



Read this instruction sheet completely before beginning any work.

This guide is to help you install your fence panels, posts, and gates for the Ranch Rail two, three, and four rail fence styles.

Before you begin, it's important to check:

- ✓ To ensure your fence footings do not exceed legally established property lines.
- ✓ The local codes for specification regarding frontage locations, allowable fence heights and if a permit is required etc.
- ✓ With your local utility companies for locations of underground cables or pipelines. (You can call 811 to get started).



Two Rail

Three Rail



Four Rail



General Information:

- During panel / gate assembly, work on a soft, non-abrasive surface to avoid scratching.
- When cutting PVC components with a power saw, use a fine-toothed blade (plywood blade, finishing blade, etc.).
- Plan ahead when working with PVC glue. It dries very fast, requiring speed and precision. Two Part Epoxy (PVC glue) can be found at your local hardware store.
- Laying out the fence is the critical first step toward ensuring a quality installation.

Note: *Standard fence sections and gates are designed for level terrain. Significant slope in the terrain will require modification to the panel or gate and post.*

Tool & Materials Checklist:

- Post Hole Digger or Auger
- Drill
- Circular Saw
- Rubber Mallet
- Post Level
- Pencil
- Two Part Epoxy (PVC Glue)
- Shovel
- Stakes
- String
- Tape Measure
- Concrete mix
- Gravel
- Re-Bar
- Cleaning cloth or paper towels
- Duct Tape
- Screw Driver
- Funnel

While installation of fences varies depending on the fence style, material, and the terrain it will be installed into, taking the time to properly lay out your fence can help to avoid mishaps later. It is a good idea to lay out the fence as a "test fit" before digging holes for the posts. Remember to always measure twice and use a level to maintain straight lines.

Prepare Fence Layout:

Step 1:

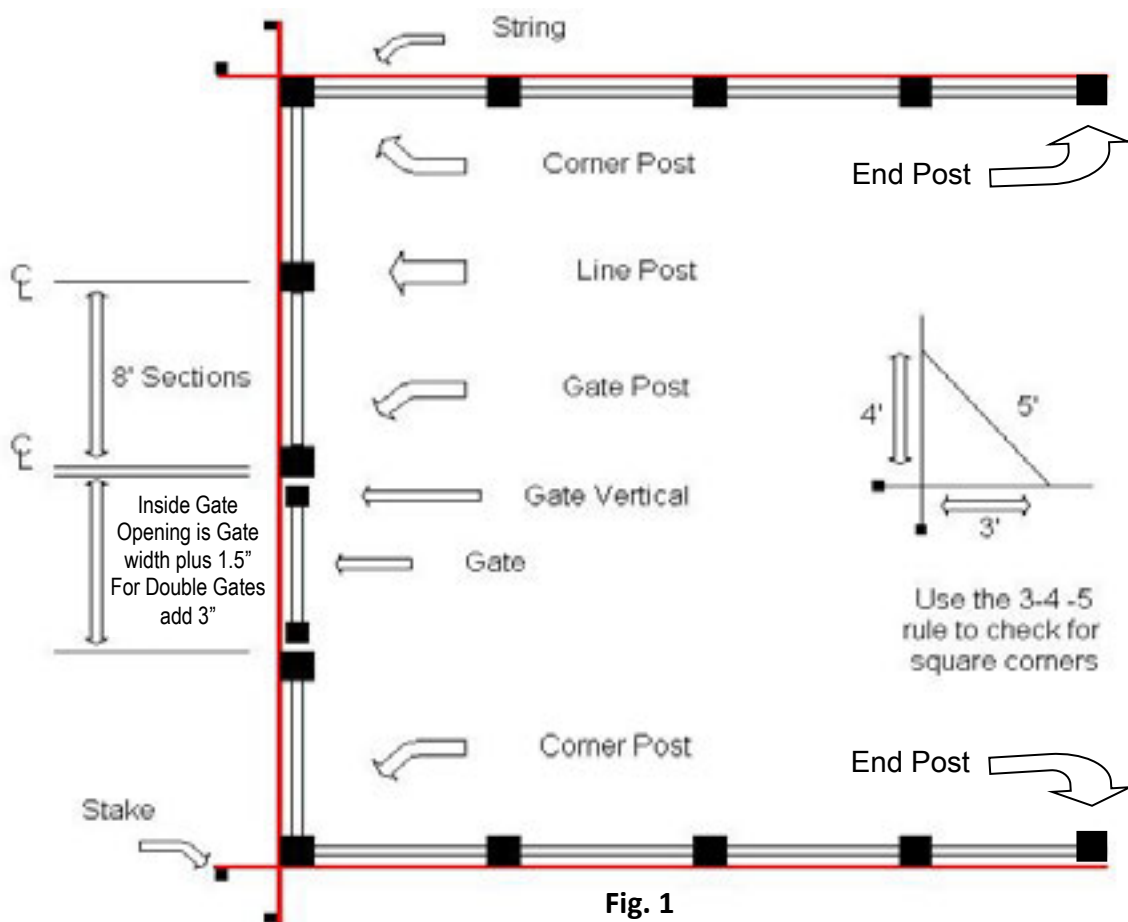
Locate the boundary lines to your property.

