

Fulton Rail™

Railing Installation Guide



Posts 3

Level Panels 6

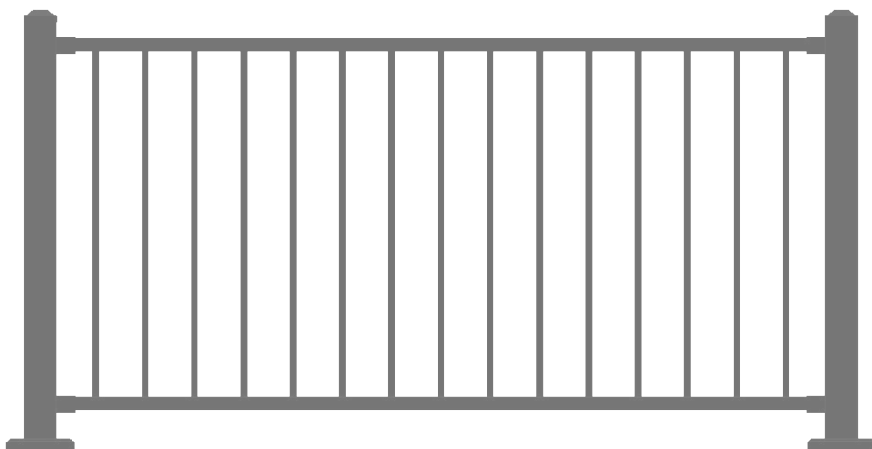
Stair Panels 8

Gate Kit..... 12



Important Information

- Please read all instructions completely before starting any part of the installation. Always make sure to visit www.TimberTech.com to ensure you are viewing the most current installation instructions, care and cleaning, technical information, and more.
- Fulton Rail should be installed using the same good building principles used to install wood, composite, or metal railing and in accordance with the local building codes and the installation guidelines included below.
- The AZEK Co. LLC accepts no liability or responsibility for the improper installation of this product.
- Fulton Rail may not be suitable for every application, and it is the sole responsibility of the installer to be sure that Fulton Rail is fit for the intended use. Since all installations are unique, it is also the installer's responsibility to determine specific requirements in regard to each rail application.
- The AZEK Co. LLC recommends that all applications be reviewed by a licensed architect, engineer, or local building official before installation. If you have any questions or need further assistance, please call TimberTech Customer Service at 877-275-2935, or visit our website at www.TimberTech.com.
- Fulton Rail is tested as a whole system and should be used that way. It is not intended to be used in conjunction with other railing systems or fasteners.
- The following Installation Guidelines are applicable for installation of Fulton Rail only.
- **IMPORTANT:** Make sure the DRIVE TOOL/DRILL is configured or set to use the SCREW setting when driving and/or tightening all FASTENERS.
- **SAFETY:** Always wear goggles when handling, cutting, drilling, and fastening materials.
- Failure to install this product in accordance with applicable building codes and Fulton Rail written Rail Install Guide may lead to personal injury, affect rail system performance, and void the product warranty.
- The buildup or generation of static electricity is a naturally occurring phenomenon in many plastic based products such as carpeting, upholstery, and clothing, and can occur on alternative decking under certain environmental conditions. This static electricity can discharge once contact is made with hardware, railing, or other conductors of electricity.

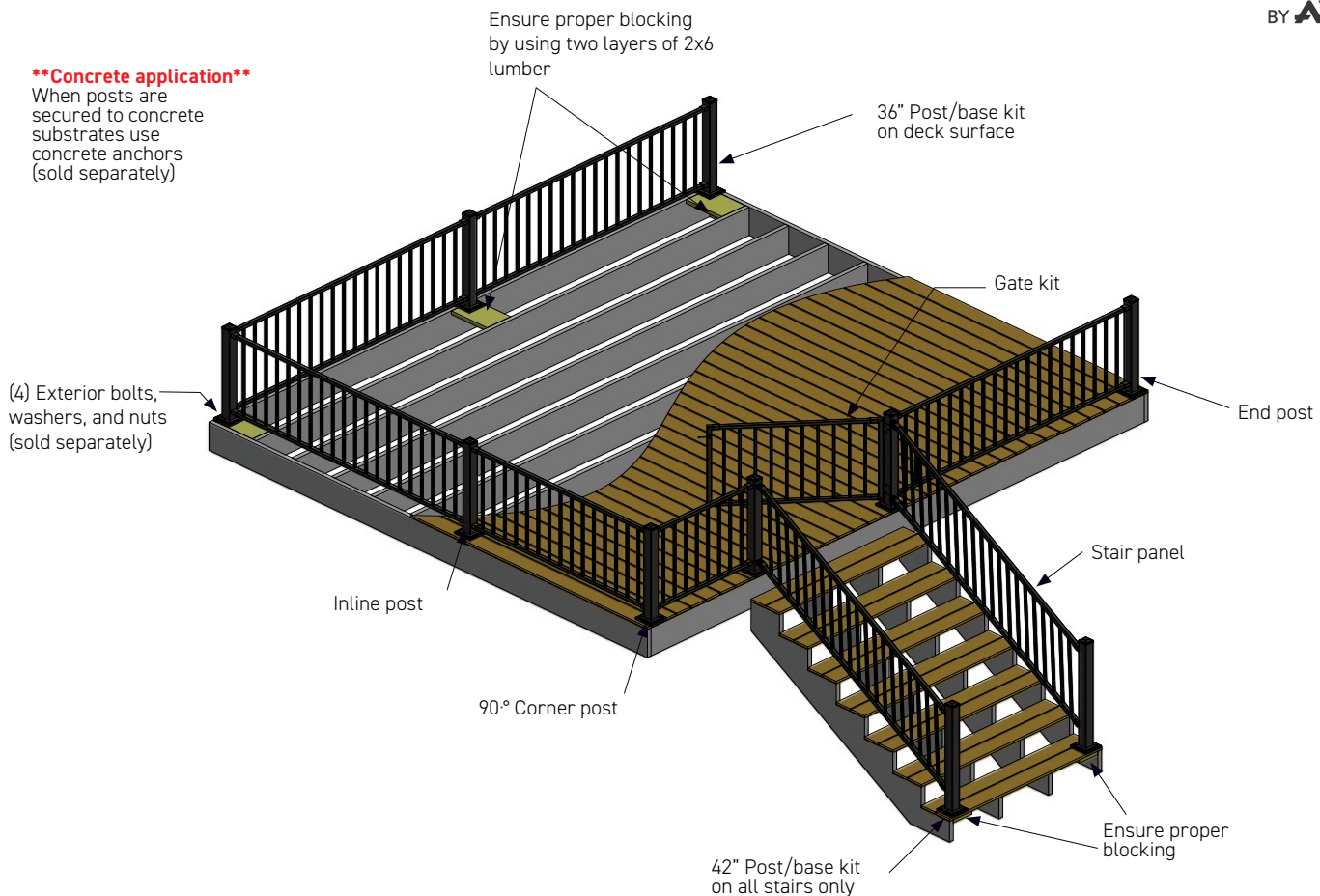


NOTE: IF INSTALLING POST LIGHTING, WIRING MUST BE INSTALLED PRIOR TO SECURING POSTS TO DECK/STAIR SURFACE AND INSTALLING TOP RAIL SNAPS.

