

## NEWPORT PICKET GATE (41" WIDE 46" HIGH GATE) (TO FIT 42" OPENING BETWEEN POSTS)

Distance between latch post and gate	A
Width of Gate	B
Distance between gate and hinge post	C
Total distance between posts	D

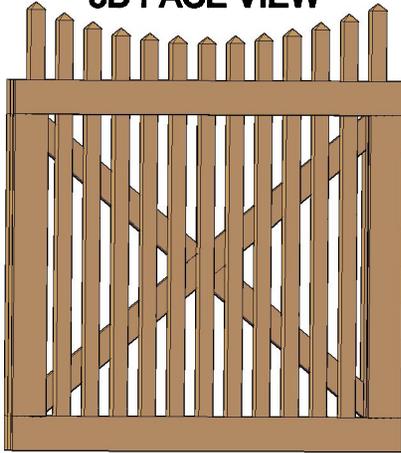
Hardware Required				
	Galvanized Finish	Black Powder Coat over Galvanized Finish		
Hinge Set	8292-122	8292-12sp		
fasteners included				
Latch Options			Dimensions (feet and inches)	
			A	B
			C	D
Ring Gate Latch	4149-062	4149-L6SP	0.5"	41"
Hampton Thumb Latch	NA	4300-WSP	0.5"	41"
Magna Latch (swimming pool)*	NA	MLTPSBGA	0.5"	41"
Optional Hardware				
Paddlock Eyes	NA	1300-00SP		
Gate Stop (recommended)	NA	1400-BSS		
Gate Spring Closer	4612-HSC	4612-HSS		
Lumber Required (Cedar)				
Posts	2 of 8' x 6" x 6" (usually dressed out at 5.5" x 5.5")			
Lumber Dimensions	# and Length Required	Part of Project		
2 x 4 (actual 1.5" x 3.5")	1 at 8' and 1 at 12'	back layer rails and stiles and end picket filler blocks		
1 x 6 (actual 0.75" x 5.5")	1 at 4'	Diagonals (cut down the center for 2 pieces of material actual size 3/4" x 2.75")		
1 x 4 (actual 0.75" x 3.5")	2 at 8'	front layer rails and stiles		
2 x 2 (actual 1.5" x 1.5")	7 at 8'	pickets (alternatively use 4 at 2" x 4" by 8' and cut down to 2" x 2")		
Fasteners Required				
60 of 2.5" x #8 wood screws (stainless preferred)				
Approximately 60 2" finishing nails (stainless preferred)				

### Snug Cottage Hardware

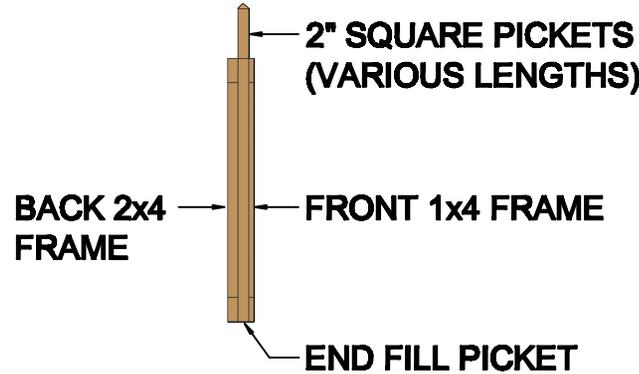
**Download includes this materials list, component cutting and layout sheet, tips on installing gate posts, and detailed instructions.**

**For a complete listing of our free gate plans and gate layouts visit [snugcottagehardware.com](http://snugcottagehardware.com).**

