

Putting a Post in the Right Hole (Part 3 Paling Fence Project)

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So how deep should you make the post holes?

Simple you want around a third of the post in the hole. So for a 6' (1.8m) fence you would need at least 8' (2.5m) posts. With a third of the post in the hole your fence will be very sturdy, any less and your posts can work free and lean over. If you use a solid concrete base you may be able to get away with only a quarter of the post in the ground but remember the leverage at the top of the post is now allot greater.

So once you have used your auger to dig a 3' hole what next?. Well in my grandfathers day he would have placed the post in the hole and earth rammed the dirt around the post. This is still a great way to hold a post in the ground and earth ramming can be as sturdy as any method perhaps even more so. However it is time consuming and hard work.

Personally I love rapid set concrete. For a standard post hole use 1 1/2 20kg bags of the stuff. The instructions on the bag says to use two bags but I mix in some of the soil removed from the hole and it works very well.

First place the post in the hole and make sure it is the right height. If it needs to be a little higher lift the post out and put some soil back in the hole. Of course if it needs to go lower you have two choices, make the hole deeper or shorten the post :-).

For the end post place the post in the hole so that the outside surface of the post forms the line of the fence in at least one direction. If its a corner post then make sure it lines up in two directions. Pour some water in the hole, about 2.5 litres and 3/4 of a bag of rapid set concrete. Using a crowbar mix the water and concrete by plunging the bar in and out of the hole without moving the post. Next put some soil in the hole all around the post and mix again. We are not looking for a perfect mixture just make sure the soil and concrete are moist. Now level the post, make sure it is still in position and perfectly vertical in both directions. Use a spirit level or plumb bob they give the best results.

Pour in some more water and another 3/4 of a bag of concrete. Mix a little with a crowbar and top with soil, check the post is still vertical and press the soil down around the post with your boot or post hole rammer (piece of 4"x2" wood). That's the first post done.

Do the same with the other end posts and any bend posts. The concrete is still going to be wet so either call it quits for the day or brace the post in the vertical position so you can string a very tight string line between the posts. A diagonal brace from a stake hammered into the ground to 2/3 of the way up the post along the line of the fence works best.

A string line is used to line up the intermediate posts. But it needs to be high enough above the ground to be out of the way of the post hole digging equipment. A nail driven into the top of the end and bend posts on the rail side of the post makes a great anchor for the string line. Make the string line as tight as possible to reduce any sag and lateral movement.

For a paling fence a post spacing of 9' - 10' (2.70 - 3.05m) is most desirable. For best visual appeal evenly spaced posts look best. So measure the horizontal distance along the entire fence line and calculate the best spacing. Divide the horizontal fence line length by 10' and round up the result to the next whole number. This is the number of panels in the fence. The length of each panel or post spacing is given by dividing the total horizontal length of the fence line by the number of panels. The number of posts required is the number of panels minus 1, but don't forget to add the end posts and each bend post. Here the simple version of the above:

hoz length - horizontal fence line length from end post to end post. panels - number of panels between end posts.
posts - number of post required not including the two end post or any bend posts. ps - post spacing (distance between post centres). panels = (hoz length / 10') rounded up to next whole number. post = panels + 1 ps = hoz length / panels

Now mark out the posts and start digging. Remember the string line marks the front of the post so adjust the hole accordingly. Also remember that the post spacing is the horizontal distance not the slope distance between centers