

# **Steel Board Fence Installation Instructions**

The Steel Board Fence components include posts in five different types, and rails, lock spacer assemblies, and post caps.

The posts have pre-punched rail openings lined with rubber grommets. The post selection includes: 1) line posts; 2) four-way cross posts; 3) three-way posts (or Tees); 4) corner posts (90°); and 5) terminal (or end) posts. Each post is 100" in length and has a tab punched 24" from the bottom that serves to lock the post into the concrete footing. If the post must be shortened, it must be trimmed from the bottom, not the top.

The rails are approximately 9 5/8 feet in length and have a 23° articulation allowance in any direction within each post opening to readily accommodate a hilly terrain or installation of a round corral. The lock spacer assemblies are inserted in each post and serve to lock the rails in place, eliminating the need for nails or screws or special tools for removal.

This information is important for you to keep in mind as you read and follow these installation instructions. Refer to the attached Steel Board graphical installation layout and specifications for additional information.

Before you get started, make sure to check local codes and permit requirements and contact your local utility companies to check for underground services such as electrical, plumbing, or cable.

### Materials required are as follows:

- 1. Post hole digger
- 2. Metal cutting saw for cutting rails and trimming posts
- 3. Tape measure
- 4. Level
- 5. Rubber mallet
- 6. Pliers
- 7. Wood board cut to 110 5/8" for spacing gage
- 8. Concrete (approximately two (2) 80 lb. bags per post hole)
- 9. String and stakes

## Step 1: Setting the Posts

- 1. Decide on all the gate placements and install the end gate posts first. Gates within the fence line are installed during the fence line build. See the Steel Board Gate installation instructions for further information.
- 2. From the open end of the first gate, set the first fence post at a 3" gap to the gate for proper latch installation. Using a post hole digger, dig post holes 9" in diameter and 43" deep (or deeper) with 115 <sup>3</sup>/<sub>4</sub>" between post hole centers on flat ground. Use a line with a clip or marker at exactly this 115 <sup>3</sup>/<sub>4</sub>" incremental distance.
- 3. Make sure to bend out the post anchor tab on the bottom of every post before the post is placed in the post hole. A screwdriver or a set of pliers or channel lock tool works well. The bent out tabs prevent post movement once the concrete is set.
- 4. Put the fence post into the hole and use a rubber mallet to tap it into the hole another inch or two until it can be set 43" in the ground and to a height of 57" above ground. Tapping the post down the last inch or two enables drainage to the soil once the concrete is set.
- 5. Set the post to a height of 57" from the ground. Run a string line along the planned fence line at the same 57" height to ensure all posts are set to the same height. Keep in mind the ground will vary a few inches up and down even on a relatively flat terrain. You want the fence line to look very straight where the terrain allows and with very gradual undulations in varying terrain.
- 6. Pour concrete up to 2-4" below ground level. Work concrete into hole by shaking post. Use post level to ensure the post is plumb and in line and not rotated out of square. After the concrete is set, fill the rest of the hole with dirt.
- 7. If impenetrable rock is encountered requiring a shallower hole, the posts can be trimmed **from the bottom**. Dig the hole around the rock in such a way as to lock your concrete to the rock when it sets. This will allow the post to be set as rigidly as possible given the conditions.
- 8. Set all remaining posts the same way, utilizing a 110 5/8" cut wood post spacing gage. With the wood post spacing gage contacting both posts at their base on the ground, butt each post tightly to the wood gage nose while setting the next post. Use a level to ensure the post is plumb and square. Eyeball your line before tapping it down. The plumb and square posts with the wood gage on the ground will ensure optimum rail engagement throughout the fence line, including straight, rounded or sloped fence lines.

9. When encountering an obstacle such as a corner, building, or gate, the post spacing distance will likely be shorter. Set the post where it needs to be to accommodate the obstacle and plan to trim the rails later to fit as detailed below.

# Step 2: Inserting the Rails

- 1. Once the concrete is set, the rails can be mounted. The concrete should be allowed to set at least 24 hours before you begin mounting the rails.
- 2. Make sure a rubber grommet is properly installed in each rail opening on the posts before you get started. Replace any missing rubber grommets using the extra grommets provided. Dampen the rubber grommets with a wet cloth to ease insertion of the rail.
- 3. Starting at a gate or other terminal post (post #1), insert one end of the rail into the top rail opening on the next post (post #2) all the way until it bumps the back side of the post and then swing it into position and insert the other end back into the top rail opening on post #1. Take a lock spacer bar and drop it into the top of post #1 and let the top tab of the lock spacer rest on the top of the inserted rail. Pull the top rail tightly back into the post #1 lock spacer. Do the same for the remaining rails in this section.
- 4. Mount the next section of rails. Drop the lock spacer bar into post #2 and let the top tab of the lock spacer rest on the top inserted rail from the first section. Insert one end of the rail into the top rail opening on the next post (post #3) all the way until it bumps the back side of the post and swing the rail to insert the other end into the top rail opening on post #2 and pull the rail until it bumps into the lock spacer tightly. Mount the remaining rails in each fence section following the same steps and continue inserting the rails all the way down the fence line until the next terminal or corner post.
- 5. When encountering a corner or end post, it may be necessary to cut the required rails to a shorter length. If so, measure and cut the rail to the distance between the two posts *plus* 3.5". We recommend applying a cold galvanizing spray and touch up paint to the cut ends to resist future corrosion. Insert the cut rails following the same procedure outlined above.
- 6. When entering a corner with the narrow (3.5") post side facing the last post it will be necessary to pull the lock spacers out of the last two posts to make room to insert the rails away from the corner and not with the method used to this point. Be sure to replace the lock spacers when the section is done.

#### **Step 3: Mounting the Post Caps**

Place the cap on top and gently pound down with a rubber mallet to make sure it is resting squarely on top of the post.

We recommend waiting three (3) days before letting the horse back into the fenced area to ensure the concrete footings are beyond at least half of their rated strength, even with a fast setting concrete. The horse will likely test the fence and could cause unnecessary damage when concrete footings are not adequately set. Installed correctly, the Steel Board Fence will last generations!

Good luck! If you have any questions regarding these instructions or need help during installation, feel free to call us at Buckley Fence, LLC. Our contact information is below.