



Let's Build Something Together™

Fence Installation Tips:

LAYOUT AND DIGGING POST HOLES

Skill Level: INTERMEDIATE Give these projects a try if you're a confident DIYer with a good working knowledge of a variety of tools. They can take a day or more to complete. If you can build a birdhouse or install a ceiling fan, your skill level is probably appropriate.

✓ MATERIALS

- Tape Measure
- Furring Strips, Screws and Drill—for batterboards
- Mason's String
- Line Level—optional
- Shovel, Spud Bar, Post Hole Digger or Power Auger
- Gloves
- Ear Protection
- Safety Glasses

In this series, you'll learn how to plan and install a fence in your yard. This second set of instructions and accompanying video cover layout and digging post holes for your new fence. Other instructions in this series are available online at [Lowes.com/Videos](https://www.lowes.com/Videos).



LAYING OUT THE FENCE

Laying out a fence means lining up and marking the location of the posts before actually installing them.

- 01** Begin by making some batterboards (two stakes and a horizontal cross piece) out of furring strips and screws.

Placed at the corners of your layout, batterboard support the layout strings and allow you to easily make adjustments by simply moving the strings.



- 02** Start the fence layout at the corner of the house, outbuilding or other hardscape feature.

- 03** Drive a batterboard in the ground to mark where the fence will start. Tie mason's string to the batterboard to mark the line where the edges of the posts will be set.

- If you plan to install your panels between the posts, set the strings to the outside post edge.
- If you plan to install pickets or panels to the outside of the posts, set the strings to the inside post edge.



IMPORTANT

Before you begin this project, watch all of the videos and read all of the instructions in this *Fence Installation Tips* series. If you are not comfortable planning and building a fence, discuss the job with a Lowe's associate or call a professional for help. Also, call 811 to be connected with your local utility companies. Make sure that the site you have selected and where you will dig does not have underground utility lines that can be damaged by digging tools.





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LAYING OUT THE FENCE (cont.)

- Be sure to keep in mind that if you're attaching to the face of the post, account for the rails and pickets when lining up the fence with the edge of the house.



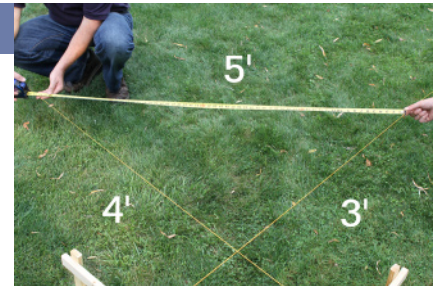
- 04 Measure for each run of your fence. Use batterboards and stretch mason's string between them to mark the layout. Use two batterboards at corners.**

- 05 Review the fence layout and adjust as needed to use full panels or to have no fence sections less than 2' wide. Partial sections should be located at corners or near gates.**



- 06 Verify that the fence layout is square.**

1. From an outside corner, measure 3' along one line and make a mark on the string.
2. Measure 4' along the other line and make a mark on the string.
3. Measure the diagonal distance between the two marks and adjust the stakes as needed so the distance is 5'.
4. Repeat the squaring process at all fence corners.



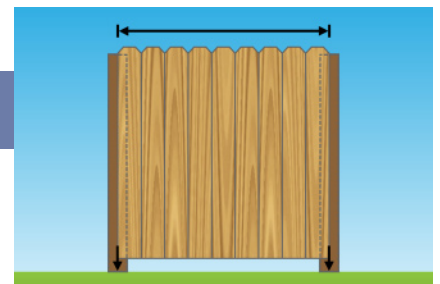
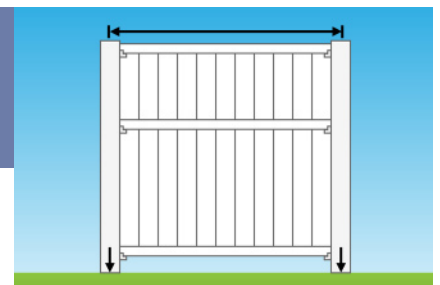
- 07 Drive stakes at the locations where fence posts will be installed. Make sure the stakes are positioned against the string. The distance between posts is dictated by the size of pre-built panels, horizontal rails, or local building regulations. Typically, spacing is between 5' and 8'.**

- For pre-built panel kits, the manufacturer will recommend post spacing, depending on whether the panels fit on the face or between the posts. If they attach between the posts, typically it's the width of the panels, plus the thickness of the brackets, plus the half the width of the posts. For best results with pre-built panels, only mark 3-4 holes at a time.

$$\begin{array}{l} \text{Panel Width} \\ + \text{Bracket thickness} \\ + \frac{1}{2} \text{ Post Width} \\ \hline \end{array}$$

Post Spacing

- If you're attaching pre-built panels to the face of the posts, the post spacing will be the width of the panels.