It is the responsibility of the installer to meet all local code requirements and obtain all required building permits. The installer should determine and implement appropriate installation techniques for each installation situation. AZEK Co. LLC or its reseller shall not be held responsible for improper or unsafe installations.

Installing Fulton Rail™ Steel Railing System

TimberTech
RAILING
BY AZEK



Important Note:

Prior to construction, check with your local regulatory agency for special code requirements in your area.

Common railing height is 36" or 42". Post spans will vary depending on job site conditions. Never span more than 8' on-center between railing posts. Spans greater than 8' will require a foot block. Spans longer than 12' in length will require reduced post spans. For all other applications, consult a design professional or an AZEK railing representative for more information. Read instructions completely to get an understanding of how the product goes together and how each piece affects the other.

Visit www.timbertech.com/resources/installation-guides/ to view installation guides and videos.

Consult your local building codes for guard and handrail requirements.

Suggested Tools:

- Safety Gear
- Safety Glasses
- Gloves
- Drop Sheets
- Steel Toe Boots
- Tape Measure
- Level
- Post Level
- Portable Band Saw with 24TPI Cutting Blade
- Hand Drill
- T20 Torx Bit
- T30 Torx Bit
- 13/64" Drill Bit
- 5/32" Drill Bit
- 5/8" Wrench or Socket Set
- Black Touchup Paint (Rust-Oleum® Flat Protective Enamel)



Important Note:

Actual Level Panel Lengths Are As Follows:

- 6' Panels = 69.5"
- 8' Panels = 93.5"

1

How to Secure Posts to Deck

- Install proper post blocking. (*Dia. #1A & 1B*)
Use proper attachment screws or anchors shown in diagram. (Hardware for post attachment are not provided with the posts.)
- With 3/8" drill bit, drill through deck boards and blocking. (*Dia. #1C*)
- Drill a 5/8" hole in center of four deck screw holes for lighting wires (optional).
- Level and plumb post using shims.
- Secure posts to deck frame with suggested bolts, washers, and hex nuts. (*Dia. #1B*)
*Verify local code requirements for post attachment hardware.
- Install post caps (after panels are installed). (*Dia. #2*)



Important Note:

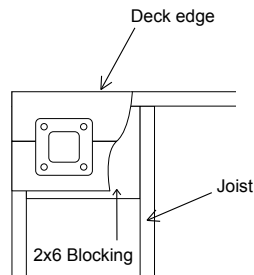
Touch up any damaged areas of post prior to installation and two-piece post skirt using recommended paint.



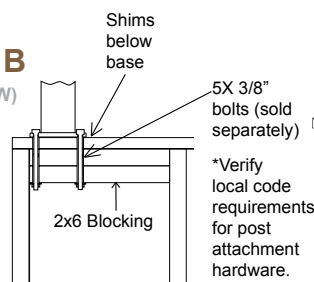
Caution:

Fulton posts are for surface mount only and should never be attached to deck boards only.

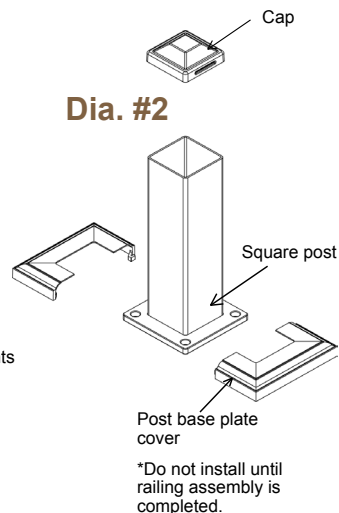
Dia. #1A
(TOP VIEW)



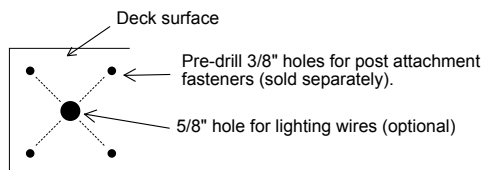
Dia. #1B
(SIDE VIEW)



Dia. #2



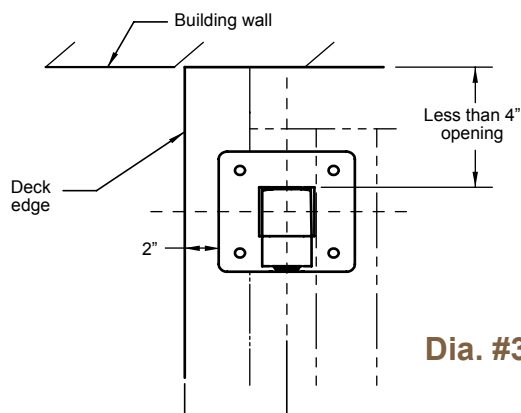
Dia. #1C
(TOP VIEW)



2

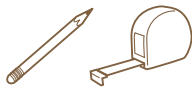
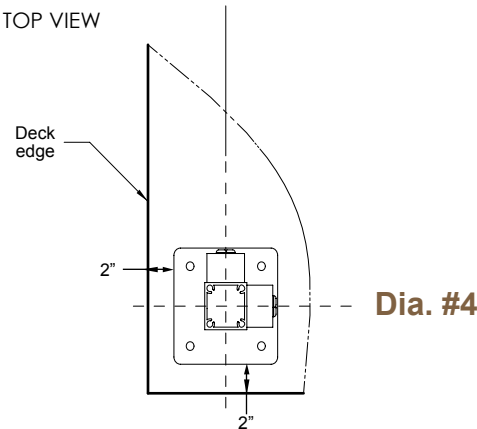
Install End Posts

Locate and install end posts at all end locations with maximum gap between post and wall to be less than a 4" opening. (*Dia. #3*)



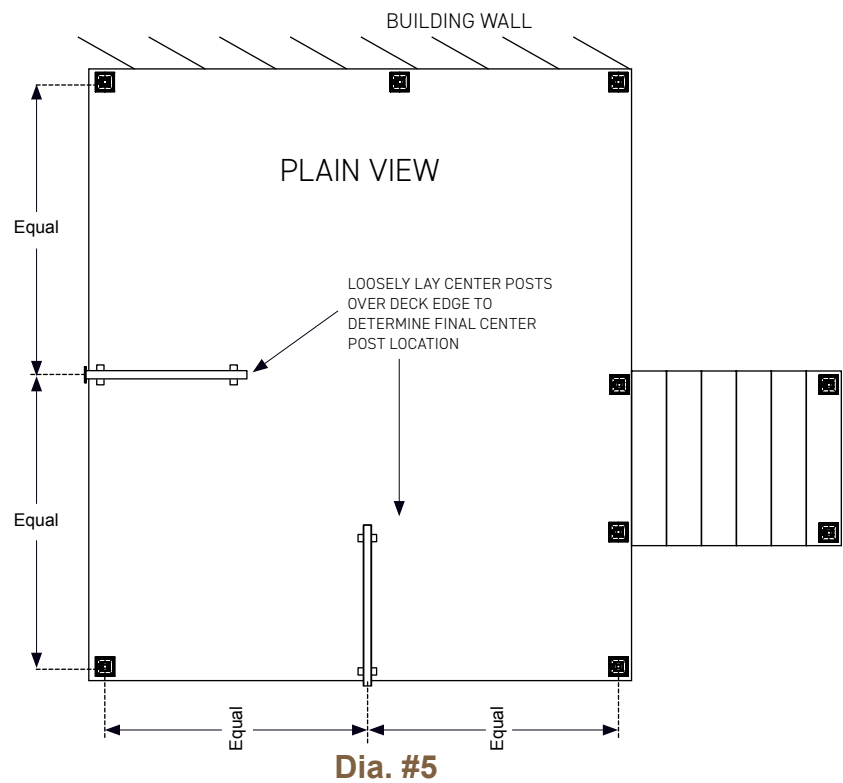
3 Install 90° Corner Posts

Locate and position 90° corner post 2" from each edge, and temporarily fasten using a single fastener through base plate mounting hole. (Dia. #4)

