# FENCE INSTALLATION

#### **BUCKLEY FENCE INSTALLATION WRITTEN INSTRUCTIONS**

Buckley Fence components include 5 different post types (line, terminal/end, corner/90°, 3-way/tees, 4-way/cross), rails, lock spacer assemblies, and post caps. The posts have pre-punched rail openings lined with rubber grommets. Extra grommets and lock spacer assemblies are shipped inside each post.

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' 6 3/16" in length and have a 23° articulation allowance in any direction, allowing for hilly terrain, round corrals and elegant curves. The lock spacers are inserted in each post and serve to lock the rails in place.

Refer to page 3 of this manual for dimensions and specifications.

Before you get started with installation, 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. Call 811 for the Digger's Hotline.

#### **REQUIRED MATERIALS**

- Auger with an extension to at least 43"
- Metal cutting saw (if trimming posts & rails)
- 3. Tape measure
- 4. Level
- 5. Rubber mallet
- 6. Multi-tool or pliers
- Wood board cut to 110 5/8" for spacing gauge

- 8. Concrete (approximately three80 lb bags per post hole)
- 9. String
- 10. Stakes
- 11. Brightly colored spray paint
- 12. Towel/rag
- 13. Manual post hole digger
- Rustoleum touch up paint (provided with every order)



### PLANNING YOUR LAYOUT BEFORE DIGGING

Plan your layout ahead to avoid cutting rails and having unnecessarily small sections. In most situations, it makes sense to decide on all gate placements first. Some gates, like driveway gates, must be installed in precise locations; these should be installed first. These can be used as anchors in your project for measuring out post centers. Pasture gates can simply be installed as you work down your fence line.

Refer to the Gate Installation Instructions on page 20.

It's important to note for planning, that Buckley Fence sections are 9.65', longer than the typical section length of wood or vinyl. When planning your layout, the goal is to have each section look as uniform as possible. For instance, rather than creating one 4 ft section when approaching an end point, plan to minimally shorten 2 to 3 sections so they do not visibly stand out.

After planning your layout, you can begin installation, ideally at a gate. When installing a Buckley gate post, the fence post is installed at a 3" gap for proper latch installation. From the first fence post, measure and mark with spray paint or stakes where your post centers will go. Use a string line at exactly 115 3/4" post center to post center. Refer to our Post Center Measurements on page 5.

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. Plan to trim the rails to fit. Details on how to trim rails can be found on page 12.



# 2 DIGGING THE HOLES

Before digging the post holes, mark all utility lines using the Digger's Hotline (Dial 811). For safety, we recommend carefully hand digging if next to any utility lines.

- 1. For standard post holes use a 12" auger with extension. Dig post holes 43" deep (or deeper) with 115 3/4" between post hole centers on flat ground. (Figure 1)
  - a. You can use as narrow as a 9" auger, but we recommend against this since it will require additional hand digging due to imprecision. A 12" auger does require additional concrete, but eliminates the need for hand digging, decreases labor costs, and improves overall efficiency.
- 2. If you encounter smaller rocks while digging the post holes, attempt to break them up. If an impenetrable rock is encountered, you will have to trim the post from the bottom with a metal cutting saw and secure it to the rock.

- a. If your hole can be dug deeper than 2 ft: Manually dig the hole around the rock to lock your concrete to the rock when it sets. This will allow the post to be set as rigidly as possible.
- b. If you can't dig your hole deeper than 2 ft: Secure your post to the rock with the aid of rebar.
  - i. Drill a hole into the rock that is outside of where the post will go. Drive either a long bolt or a cut piece of rebar into the hole you drilled. When the concrete is poured, the concrete surrounds that rod and becomes part of the rock.
  - ii. Put the post into the hole next to the rebar, then pour the concrete. The rebar and concrete become one, securing the post.



