft. Stair



Transfer the length of the cut bottom rail to the H-bar.



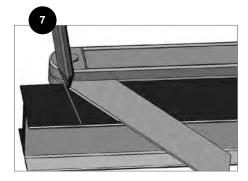
Remove the baluster guide from the rail box. Place on a flat surface and insert the balusters into the precut slots.



Note: The screws should penetrate fully through the baluster.

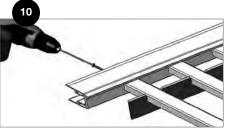
Secure the remaining balusters working to the

other end. Do not over tighten.

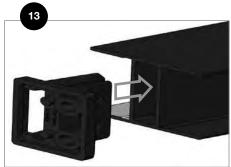


Scribe the stair angle to the side of the H-bar at both ends.

balusters into the precut slots.



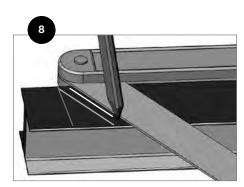
Align the end baluster with the predrilled hole in the bottom rail.



Starting at one end, hold each baluster securely against the aligning feature and drive screws parallel with the balusters, not perpendicular to the bottom rail. Do not over tighten.

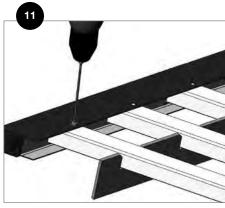


Insert the top stair brackets into the center cavity in the top H-bar.



Scribe a second line 7/32-in. inside the first. *Note: This allows for the thickness of the upper bracket.*

The total length of the H-bar will be 7/16-in. shorter than the cut bottom rail.



Move the baluster guide to the top rail end of the balusters.

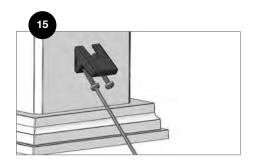
Starting at one end screw the end baluster using the supplied pan head screw into the predrilled hole on the side of the aluminum H-bar.



Secure the top brackets to the H-bar using (two) 5/8-in. self-drilling pan head screws. Do not over tighten.

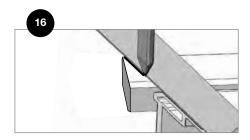


fiberon° Symmetry Railing Installation Instructions - 6-ft. and 8-ft. Stair

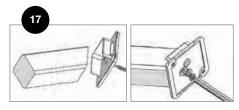


Note: For best results, predrill bracket holes on post with a 1/8-in. - 5/32-in. bit to ensure accurate screw placement and full insertion, particularly as the stair angle increases.

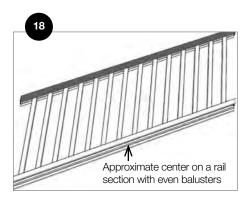
Secure the bottom stair brackets to the post using the supplied pan head screws at the desired height. Do not over tighten.

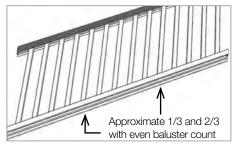


Before assembling the crush block, transfer the stair angle to the end of the crush block and cut to desired length.



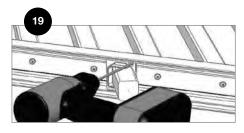
Secure crush block to crush block holder using a supplied #8 flat head screw. Do not over tighten.





For 6-ft. rails sections, position the crush block and holder inside the bottom rail at the approximate center point.

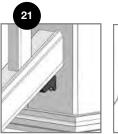
For 8-ft. rail sections, position the two crush blocks and holders inside the bottom rail at the approximate 1/3 and 2/3 points.

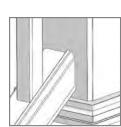


Predrill two holes with a 1/8-in. bit taking care to not drill through the top of the bottom rail.

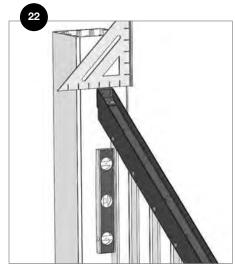


Secure crush block to the bottom rail using the supplied two #8 flat head screws. Do not over tighten.

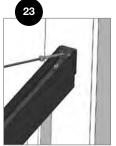




Carefully position the pre-assembled railing infill between the posts, then slowly lower over the bottom brackets until fully seated.



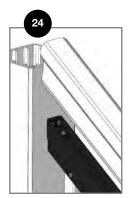
Center the H-bar on the post and check rail for plumb.

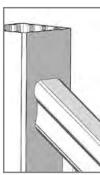




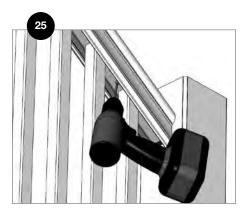
Starting at the top, secure the H-bar to the posts at both ends using the supplied #10 x 2-1/2-in. self-drilling pan head screws. Do not over tighten.

