

Installation Guide

Privacy, Picket and Ranch Rail

The following instructions will provide recommendations on the installation of your new fence style. You will find instructions for fence lay-out, setting posts, cap installation and clean up, common for each style. Follow the style specific instructions for assembling fence sections for the fence style you've purchased.

Remember to register your Limited Lifetime Warranty at the web site listed on the box label. The manufacturer does not warrant installation. These instructions are not exhaustive and are provided as guidelines and suggestions.

Installation Steps

Step 1. Layout fence and position posts

- Remember – Consider soil conditions, slopes, utility locations and property lines when positioning posts.
- Run a string line to locate the fence line, using the line to establish the outside faces of your posts (Fig 1).
- Stake out the fence posts, locating line, corner, end and gate posts. Mark the centers of the post locations for your fence style and gate using dimensions from the Post Location Chart below.

Post Location Chart

The following chart summarizes sizes and measurements for posts, fence sections and gates.

Fence Style	Post Size	Fence Span	Fence: On-Center Distance	Gate Opening	Gate: On Center Distance
Picket Fence	4 x 4	68"	72"	48"	52"
Privacy & Privacy w/ Lattice	5 x 5	68 3/8"	73 3/8"	48"	53"
Ranch Rail	5 x 5	93"	98"	72"	77"

("On Center" means from center of one post to center of next post):

- Ensure square corners with the 3-4-5 Triangle Method (Fig. 2).

Post Styles.

- There are 3 styles of posts needed to complete your project (Fig. 3). Line Posts, Corner Posts and End Posts (Also use End Posts for Gate Posts).

Make sure you have the correct type and quantity of posts before proceeding.

Step 2. Set posts

- Remember – Call before you dig. Contact your local utility providers to locate underground utilities in the area.
 - Check applicable building codes, including local recommendations, for proper installation requirements and recommendations (e.g. ASTM F-199-14 has additional recommendations for applications in frost regions).
- Ensure that the bottom of the post is set at least 24" below grade for the Picket and Ranch Rail styles, 32" below grade for the Privacy and Privacy with Lattice styles, plus a 6" gravel base in each hole (Fig. 4).

Minimum post setting chart (check applicable building codes and recommendations)

Fence Style	Post Size	Post Depth (A)	Post Hole Depth (B)	Post Hole Diameter (C)
Picket Fence	4" x 4"	24"	30"	10"
Privacy & Privacy w/ Lattice	5" x 5"	32"	38"	12"
Ranch Rail	5" x 5"	24"	30"	12"

- Prior to pouring concrete, ensure the routed holes in the posts are oriented in the correct direction.
- Mix concrete according to manufacturers specifications. Place and hold the post while pouring concrete 6" at a time, tamping to eliminate air pockets. Leave enough space at the top of the concrete to allow sod to grow around the post. Set the correct post height, plumb and level each post.
- Before concrete sets, site down the fence line and, if necessary, adjust posts. If posts are too high, place a wooden block across the top of the post and tap down with a rubber mallet. Allow post concrete to set 24 – 48 hours before installing fence sections.

What You'll Need

- Power auger or post hole digger and shovel
- Post hole concrete and gravel
- String line, stakes and level
- Electric drill, 1/8" drill bit and #2 Philips bits
- Tape measure
- Safety glasses and work gloves
- PVC adhesive
- Miter Saw/Chop Saw (optional if cutting down rails or pickets)
- File (optional for sloped picket installations)

Fig. 1 Sample Staking and Post Layout

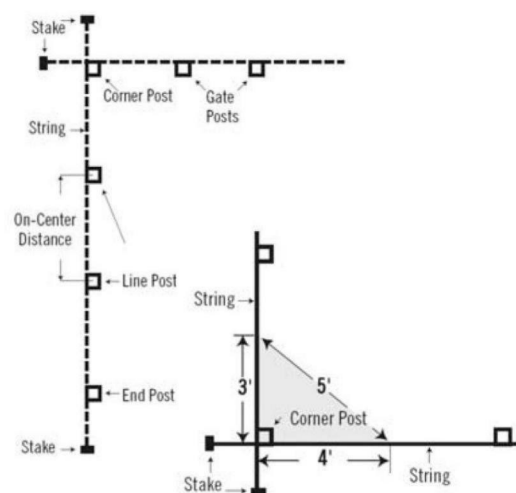
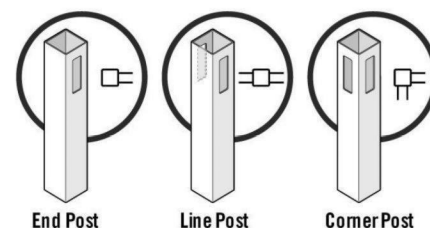


