



POST & RAIL ASSEMBLY INSTRUCTIONS

Read all instructions before assembly

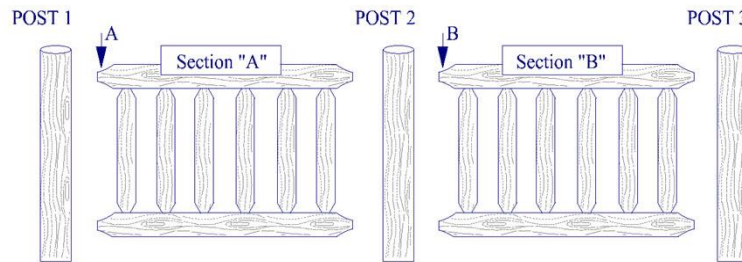
Tools and hardware needed: tape measure, 4' level, drill and bits of desired fasteners, fasteners depend on application, utility knife, ratchet set

Do Not Remove Bands from Rails until All Assembly is complete.

Whenever possible dry fit post and rail sections from corner to corner. Plumb all posts before marking for any drilling or notching. Be sure all adjustments are made before bolting post to the joist.

Horizontal Rail Sections

1. If "Custom Railing" to fit your deck was ordered, match rail sections with corresponding post.



Example: "A" insert into post "1", "B" insert into post "2" etc.

The rail sections are marked on the tenon ends of the rails (A,B,etc.). Posts are marked with a number on the bottom (1,2, etc.). It is important to follow the numbered posts with corresponding rail sections to ensure proper fit as the posts and sections vary in diameter and have been designated for the corresponding rail sections only.

2. If Preassembled Horizontal Tenoned Sections (4', 6', 8' or 10') were ordered, posts will need to be drilled (2" saw tooth Forstner bit works well).
 - a. Layout sections and posts on deck/loft where they will be installed.
 - b. Measure center to center of tenoned rails to determine post hole locations. Add 5" to that distance and mark post measuring from the top down; this will be the center of the bottom hole. Also mark post 5" from the top for the first hole; be sure these are inline. Before drilling ensure the holes are marked in the correct locations. (Every measurement varies.)
 - c. Dry fit the tenoned rails into posts making sure posts are plumb.
3. If Square Cut Rails
 - a. When attaching rails in between posts
 - i. Install posts making sure they are plumb.
 - ii. Use two short pieces of 2x4 boards as a spacer at the bottom of the rail to give you a 3-1/2" gap between the deck and bottom rail.
 - iii. Cut to length if necessary by trimming the same distance from each end so spindle spacing between posts are similar. (Note: Over 4" spacing between spindle and post does not meet Building Code.)
 - iv. Use (1) 10" or 12" LogHog Timber Screws (or similar with ESR 1078 1-05 rating) to penetrate through the post and into the end of each rail (at its center) at least 4" and slightly countersink into post. (Ensure post and rail connection is tight without over tightening.)
 - b. When attaching rails to side of post the rails must be fastened to the deck or loft side of the post.
 - i. Trimming of the ends may be needed so rail location extends to at least the center of post (4" max spacing between spindle and post).
 - ii. Use (2) LogHog Timber Screws and penetrate at least 4" into the post with a maximum of 1" countersink into rail. (Ensure post and rail connection is tight without over tightening.) If connecting two sections to one post a minimum of (4) Timber Screws is needed.

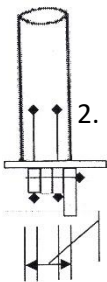
Post-to-Deck Connection:

With the rail sections in place attach posts to joist - Stainless or galvanized fasteners are recommended for exterior applications.

1. Shoulder Notched Posts

- a. Option 1
 - i. Drill two holes for ½” bolts through post and joists.
 - ii. Attach ½” bolt through post and rim boards using 2” washers each side and ½” nut.
- b. Option 2
 - i. Attach (3) Fasten Master ThruLOK w/ washer and nut as directed by hardware manufacturer.
 - ii. Attach (1) SPAX 3/8” x 8” Exterior PowerLag T-Star washer head on the inside of the joists up at an angle into post.
- c. Other attachment options on www.log-siding.com/links/

When a post lands on a joist a single hold down anchor is needed to strengthen the rim connection to the joist. If the post does not land on a joist then two hold down anchors are needed, one on each joist on both sides of the post above. Use ½” galvanized bolts with nuts and washers. Lengths vary per application.



2. Flush Mount Posts

- a. Reinforce underside of deck by bolting a triple block beam of pressure treated 2x4 to the joist using ½” dia. bolts with washers each side. Using a 5/16” drill bit make two holes up through block beam and decking, into post as shown in drawing. Use 12” Lag Bolt with washer to firmly attach post without over tightening.
- b. Newel post connectors can also be used if they meet code in your area.

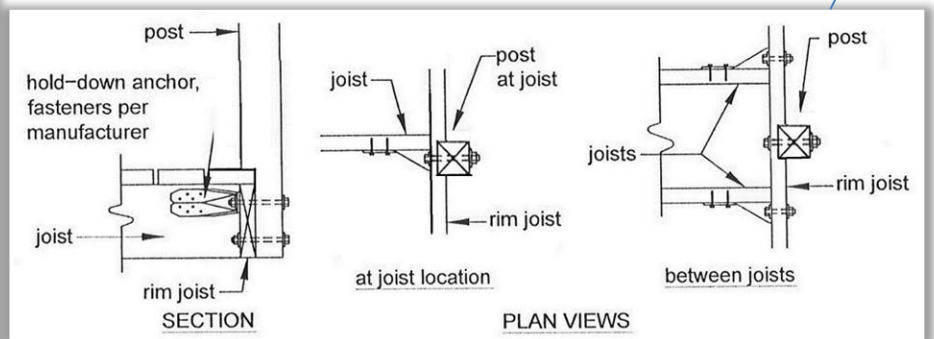
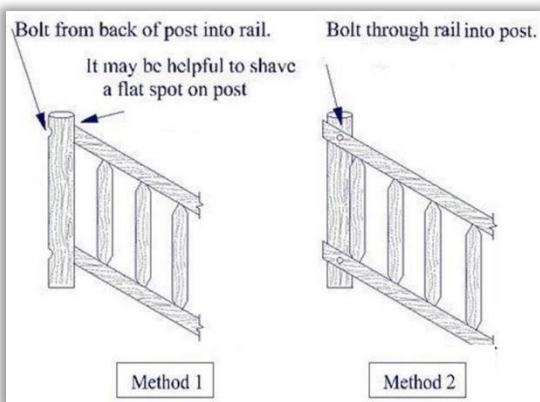
- 4. Remove strapping from rail section.
- 5. Toenail 3 ½” exterior screws at the base of each tenon at an angle into the inside of the post hole countersinking ¼” to the hide screw.

Stair and Ramp instructions-(Refer to Horizontal Square Cut Rails)

Start with the upper section first to best hide fasteners. Because the bands are snug tight the stair rail angle may be compressed giving you the wrong angle. It may be necessary to remove bands prior to assembly to position the spindles at the proper angle. In this case use rope or bungee cords to hold the rails together while marking rail ends for trimming.

Commonly used methods for attaching rail sections to posts.

Commonly used methods for hold down anchors on or near posts.



Each situation is unique and on-site modifications may be needed. Due to this and ever changing building codes, the above installation suggestions should serve only as a guide.