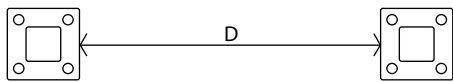


4 Determine Center Post Locations

Loosely lay center post over deck edge and adjust as required to determine final center post mounting locations.



For Uncut Panels:

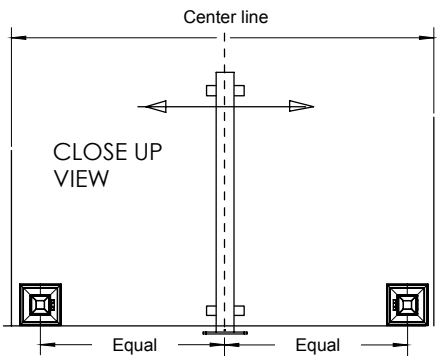


8' Span

D = 92"

6' Span

D = 68"



Dia. #6

1 Cut Level Panel (When Needed)

Clamp or hold panel against post, adjust for equal end spacing. (Dia. #1)

- Determine the desired center of the rail, either a baluster or between two baluster holes. (Dia. #2)
- Measuring from the determined center, cut both ends of the rails.
- Mark the top and bottom rails.
- Cut panel $\frac{3}{4}$ " less than opening size.
- Clean cut areas and apply touch-up paint on exposed ends. Touch-up paint sold separately.
- Paint cut ends of rail before final installation to prevent rust.



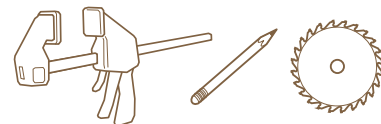
Important Note:

- Avoid damaging deck finish by cutting and painting away from deck.
- $1\frac{3}{8}$ " minimum between post and baluster

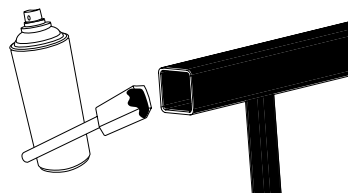
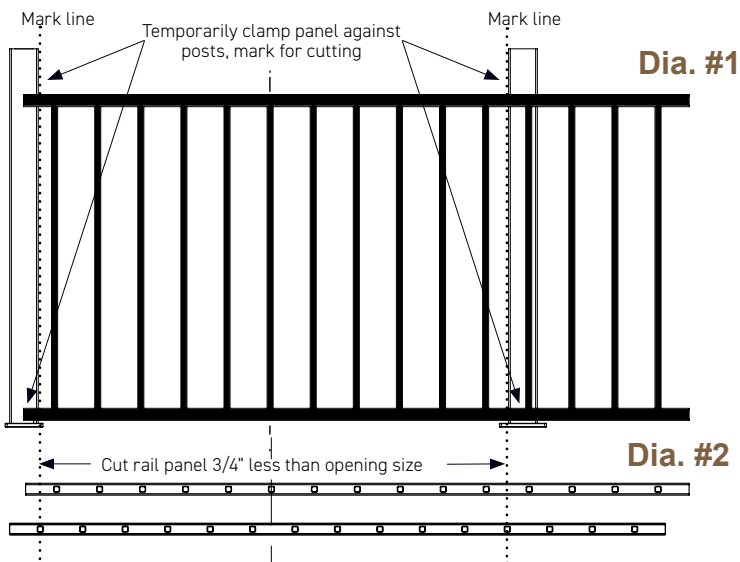


Caution:

Paint touch up **REQUIRED**



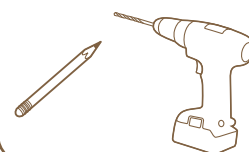
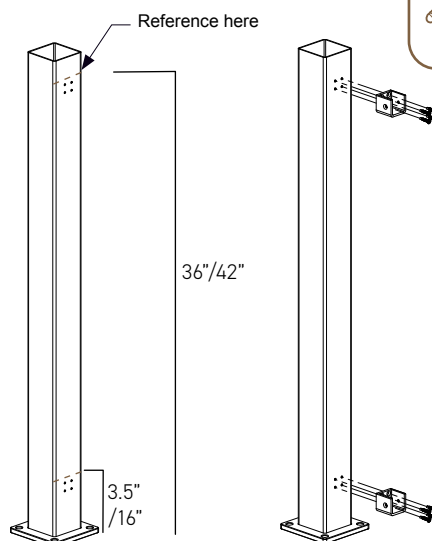
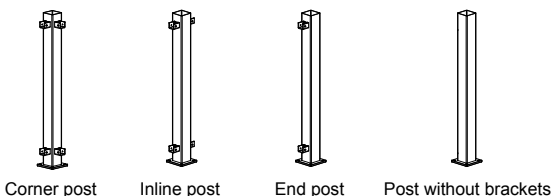
$1\frac{3}{8}$ " min between baluster and post



2 Bracket Installation

How to install brackets on a post without pre-installed brackets.

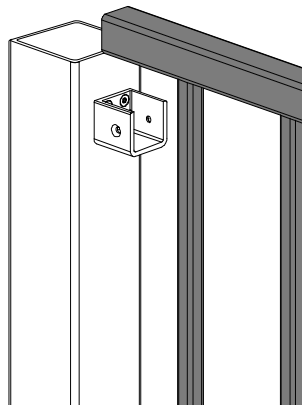
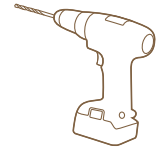
- Measure $36"$ and $3\frac{5}{16}"$ (or $42"$ and $3\frac{5}{16}"$ for $42"$ installs) from deck surface and mark a reference line on the post.
- Mark holes on post using bracket as a guide
- Pre-drill holes through the post with $\frac{5}{32}"$ drill bit.
- Attach the bracket to the post with the provided self tapping screws.



