CUSTOMER SERVICE CONTACT INFO

Phone/Fax: 888-686-7245 (RAIL)
Email: sales@stainlesscablerailing.com
Website: www.stainlesscablerailing.com
Address: 4055 S Grant St.
Washougal, WA 98671

CABLEVIEW® WOOD RAILING INSTRUCTIONS

Choose **STAINLESS CABLE & RAILING™** for all your fittings and cablerail assemblies! **SIMPLE, STRONG**

Table of Contents:

Just follow these simple steps:

1. INTRODUCTION / TIPS

Thanks to their density and durability, our woods are recognized as some of the best timber species for exterior decks and railings. When working with them, keep in mind the following:

- Make sure to check and follow local building codes
- Wear safety glasses and masks at all times to keep sawdust out of eyes and mouth
- Cut Ipe wood using carbide-tipped saw blades
- Drill holes before inserting screws
- Use only stainless steel screws to fasten. Square drive is recommended to minimize stripping.

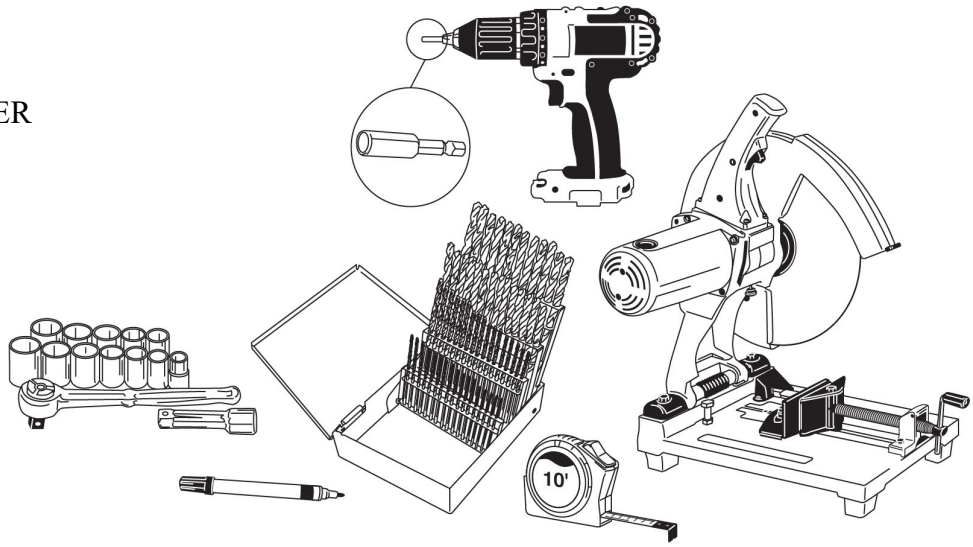
IMPORTANT TIPS:

- Store posts and top rails at the installation location at least one week prior to installation, allowing the wood to acclimate to the humidity levels of its environment. Keep dry and out of direct sunlight by covering. Stored railing should be supported to prevent warping and kept off the ground. Used scraps of wood between the boards will allow air circulation. Failure to allow enough time for the wood to acclimate can increase the chances of cracking, checking, warping, etc. after installation.

- Our Ipe and Batu products will naturally darken upon exposure to sunlight, though specific areas might darken at different rates. Differences in shade between adjacent areas will become less noticeable with time, as the entire surface darkens to its long-term shade. Both species will oxidize and turn a silvery gray if you do not put any finish on your wood. If you prefer this color or would rather not bother with oil finish, you may leave the wood untreated.

2. NECESSARY TOOLS

1. MEASURING TAPE
2. CROSS CUT/CHOP SAW
3. DRILL
4. DRILL BITS INDEX
5. UNIVERSAL BIT HOLDER
6. SOCKET WRENCH SET
7. BLACK MARKER



3. LAYOUT

SC&R Stainless Cable & Railing — Cable Railing Layout

Customer Name: _____ Date: _____

CABLE RUN	Cable Length(FT)	Cable Length(IN)	# Cable Runs	Total Cable	SM Tensioner	SM Toggle End
A	5		10	50 FT 0 IN	10	10
B	13	6	10	135 FT 0 IN	10	10
C	9		10	90 FT 0 IN	10	10
D	13	6	2	27 FT 0 IN	10	2
E	21		8	168 FT 0 IN		8
F	4		8	32 FT 0 IN	8	8
G	3	8	2	7 FT 4 IN	10	2
H	8		8	64 FT 0 IN		8
I						
J						
K						
L						
M						
N						
O						
Required Overage Cable (IN)				206		
Total	591 FT 4 IN				58	58

Different colored lines represent separate cable runs.

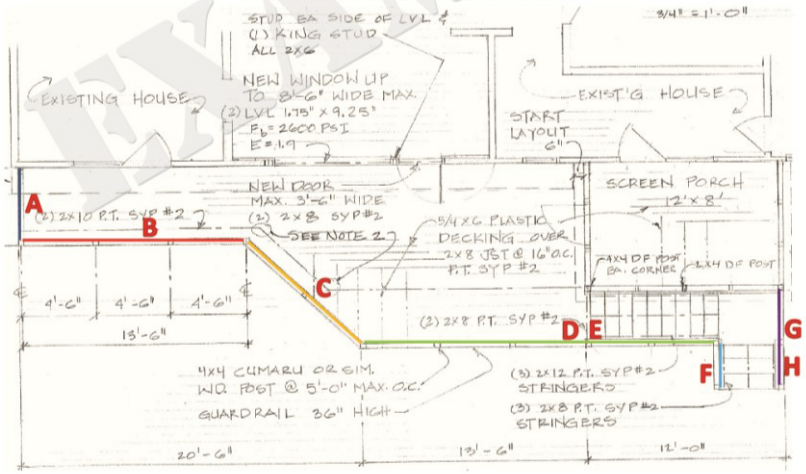


Fig 1

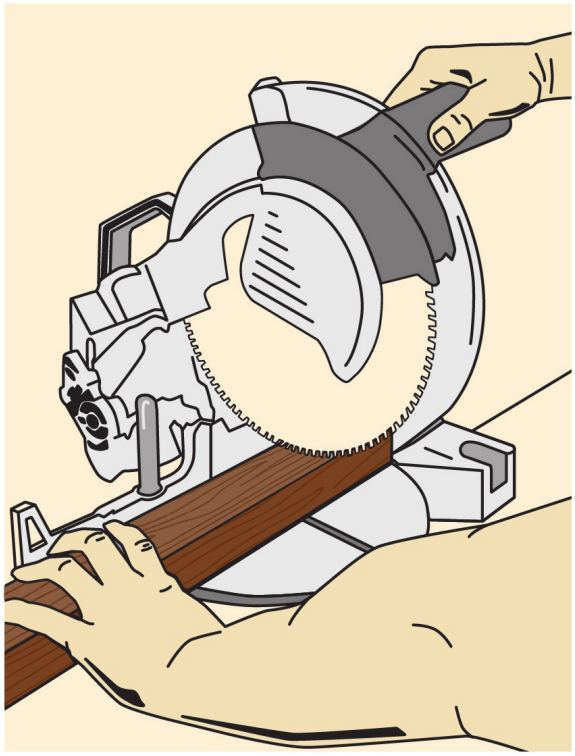
NOTE: This sheet should be included with your shipment. Call 888-686-7245 if you do not have this.

Determine where the cable will start and stop (ie; Sections).

Reference the color-coded layout sheet (Fig 1) if it was included with these instructions.