Symmetry Railing Installation Instructions - 6-ft. and 8-ft. Stair

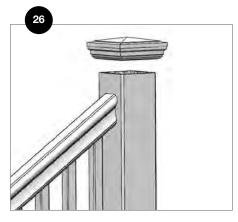




Position the top rail over the infill assembly, and carefully lower into place.



Starting at one end of the rail, secure the top rail with supplied 1-7/8-in. screws between the post and first baluster (if there's room), at the center of the top rail, and approximately between every second and third baluster in the infill.



Finally, position and glue the post cap over the post sleeve.

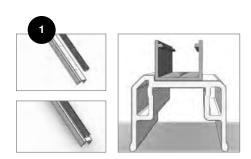


fiberon Symmetry Railing Installation Instructions - ClearVisionSystem

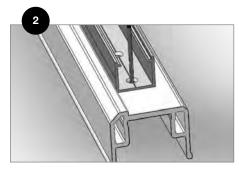


Note: Prepare top rail, bottom rail and H-bar and attach bottom rail brackets to the posts following standard 6-ft. line railing installation instructions prior to CVS installation.

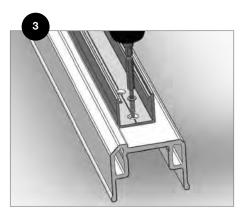
Note: CVS Panels are for maximum railing lengths of 6-ft., line installation only.



Position and center the CVS aluminum rail over the bottom rail. The aluminum rail should be flush with the aligning feature on the bottom rail.



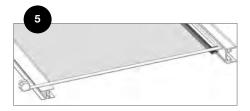
Predrill a 1/8-in. hole through the bottom rail using the aluminum CVS rail as a template.



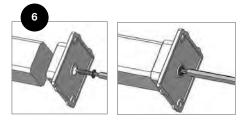
Secure the CVS rail with a #10 flathead screw.



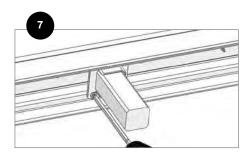
Predrill the remaining holes and secure with a #10 flathead screw.



Assemble pieces together and measure from the top of the bottom rail to determine top bracket height placement on the post.



Measure and trim crush block to the required final length. Secure crush block to holder using supplied flat head screw.

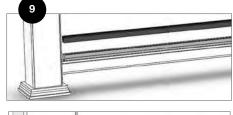


Position the crush block and holder inside the bottom rail at the approximate center point.

Predrill two holes with a 1/8-in. bit and secure with the supplied flat head screws. Do not over tighten.



Reposition the bottom rail over the previously installed bottom rail brackets.



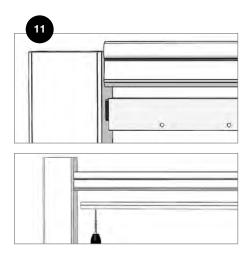


Position the lower CVS seal over the bottom rail, and press-fit into the aluminum channel.

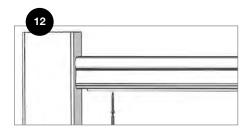


Secure the top H-bar to the posts, taking care to level.

Symmetry Railing Installation Instructions - ClearVisionSystem



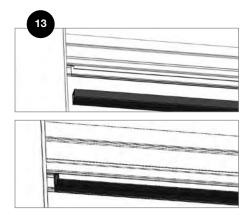
Position the top rail over the H-bar, and carefully lower into place. Center the top CVS aluminum channel under the H-bar.



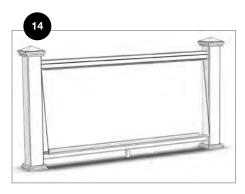
Insert the top CVS rail into the H-bar.

Tip: Use clamps to keep top Symmetry rail and CVS channels firmly together.

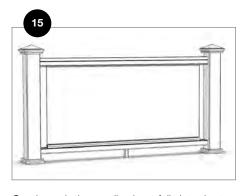
Secure the CVS rail through the H-bar and into the top rail using the supplied $\#10 \times 1-7/8-in$. self-drilling screws.



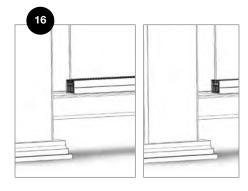
Center the CVS top seal under the top rail, and press-fit into place.



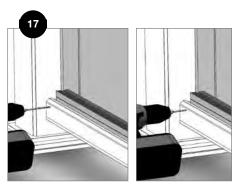
Insert the acrylic sheet by angling it upwards from the deck side of the guardrail.



