

# Rail Manual 6000

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## LEVEL RAILING

### Preparing Posts:

- Reference rail layout and figure how many corner, line, and end posts.
- Remove rail brackets from rail kits.



- Mount rail brackets on posts using the color match screws. Corner posts will have brackets on two adjacent sides, line posts will have brackets on opposite sides, and end posts will have brackets on one side.



Corner



End

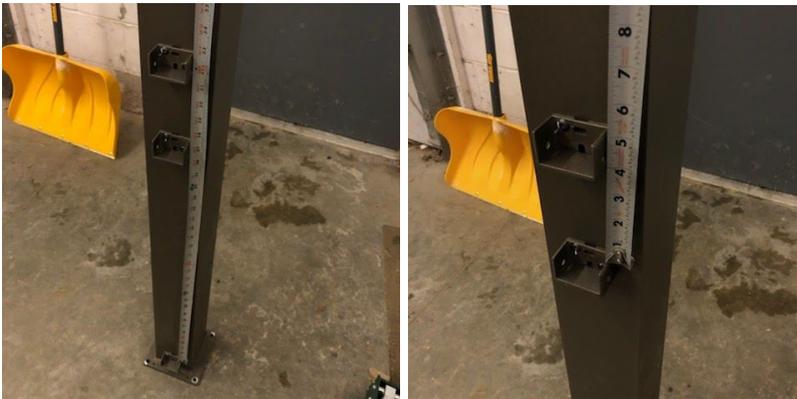


Line

- Use Digger or Midwest template for bracket spacing and installation. If no template is available, attach bottom bracket so there is no more than a 2" clearance between the bottom rail and decking.



- (Skip this step if mid rails are not used) Attach mid bracket 27 1/2" from the top of the bottom bracket to the top of the mid basket.
- Attach top bracket 32 5/8" from top of the bottom bracket to top of the top bracket, or 5 1/8" from top of the mid bracket to top of the top bracket.

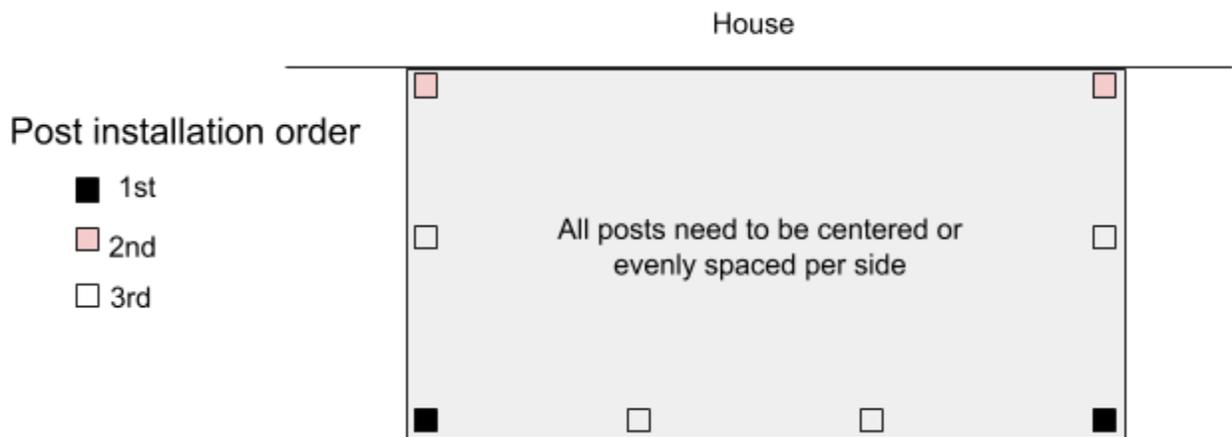


#### Installing Posts:

- Add 3" - 4" of solid wood blocking under any post locations with missing framing. Posts must be secured into solid wood.



- Install corner posts first, then end posts, and finally line posts. Corner posts will determine end and line post locations.
- Starting with the corner post, place post where it will be installed and mark holes for lags. Pre-drill the decking before lagging the post into position. If using the supplied shims, place them under the post before installation. Also, pre-drill for lights if needed. Repeat steps for end and line posts.
- Line posts need to be centered or evenly spaced between corner/end posts.
- Plumb all posts.