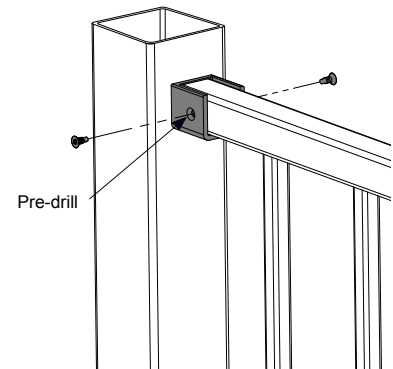
3 Secure Level Panels to Posts

- Drop panel onto the post mounted brackets. (*Dia. #3*)
- Pre-drill with 5/32" drill bit through bracket into top rail.
- Using (8) - #10x1/2" self-tapping screws, secure the upper and lower brackets to the panel. (*Dia. #4*)

Tip: To avoid scratching the posts, slide rail panel in from the side, then downward onto the brackets.



Dia. #3



Dia. #4

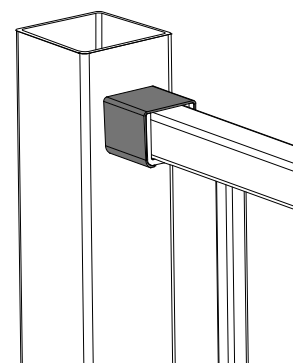
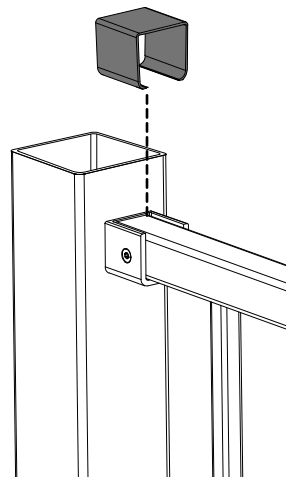
4 Install Bracket Covers

The bracket snap covers securely fasten from the top pushing downward on the bracket.



Important Note:

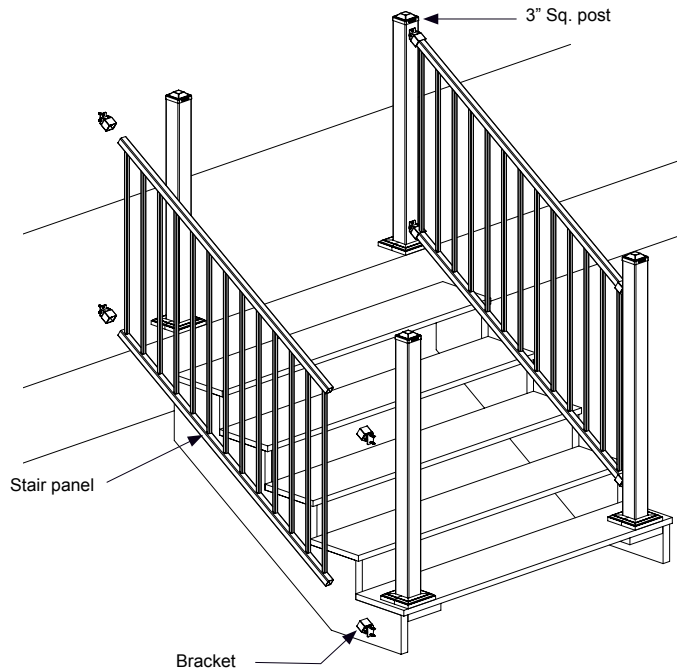
The top covers should snap firmly onto the steel railing brackets. **Do not use a hammer.** If you are having issues, check that the panel is dropped completely into the bracket so that there is no gap between bracket and panel.





Important Notes:

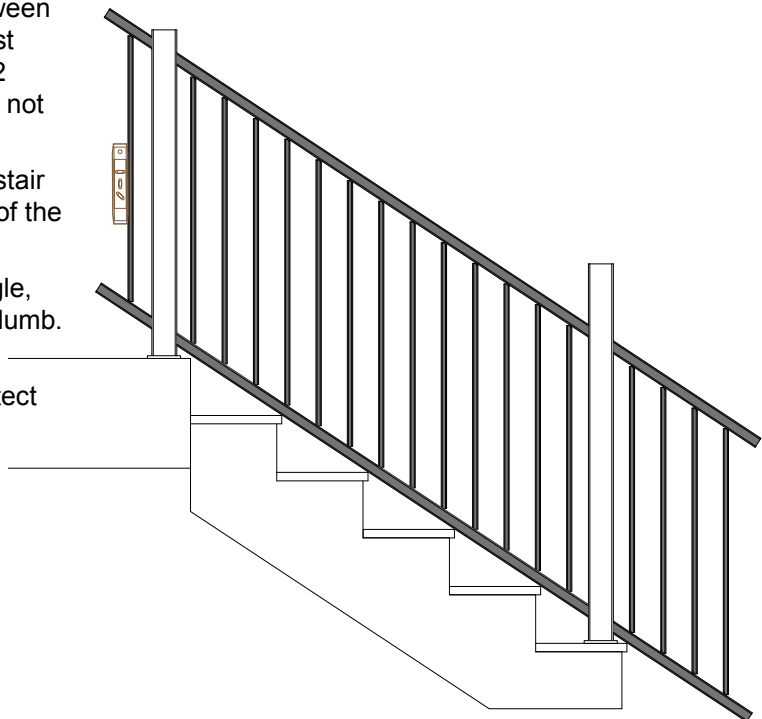
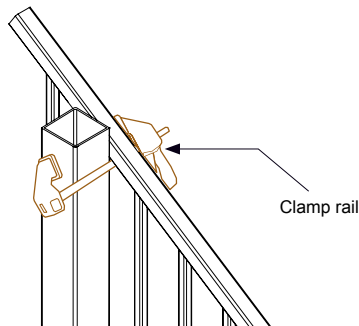
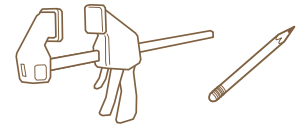
- Actual Stair Panel Lengths: 6' Panels = 69.43" and 8' Panels = 91.31". 3" posts are required to reach 6' and 8' lengths.
- Stair railing panels are designed to articulate between 30° and 45°.
- Maximum post spans on stair railing application is 96" on center. Additional posts are required on any stair application more than 8' in length.



1

Fit Stair Railing Panels

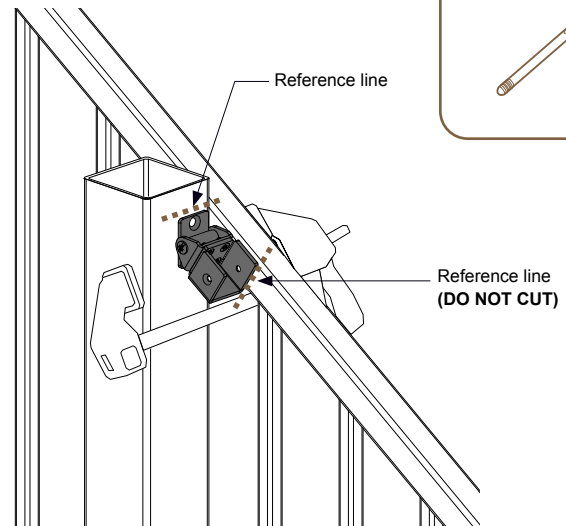
- Align the stair panel next to the posts with the bottom rail contacting the nose of all stair treads.
- Position the panel such that the gap between the last baluster on each end and the post are the same distance, and at minimum 2 1/4" between post and baluster and does not exceed 4".
- Temporarily clamp the bottom rail of the stair panel to the posts at the top and bottom of the stair. Use cardboard to protect finish.
- Rack stair section to achieve desired angle, and use a level to ensure balusters are plumb.
- Temporarily clamp the top rail of the stair panel to the posts. Use cardboard to protect the finish.