4. CUT POSTS TO LENGTH

Fig 2



Posts are shipped oversized to accommodate a variety of configurations and may need to be cut to length. If posts need to be cut, use a carbide tipped blade on a cross cut/chop saw (Fig 2). Cut posts to the appropriate height given your desired overall railing height including your top rail.

IMPORTANT:

- Make sure you are cutting the correct end of the post.
- Cut slowly through the wood to minimize splintering on the bottom of the board.
- Have the good side face up while cutting to minimize splintering on the ends.
- Before cutting stair posts, refer to Step 6-7.

NOTE: For 36” height, there are typically 11 holes/cables.
For 42” height, there are typically 13 holes/cables.

Install rail posts flush to the inside or outside of the deck frame. Consult your layout sheet (Fig 1) for post spacing.

Use 2 3/8" through-bolts to attach 4x4 wood posts to the deck framing. Be careful not to over-tighten the fasteners, as this will crush wood fibers and compromise the integrity of the post.

Simpson Strong Tie DTT22 brackets are available for rail post connections attached inside the frame. This bracket nicely transfers normal and perpendicular stress into parallel shear loads that work with bolts to increase load capacity. The design of these brackets complies with IRC and IBC code requirements for a safe and secure hold. They fasten easily to a single 2x joist using the provided screws, and accept a 3/8"-1/2" hex bolt. A washer must be installed between the nut and seal.

Do not notch the guard posts where they connect to deck framing. These ends of the guard post are subject to the greatest bending force. This method often results in the post cracking at the notch. Instead, it is recommended that you fasten your 4x4 posts at their full cross-section, as this will provide the best and strongest result.

5. INSTALL POSTS

1 **Post-Intermediate**
(4x4)

1 **Post-Terminal**
(4x4)

2 **Standoff Spacer**
ITEM# 732486

3 **3/8" Bolt, Nut & Washer**
ITEM# 987487

4 **DTT2Z Deck Post Connector**
ITEM# 729288

5 **½" Bolt, Nut & Washer**

3 **2 3/8" Lag Bolt**
ITEM# 987586

Refer to the layout (Fig 1) for proper post location.

Use the layout (Fig 1) to determine post position. Additional blocking may be needed for strength and should be added at this time.

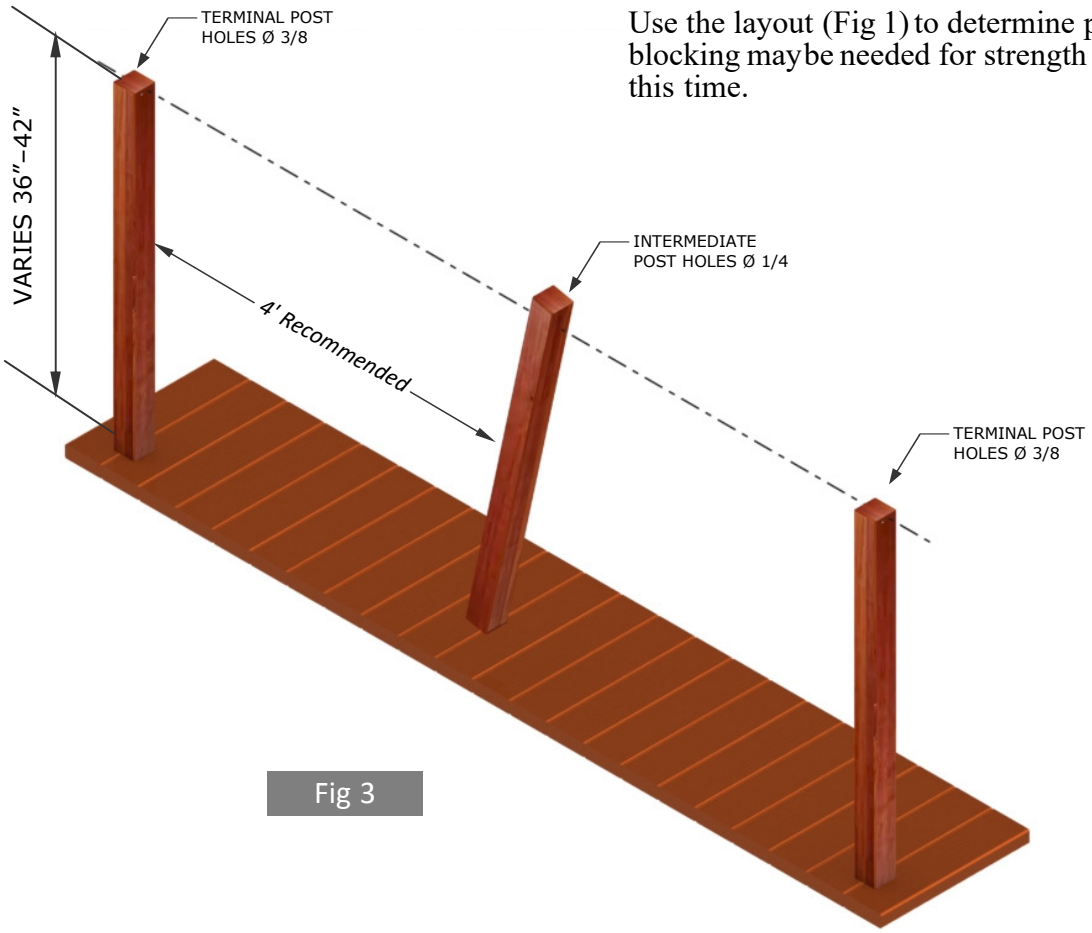
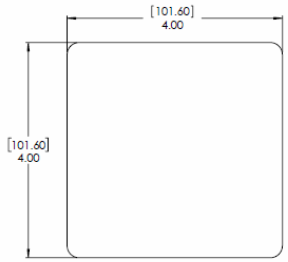
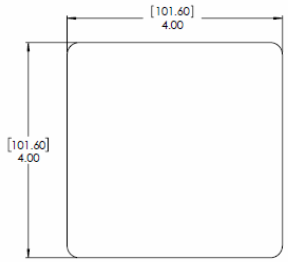


