

**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 days to finish. If you've built a deck or installed an irrigation system, these projects probably match your abilities.

In this third part of *How to Build a Home Access Ramp*, you'll learn how to add the decking and platform railings to your ramp. As needed, review Part 1 on planning and layout, and Part 2 on installing posts and framing.



## MATERIALS AND TOOLS (for Part 3):

- ☐ Decking Planks (Wood or Composite)
- ☐ Tape Measure
- ☐ Pencil
- ☐ Circular Saw
- ☐ Jigsaw (optional)
- ☐ Table Saw (optional)
- ☐ Electric Drill with Bits
- ☐ Wrenches
- ☐ Fasteners: Deck Screws, Other Hardware
- ☐ Framing Square
- ☐ Railing Kits (Wood or Composite)
- ☐ Planer (if needed)
- ☐ Work Gloves
- ☐ Safety Glasses

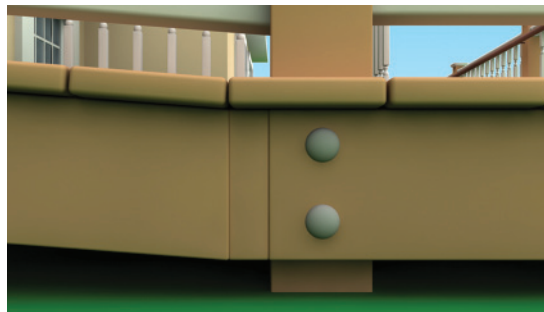
## INSTALLING DECKING

When installing decking on a home access ramp, start with the ramps.

**01** Cut a few of the planks to the width of the ramp.

**★ TIP** If needed, the planks can extend over the edges of the ramp, and you can cut the excess with a saw after all of them have been installed.

**02** Set the first plank on the stringers at the bottom of the ramp making sure the top surface is flush with the edge of the platform end joist. (fig. 1)



(fig. 1)

**! TIP** If decking needs to be cut out around posts, mark the board with a pencil and use a jigsaw to make the cut.

### IMPORTANT

Before installing an access ramp, check with the local building department and homeowner's association to see if a building permit is required and whether there are specific requirements. If you have additional questions, discuss the job with a Lowe's associate or call a professional for help.

## INSTALLING DECKING (cont.)

**03** Secure the plank by drilling pilot holes through the board into the stringers, then attaching with deck screws.

**04** Fasten the next planks in place going up the ramp incline.

**! TIP** The ADA recommends a 1/8" drainage gap between the decking planks. For kiln-dried lumber and composite decking, use an 8d nail to set the gap during installation. For treated lumber decking, typically the wood will dry and shrink over the course of about one year, so you do not need to set the gap during installation.

**★ TIP** Periodically check that the planks are square to the frame.

**05** Continue installing all planks on the ramp, except the last few, following the previous instructions.

**06** For the last few planks, you may need to adjust the spacing and cut the last one to fit.

**07** Hold the last plank in place and use a framing square to mark the edge so it is flush with the rim joist. (fig. 2)

**08** Adjust the power saw as needed and cut the last plank at an angle for a smooth transition to the platform. (fig. 3)

**09** Attach the last plank to the ramp framing.

**10** Continue measuring, cutting and fastening decking planks to the other ramp sections following the previous instructions. Remember to periodically verify that the planks are squared with the frame and the other decking.

**★ TIP** If needed, for the plank at the landing end of the ramp, you can use a planer to taper the board and make the transition easier. (fig. 4)

**11** When you have the ramp sections finished, install the platform decking following the same methods. (fig. 5)



(fig. 2)



(fig. 3)



(fig. 4)



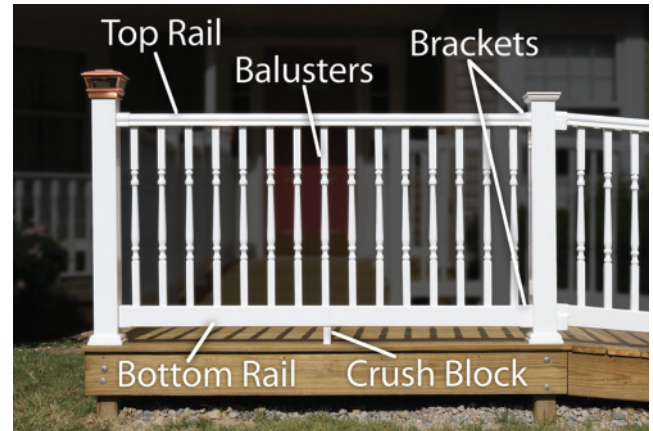
(fig. 5)

## INSTALLING PLATFORM RAILINGS

Access ramp railings can be constructed of wood components or vinyl-composite railing kits. Vinyl platform railing kits consist of pre-cut balusters, top and bottom rails with brackets, and vinyl post sleeves. Wood platform railings can be constructed from pre-cut balusters and 2" x 4" rails attached to the wood posts. A top handrail constructed of 5/4 decking will be placed over the top rail. Whichever method you choose, be sure to follow local building codes and ADA guidelines for railing construction. In most cases, the bottom rail should be 3" from the deck surface and the top rail should be between 34" and 38" from the deck surface.