2

Align Stair Brackets

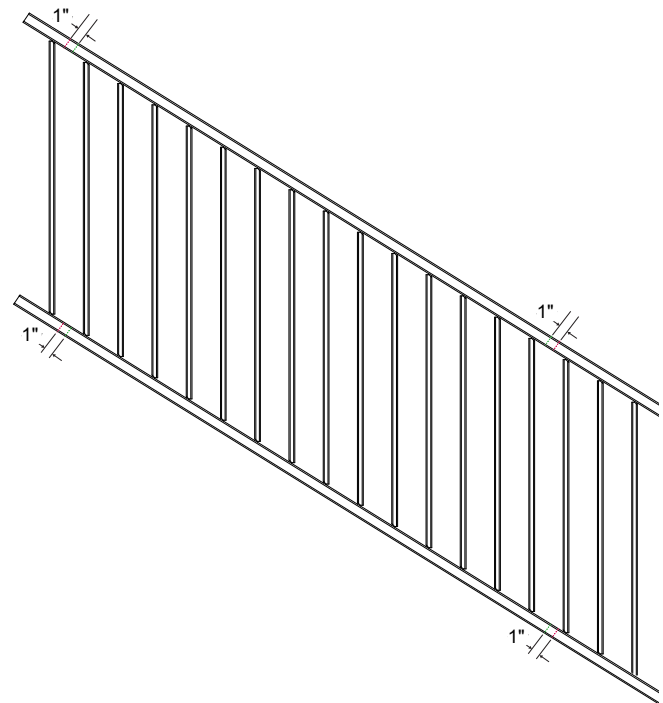
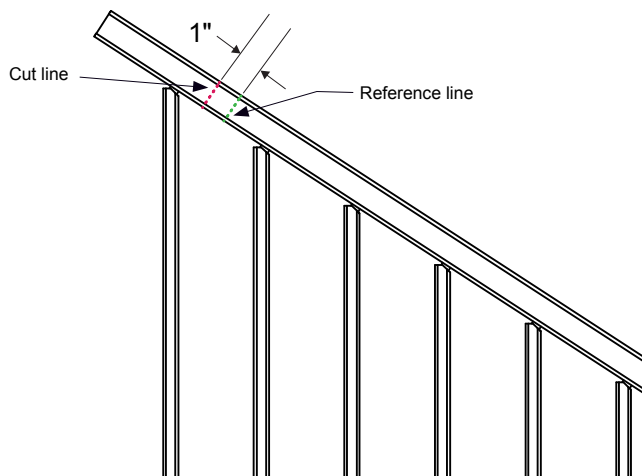
- Take a stair bracket, hold it next to the stair panel rail and flush to the post making sure it's flush on the post and centered on the rail.
- Mark the top edge of the post side bracket where it falls on the post with a reference line.
- Adjust the bracket so its moving part is at the same angle as the rail. Mark a reference line at the end of the bracket onto the rail.
DO NOT CUT THIS LINE
- Do this reference line marking at each of the three other bracket locations.



3

Mark The Panel For Cutting

- Remove the four clamps, and lay the panel down. At each location on the panel mark a cut line 1" longer (towards the end) from the reference line. This accounts for the portion of the rail that sits inside the bracket.



4

Cut The Panel

- Cut the panel at each of the cut lines.
DO NOT CUT THE REFERENCE LINE
- Paint the cut ends of the panel to prevent rust.



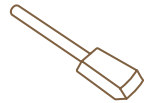
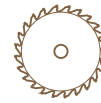
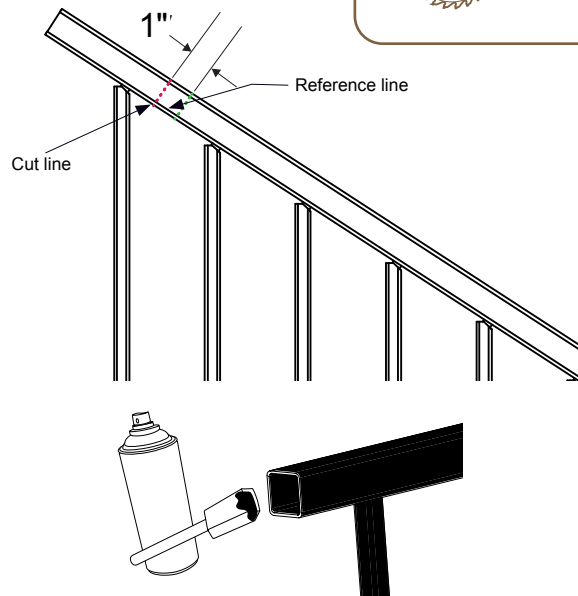
Important Note:

- Avoid damaging deck finish by cutting and painting away from deck.
- 2 1/4" minimum between post and baluster.



Caution:

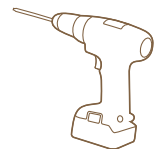
Paint touch up **REQUIRED**



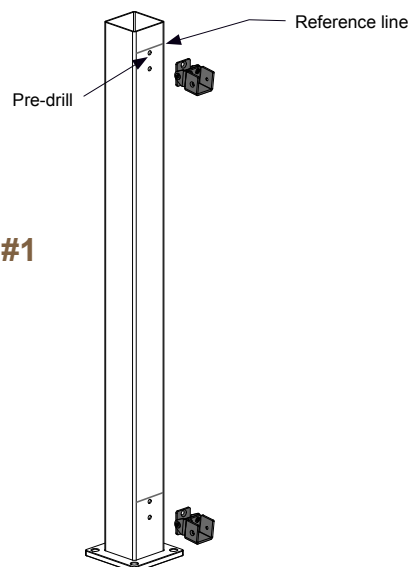
5

Attach Brackets To Post

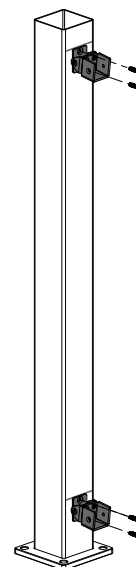
- Mark holes on post using bracket as a guide.
- Predrill holes through the post with 7/32" drill bit. (Dia. #1)
- Attach the bracket to the post with the provided self tapping screws. (Dia. #2)