Fig 3



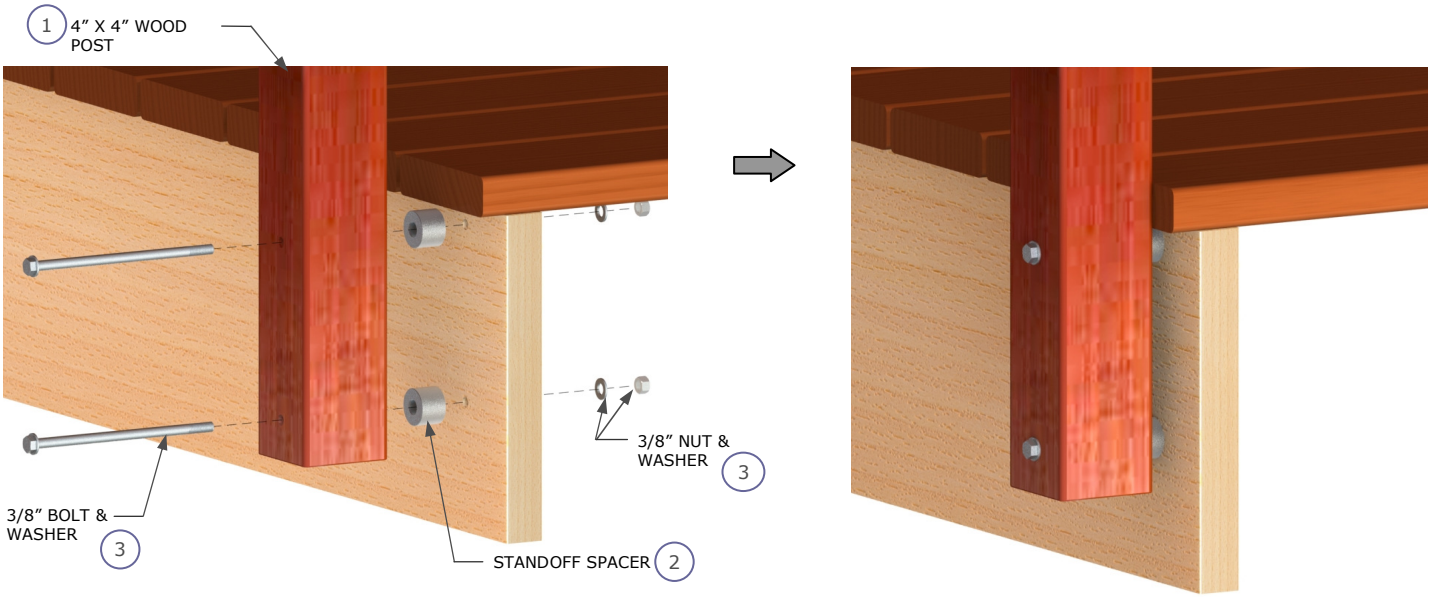
POST (4x4) - INTERMEDIATE

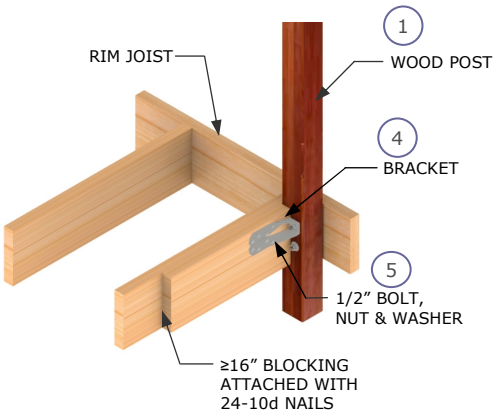


POST (4x4) - TERMINAL

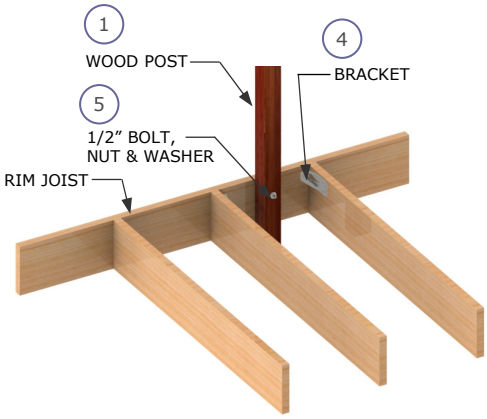
Check your local building code requirements to determine approved mounting techniques. Fig 4 shows typical mounting options.

Fig 4: Wood Post Installation

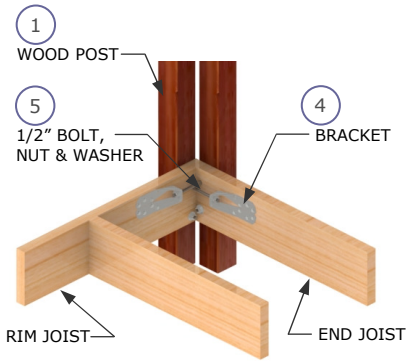




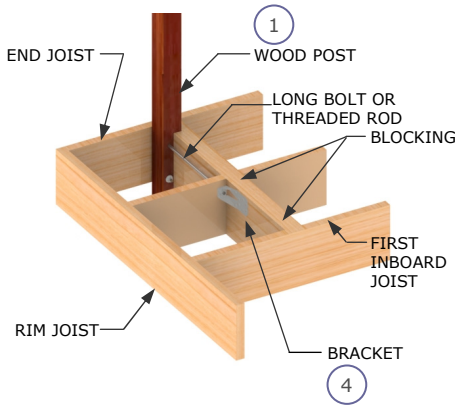
POST ALONGSIDE JOIST



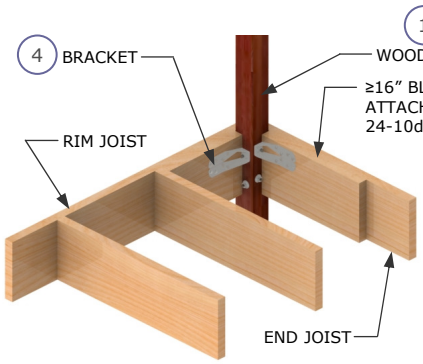
POST NOT ALIGNED TO JOIST



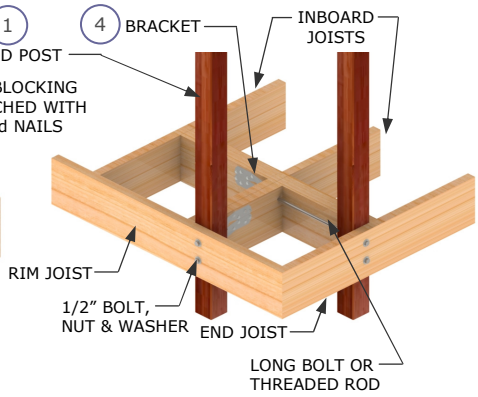
PAIRED POST AT OUTSIDE 90° CORNER



POST AT END



POST AT 90° OUTSIDE CORNER



POST AT INSIDE CORNER

Adjust mounting location up or down, as needed, keeping in mind the following:

1. Overall rail height. (36”-42”)
2. Gap between the edge of the board and the first cable (3”).
3. Depending on the mounting hardware chosen, drill (2) appropriately sized holes through the base of each post. Use the following chart (Fig 5 & 6)

Hardware Size	Post Hole Size
3/8" Bolt	13/32"

Fig 5: Wood Post Installation

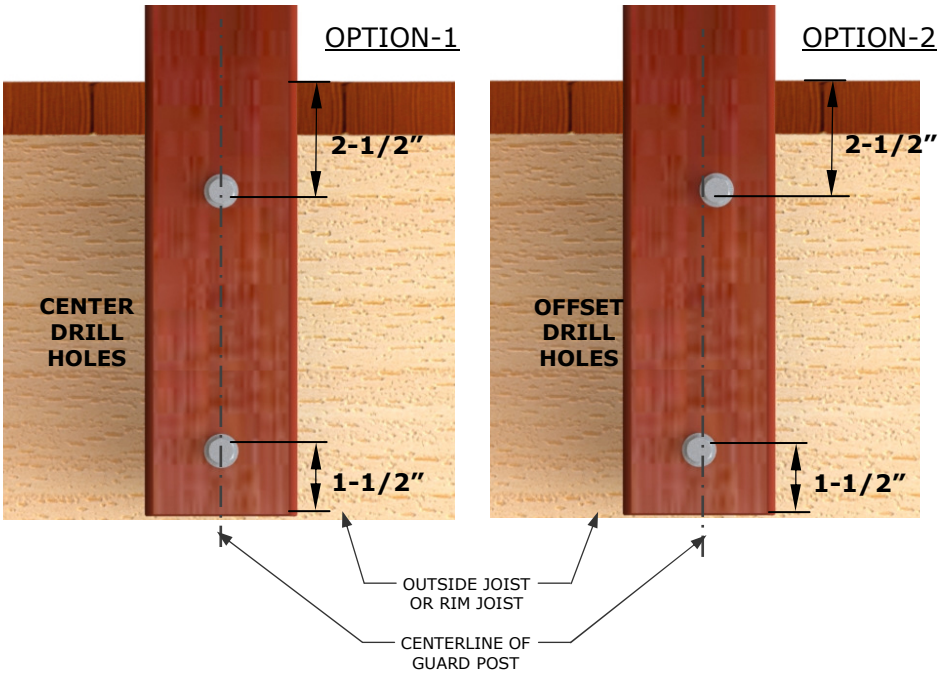
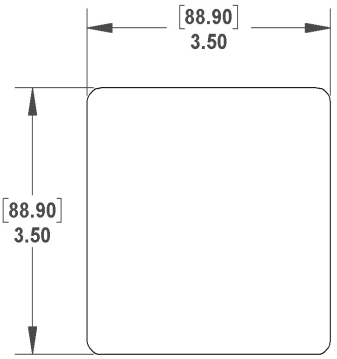


