

**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 fourth, and final, part of *How to Build a Home Access Ramp*, you'll learn how to build the ramp railings and finish up your ramp. As needed, review Part 1 on planning and layout, Part 2 on installing posts and framing, and Part 3 on installing the decking and platform railings.



## MATERIALS AND TOOLS (for Part 4):

- ☐ Tape Measure
- ☐ Pencil
- ☐ Circular Saw
- ☐ Table Saw (optional)
- ☐ Electric Drill with Bits
- ☐ Fasteners: Deck Screws, Other Hardware
- ☐ Framing Square
- ☐ Railing Components (wood or vinyl-composite)
- ☐ Post Caps
- ☐ PVC Cement/Wood Glue
- ☐ Work Gloves
- ☐ Safety Glasses

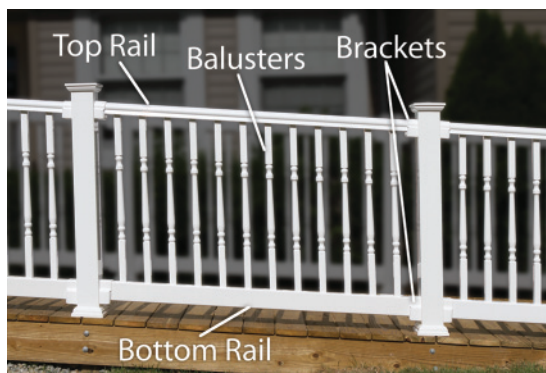
## INSTALLING RAMP RAILINGS

Access ramp railings can be constructed of wood components or vinyl-composite railing kits. Vinyl ramp railing kits consist of pre-cut balusters, top and bottom rails with brackets, and vinyl post sleeves. Wood ramp 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 Ramp Railings:

- 01 Cut the posts to the proper height above the decking.
  - Measure the height from the decking along the higher side of the post.
  - Cut the tops horizontally, not at an angle.

- 02 Slide the vinyl post sleeves over the posts.



### 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.

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

03 Measure the gap between the deck surface and the post sleeves. (fig. 1)

04 Transfer this measurement to the post sleeves, remove them and cut along the angled lines. (fig. 2)

05 Cut the post sleeves to height so they're flush with the top of the wood posts.

06 Slide the sleeves over the wood posts.

07 At this point, it might be easiest to work on each railing section individually. To assemble the railing, slide the special brackets over the top and bottom rails.

08 Hold the rails together, lining up the holes, and with the brackets next to the posts. (fig. 3)

■ Try not to have partial holes at the brackets.

■ Use a piece of tape to keep the brackets in place.

09 Mark the post line on the brackets.

10 Cut the top and bottom rails, with brackets, on the line.

11 Place the cove base moulding over the posts.

12 Assemble the railing, inserting the balusters in the bottom rail holes, then the top rail holes.



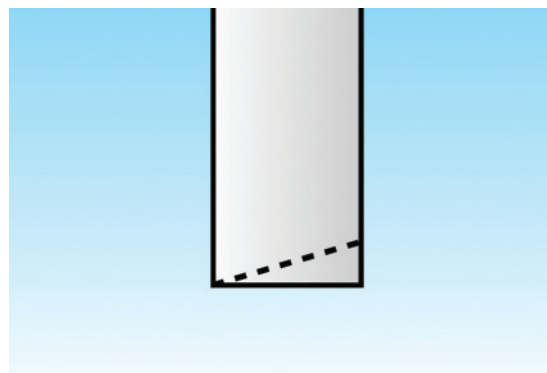
TIP

Use bungee cords to hold the railing together for assembly.

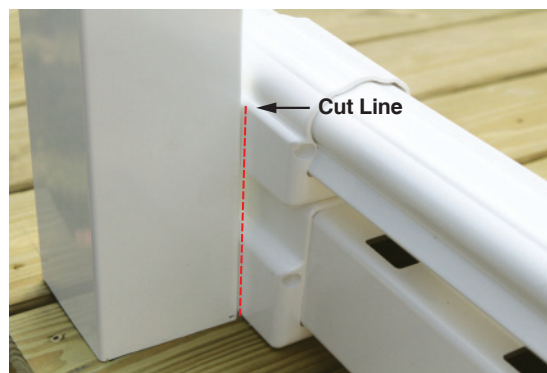
13 To set the ramp railings at the proper height, cut spacer blocks to help hold the railing in place. (fig. 4)



(fig. 1)



(fig. 2)



(fig. 3)



(fig. 4)