Dia. #1



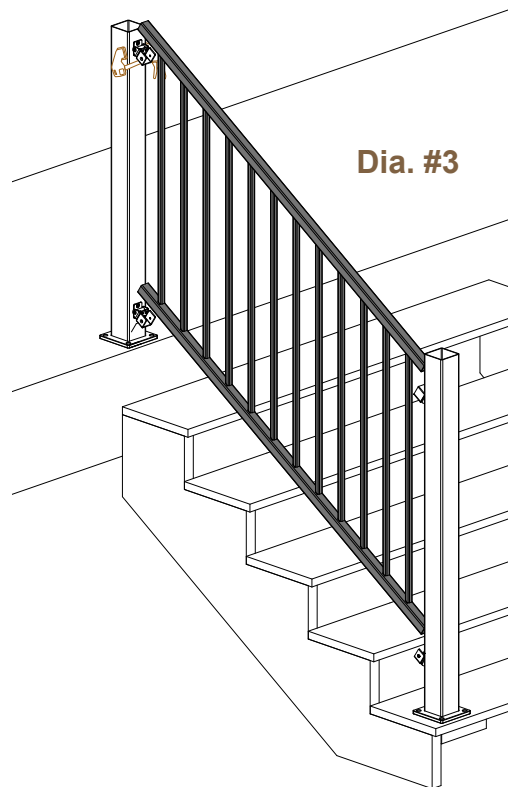
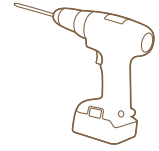
Dia. #2



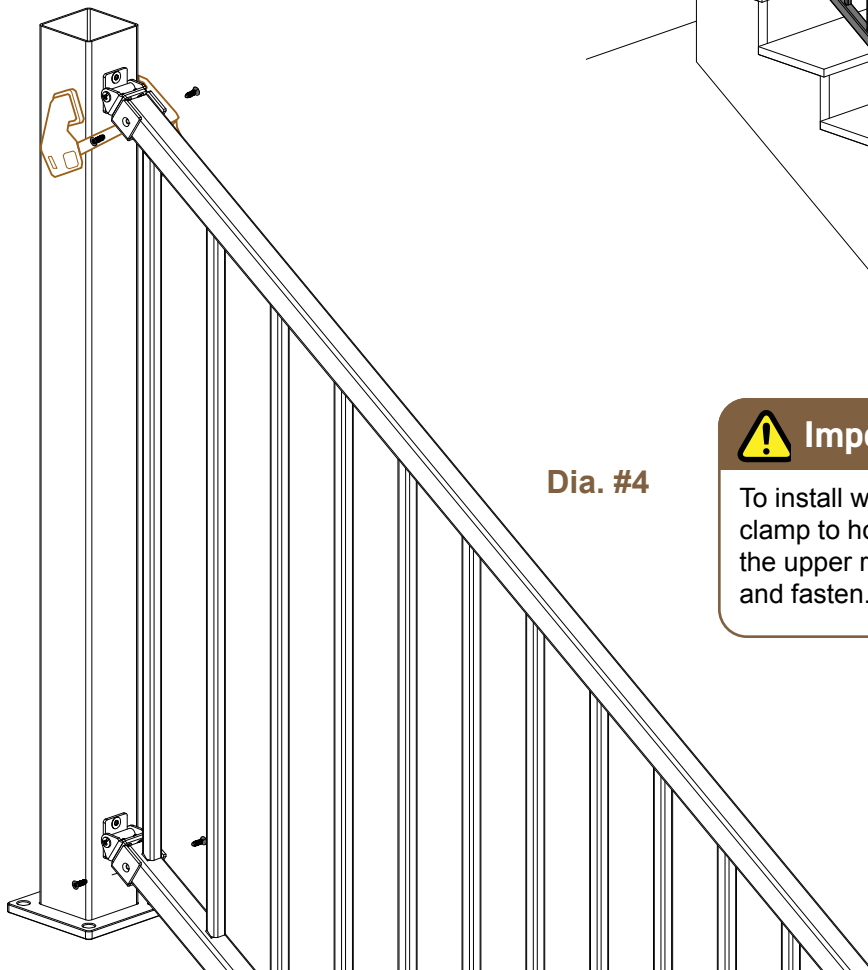
6

Secure Stair Panels to Posts

- Drop panel onto the post mounted brackets. (Dia. #3)
- Pre-drill with 5/32" drill bit through bracket into top rail.
- Use a soft clamp to hold rail to bracket while pre-drilling.
- Using (8) - #10x1/2" self-tapping screws, secure the upper and lower brackets to the panel. (Dia. #4)



Dia. #3



Dia. #4



Important Note:

To install with only one person, use a clamp to hold the top brackets against the upper rail of the panel. Then pre-drill and fasten.

7

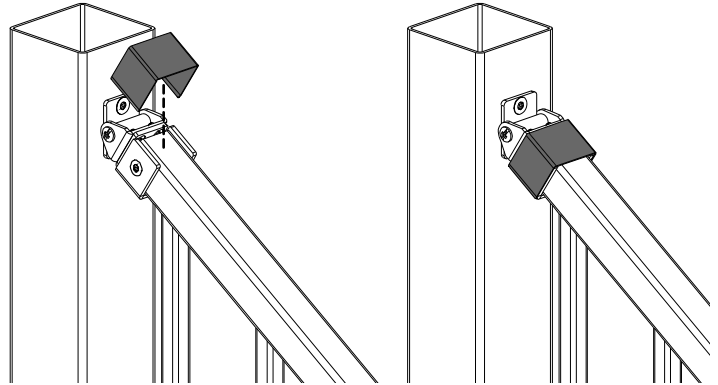
Install Bracket Covers

The bracket covers fasten securely from the top. Push downward on the bracket until you hear a snap.



Important Note:

The top covers should snap firmly onto the steel railing brackets. **Do not use a hammer.** If you are having issues check that the panel is dropped completely into the bracket so that there is no gap between bracket and panel.



Suggested Tools:

- | | | | |
|------------------|-------------------|-----------------------|---------------------|
| • Cordless Drill | • Safety Glasses | • Jig Saw/Miter Saw | • Portable Band Saw |
| • Pencil | • T20 Drive Bit | • Carbide Tipped Fine | |
| • Tape Measure | • 5/32" Drill Bit | • Tooth Blade | |

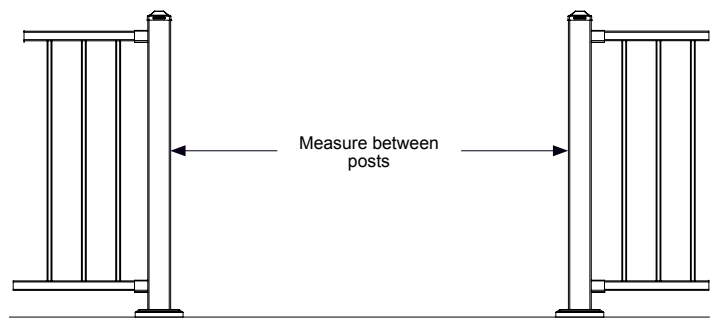
1 Remove all Items From Package

Installation Components:

- | | |
|--|--|
| • One (1) - Picket Panel (Purchase Separately) | • Two (2) - Self-Closing Hinges |
| • Two (2) - Gate End Posts w/ Welded Rods | • One (1) - Locking Latch Kit with Key |
| • Sixteen (16) - 5/8" Self-Tapping Screws | • Sixteen (16) - Color Matched Self-Tapping Screws |