Fig 6



3.5x3.5 WOOD POST

6. INSTALL TOP RAIL (Not all designs will have this; **skip to Step 7 for Post-to-Post Rail**)

6A. Measure and cut top rail. Keep in mind that the top rail is used in the longest lengths practical since longer railings will incorporate more posts and strengthen the handrail.

① **Post-Intermediate** (4x4)

① **Post-Terminal** (4x4)

② **Wood or Composite Top Rail**

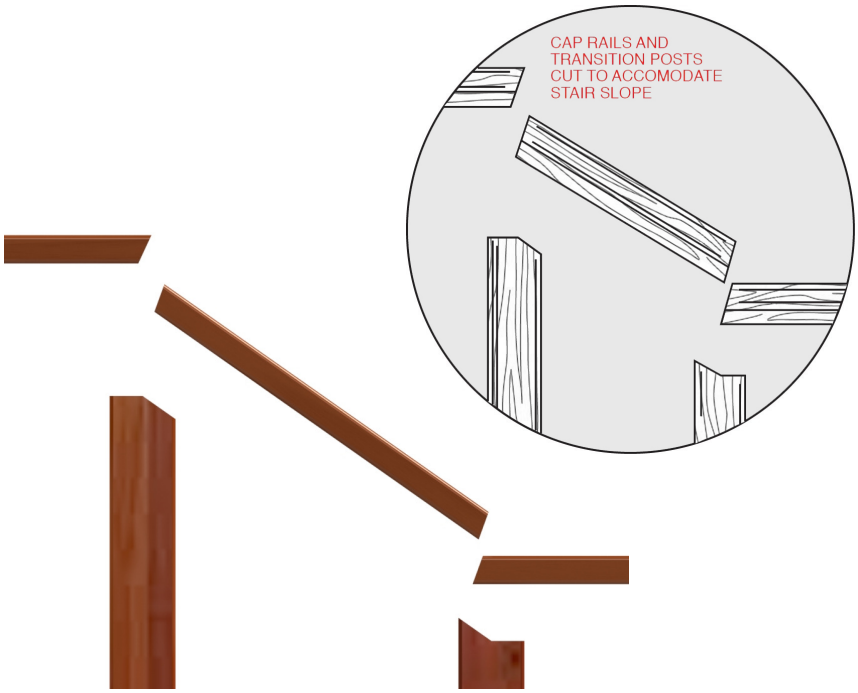
③ **Wood Plug**

④ **Screw**

Fig 7: Install Top Rail - Typical Post

Fig 8: Install Top Rail - Butt Splice

Fig 9



Top rail may run continuously from the horizontal to accommodate angles (Fig 9). Mitre cuts are required.

To attach top rail to post, first position and center top rail over a plumbed post. Terminal posts - where the cable starts and stops, thus transferring the highest loads - should have four screws through the top rail into the post. Intermediate posts only need two screws (Fig 10).

If using our Wood Installation Kits with 3/8" Ipe Plugs or a Plug Cutter and #10x3" Square Drive Deck Screws, follow this procedure:

- Once the drill locations have been identified and marked, drill through them one at a time using the 7/64 straight bit to create pilot holes. These holes should be slightly deeper than the overall screw length. Otherwise, the screw might bottom out and later break off (Fig 11).
- For the top rail only, drill 3/16" clearance holes into the pilot hole you have just drilled.
- Using the 3/8" countersink included in the installation kit, drill the screw pilot holes.
- Drive each screw through these holes using the supplied square drive bit, to attach the top rail to the post. Seat the screw head firmly into each countersink hole.

Fig 11

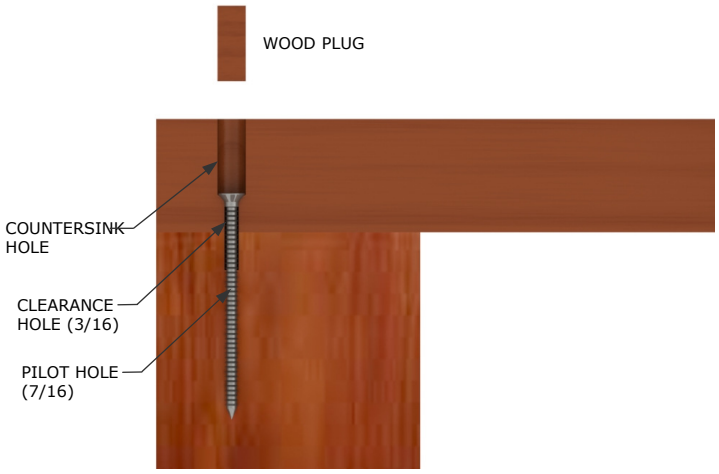
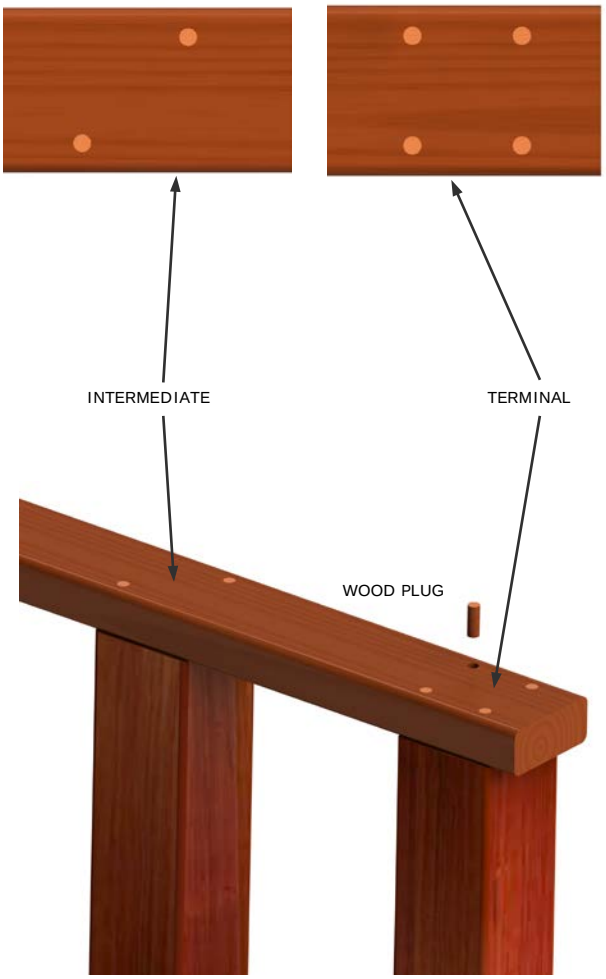


Fig 10



6B. INSTALL PLUGS

NOTE: If using the Wood Frame Kit with the Plug Cutter for Batu and Western Red Cedar Systems, first make your plugs using a piece of wood left over from installation.