Fig. 2 3-4-5 Triangle Method



End Post Line Post Corner Post

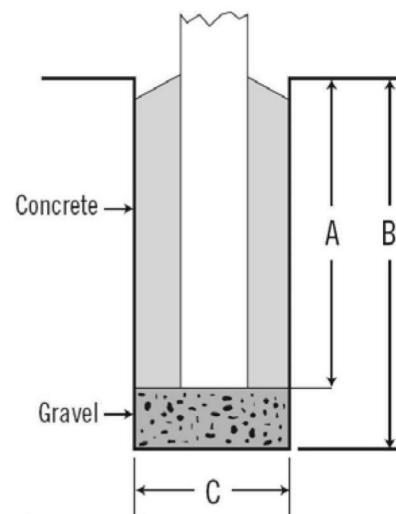


Fig. 4 Post Hole Dimensions

Step 3. Assemble and install fence sections

Having set your posts, you are now ready to assemble the fence sections for your fence style. Style specific section assembly instructions are described below. Remember – Protect the finish of your fence during assembly by assembling on a dry, clean and flat surface.

Privacy

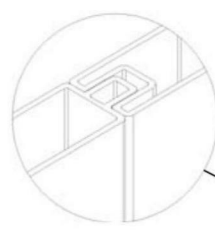
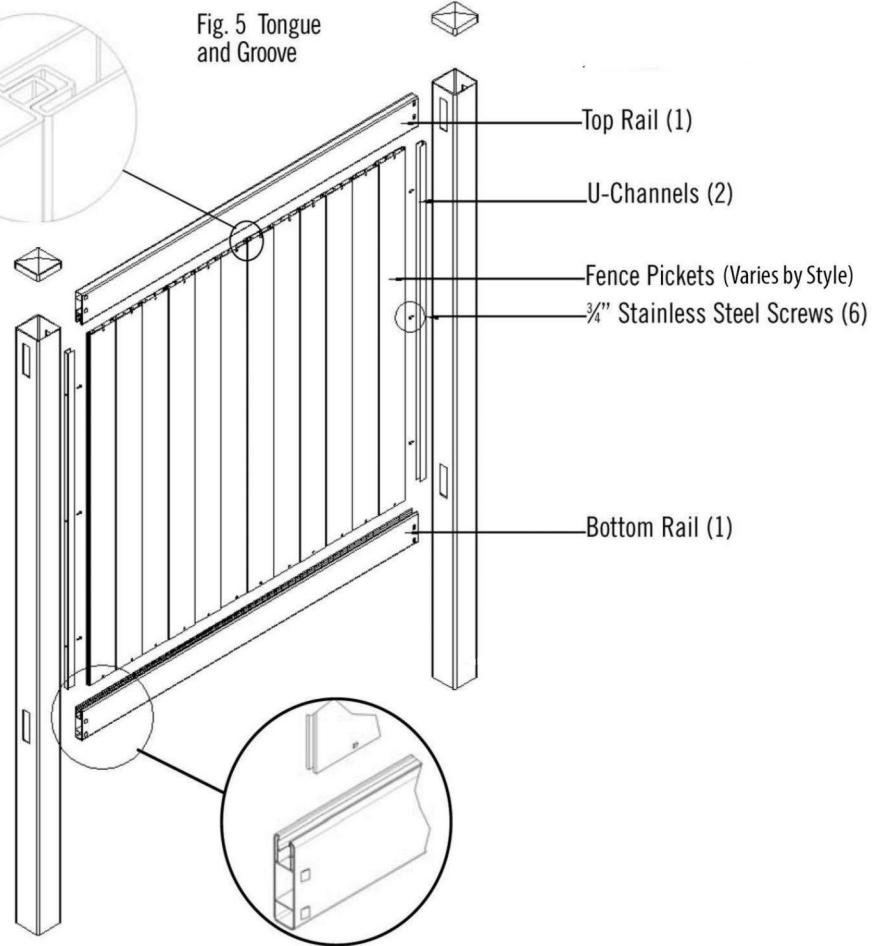