2 Measure Between Posts

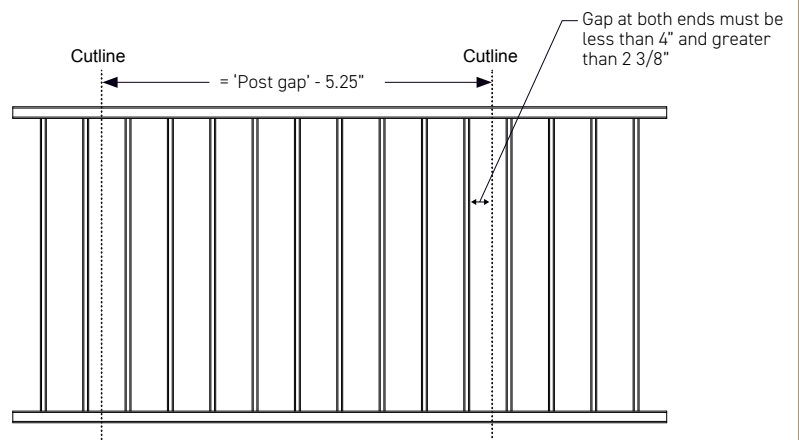
- Measure the gap between your posts, and write down this dimension. (*Dia. #1*)



Dia. #1

3 Cut Panel

- Your gate will be 5 1/4" shorter than the distance between posts. (This accounts for gate end length and a 1" gap for hinges and clearance.)
- Align your cuts such that the distance from the last baluster to the end is the same on both ends.
- Painting the cut ends will prevent rust. (*Dia. #2*)

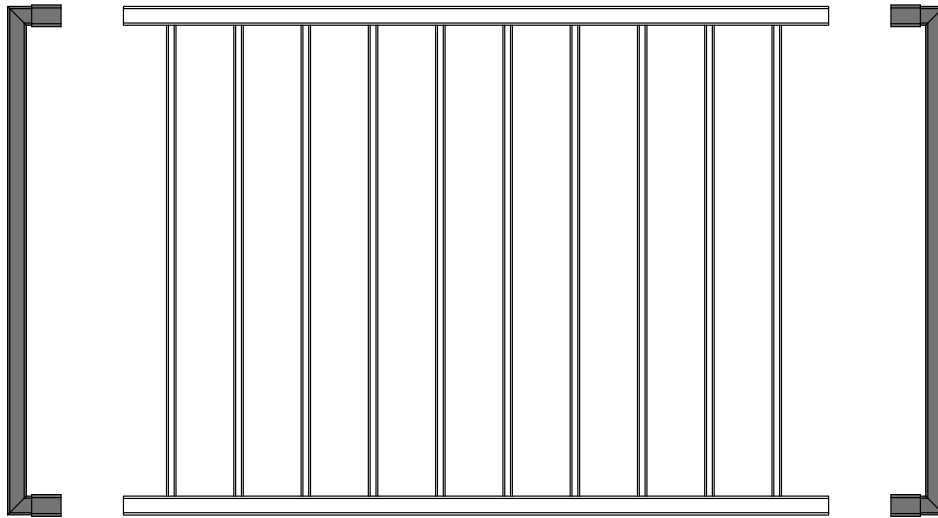
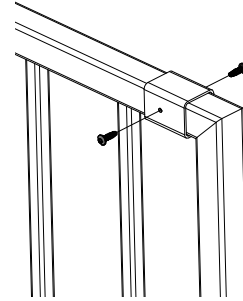


Dia. #2

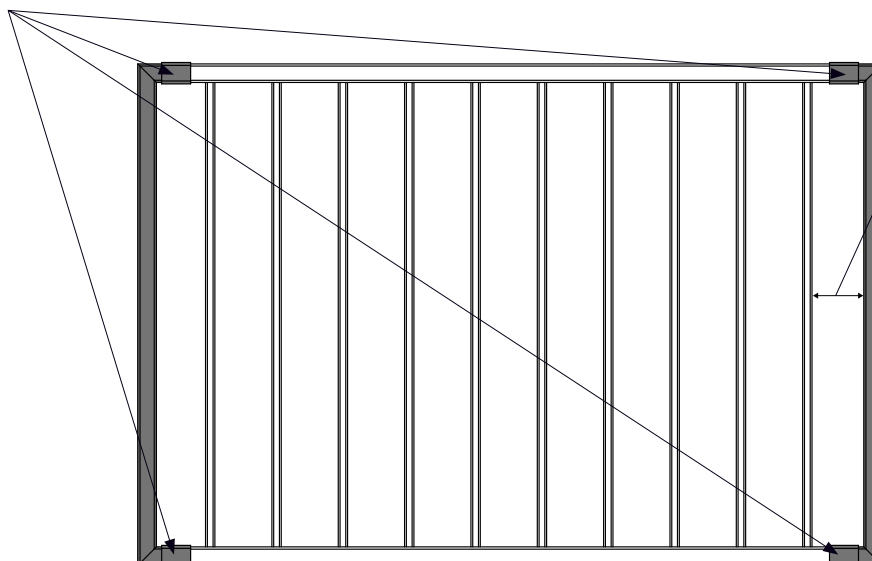
4

Fasten Gate Ends To Panel

- Slide gate ends onto the ends to the newly cut panel.
- With the gate ends fully seated on the panel, pre-drill with a #25 drill bit through both the gate ends and the panel in four places.
- Use the included screws to fasten together.
- Next, install your latch and hinges according to the instructions included with those components.



Pre-drill and
screw here



Gap at both ends must be
less than 4" and greater
than 2 3/8"

5

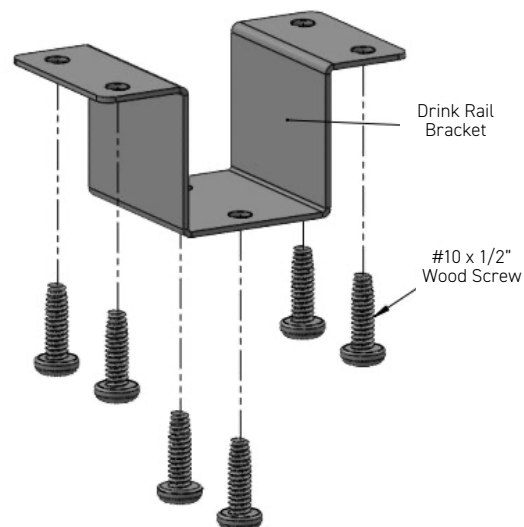
Install Gate Hinges Per Instructions Provided In Hinge Package

6

Install Gate Latch As Per Instructions Provided In Latch Package.