### **3** SETTING THE POSTS

- 1. Plan to set posts beginning at corners, end posts, or obstacles in the fence line.
- Once your post and rail crates are unloaded from the truck, cut the banding and remove the packaging.
   a. Each post and rail comes in its own polyethylene sleeve which are perforated long-ways, allowing for easy removal. The lock spacers come packaged within each post.
- 3. Remove the polyethylene sleeve upon placing it into the hole or after most of the installation is complete if you want to protect the posts from mud and dirt.
- 4. Bend out the post anchor tab to at least 45° (and not more than 90°) before placing it in the auger hole a. To bend the tab you can use a screwdriver, a multitool, set of pliers, or channel lock tool. You can bend the post tabs at the same time on all posts and then walk them to their holes, or do them one at a time as shown. The post anchor tabs prevent post movement.
- 5. Put the fence post into the hole, then push it into the ground 1"- 2", or tap it down using a rubber mallet.

  a. Tapping the post down the last inch or two enables drainage to the soil once the concrete is set. This is a critical step; enabling drainage prevents the post from filling with water, freezing, and fracturing the post.
- 6. Set the post 43" in to the ground and to a height of 57" above the ground.



- 7. Set all remaining posts the same way. Use a cut piece of wood measuring 110 5/8" as a spacing gauge to streamline the spacing of the posts.
  - a. Lay the wood spacing gauge flat on the ground and contact both posts at their base. Butt each post tightly to the wood nose while setting the next post.
  - b. Double check that the post is plumb and square with your levels after removing the wood gauge.
  - c. Eyeball your fence line before tapping it down, making sure it appears straight.
    i. Using a wood spacing gauge will help you navigate sloped terrain since you're automatically compensating for the slope. In other situations, like an arena installation or a rounded layout, it ensures proper rail engagement.
    Additionally, you don't have to use a tape measure, increasing efficiency as you're setting the fence line.



- 8. Once the fence line is set, pour concrete all the way to the bottom of the hole, stopping 2-4" below ground level.
  - a. A hydraulic concrete mixer such as a Mud Hog is recommended for larger jobs, as it pays for itself in the first 5,000 ft, however it is not required.
- 9. Work concrete into the hole by using a steel rod to poke air out of the concrete. Avoid shaking the post since it can cause the post to come out of alignment. If you're using quick setting concrete, you have 20-40 minutes to adjust the height of your posts.
- 10. Use a level to ensure the post is plumb in both directions, in line with the other posts, and not rotated out of square. To ensure plumbness, use a level on each side of the post or a fence plumb.
- 11. Once the concrete is poured, fill the rest of the hole with dirt. Wipe off any concrete that might have splashed onto the post.
- 12. Use a string line strung across the top of approximately 15 posts. Ideally start at a terminal post, moving down the fence line in 15 post sections.
  - a. Attach the string line to two terminal posts in the section, both measuring 57" from ground to top of post. Set all of the line posts between the terminal posts to that string line.
  - b. The nominal height of the line posts will be 57" from the ground, but will vary with the terrain. Make sure to eyeball the line when nearing completion of the section, ensuring posts are at the correct height before the concrete sets.



### 4

#### **INSERTING THE RAILS**

Once the concrete is completely set, the rails can be mounted. The concrete should be allowed to set at least 24 hours before you begin mounting the rails.

Line and end posts come with grommets already installed. Corner, tee, and four-way posts only have grommets installed on one side allowing them to fit into the crates for shipment. Therefore, corner, tees, and

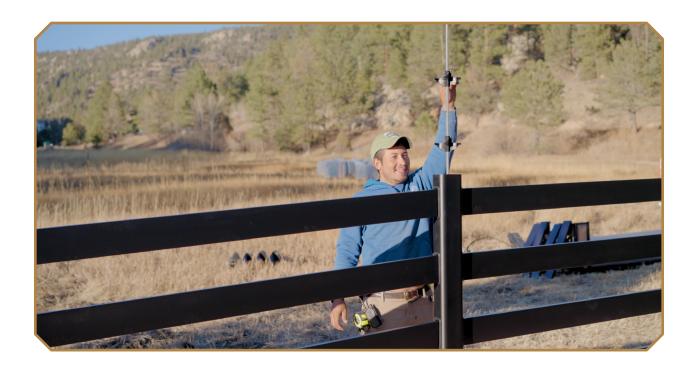
four-way posts will require inserting grommets before rails can be mounted. 95% of the grommets come preinstalled to your posts.