#### Preparing Rails:

- Separate railing and spindles from kit
- Start with the bottom rail and install spindles with a non marring rubber mallet (if you have a three rail system, use longer spindles). Take care not to damage the plastic insert in the rails when installing spindles.
- (Skip this step if mid rails are not used) Lay mid rail over spindles, starting from one side, pound railing onto spindles. If you have small spindles, install them at this time to the middle rail.

- (Skip this step if using 6' C30 railing) Lay top rail over spindles, starting from one side, pound railing onto spindles.



#### Installing Rails:

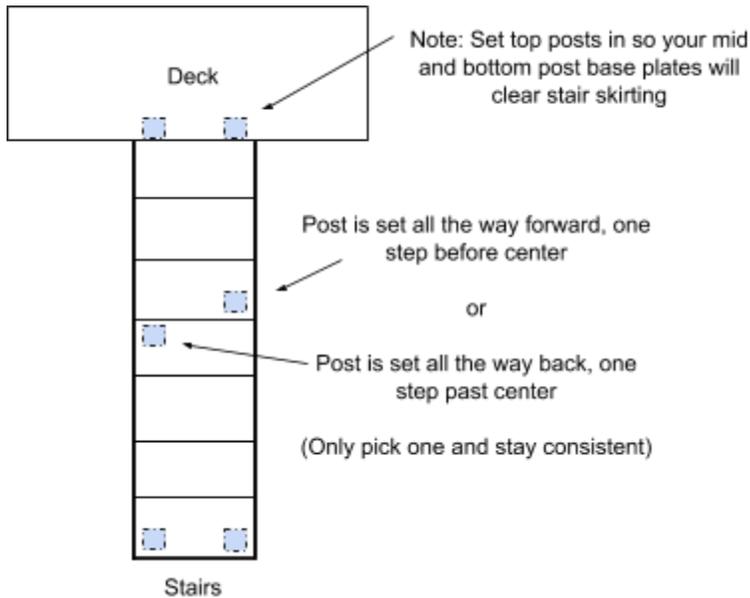
- Measure post to posts and subtract a  $\frac{1}{4}$ " to allow for rail brackets.
- Layout your measurement on your rail section making sure you have an even reveal between the last spindles and the posts. You should have no spaces in your rail where a 4" sphere can pass through.
- Trim rail section with a non ferrous blade.
- Set rail section into post brackets and use flat head screws to fasten.
- Check rail sightlines, adjust posts in or out as needed.
- Install rail caps first, then flairs, and lastly post caps.

## STAIR RAILING

#### Installing Posts:

- Reference rail layout for post locations. If you're using mid posts, space posts evenly between top and bottom posts.
- Add 3" - 4" of solid wood blocking under any post locations with missing framing. Posts must be secured into solid wood.
- Install top posts first, then work down to mid posts (if using them), then lastly install the bottom posts.
- Starting with the top post, figure post location and place post where it will be installed and mark holes for lags (when figuring post location, adjust placement for any variables that may intrude installation of future posts down the stairs, example stair skirting. You want all posts to line up in a straight line. You'll need a minimum  $\frac{3}{8}$ " around the post base plate to install flairs) . Predrill the decking before lagging the post into position. If using the supplied shims, place them under the post before installation. Also, predrill for lights if needed.
- Mirror post location on other side of stairs and repeat post installation.

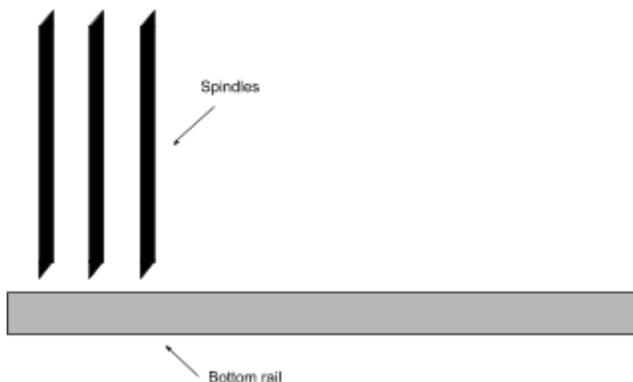
- (Skip this step if you are not using mid posts) Count the number of steps and figure middle step for mid post installation (don't figure bottom step when finding center). If there is an even number of steps, install the post all the way back one step past center, or all the way forward one step before center, trying to center the post as much as possible. Install post on other side of steps mirroring mid post location.