Fig. 5 Tongue and Groove

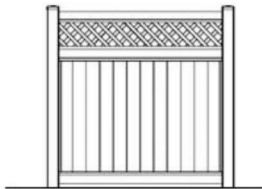
- a) **Install U-Channels:** Pre-drill 3, ¼" holes equally spaced in each u-channel, center and install between routed holes on each post with #8, ¾" screws supplied
- b) **Install Bottom Rail:** Install bottom rail into bottom holes of post, groove side up.
- c) **Install Privacy Pickets:** Slide pickets into place on bottom rail from right to left. Ensure tongue and groove of each picket lock together (Fig. 5).
- d) **Install Top Rail:** Install top rail into top hole of post, groove side down, sliding over privacy pickets at an angle, into adjacent post. Lower top rail onto privacy pickets, sliding rail as far as possible into the first post. When privacy picket is fully engaged in top rail, slide rail into second post.



Rail ends should be notched prior to installation.
(For certain products this is done at the factory and additional notching will not be needed)

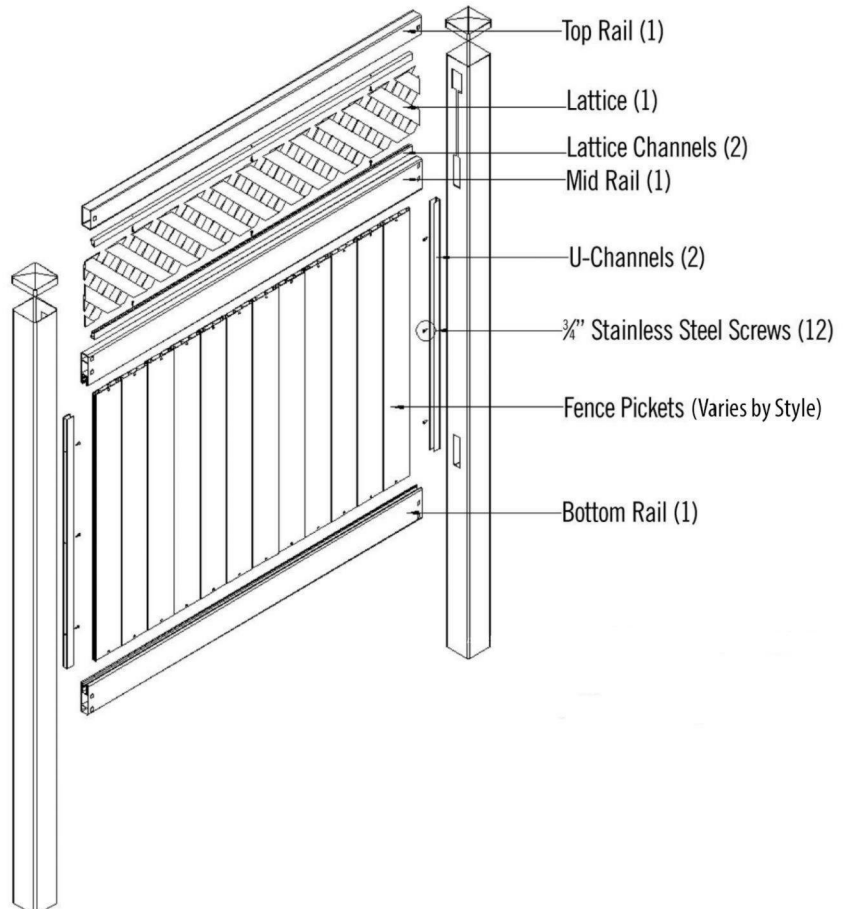
Note: Use of reinforcement inserts is required in the bottom rail for darker colors in addition to the attachment of U channel to the post.

Privacy with Lattice



Follow Privacy instructions steps a), b) and c) above until panels are in place.