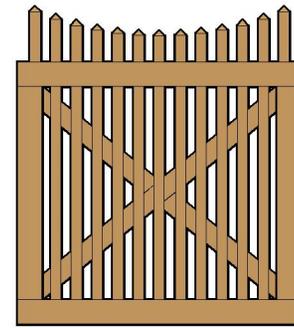
### 3D FACE VIEW



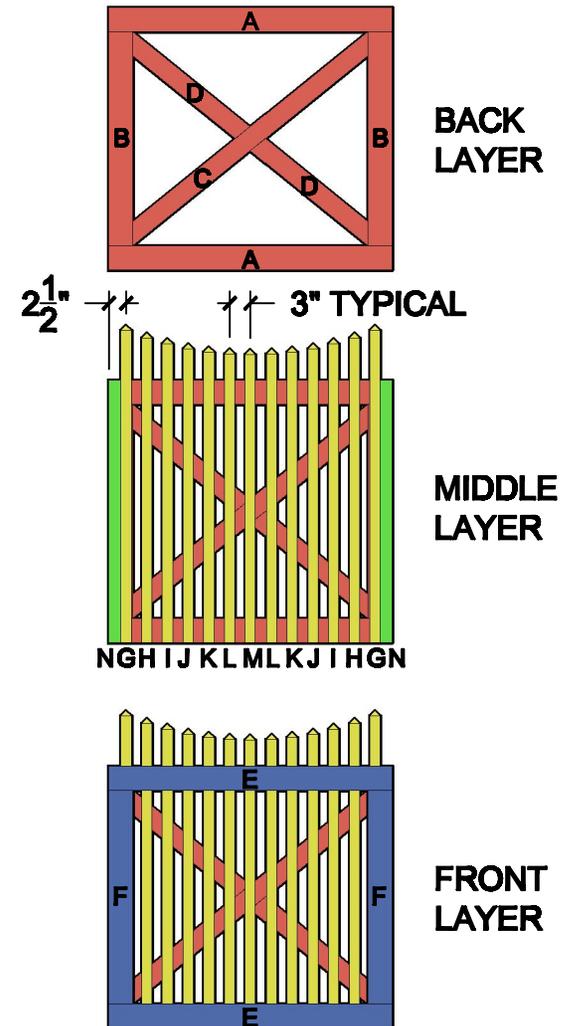
### SIDE VIEW



### FLAT FRONTAL VIEW

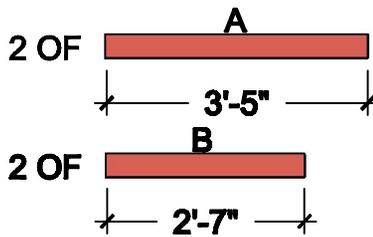


### THREE LAYERS

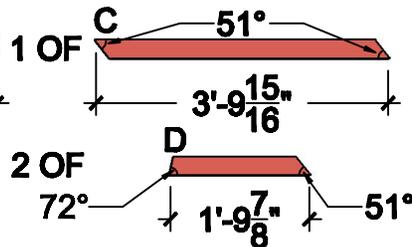


## COMPONENTS

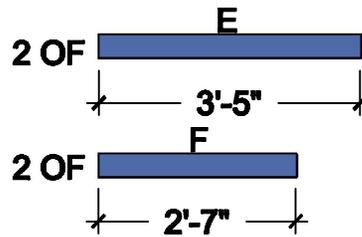
#### 2x4 BOARDS



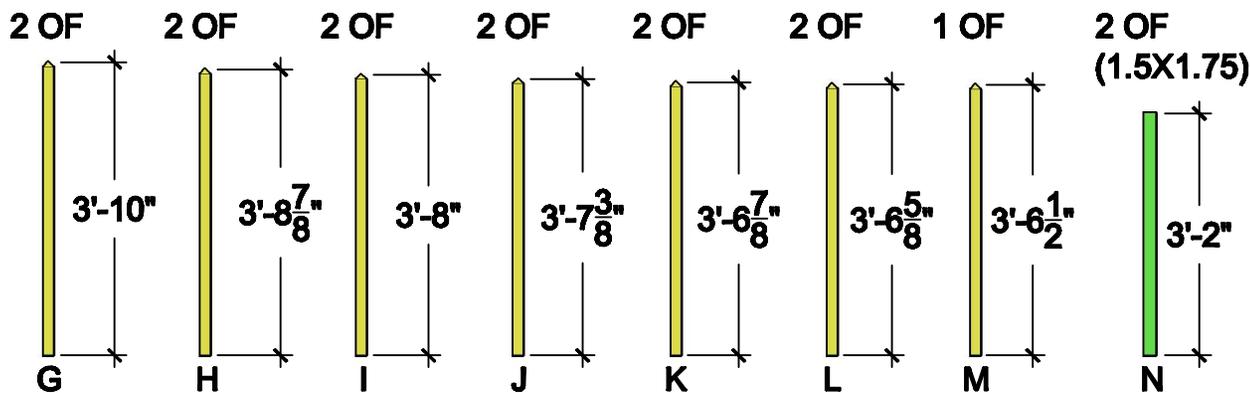
#### 1x2-3/4 BOARDS



#### 1x4 BOARDS



#### 2x2 PICKETS



### Snug Cottage Hardware

Newport Picket Gate - 41" Wide (For A 42" Opening) x 46" High

## Newport Picket Gate Assembly Instructions

1. If you need to modify the height or width of this gate, you need to plan for that modification now. For Example, I added 2" to the height of the plan to accommodate my area's local pool code. I did so by adding 2" to each picket and all vertical support members. Adding the height will also change the length of the "X" bracing and the angles that the ends are cut to.
2. Cut all pieces to finished dimension except for the "X" bracing pieces. Although the plans state the dimensions and angles to finish cut these pieces to, we think it is a good practice to mark and cut these pieces after the gate frame is assembled. This will give you the best possible fit and also allow for deviations in standard lumber dimensions from one part of the country to another. Use the listed dimensions of the "X" bracing as a guide rather than taking it as being 100 percent correct.
3. Lay out the 2 x 4 gate frame on a flat surface, best sides down. This layer is referred to as the back (red) layer. Add exterior grade wood glue to each of the four intersections and pocket screw or "toe" screw together from the back side. Ensure the outside edges are lined up and don't worry about the screw holes as they will be covered when you put the middle layer in the gate. Please pre-drill all holes with the appropriate sized drill bit to prevent the wood from splitting. Fastening the gate frame together will make the rest of the assembly easier to handle and keep things from shifting on you while you work.
4. Ensure the 2 x 4 frame is square by measuring across it diagonally from corner to corner in each direction. When the frame is square the measurements will be the same in each direction. If they are not you need to make it square before proceeding or you will end up with an un-square finished product.
5. Now the glue has had time to set up you can lay out the "X" bracing pieces to mark and cut. The full length piece of the "X" bracing should extend from the bottom of the hinge side to the top of the latch side. In this position it will help to hold up the latch side of the gate and prevent it from sagging over time by transferring the load or weight on the latch side back to the bottom hinge. This is important to note here because the position of the continuous "X" brace will change depending on which side you intend to hinge the gate from. (For example: in our plan the hinges would go on the left hand side in the picture)
