Building A Board On Board Wood Fence

Objective: By mastering this lesson, you will be able to build the most popular wood fencing that is both pleasing to the eye and functional.

Equipment: Nail guns, nail gun oil, air hose, compressor, hammer, pry bar, tape measure, 12’ piece of plastic conduit, string line, torpedo level, six penny picket nails, sixteen penny rail nails, loose six penny nails, circular saw, and tape measure.

Key Questions:
1. How do I install the rails?
2. How do I install the pickets?
3. How do I build a board-on-board fence?

How do I install the rails? For each style of fence, the rails may be placed at different heights. Once you verify the style of fence that you are building, you will be able to determine the location of the rails. Typically, the top rail is placed 7-8” from the top of the fence. The bottom rail is typically 7-8” from the grade. And the middle rail is placed even between the top and bottom rails. Do not place your rails any further from either the top or bottom of the fence. Though cedar is less likely to bow than treated or pine

6’ cedar solid privacy fence

Materials:
- 2” x 4” x 8’ cedar
- 1” x 6” x 6’ (5 1/2” actual) dog ear pickets
- 4” x 4” x 96” stained and treated posts
- 1/8” aluminum coated nails @ pickets
- 3” aluminum coated nails @ rails

Gaps:
- 1” approx. @ hinge side of gates
- 1” approx. @ latch side of gates
- 2” (+4”) approx. @ bottom of fence

May be gaps at pickets when dried.
materials, it will still bow if not held firmly in place.

Only once the concrete has hardened around the posts, we are ready to rail our wood fence. Though the steps stated below are mostly generic to all wood fencing, there are some individual differences that will be discussed later.

1. Lay your rails out three per bay for six foot fencing and two per bay for four foot fencing.
2. Mark your post with a crayon at top of rail for each rail.
3. With your posts set at 7’ 10” center to center, start raling your fence at one end of the project, setting the first rail flush to the edge of the post. The rails are installed to the outside of the fence toward the public or neighbor’s side. This is important as it applies to some strict building codes that require the good side facing out.
4. As the rail extends to the next post, cut the rail at the center of the post. Repeat this for all three rails. Then, start with another rail butted firmly against the installed rail. Again, cut the rail at the center of the next post. In other words, the rails should always be joined at the center of the post. Use your circular saw to cut the rails. Be sure that the depth is set correctly, avoiding cutting into the post.
5. Where the rail covers the post, install two sixteen penny nails at each end of the rail into the post. To avoid splitting, make sure that you do not get too close to the end of the rail or next to a knot.
6. Repeat this installation throughout the fence line. When finished the rails should flow with the grade.

How do I install the pickets? The pickets will be installed on the neighbor/public side of the fence, leaving the good side out.

1. Layout enough pickets at each bay, standing the pickets up against the fence.
2. At each change in grade, temporarily nail one picket. Do not worry about properly spacing these pickets. Once you begin to install all the pickets, these temporary pickets will be removed and fit into the fence line.
3. At each temporary picket, place a six penny nail half way into the top.
4. Run a string line from temporary picket to temporary picket, wrapping the string
around each nail as shown below.

5. The string line represents the top of the fence and how it flows. Evaluate the string line to determine if you can make any adjustments in the fence line to “better make it flow.” You may slightly push a picket into the ground and you may raise a picket a couple inches above grade. Too much variation will lead to a large gap at the bottom of the fence.

6. After making your adjustments, start at one end of the fence line. Place your first picket flush to the edge of the house or end of rails.

7. Each picket will receive two six penny nails at each rail. Nail the picket to the rail with one nail at the top rail.

8. Before proceeding to add more nails, place your torpedo level along side of the picket and level it.

9. Refer to the next section below on how to space your pickets for a board on board fence. Once you have achieved your board on board spacing, come back to this section, starting with step 10 below.

10. When encountering a temporary picket, move it so that it does not interfere with the spacing but keep the string line intact.

11. Initially, install only two nails per picket. At the end of the run, you can then go back and hit the remaining nails. This is recommended in case you do make a mistake or get out-of-plumb which will be evident at the end of each run.

12. When installing the nails, make sure that these are in the center of the rail and approximately one inch in from the side of the picket. This is to avoid splitting the rail or picket. Also, make sure that the nails are in a straight line and not jagging up and down.

13. The head of the nail should be slightly countersunk into the picket to assure that it does not come-out over time.

*How do I build a board-on-board fence?* There is a 3 ½” spacing between the pickets. The pickets are on both sides of the fence. The spaces alternate on both sides of the fence, leaving no visible gap between the pickets.
1. On the outside / public side of the fence, place a picket on each post to cover the post and rail connections.

2. Then, calculating the measurements between these pickets, evenly space your pickets, leaving approximately a 3 ½” gap between each picket. Install all the exterior pickets before moving to the inside row.

3. On the inside / homeowner side of the fence, place your first picket centered over the first gap at the bay. Then, using the identical picket spacing as used on the outside row of pickets, install the balance of pickets between the posts.

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