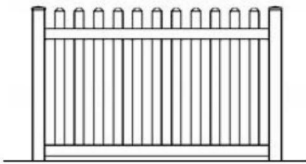
- d) **Install Mid Rail:** Install as per Privacy Top Rail above.
- e) **Install Lattice Channel:** Lattice channel keeps the lattice in place horizontally and is installed along the underside of the Top Rail and the upper side of the Mid Rail. Fasten channel using 3 of the self tapping screws provided.
- f) **Install Lattice:** As far as possible, insert one end of lattice into slotted post while lowering the lattice into the upper channel of the mid rail. Center the lattice between posts making sure it remains slotted into both posts.
- g) **Install Top Rail:** Install as per Privacy Top Rail, ensuring lattice is fully engaged in the lattice channel.



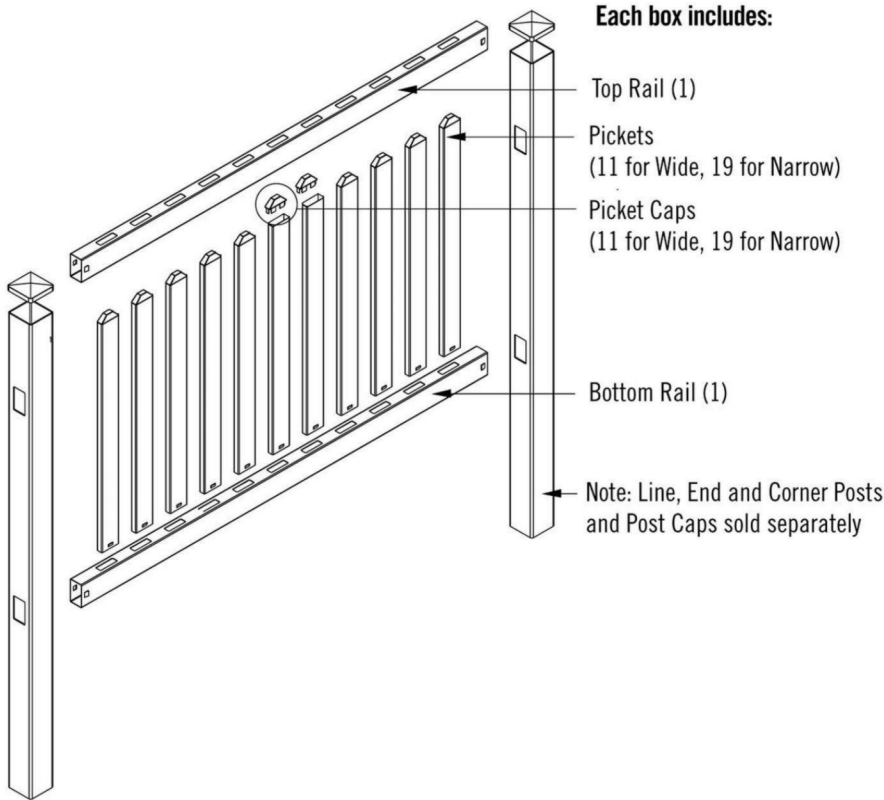
Step 3. Continued

Straight Picket

Wide Straight Picket
(Narrow Straight Picket not shown)

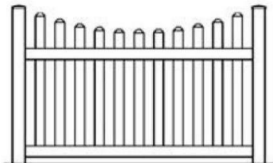


- a) **Install Picket Caps:** Carefully apply PVC adhesive to the inside of the un-notched end of the picket and insert picket caps into this end of the picket, ensuring a tight fit between the cap and picket. If needed, tap the picket cap into place with a rubber mallet.
- b) **Align Pickets:** Line up the pickets for the section so that the notched ends are facing the same direction.
- c) **Install Pickets into Rails:** Slide the pickets through the top rail, one at a time, ensuring the larger routed holes are on the underside of the top rail, which eventually faces the ground. Then insert pickets one at a time into the bottom rail, until the notches are fully engaged. If necessary, use a rubber mallet to tap the pickets into place.
- d) **Install Assembled Sections:** Position assembled fence sections so that rails align with pre-routed holes in posts. Starting with the left side of the section, insert rails into routed post holes, engaging the notches at the ends of the top and bottom rails. Swing the right side of the section into place, sliding the rails into the post, fully engaging the notched ends.