6. Mark and cut the full length diagonal brace to a snug fit and install using a bit of glue and a "toe" nail or pocket screw at each intersection. This will hold it in place until you install the pickets and then you can nail it to each picket from the back side.
7. Now cut the two shorter diagonals and install in the same fashion as above.
8. You can now start laying out the pickets. First, install the two shortest pieces on each side, using glue and screws. They should be flush with the outside edges as well as the top and bottom of the gate as shown in the middle (green) layer diagram.

9. Lay all the pickets in the space between the two you just installed and slide them all tightly against one side. Measure the empty space that is left and divide it by 12 which is the number of spaces between the pickets shown on the plans.
10. Cut a couple of spacer blocks to the calculated dimension in step 9 and use those to correctly space the pickets.
11. Begin installing the pickets with screws through the pickets and into the 2 x 4 frame behind (use 2.5" weather proof screws). Pre-drill all the holes to keep the wood from splitting. The screws you are installing in this step will be covered by the front (blue) layer on the plan.
12. Once you have all the pickets installed, you can place the individual pieces of the front (blue) layer on top of the picket and install using 3" weather proof finishing nails. While installing this layer we recommend putting a bit of exterior grade wood glue on each joint to keep them tight together for the long term. We used finishing nails to install this layer rather than screws so we could set the nails, fill the holes with exterior grade wood filler and sand them so you won't see any fasteners in the finished product.
13. Flip the gate over and install a 1.5" weather proof finishing nail at each intersection of the "X" bracing and the pickets. This will help to hold it all together. Set the nails and fill the holes with exterior grade wood filler.
14. Once the glue and wood filler are dry, you should give the gate a good sanding to prepare it for an application of your favorite exterior wood stain or exterior primer and paint.

### **Tips for a better finished product:**

1. While assembling your gate, be mindful of where the hinges will fasten in the end. The hinges shown on the plan install on the gate using 2 wood screws and a 3/8" carriage bolt. Try to keep the fasteners you use to hold the gate together away from the location of the fasteners for the hinges. If you have put a screw in where you need to drill a hole later, it will be very difficult to fix.
2. Before you put the front (blue) layer on, approximate where the hinges will be installed. You may find it helpful to install a filler block between a couple of the pickets top and bottom for the screws to hit when you install the hinges.
3. Before I installed the front (blue) layer of my gate when I built it, I painted it as two separate pieces to make getting the brush between the pickets a whole lot easier. It added some extra time to the project but I think it was worth it in the end.