### To Install Vinyl Platform Railings:

- 01 Cut the platform posts to the proper height above the decking.
- 02 Slide the vinyl post sleeves onto the posts. Cut them if necessary.
- 03 Measure the distance between the posts for the rail lengths. Subtract 1/2" from this measurement to account for the thickness of the brackets.
- 04 Line up the baluster holes on the top and bottom rail, and mark the rail lengths so that the end baluster holes have equal distance on both ends. Make sure the ends don't have partial holes that won't be covered by the brackets. (fig. 6)
- 05 Cut the top and bottom rails to length.
- 06 If needed for longer rail spans, attach a crush block to the center of the bottom rail with PVC glue and allow it to dry.
- 07 Assemble the railing, inserting the balusters in the bottom rail holes, then the top rail holes. (fig. 7)



(fig. 6)



(fig. 7)



**TIP**

Use bungee cords to hold the railing together for assembly.



## To Install Vinyl Platform Railings: (cont.)

08 Slide the base cove moulding over the posts. (fig. 8)

09 Mark the posts for the brackets:

1. Place the brackets on the ends of the rails.
2. Hold the entire railing in place, centered between the posts.
3. Outline the brackets with a pencil or marker. (fig. 9)
4. Remove the railing.

10 Install the brackets:

1. Remove the brackets from the rails.
2. Place the flange in position inside the bracket.
3. Hold the bracket in the outline on the post. (fig. 10)
4. Mark and drill the flange screw holes.
5. Attach the flange with screws.
6. Repeat to install the other three bracket flanges for the railing.
7. Replace the brackets on the rail ends.
8. Lock the entire railing in place. (fig. 11)



(fig. 8)



(fig. 9)



(fig. 10)



(fig. 11)

## To Install Wood Platform Railings:

01

Cut the posts to height.

- Remember to account for the top handrail. If you're adding post caps, cut the posts a few inches above the handrail height.

02

Measure the distance between the posts, and cut the top and bottom rails to length.

03

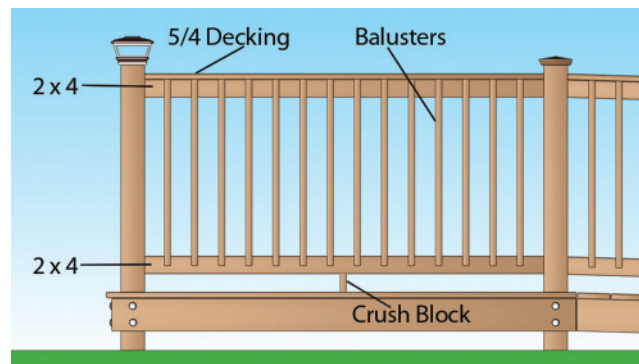
Attach the top rail to the posts with screws.

- Cut blocks from scrap 2" x 4" to help hold the top rail at the correct height.
- Line up the top rail with the interior edge of the posts.
- Drill pilot holes through the top of the rail into the posts and drive in screws.
- Also drill pilot holes through the bottom of the rail into the posts and drive in screws.

04

Attach the bottom rail to the posts with screws.

- Cut blocks from scrap 2" x 4" to help hold the bottom rail at the correct height.
- Line up the bottom rail with the interior edge of the posts.
- Drill pilot holes through the top of bottom rail into the posts and drive in screws.



TIP

For long rails, use a crush block under the bottom rail (similar to vinyl railings). Use screws to attach it.

05

Cut the top handrail to length.

06

Drill pilot holes through the top handrail and secure it to the top rail with screws.

## To Install Vinyl Platform Railings: (cont.)

07

Attach the balusters with screws.

1. If needed, determine the size of your balusters to attach to the top and bottom rails, and cut them to length.
2. Determine the spacing between the balusters, based on your local building codes. Typically, it should be the width of a 2" x 4", so use a scrap 2" x 4" as a spacer to line up the balusters.
3. Hold the first baluster in place, against the bottom of the handrail. Drill a pilot hole into the top rail, and secure with screws.
4. Line up the baluster with the bottom rail, drill a pilot hole and secure with screws.
5. Attach the rest of the balusters using the 2" x 4" spacer.

Your ramp is almost finished. To see the final steps, check out *How to Build a Home Access Ramp: Part 4* at [Lowes.com/Videos](https://www.lowes.com/Videos).

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