

TIPS & POINTERS FOR INSTALLING GATES & POSTS

INTRODUCTION

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

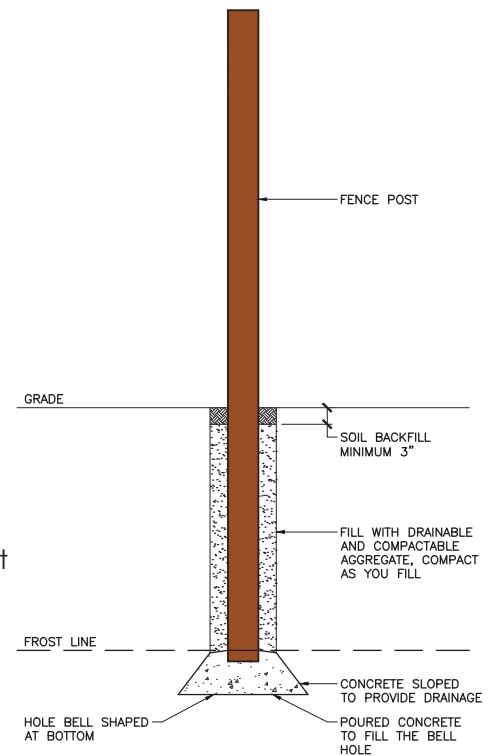
1. Ensure that the depth of the hole extends well below the frost line.
2. The diameter of the hole permits 2" of clearance between the post and the edge of the hole.
3. Ensure that tree roots are not close to the post as when the root grows in diameter it will move the post.
4. Remove all stones and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

THE HINGE POST

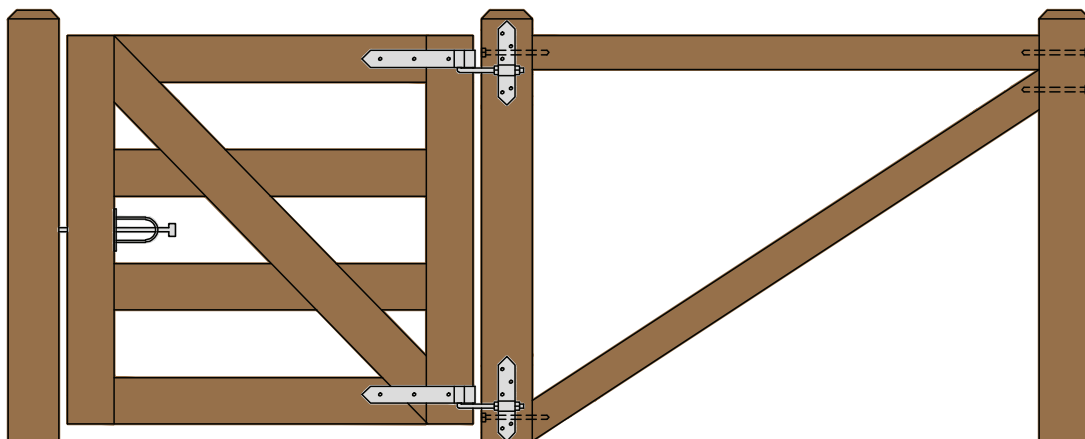
1. The hinge post must be of sufficient size to support the weight of the gate. A 4 x 4 is not sufficient for a drive gate for example.
2. Brace the gate hinge post to the first line post.

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.



HAND DUG OR AUGURED
HOLE WITH BELL END



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.

OUR COMPREHENSIVE PLANS ARE ONLY A STARTING POINT

We have found that four rail 46" high gates are very common and functional. You are free to construct a gate using our plans as a startingpoint.

If you require a three rail gate just remove a board from our plan and adjust the space between the boards accordingly.

If you need a higher gate or a narrower gate to fit an existing opening make the changes to the horizontal boards and stiles (uprights). Remember however, that this will change the length of the diagonals and the angle at the end of the diagonals. Determining the angles and length of the diagonals is explained in the Snug Cottage "Build A Better Gate" brochure.

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If you need to keep your small dog or chickens in or keep pesty rabbits out then install a galvanized wire mesh between the first layer of boards and the middle layer of boards.

The mesh can be cut so that it comes to within approximately 2 inches of the edge of the gate. This will mean that there aren't any sharp wire ends exposed when the gate is completed.

The Central Hinges (8312) require about 4.5 to 5.0 inches between the gate and the post. If this is a problem then we suggest a few filler blocks lag screwed to the fence post (see picture).



To order hardware required to complete a gate, please contact...

Snug Cottage Hardware
Phone (800) 637-5427 or Email info@snugcottagehardware.com

We would love to see what you build! Please send us photos when your project is complete.