Extra grommets are packed inside the corner, tee, and four-way posts. We recommend mixing Simple Green and water to dampen the grommets and ends of your rails. This eases the insertion of the rails into the rubber grommets.

Buckley Fence requires no nails, screws or fasteners for installation. Instead, our post and rail system utilizes the lock spacer. Our lock spacers simplify installation and make rail replacement quick and easy for our customers. The lock spacer holds rails in place snugly but also allows up to 45 degrees of articulation. In order to properly insert your rails, you will need to remove lock spacers as you move down the fence line and then replace them to lock your rails into place.



- 1. Insert one end of the rail into the top rail opening of Post #1.
- 2. Swing the rail into position and insert the other end into the top rail opening of the adjacent post (Post #2).
- 3. Push the rail until it contacts the backside of Post #2, leaving space for the lock spacer to drop into place in Post #1.
- 4. Drop a lock spacer into the top of Post #1, ensuring it rests on the inserted rail.
- 5. Pull the rail back firmly against the lock spacer to secure it.
- 6. With the lock spacer correctly in place, insert the remaining rails in this section.
- 7. Pull all rails snugly into the lock spacer at Post #1—this prevents accidental falls that could chip or damage lower rails during installation.
- 8. Move to the next section and repeat the previous steps.
- Continue this process for each section until the fence line reaches the next corner or terminal post. Ensure you replace the lock spacers in the posts as you go. Please note that corner and tee posts have unique lock spacers that conform to corners and tees.



Above: Lock spacer being dropped in to line post. Below: Lock spacer resting on the inserted rails.



# **5** CUTTING RAILS

There are some circumstances when you will need to cut rails. Planning your fence line helps to avoid having to shorten multiple sections. If you need to shorten a section, you can cut the rails to a shorter length.

- 1. Measure the distance between the two posts.
- 2. Add 3.5" to that measurement.

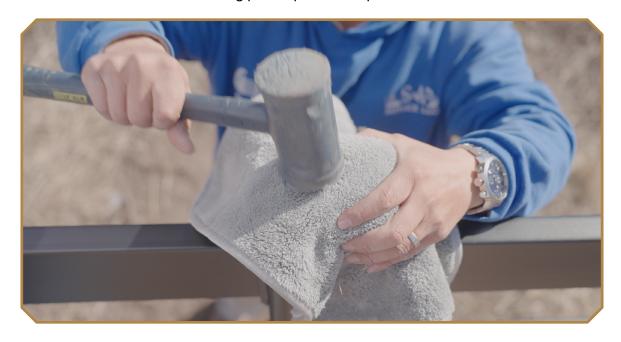
- 3. Cut the rail to that length using a metal cutting saw. We recommend applying the provided touch up spray paint to the cut ends to resist future corrosion.
- 4. Once the paint is dry, insert the cut rails following the same procedure you used to insert the other rails.



### 6 MOUNTING THE POST CAPS

We recommend waiting to install your post caps until all the rails have been inserted. Before you mount your post caps, verify that every single post has a lock spacer installed.

- 1. Place the post cap on top of the post.
- 2. Place a towel over the post cap.
- 3. Gently pound down with a rubber mallet to secure the post cap. Make sure it is resting squarely on top of the post.
- 4. Continue down the fence line installing post caps on each post.



We recommend waiting three days even if using a fast setting concrete, before letting large animals such as horses, cattle, or sheep back into the fenced area. This ensures the concrete footings are beyond at least half of their rated strength. Livestock will likely test the fence and could cause unnecessary damage if concrete footings are not adequately set.

When fence installation is complete, reusable crate ends and gate pallets will need to be returned. Please reference our Crate Return and Gate Pallet Return instructions starting on page 49.

Thank you for your purchase! Please don't hesitate to contact us at 720-644-6884 if you have any questions about installation. Thank you for choosing Buckley Fence