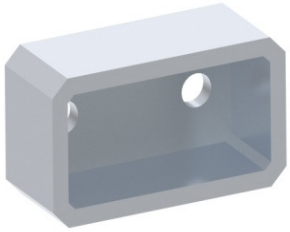
1. Paying attention to plug color and grain, choose the best plug for each hole. Brush a layer of the included glue across the bottom and sides of the plug.
2. Gently tap the plug into the hole using a mallet, until you feel it seat against the screw head. Wipe away excess glue.
3. Once the glue is dry, trim the wood plug until it is nearly flush with the surrounding surface. Use a flush-cutting saw or chisel and mallet to do this.
4. With sanding block that has 80- or 100-grit sandpaper, grid the plugs down the rest of the way, until they are flush with the surrounding wood. Repeat these steps for each plug.

7. POST-TO-POST INSTALLATION (Not all designs will have this; **skip to Step 8 for Finishing**)

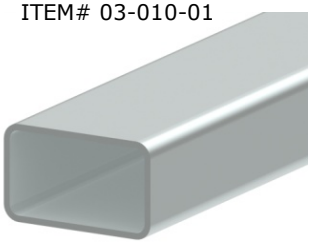
A POST-TO-POST RAIL can be used in the following ways:

A. Support for a wood top rail
B. Handrail for stairs

1 **Post-to-Post Bracket**
ITEM# 984905

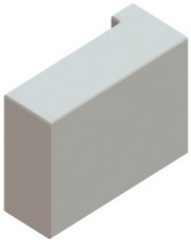


2 **Post-to-Post Inline Handrail/Support Rail**
ITEM# 03-010-01



3 **Wood or Composite Top Rail**

4 **Plastic Bracket**

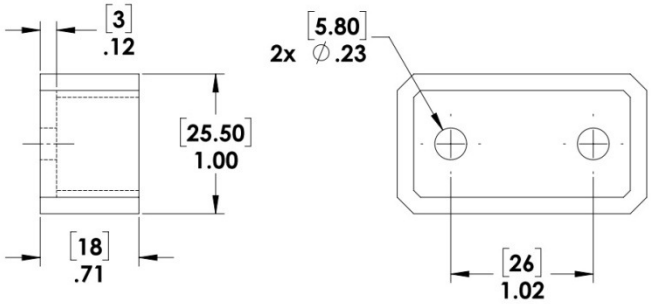


5 **#8x3/4" Pan Head Screw**

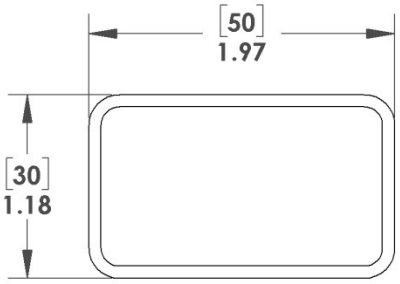
6 **#8x1-1/4" Pan Head Screw**

7 **#10x3/4" Pan Head Screw**

8 **#10x2" Pan Head Screw & Washer**



POST-TO-POST BRACKET



INLINE HANDRAIL/ SUPPORT RAIL

7A. SUPPORT FOR WOOD TOP RAIL

Must be installed sequentially starting from the first terminal post. Hold the mounting bracket centered against the inside face of the post, and 1/16" from to the top of the post (Fig 13). Mark with a felt tipped pen the two holes (Fig 12). Center punch the marked holes and drill pilot holes into post to accept 2 #12 x 3/4" stainless pan head screws (included). Using these screws, attach mounting bracket to post (Fig 12). Repeat procedure for the next post. With the chop saw, cut the **POST TO POST RAIL** to length. At this time, loosen or remove anchors to allow the **POST TO POST RAIL** to be inserted over the brackets. Re-tighten the posts.

The **POST TO POST RAIL** is then screwed into place by pre-drilling 1/8" pilot holes through the rail into the bracket and securing with 2 #8 x 3/4" stainless pan head screws (Fig 14). A variety of customer supplied top rail wood works well in this application.

Usually drilling up from the bottom through the POST TO POST RAIL and screwing into the wood works the best (Fig 15).

Fig 12: Post-to-Post Bracket Installation

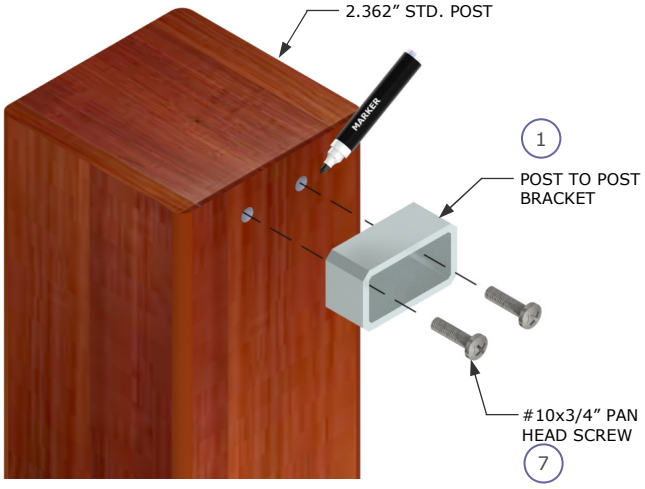


Fig 13: Post-to-Post Handrail/Support Installation

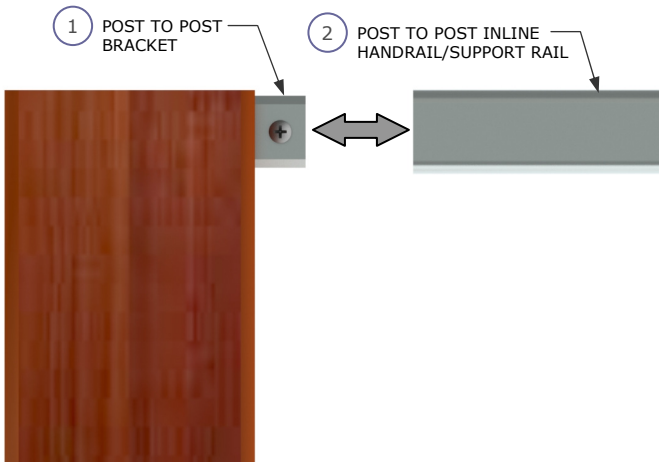


Fig 14

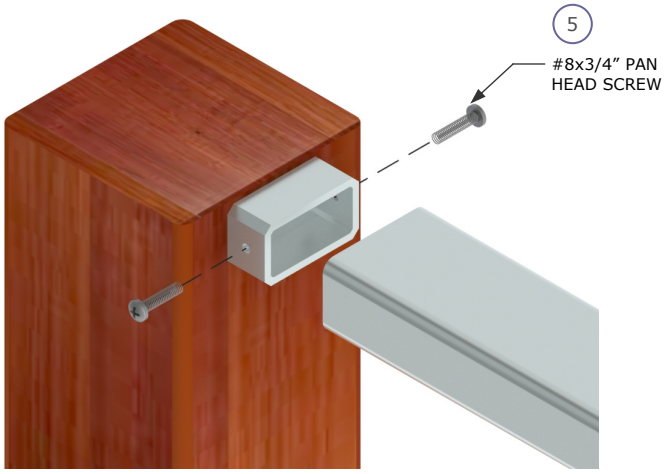
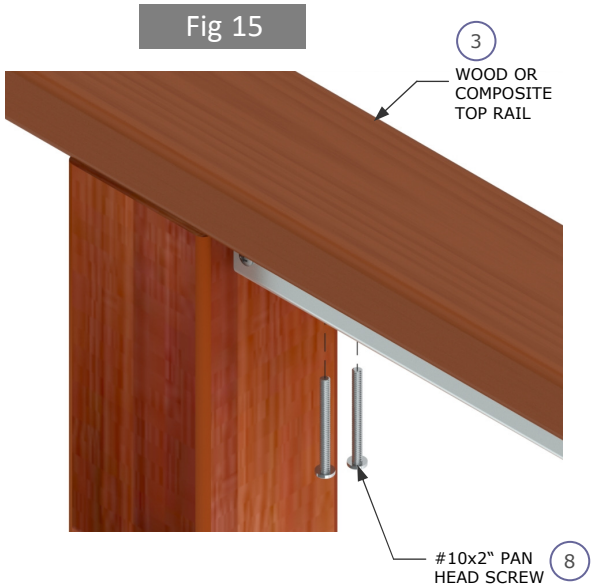