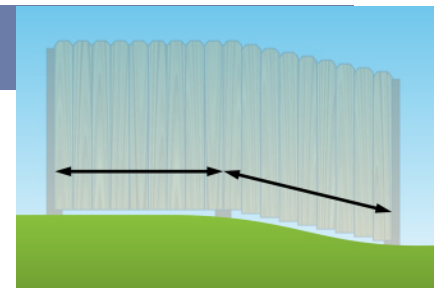
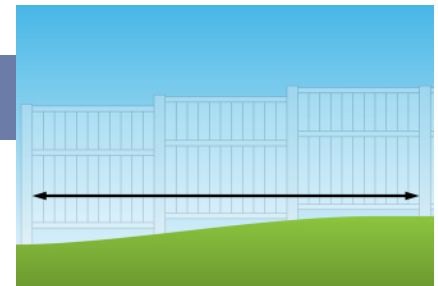
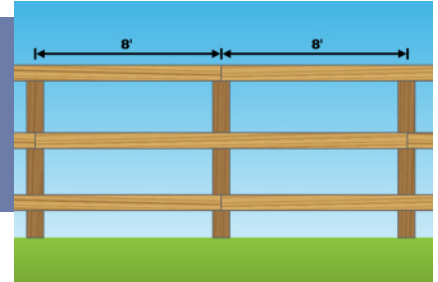
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LAYING OUT THE FENCE (cont.)

- If you're installing a component built fence, typically the spacing will be determined by the length of the rails to which you'll attach the pickets, unless otherwise noted by local building regulations. For instance, if you're using 16' rails, they can span 3 posts, so your spacing will be 8'. You can dig all the holes at the same time for a component built fence.
- **TIP:** If the yard isn't level, start post measurements at the highest points, and work downhill.
 - For a panel built fence, measure horizontally rather than along the slope. Use a line level if necessary.
 - For a component built fence—pickets that will be attached individually—measure along the slope, since the rails will follow the contour of the land.



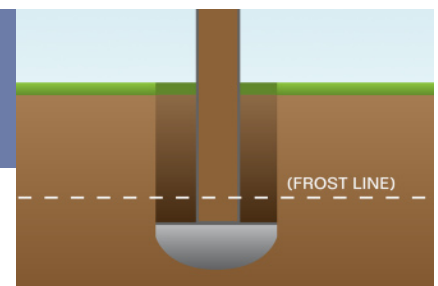
08 Insert stakes at the planned location for gates, including hardware in the width.

DIGGING POST HOLES

- 01 Mark the center for the first post on the ground. It should be set back half the width of the post from the string.**
- **TIP:** After marking your hole, mark where the layout string is tied to the batterboards and remove the strings to make digging easier.



- 02 Dig the first post hole. Local building code will dictate post hole depth and diameter. Typically, the diameter is 3 times the width of the post (12" for a 4"x4" post). The hole depth should be below the frost line. Typically, this means to a depth of 30" (24" for post, 4" for gravel, and 2" below ground level).**





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DIGGING POST HOLES (cont.)

03 Dig the second and third post hole.

- For panel fences, do not dig additional post holes until the first three posts and panels are installed. This allows you to make adjustments as needed for spacing posts and panels.
- For component fences, you may continue digging post holes as long as you are sure that the distance between the posts will be at or less than the length of the horizontal rails.
- **TIP:** Digging post holes is easiest with a power earth auger. A shovel or spade may take longer, but they're good for cutting overgrown roots in a hole. A spud bar works well for loosening dirt from the sides. Clam-shell post hole diggers can help remove loose dirt in the bottom of the hole.



This series on *Fence Installation Tips* offers several types of fence installation. You can find the videos with printable instructions at [Lowes.com/Videos](https://www.lowes.com/Videos).

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