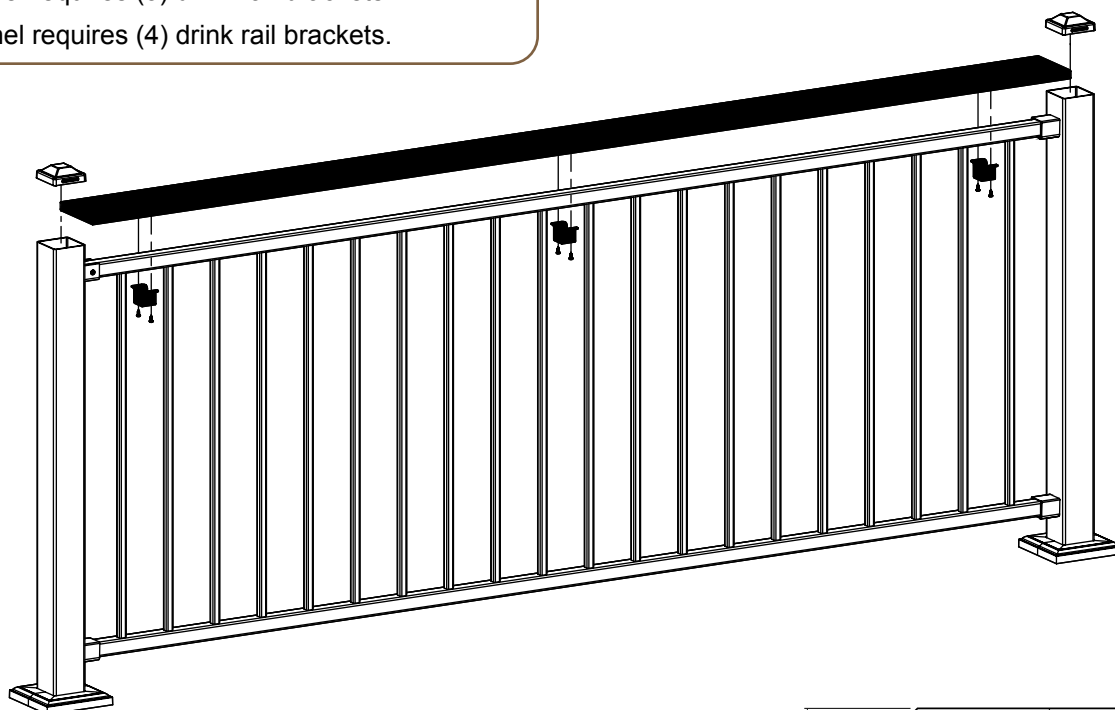
1 Fasten Drink Rail To Panel

- Remove the panel bracket covers and post caps if already installed.
- Measure between posts on the top of the panel, and cut the drink rail board to length.
- Position the board on the top rail of the panel and center it.
- Using a soft clamp or cardboard (to not scratch the finish) clamp the board to the panel.
- Using the drink rail brackets as a template, position a brackets in the second baluster gap and one close to the center of the board.
- Using a 5/32" drill bit pre-drill, make sure not to drill through the board.
- Using the T20 Torx bit, fasten the bracket to panel and board with the included screws.
- Reattach the post caps.

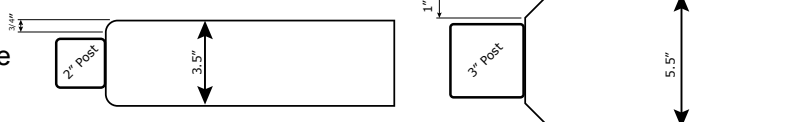


Important Note:

- 6' panel requires (3) drink rail brackets.
- 8' panel requires (4) drink rail brackets.



Tip: For a professional look consider using a trim router to round or chamfer the corners of the drink rail board.



1

Fasten Foot Block To Panel

- Locate the center of the panel, and mark a centerline.
- Using the footblock as a template, mark the two holes.
- Pre-drill into the bottom panel rail using a #25 drill.
- Fasten the footblock with the two (2) included #10 self tapping screws.
- Proceed to the panel installation.



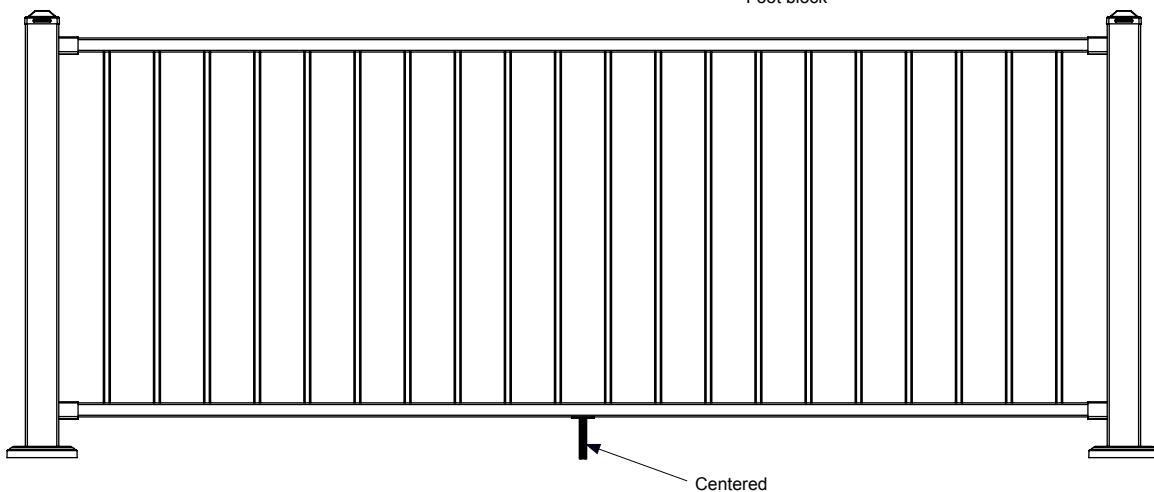
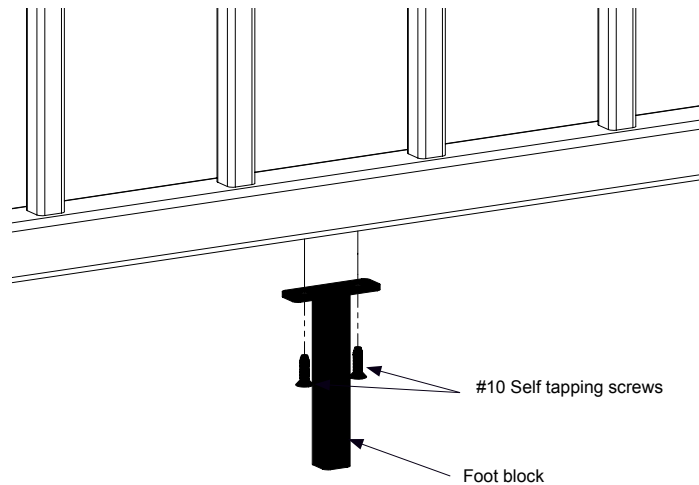
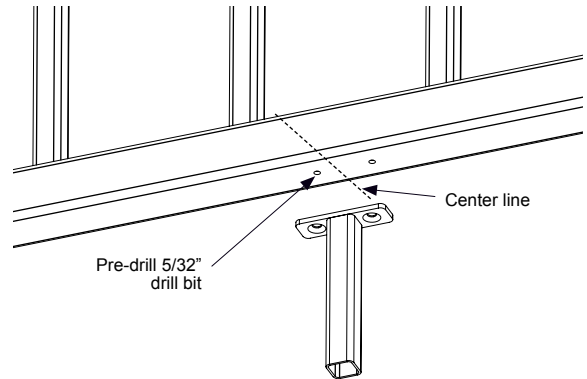
Important Note:

Footblock required for 8' panels in order to be residential code compliant.



Caution:

- Footblocks need to be installed prior to panel installation



Plan Drawings/Notes



Important Note:

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