Scalloped Picket

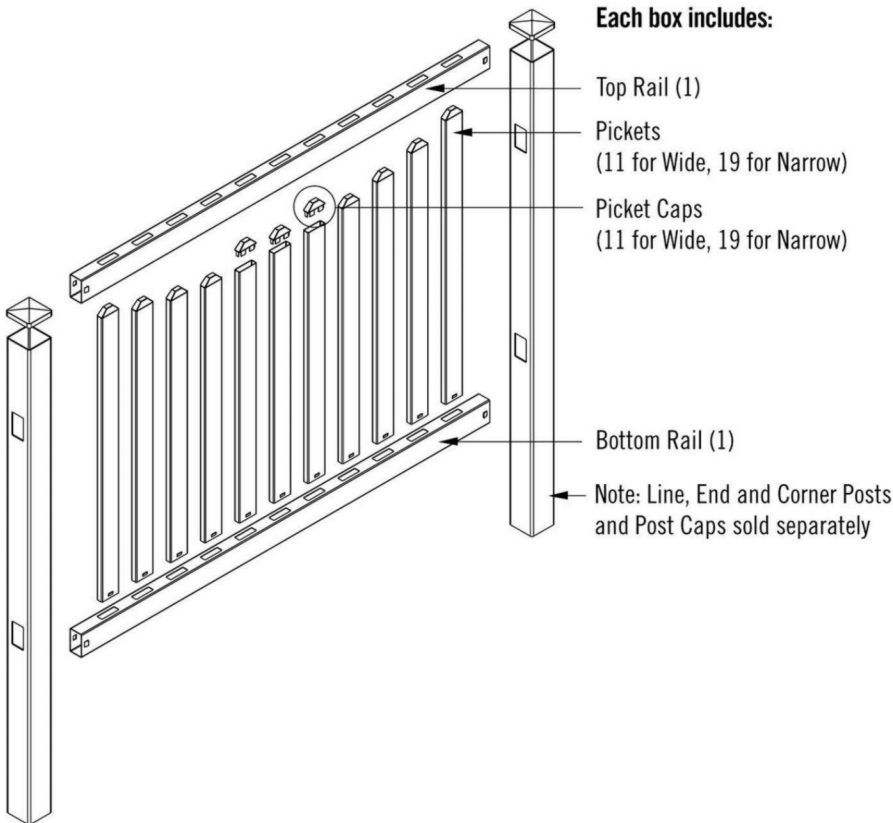
Wide Scalloped Picket
(Narrow Scalloped Picket not shown)



To assemble the Wide and Narrow Scalloped Picket styles, cut the un-notched ends of the straight pickets to the required length, using the chart below. Number each picket with a pencil to identify their individual location in the completed section.

Once all pickets are cut to length, layout the numbered pickets for each section to form the scalloped curve, placing the shortest picket in the center of the section.

Install picket caps, assemble and install the fence sections using the Straight Picket installation steps above.

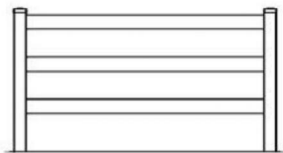


Scalloped Picket Cutting Guide

Narrow Scalloped		Wide Scalloped	
qty	length	qty	length
1	37 15/16"	1	39 7/16"
2	38 1/16"	2	39 1/2"
2	38 11/16"	2	39 3/8"
2	39 11/16"	2	40 1/4"
2	41 1/8"	2	40 3/4"
2	43 1/16"	2	41 1/4"
2	41 15/16"		
2	42 3/4"		
2	43 3/16"		

Step 3. Continued

Ranch Rail



- a) **Install Rails clips:** Insert supplied rail clips (Fig. 6) into both ends of the rails before inserting rails into posts. If trimming rails is required, drill a 1/2" hole at cut ends to accept the rail clip. (Fig. 6)
- b) **Install Rails:** Insert bottom rail into routed post, left side first, as far as it will go, then slide right side of rail into the other post, fully engaging the clip. Work your way up, repeating this step, until all rails in each section are installed.