# Installing Gates and Posts

## Tips and Pointers

When one installs a gate we hope that the gate will not sag and that the gate post will not move so that our work will not only look great but function properly. However, this can be difficult to achieve as the wood that the gate and post is made of is a dynamic medium that is expanding and contracting as well as twisting and warping with changes in temperature and humidity. Furthermore, in northern areas there is frost heavy which tends to move posts in the ground. While we cannot eliminate these problems we can do certain things to prevent gates sagging and posts moving. Therefore, we suggest first of all to use hardware that is adjustable so that small adjustments can be made to correct movement of the posts and gates construction techniques that will prevent the gate from sagging.

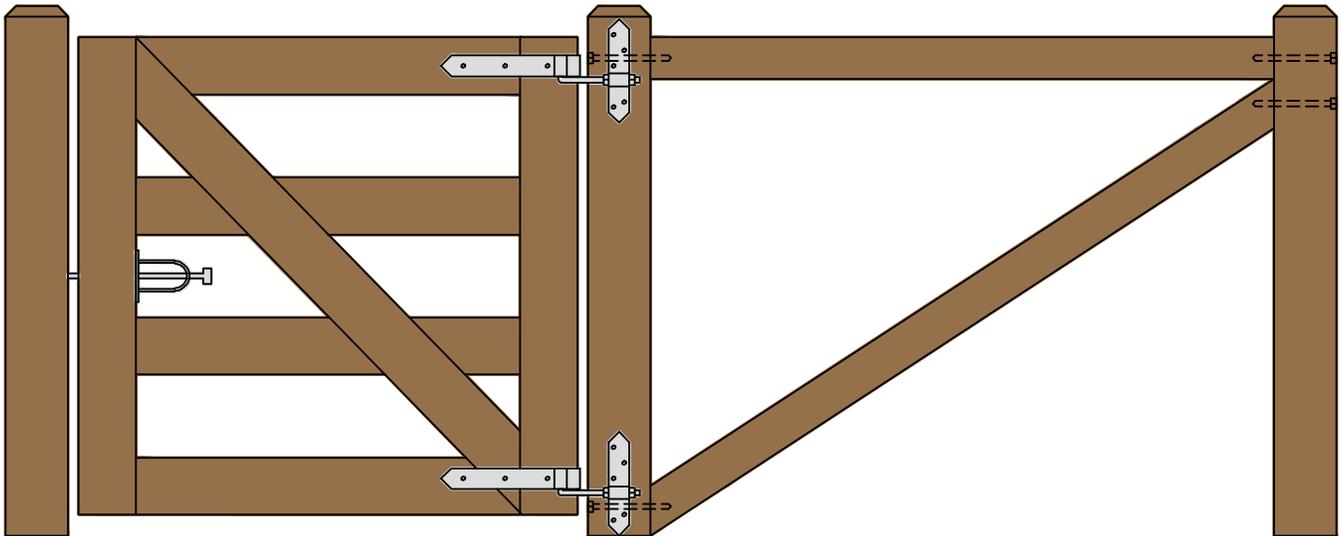
In addition, below are some recommendations that will reduce the chance of posts moving.

### The Post Hole

1. Ensure that the depth of the hole extends well below the frost line.
2. The diameter of the hole permits 2" of clearance between the post and the edge of the hole.
3. Ensure that tree roots are not close to the post as when the root grows in diameter it will move the post.
4. Remove all stones and boulders that may push against the post.

### The Hinge Post

1. The hinge post must be of sufficient size to support the weight of the gate. A 4 x 4 is not sufficient for a drive gate for example.
2. Brace the gate hinge post to the first line post.



We strongly suggest that the bracing between the hinge post and first line post for larger and heavier rail or driveway gates should be done as shown above. The top horizontal brace (4 x 4) fit tightly between the two posts and that lag screws are placed through the post and extend at least 3" into the horizontal brace (if the horizontal brace is not fixed securely to the posts then it is totally ineffective). The diagonal brace (4 x 4) should fit snugly under the horizontal brace at the line post end and slope downwards to fit snugly against the gate post just above ground level. Lag screws are placed through the post and extend at least 3" into the diagonal brace.

If a wire brace is used it should extend from the high side of the hinge post to around the line post at just above ground level.

## **Should hinge posts be cemented?**

While it is common practice to pour cement around hinge posts it may not be the best practice. If the hole is irregular in shape (which most are) the cement will assume the shape of the hole. The irregular surface of the cement will in fact increase potential for frost heave because the cement and post will now have no choice but to move with the ground when it heaves. Water is trapped between the post and cement and the post will never dry out, therefore dramatically increasing wood rot.

While it is more work if done properly we suggest that once the post is set in the hole that it be back filled with gravel that is tamped firmly as the hole is filled. This will allow for better water drainage with less wood rot and the post will not be united with upper soil levels as they heave in winter.