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

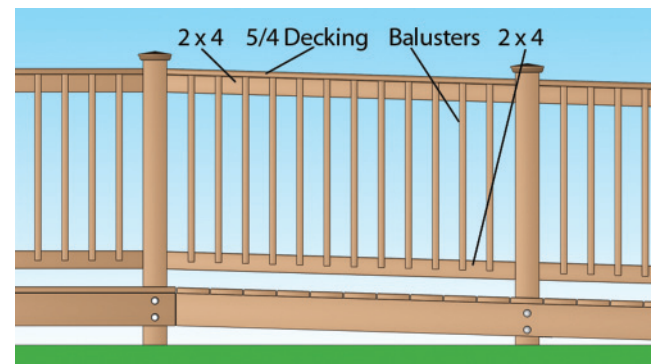
- 14 Hold the railing in place on the spacer blocks.
- 15 Center the railing on the posts.
- 16 Use a long nail to mark the screw holes through the brackets.
- 17 Remove the railing and drill the holes.
- 18 Reposition the railing, and secure with screws. (fig. 5)
- 19 Continue installing the other railings.



(fig. 5)

## To Install Wood Ramp Railings:

- 01 Cut the posts to the proper height above the decking. Use the measurements from your platform assembly.
  - Measure the height from the decking on the higher side of the posts.
  - Cut the tops horizontally, not at an angle.
- 02 Attach the top rail to the posts with screws.
  1. To mark the angle on the rail, use the spacer blocks from the platform assembly. Position the blocks and hold the rail against the posts.
  2. Mark along the post edge onto the rail.
  3. Cut along the lines.
  4. Using the spacer blocks to hold the top rail at the correct height, line up the top rail with the interior edge of the posts.
  5. Drill pilot holes through the top of the rail into the posts and drive in screws.
  6. Also drill pilot holes through the bottom of the rail into the posts and drive in screws.



## To Install Wood Ramp Railings: (cont.)

03

Attach the bottom rail to the posts with screws.

1. To mark the angle on the rail, use the small spacer blocks from the platform assembly. Position the blocks and hold the rail against the posts.
2. Mark along the post edge onto the rail.
3. Cut along the lines.
4. Using the small spacer blocks to hold the bottom rail at the correct height, line up the rail with the interior edge of the posts.
5. Drill pilot holes through the top of the rail into the posts and drive in screws.

04

Attach the top handrail to the top rail with screws.

1. Hold the top handrail against the post and mark the angle.
2. Cut the top handrail.
3. Hold it in position, drill pilot holes and attach with screws.

## FINISHING AN ACCESS RAMP

01

Install post caps with a small amount of PVC cement for vinyl railings or wood glue for wood railings. (fig. 6)



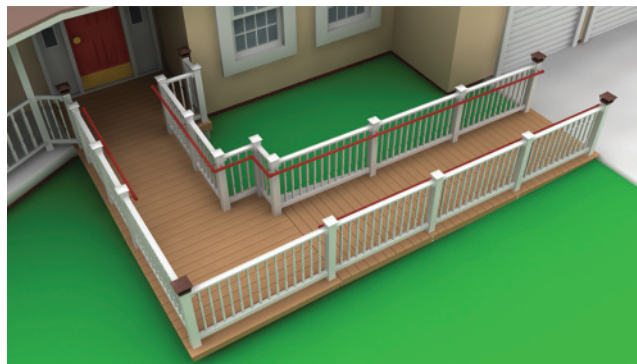
(fig. 6)

02

If needed, install a doorway transition to the decking with screws.

03

To make the ramp more accessible, add a safety handrail to the posts. ADA guidelines recommend handrails at least 32" above the decking, on both sides of the ramps and along the inside turn on rest platforms. Follow the manufacturer's installation instructions. (fig. 7)



(fig. 7)



## FINISHING AN ACCESS RAMP (cont.)

**04** For safe use at night, install low-voltage wired or solar deck lighting following the manufacturer's directions. (fig. 8)

**05** For a more finished look on taller ramps, add lattice trim around the bottom.

1. Attach 2" X 4" cleats to the inside of the joists. You'll attach the lattice to the cleats.
2. Cut the lattice sheets to fit the selected areas.
  - For areas below the ramps, hold the lattice sheet in place, mark the slope of the ramp, and cut along the line.
3. Secure the lattice to the cleats with screws.

**06** As required, call a local building inspector for the final inspection.

**07** Contact a local recycling center for treated lumber disposal instructions.



Don't burn treated lumber as it releases harmful chemicals.



(fig. 8)

**08** Allow the treated wood to dry, which might take about six months, then apply a water sealer.

A home access ramp can make life easier for someone who has trouble getting around. For other ideas to make a home more accessible, visit [Lowe's.com/AccessibleHome](https://www.lowes.com/AccessibleHome). And for more home improvement ideas, check out [Lowe's.com/Videos](https://www.lowes.com/Videos).

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