Fig 15



90 DEGREE POST-TO-POST INSTRUCTIONS:

Determine the proper placement of the plastic bracket vertically on the post. This is based on where you plan to attach the Post-To-Post rail.

Insert # 8 x 1 ¼ Screw, hold in position, pushing hard on the corner of the bracket (Fig 16).

Using the proper size Philip driver, power turn each screw until it drills into the post and tightens.

Fig 16: 90deg Post-to-Post Instructions

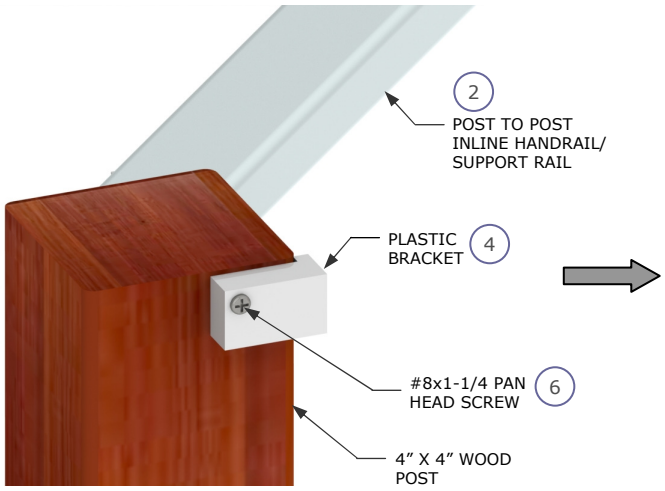
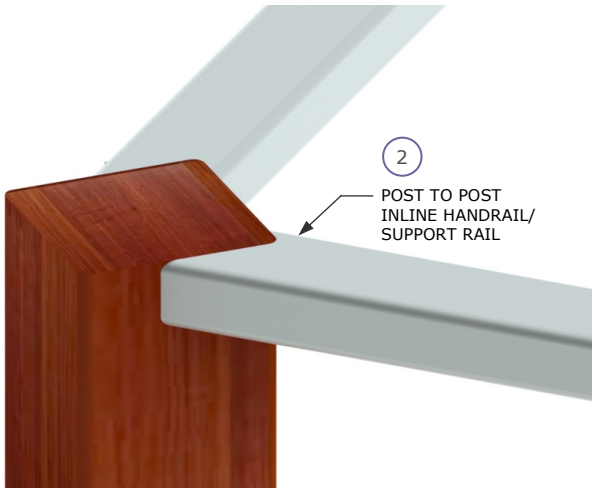


Fig 17



135 DEGREE POST-TO-POST INSTRUCTIONS:

Determine proper placement of plastic bracket vertically on the post.

Insert a # 8 x ¾ Screw in the hole on the short side of the bracket and a # 8 1 ¼ Screw in the hole on the long side of the bracket.

Attach bracket with screws using a long Philips driver.

Install corner Post-To-Post piece (cut at proper angle and length) over bracket. Line up rail so it is flush with sides of post.

On the underside of the corner piece, drill through the METAL ONLY with an 11/64" drill bit, exposing the plastic bracket inside (Fig 19).

Drill a ½" pilot hole into the plastic bracket with a 1/8" drill bit.

Using a Philips screwdriver, hand screw in # 8 x ½" screw.

Fig 18: 135deg Post-to-Post Instructions

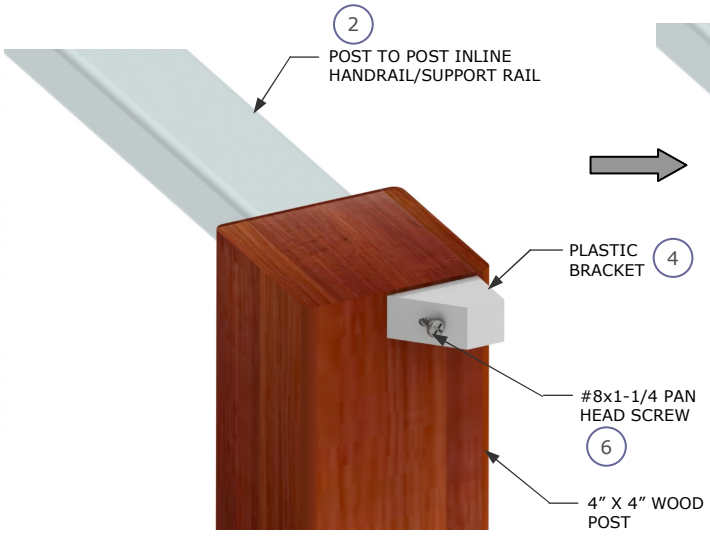
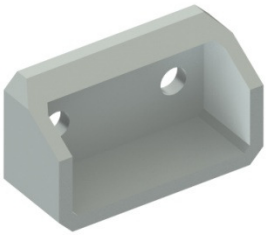


Fig 19

7B. HANDRAIL FOR STAIRS

1 **Post-Intermediate**
(4x4)

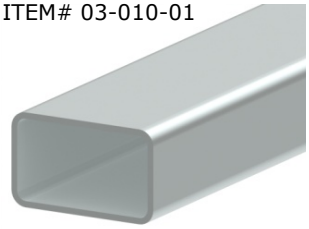
1 **Post-Terminal**
(4x4)