- Repeat post installation for bottom posts.
- Plumb all posts.

### Preparing Rails

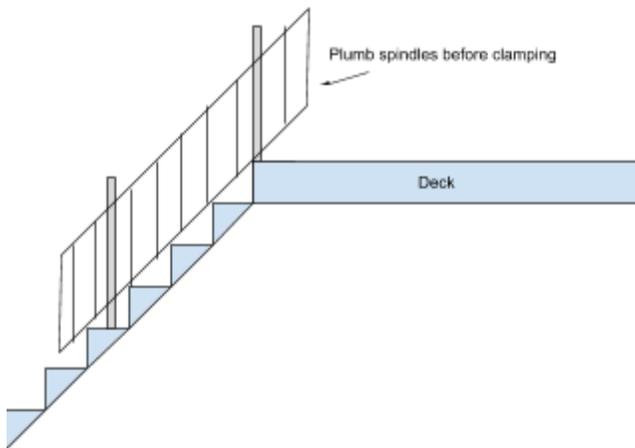
- Separate railing, spindles and hardware brackets.
- Start with the bottom rail and install spindles with a non marring rubber mallet. If spindles are mitered, make sure they are facing the same direction (if using a three rail system, use longer spindles). Take care not to damage the plastic insert in the rails when installing spindles.



- (Skip this step if mid rails are not used) lay mid rail over spindles, starting from one side, pound railing onto spindles. If you have small spindles, install them at this time to middle rail.
- (Skip this step if using 6' C30 railing) lay top rail over spindles, starting from one side, pound railing onto spindles.
- Rack railing.

#### Preparing Posts

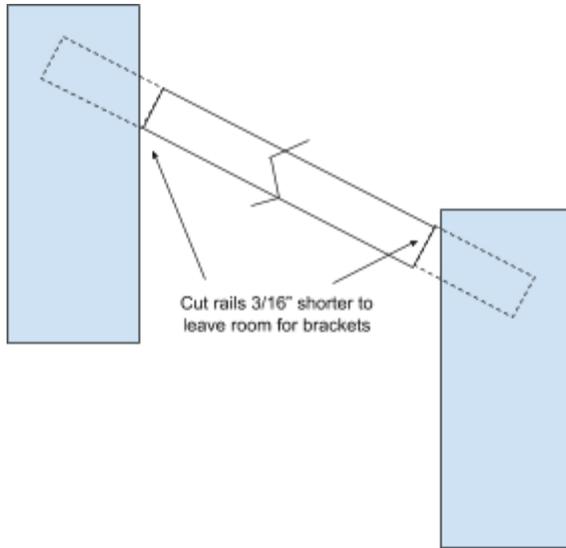
- Starting at the top, position rail section on stair nosing and against posts.
- Make sure spindles are parallel to posts, clamp rail to posts.



- Hold brackets in place next to the post and mark locations.
- Measure up 1" and install brackets with color match pan head screws.
- If using stair crossover brackets, hold bracket inline with rail and mark cut location on post. Measure up 1" and trim post.
- Measure 1- $\frac{3}{4}$ " above all remaining top bracket and trim posts.

#### Installing Rails

- Starting at the top of the stairs, position rail against posts with even spacing between end spindles and posts, make sure spindles are parallel to the posts. Clamp rail to posts.
- Mark rails for cutting.
- If using stair crossover brackets, hold bracket inline with top rail and mark cut location. Place crossover bracket on post (don't fasten with screw at this time)



- Cut railings to size with a non ferrous blade.
- Place rail into brackets, adjust the rack as needed so the spindles are parallel to the posts.
- Start with the crossover bracket (if applicable), fastener with color match pan head screws. Fasten all other railing with gold flat head screws.
- After all rails are installed check rail sightlines. Adjust posts in or out as needed.
- Install rail caps, then flairs, and lastly post caps.

#### Installing Lights

- Reference layout for light locations.
- Wire and install all lights (see manufacturer's instruction). Drop extra wire through deck.  
Note: when connecting wires keep like wires together.
- Starting with the farthest light, connect extra wire to the next closest light. Work your way back to the transformer.
- Connect last light to transformer
- Plug in the transformer.