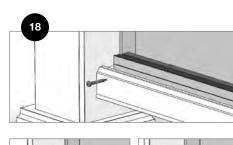
Gently push the acrylic sheet fully into the top seal until it's fully inserted into the top rail. It should just be able to swing over the bottom seal when correctly spaced.



Center the acrylic panel over the bottom seal, then gently pull it downward until fully seated.

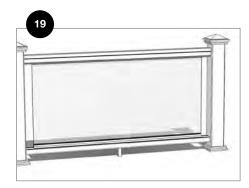


Predrill a 1/8-in. hole for a #10 x 1-1/2-in. screw.





Secure the bottom rail through the bottom rail bracket by predrilling a 1/8-in. hole for a $\#10 \times 1-1/2$ -in. screw.



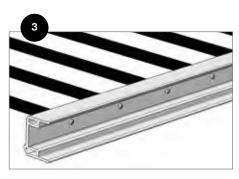
Complete the installation by gluing post caps in place.



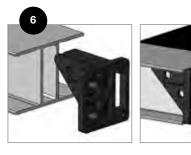
fiberon° Symmetry Railing Installation Instructions - Line Aluminum Balusters



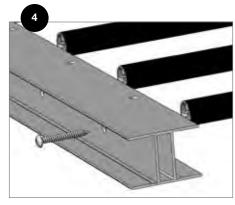
Note: Prepare top rail, bottom rail and H-bar and attach bottom rail brackets to the posts following standard 6-ft. line railing installation instructions prior to aluminum baluster installation.



Secure remaining balusters into the bottom rail. Do not over tighten.



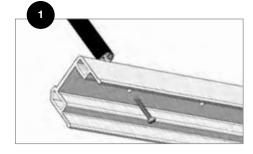
Fully insert top brackets into both ends of the aluminum H-bar with the arrow pointing upward.



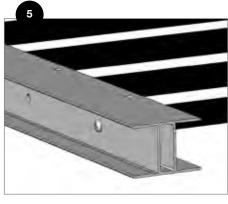
Place the aluminum H-bar in alignment with the balusters with the side holes nearest the top of the balusters facing upward.



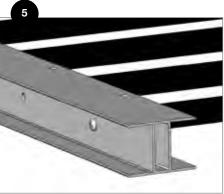
Secure with self-drilling #10 x 5/8-in. screws. Do not over tighten.



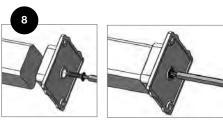
Place the bottom rail on a flat level surface with the alignment feature down. Align baluster with predrilled holes in bottom rail.



Insert supplied #10 x 1-1/2-in. screw through holes in the H-bar, and into the center ("X") of the fins inside of the baluster. Drive until secure. Do not over tighten.



Note: Shim the H-bar with a 1/2-in. - 5/8in. spacer to help ensure balusters remain perpendicular to the H-bar when securing.

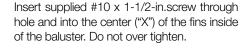


Measure and trim crush block if needed to the required final length.

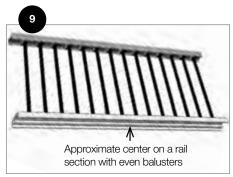
Note: When using the bracket template, a 3-3/4-in. tall crush block is required.

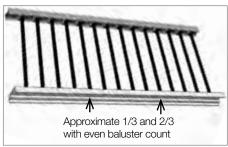
Secure crush block to the crush block holder using a supplied #8 x 1-in. screw.

Note: The screw will be off-center in the crush block.



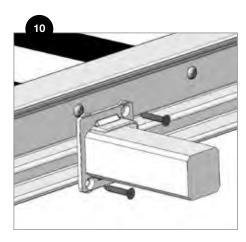
Symmetry Railing Installation Instructions - Line Aluminum Balusters



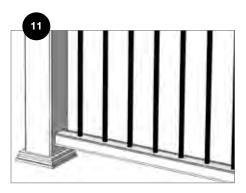


For 6-ft. rails sections, position the crush block and holder inside the bottom rail at the approximate center point.

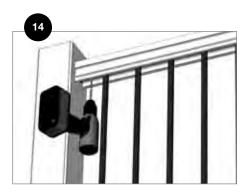
For 8-ft. rail sections, position the two crush blocks and holders inside the bottom rail at the approximate 1/3 and 2/3 points.