2 **Post-to-Post Bracket**
ITEM# 984929

3 **#10 Tapping Screw**

4 **Post-to-Post Inline Handrail/Support Rail**
ITEM# 03-010-01



5 **#8x3/4" Pan Head Screw**

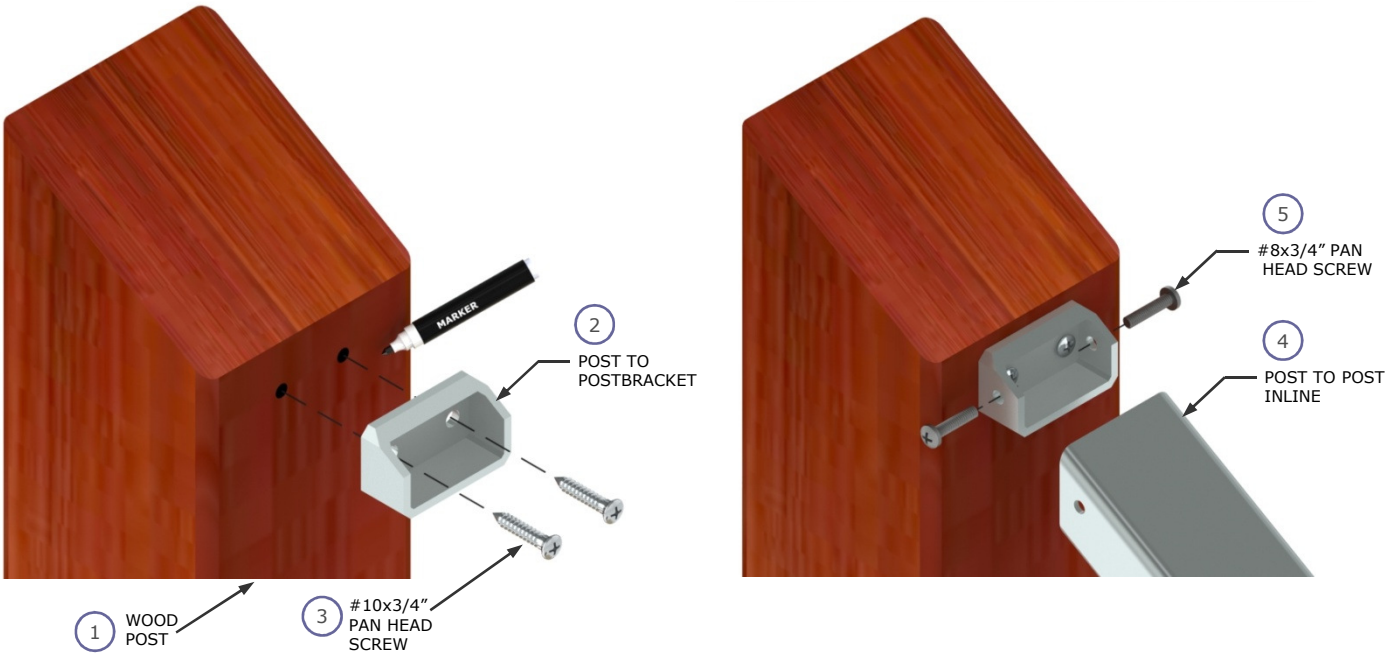
6 **Handrail By Others (Optional)**

Install top and bottom stair posts first.

Before cutting stair posts to length, keep the following in mind:

- Post-To-Post stair handrail must run continuously between the posts at the head and base of the stairs.
- Posts at the top and bottom of the stairs will be longer than the intermediate posts.
- Finished handrail height must be between 36" (max) and 34" (min).

Fig 20: Post Bracket Installation Detail



- Post-To-Post hand rail is often used as a standalone stair hand rail (Fig 21).
- Post-To-Post hand rail can also be combined with a wood top rail (Fig 22).

Fig 21: Post-to-Post Inline Handrail

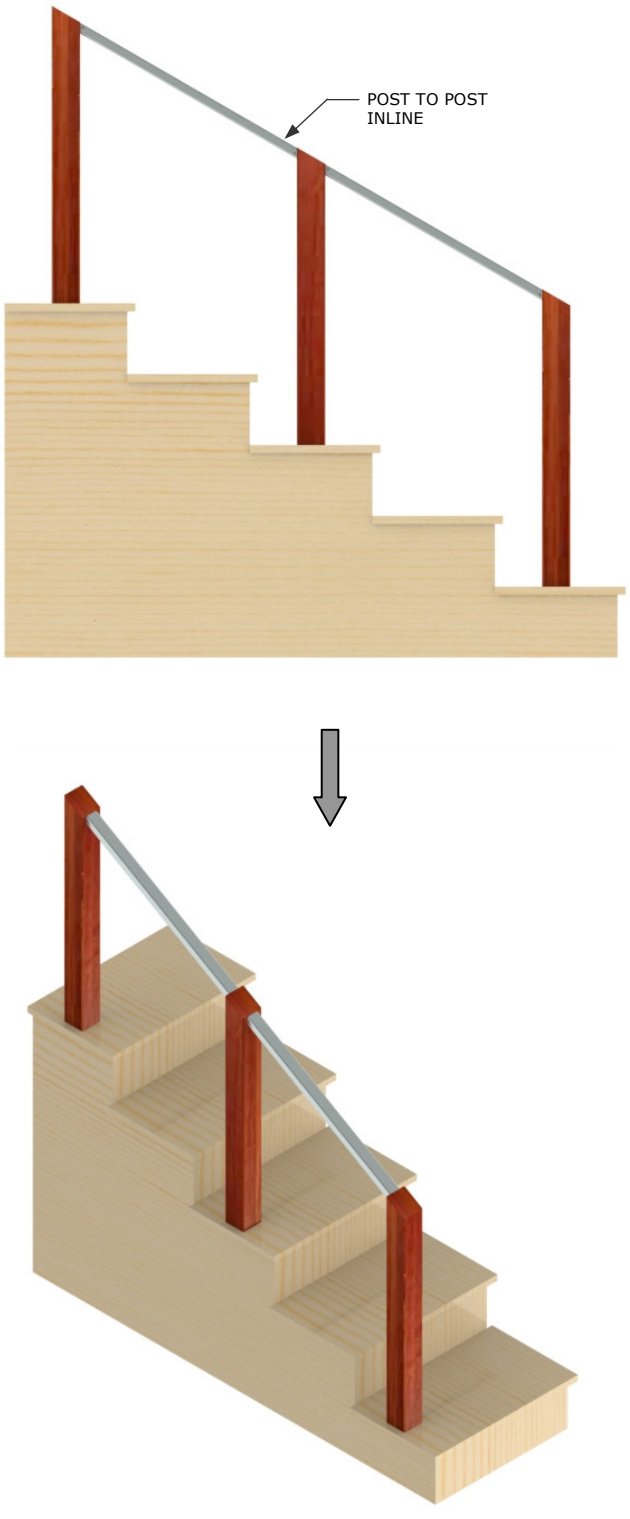
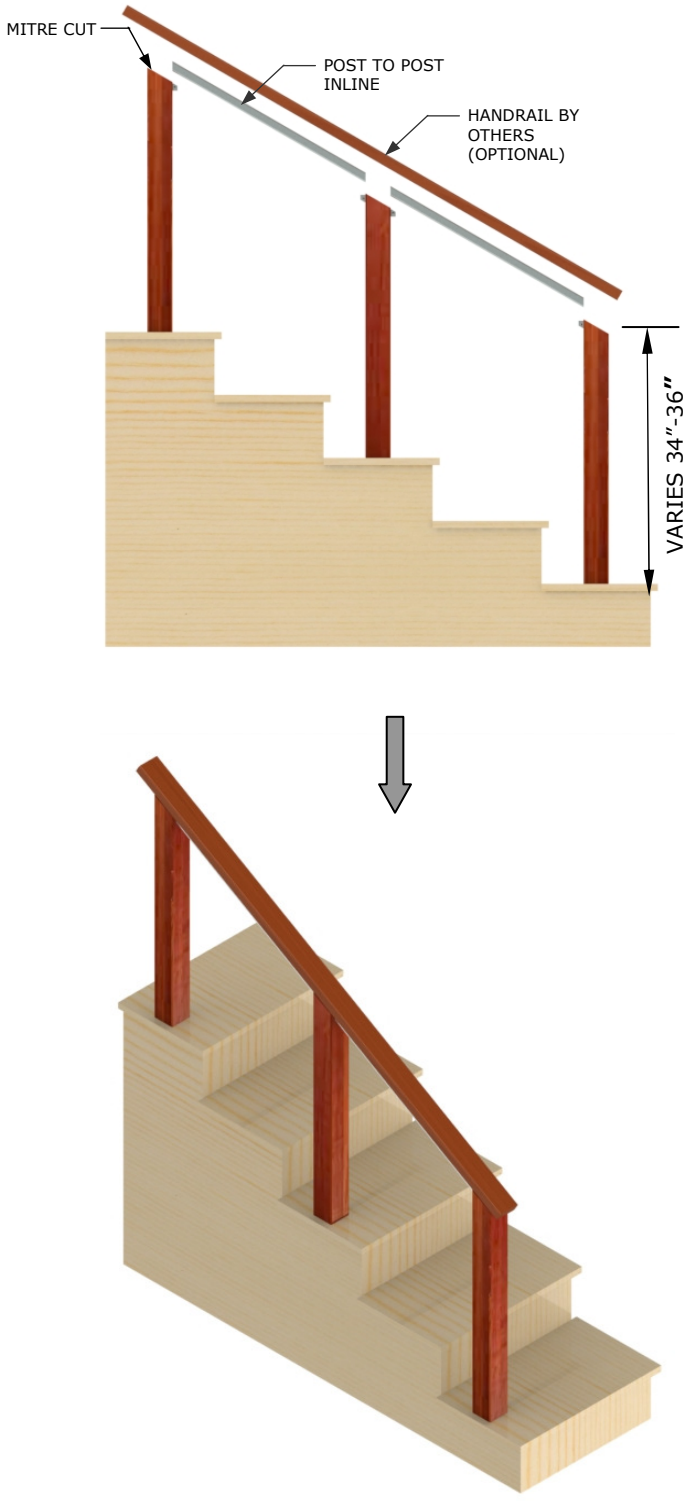