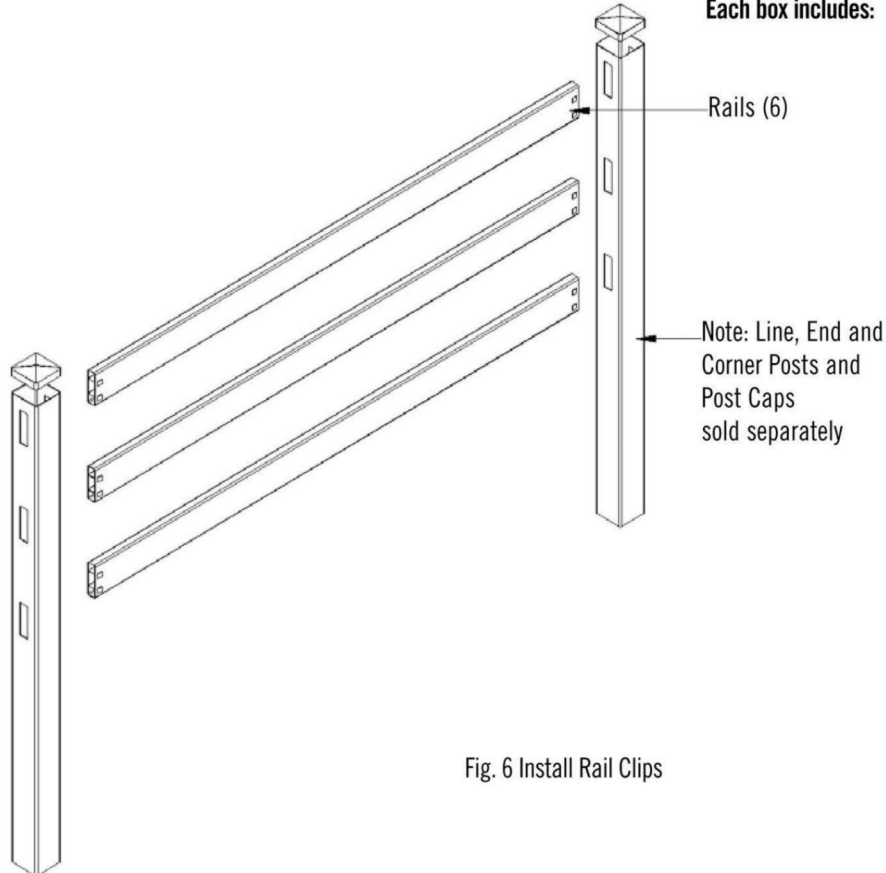


Fig. 6 Install Rail Clips

2-Rail Design

If a 2-Rail design is desired, cut the top 16" from the posts (2" above middle hole), keeping the caps for reuse. Follow steps a and b from above.



Step 4. Reinforce gate posts

- Install hinges and latch prior to setting posts and pouring concrete. Reinforce hinge and latch posts with two 6' pieces of #4 rebar (Fig. 7).
- Tape off ends of rails that will be joining the gate posts – this will prevent concrete from filling rails. Set posts and pour concrete as per Step 2.
- Pour concrete into posts, tamping occasionally to remove air pockets.
- Follow the gate installation instructions included with your gate kit.

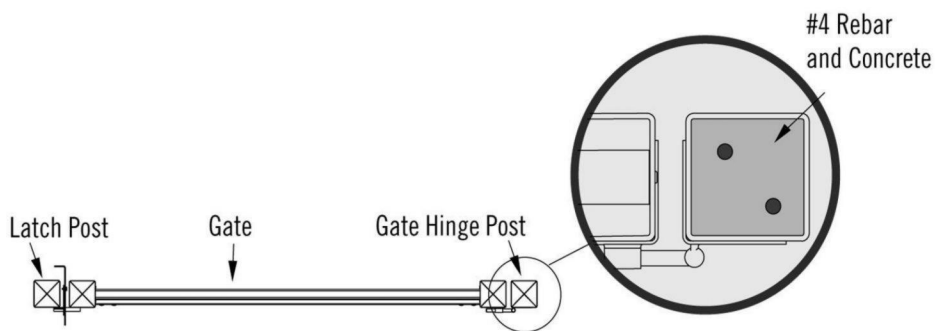


Fig. 7 Reinforced Gate Posts

Step 5. Attach the post caps

- Glue caps onto the posts with a UV-rated, "hot glue" classified PVC adhesive.

Step 6. Clean up

- Clean off cement splatter with mild detergent and non-abrasive cloth, then hose down with clean water.

Installing on slopes

Privacy and Privacy with Lattice

Slopes for Privacy and Privacy with Lattice can be addressed by either Racking (Fig. 8) the sections by trimming the panels or Stair Stepping (Fig. 9) the sections by using brackets and installing unrouted posts.