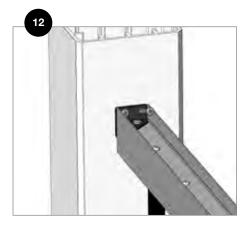
Remove the holder and predrill using a 1/8-in. drill bit. Reposition the crush block and holder, and secure with the supplied $\#8 \times 1$ -in. screws. Do not over tighten.



Position the assembled rails and balusters between the posts and over the previously secured bottom brackets. Carefully lower the assembly until the bottom rail is fully seated on the bottom brackets.



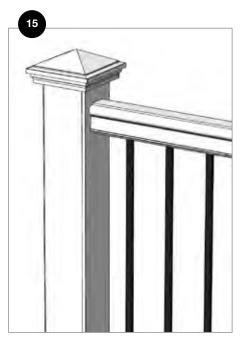
Secure the top rail using the supplied $\#10 \times 1-7/8$ -in. self-drilling screws, starting as close to the post as possible, then evenly spacing the remaining screws.



Check the top H-bar for plumb and level. Secure the assembly by driving the supplied $\#10 \times 2-1/2$ -in. self-drilling screws through the holes in the top brackets. Do not over tighten.



Position the top rail over the H-bar, and carefully lower until fully seated.



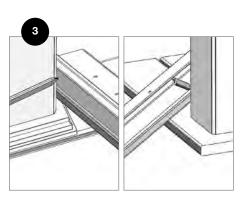
Complete installation by gluing the post caps on the post sleeves using a quality exterior grade adhesive.



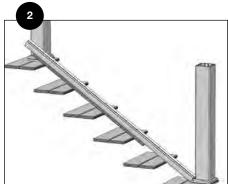
fiberon Symmetry Railing Installation Instructions - Stair Aluminum Balusters

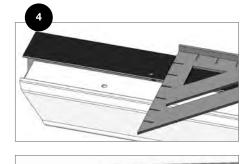


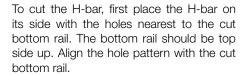
Install 4x4 posts in the pre-determined locations, cover with post sleeve and verify spacing. Posts should be plumb in both directions. Place post sleeve base moulding over post sleeve and slide it down to the deck surface.

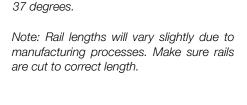


Transfer the stair angle to the both ends of the bottom rail and cut the bottom rail to the required length and angle. Test for a snug fit and make corrections as needed.





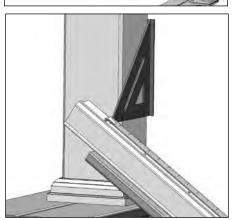




Note: The slope of the stairs can be 30 to

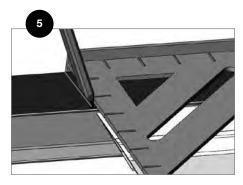
Building codes are very specific on allowable angles and widths. It is very important to consult with your local building code officials and plan your stair layout accordingly. Leave adequate space for a graspable hand rail if

applicable.

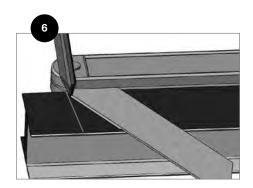


Use a 1x4 or similar support to bridge at least three stairs to establish the stair angle. Place the bottom rail between the stair posts. Center the hole pattern between the posts allowing a minimum 1-5/8-in. from rail end to routed baluster holes.

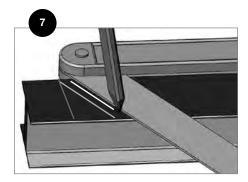
Symmetry Railing Installation Instructions - Stair Aluminum Balusters



Transfer the length of the cut bottom rail to the H-bar.

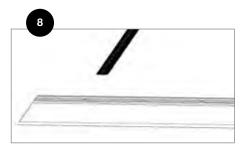


Scribe the stair angle to the side of the H-bar at both ends.



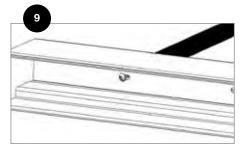
Scribe a second line 7/32-in. inside the first. *Note: This allows for the thickness of the upper bracket.*

The total length of the H-bar will be 7/16-in. shorter than the cut bottom rail.



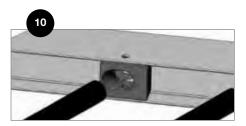
Place cut bottom rail on a flat level surface. Align the cut-end of the round metal baluster with the top surface of the bottom rail.

Note: If a custom angle is required, cut the factory angled end, leaving the square end as is. This will allow proper seating when securing the top of the balusters later in the installation.



Secure the balusters using the supplied #10 x 1-1/2-in. screws taking care to insert the screw into the center "X" of the baluster. It may be necessary to slightly over-drill the factory drilled holes, by rocking the moving bit parallel with the direction of the rail. Do not over tighten.

