

**Skill Level: ADVANCED** Try these projects after you have a collection of DIY successes under your belt, and make sure you're ready for a challenge. You'll need experience with a wide variety of specialized tools, and it may take several hours to finish. If you've built a deck or installed an irrigation system, these projects probably match your abilities.

### ✓ MATERIALS

- Deck Posts
- Balusters
- 2x4 Planks
- 5/4 Decking
- Lattice—optional
- Tape Measure
- Pencil
- Square
- Level
- Post Level
- Circular Saw
- Handsaw
- Miter Saw
- 3 lb. Hammer
- Drill with Bits
- Socket Wrench and Sockets
- Carriage Bolts, Washers and Nuts
- Screws
- Trash Bag or Container—for recycling wood
- Work Gloves
- Dust Mask
- Safety Glasses

It's time to wrap things up on your deck—you've gone from planning the design to building the stairs and now you're ready to install the railings. After that, you'll do some finish work before enjoying your deck.

### PREPARATION

**01 When you install deck railings be sure you understand and follow any local building codes, such as rail height and baluster spacing. You may need building plan approval, a building permit, and one or more inspections during the deck construction and finishing process.**

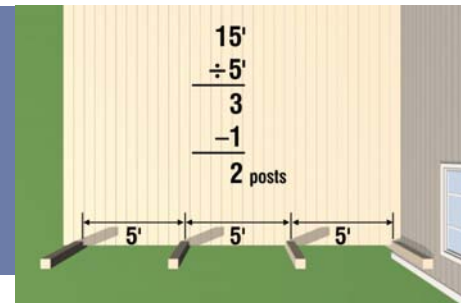
- You can buy pre-assembled railings at Lowe's or build your own using the following instructions.

### INSTALLING POSTS

**01 Calculate how many posts you'll need and where to locate them.**

- Building codes may require a maximum spacing between posts, usually between 6' and 8'.
- At minimum, decks adjacent to a house typically have posts next to the house plus two posts at the corners for stability.
- Detached or freestanding decks, at minimum, have posts at the corners.
- In addition, make sure you have posts at the top and bottom of the stairs. Refer to your deck construction plan for specifics.
- Figure out the total number of posts you'll need between corners.

1. Measure the distance between two corner posts and divide by the distance allowed between posts.
2. Round up to the nearest whole number, then subtract 1. In the deck example with the accompanying video, the side without the stairs measures 15'. Divide 15' by 5' (the local requirement) to get 3. Subtract 1; you'll need 2 posts between the corner posts.



#### IMPORTANT

Finishing a deck includes installing posts, railings, and other jobs that require lifting and manual labor. It may also require applying deck paint or finish. If that doesn't sound like something you want to do, discuss the job with a Lowe's associate. We can do the installation for you.

### INSTALLING POSTS (cont.)

**02 Measure and evenly space the posts, then mark their location on the joists.**

**03 For support, cut notches at the bottom of the posts.**

- Remove the width of the floor joist plus the decking thickness using a circular saw. Use a hand saw, or hammer and chisel, to finish the cut. You can miter the post bottoms for a neater look.
- Also notch the top for the 2x4 that will support the top rail.
- **SAFETY TIP:** Always wear a dust mask and safety glasses when cutting treated lumber.
- Apply a weather sealer to the cut ends of treated lumber.



**04 Clamp a post in place and make sure it is vertically plumb.**

**05 Drill two holes and attach the posts with carriage bolts.**

**06 Install all remaining posts in the same manner.**

**07 For extra support along the end joists, attach bracing made from the same material as the joists. Place them adjacent to where you'll attach your posts and secure with screws.**



### INSTALLING RAILINGS

Local building codes typically are very specific about the construction of deck railings. In many jurisdictions, deck railings must be between 32" and 48" in height, maximum space between balusters is 3-1/2", balusters must be larger than 3/4" and they must not be climbable for child safety. In other locations, there are no building codes for deck railings and it is up to the builder to design and construct for safety. Be sure to check your code.

**01 Once all posts are in place, install the horizontal rails with screws.**

- The example deck uses 2x4s. Refer to your deck construction plans for specifics.
- Use a miter saw to cut rail corner joints and joints on the stairs.

**02 Install the balusters (also known as spindles) with screws to the 2x4 rail and the joists.**

- You can buy pre-cut balusters or cut them yourself.
- They need to be flush with the top of the 2x4 rail and extend down to about the middle of the joist.
  - **TIP:** Another option is to attach the bottom of the balusters to a second 2x4 notched into the posts a few inches above the deck.



### INSTALLING RAILINGS (cont.)

- Evenly space the balusters and make sure they are vertically plumb.
  - **TIP:** You can use a spacer, such as a 2x4, to ensure equal distance between balusters.

#### 03 Attach the top rail with screws.

- The top rail can be flush with the 2x4s or overhang a little bit—whatever looks best to you.
- **TIP:** 5/4 decking works great as a top rail because it has a smoother surface than regular lumber.



### INSTALLING SKIRTING

You can install lattice skirting around the bottom of your deck. This may not be required by code, but it finishes the look.

#### 01 Secure small 2x4 cleats to the inside of the joists, extending down a few inches.

#### 02 Measure the area to be covered. Most lattice comes in 4' x 8' sections, so you may have to cut them to fit.

#### 03 Attach the lattice to the cleats with screws.

- **TIP:** You can add hinges to the cleats to allow access under the deck for storage.
- **TIP:** Frame the lattice with 1x4s for a more finished look.



### FINISHING THE DECK

#### 01 If your deck has any sharp edges, round them over with a router or a belt sander.

#### 02 If your deck construction requires a final inspection, call your local building inspector for an appointment.

#### 03 Call your local recycling center for treated lumber disposal instructions.

- Do not burn treated wood as it can release harmful chemicals.

#### 04 Once the treated lumber is dry, which may take a few months, apply a weather sealer to the wood surface.

- For some tips on applying sealers, check out the video and step-by-step instructions titled *Clean and Treat Your Deck* at [Lowe's.com/Videos](https://www.lowes.com/Videos).

Finally, add some furniture and plants to your new outdoor space. Then sit back and enjoy your work.



For other home improvement projects, check out the how-to videos at [Lowes.com/Videos](https://www.lowes.com/Videos).

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