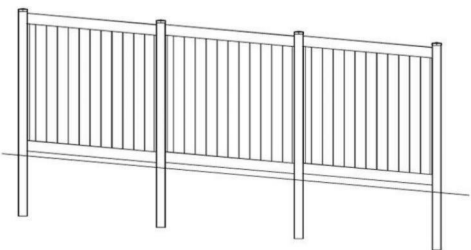


Fig. 8 Racking

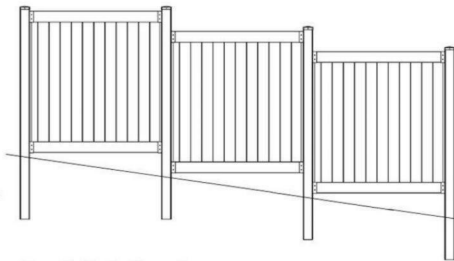


Fig. 9 Stair Stepping

Use the following chart to determine the most appropriate installation method for your project.

Slope (Drop over 72")	Recommended Installation
Up to 4 1/2"	Standard Installation
4 1/2" to 7 1/2"	Cut 1/2" across top of each fence picket (Fig. 10)
7 1/2" to 10"	Stair step fence picket(s) using brackets
>10"	Custom fabrication and installation is recommended

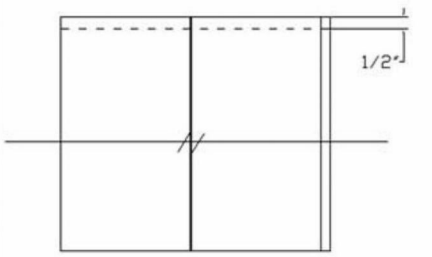


Fig. 10

Stair Stepping:

- a) Space and set posts as per installation instruction Steps 1 and 2. Post heights vary depending on the slope. Make sure there is enough post above the ground to accommodate the fence panel.
- b) Install brackets on (Fig. 11). Pre-drill posts with 1/8" drill bit, using bracket as your guide.
- c) To determine rail lengths, measure the distance between the posts and subtract 1/4".
- d) Install the fence section into the brackets. Pre-drill rails with two 1/8" holes, using the bracket as your guide. Secure rails and sections to brackets with the screws provided.

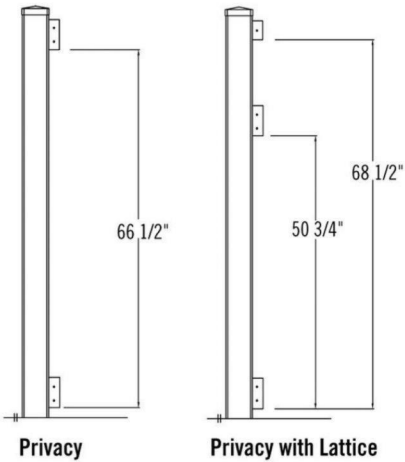


Fig. 11 Post Bracket Locations for Stair Stepping

Picket

Follow the slope with the fence (Fig. 12). Picket rails are routed to accommodate most shallow slopes. To keep pickets vertical on steeper slopes, the picket slots on the pre-routed top and bottom rails may need to be elongated with a file by 1/16" for every 2" of drop over 72".

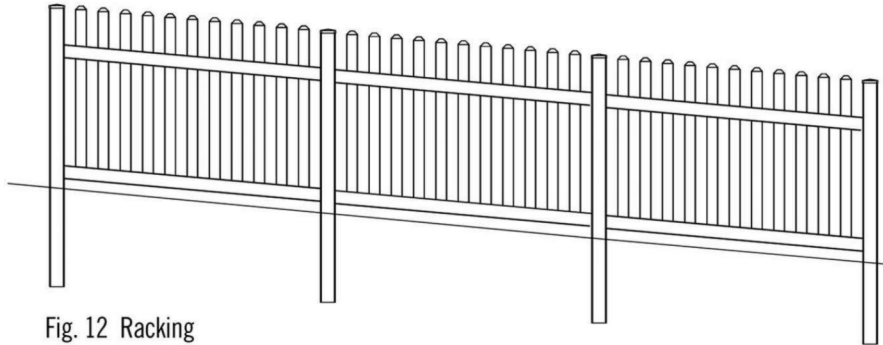


Fig. 12 Racking