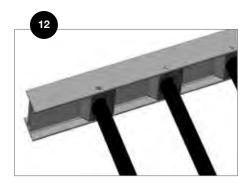
Continue working from one end until all the balusters are secured into the bottom rail.



Insert the Round Baluster Holders into the aluminum H-bar, making sure that the angled hole is oriented correctly, and that the through hole aligns with the side holes in the H-bar.



Fully seat all balusters into the holders. Secure an end baluster first using the supplied #8 \times 1-1/2-in. flat head self-drilling screws.



Pivot the H-bar towards the remaining balusters, inserting them into the holders starting from the secured end and working to the other end. Secure the remaining end baluster, and then the remaining in-fill balusters.

Note: It is important to ensure balusters are level when securing. Shim the H-bar with a 1/2-in. - 5/8-in. spacer to ensure the balusters remain fully inserted when securing.



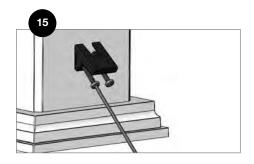
Position the top brackets into the H-bar, making sure they are inserted completely.



fiberon Symmetry Railing Installation Instructions - Stair Aluminum Balusters

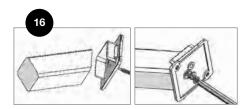


Secure using the supplied #10 x 5/8-in. selfdrilling screws.



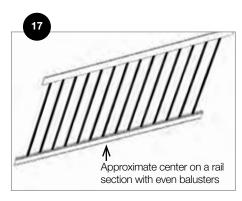
Secure the bottom stair brackets to the post using the supplied pan head screws at the desired height. Do not over tighten.

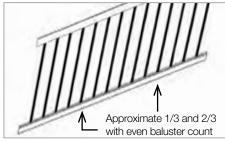
Note: For best results predrilling bracket holes on post with a 1/8-in. - 5/32-in. bit is strongly recommended to ensure accurate screw placement and full insertion, particularly as the stair angle increases.



Cut the crush block to the required length. Secure crush block to the crush block holder using a supplied #8 x 1-in. screw.

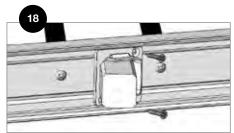
Note: the screw will be off-center in the crush block.

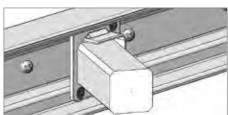




For 6-ft. rails sections, position the crush block and holder inside the bottom rail at the approximate center point.

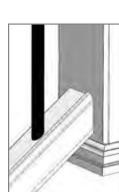
For 8-ft. rail sections, position the two crush blocks and holders inside the bottom rail at the approximate 1/3 and 2/3 points.



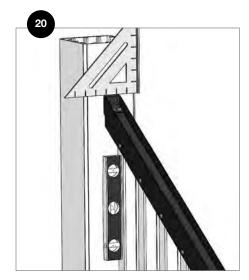


Position the crush block and holder into the bottom rail, and locate the two screw holes. Remove the holder and predrill using a 1/8-in. drill bit. Reposition the crush block and holder, and secure with the supplied #8 x 1-in. screws. Do not over tighten.

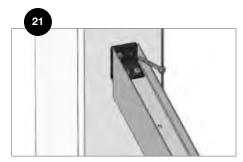




Carefully position the pre-assembled railing infill between the posts, then slowly lower over the bottom brackets until fully seated.

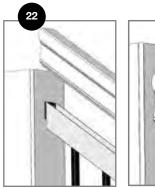


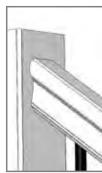
Center the H-bar on the post and check rail for plumb.



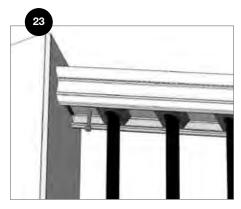
Starting at the top, secure the H-bar to the posts at both ends using the supplied #10 x 2-1/2-in. self-drilling pan head screws. Do not over tighten.

Symmetry Railing Installation Instructions - Stair Aluminum Balusters

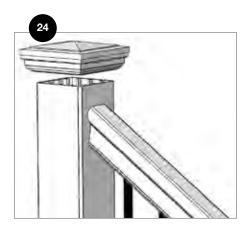




Position the top rail over the H-bar, and carefully lower until fully seated.



Starting at one end of the rail, secure the top rail with supplied 1-7/8-in. screws between the post and first baluster (if there's room), at the center of the top rail, and approximately between every second and third baluster in the infill.



Finally, position and glue the post cap over the post sleeve.