Fig 22: Post-to-Post Support Rail



8. FINISHING

End Sealing

In order to prevent any end checking, we ship our Ipe and Batu boards with the endgrain sealed by clear wax. Cutting your boards will expose fresh endgrain, which will compromise the integrity of your boards if left unsealed. We recommend applying an endgrain sealant within 24 hours of a fresh cut. Our shop offers DeckWise End Grain Sealer by the quart.

Apply end grain sealer across the ends of the boards to prevent splitting, checking, and cracking. Do not apply to the other surfaces of your boards, and clean up any spills with soap and water. Sealant should be applied with a paintbrush and will dry clear.

Finishing

All woods will lose moisture and color over time. To maintain the initial rich color of your wood and better retain its moisture, you should regularly apply oil finish every 3 to 6 months in consideration of your local climate. Without oil finish, the wood will dry out, making it more susceptible to weathering, wear, and spill absorption.

We offer Penofin Deep-Penetration Oil Finish for our wood products; Red Label for Western Red Cedar and a hardwood solution for Ipe and Batu. This deep-penetration formula soaks into the wood for complete protection, rather than merely coating the surface. Application is simple and quick, and results in a clear, UV-protective, mildew-resistant coating that won't leave a surface film and allows the wood to breathe.

Follow these steps for application:

1. Once your railing has been installed and cleaned, apply a moderate coat of the stain.
2. Allow stain to sit for 20-30 minutes, so that it may properly penetrate the wood.
3. Wipe the surface thouroughly clean to remove excess finish.

If you would rather let your railing naturally fade, then you don't have to worry about regular oil treatments. We still recommend an initial application following installation, however, as this will better ensure that the wood retains its oils and stability.

9. READY FOR CABLES

Refer to each assembly respective instructions for each cablerail assembly.

Need Assistance? Call 1-888-686-7245 (RAIL)

Marine Grade Stainless Steel Maintenance and Cleaning Procedures

Stainless Cable & Railing Inc. offers Marine-Grade Stainless Steel railing frames and cable infill that boast high resilience with little maintenance. The material is in and of itself corrosion resistant thanks to a thin “passive layer” of alloying elements that forms on the surface of stainless steel. While this protective layer is strong enough to withstand typical wear and tear, it's not impervious.

We want our customers to get the most out of their cable railing and encourage periodic maintenance to keep cable infill clean, beautiful, and strong for years to come. This is especially important for exterior applications, particularly those in harsh outdoor environments exposed to salt water, industrial pollutants, de-icing salt spray, atmospheric dirt, traffic film, etc.

Perform the following procedures to keep your railing clean and preserve your warranty. You can purchase the necessary supplies through our store individually or together in a kit. Make sure to read the “WARNINGS & TIPS” on the second page.

Initial / Periodic Cleaning:

Follow this procedure immediately after installing your railing.

1. Spray CitriSurf® onto your frames and/or cables and wipe down using a clean, soft cloth.
2. Once all stainless surfaces have been cleaned and passivated using the CitriSurf® prepare Rust Rescue 200 by shaking or stirring the mixture.
3. Using a clean, soft cloth, sprayer, brush, or roller, apply Rust Rescue to your stainless steel frame and/or cables. Wear gloves while handling Rust Rescue (during steps 3-4), as it can cause skin irritation for some people.
4. Wait 2-3 minutes, then wipe off excess.
5. Allow the remaining solution to dry completely. A hot air oven, hair dryer, or other drying medium may be used to accelerate this process.

Repeat this procedure on a regular basis as needed to keep your stainless steel bright and shiny. For coastal applications, we recommend this be done every 2-3 months or so, depending on necessity.

General Cleaning:

Remove finger prints and other marks generated from daily use as needed. Apply mild soap and water or glass cleaner to area using a clean cotton cloth or chamois. Rinse clean with water and dry completely.

Oil, Grease, and Residue Cleaning:

Remove oil, grease, or residue left from other cleaning materials (such as floor cleaner or polishing detergents) as soon as possible. Apply alcohol-based products (including methylated spirit and isopropyl alcohol) or other solvents (such as acetone) several times using a clean, non-scratching cotton cloth until all traces have been removed. Use Aluminum Oxide Scotch Brite if necessary. Rinse clean with water and dry completely.

Paint and Graffiti Cleaning:

Remove as needed using proprietary alkaline or solvent-based paint strippers. Apply chosen cleaning solvent several times with a clean, non-scratching cotton cloth until all traces of paint have been removed. Use Scotch Brite if necessary. Rinse clean with water and dry completely.

Salt Film and Environmental Deposit Cleaning:

Perform cleaning regularly in consideration of environmental conditions and the rate of deposit build up. Use a clean cotton cloth with CitriSurf® solution (available in our store) to remove contamination. Apply cleaner evenly across cables to avoid a patchy appearance. Rinse clean with water and dry completely. Follow up with the Rust Rescue application procedure detailed in "Initial / Periodic Cleaning" on the previous page. Use Aluminum Oxide Scotch Brite if necessary.

WARNINGS & TIPS

- Avoid use of the following products, as they will harm your cables:
  - Chloride-containing cleansers
  - Hypochlorite bleaches. Should accidental contact occur, rinse off immediately with copious amounts of fresh water.
  - Muriatic acid (commonly used to clean up tile/concrete installations)
  - Silver-cleaners
  - Scouring powders
  - Hard scrapers or knives
  - Non-stainless steel-based scouring pads, cleaning wool, or wire brushes
  - Any cleaning utensils that have been used on “ordinary” (carbon) steel, as this may result in iron particle “cross-contamination”

- Do not leave stainless cables or fittings in contact with steel, iron, or any other metals, as this will cause rusting due to free-iron transfer. If your frame is made of a material other than stainless steel, use protective grommets or sleeves (which can be found in our store) to keep the metals from coming into contact.

Please follow these procedures to get the most out of your stainless steel frames and cable infill by Stainless Cable & Railing Inc.

If you have any questions, call us any time at 1-888-686-7245.