Step 2:

Drive stakes into the ground along the property line. Stretch a string between each stake. **Be sure to extend the string about 24" beyond the property line (Fig. 1).** It is recommended that all posts be set approximately 6" inside of the property line so that concrete footings do not encroach onto the adjoining property.

Step 3:

Mark the location of each terminal post with a stake (corner, end and gate post are sometimes called terminal posts).



Setting Terminal Posts:

Although post depth and hole diameter will be determined by local weather and soil conditions, holes for corner post, end post and lines post are typically dug 10" in diameter and from 24" to 28" deep with sloped sides.

Step 1. Dig all corner, end and gate post holes. Position the posts in the holes.

Step 2. The post should be centered in the hole and must be square with the fence line so that when the rails are inserted into the post, they will parallel the string line. Check the post on two adjacent sides with a carpenter's level and adjust as necessary to make sure it is a plumb. The fence height above grade is determined at this time as well. We recommend following (Fig. 2).

Step 3. Pour concrete around post; fill to 2" below ground level. Once the concrete is completely dry, fill the balance of the hole with dirt.

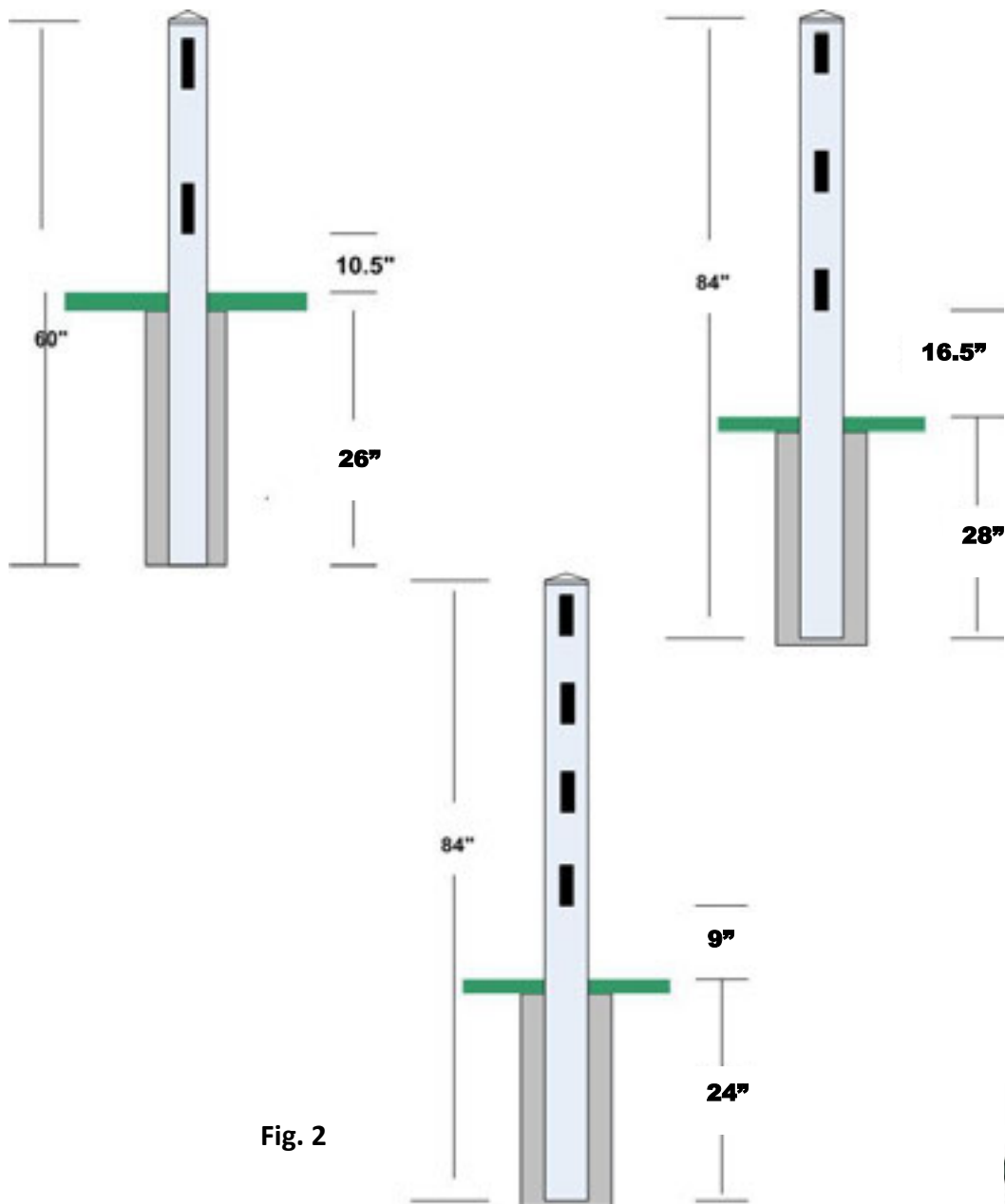


Fig. 2

Locating and Setting Line Posts:

Step 1. After the corner, end, and gate post footings have hardened enough for the posts to remain stable, stake and stretch a string line taut across the tops of the posts to mark the desired height of the line posts (Fig. 3).

Step 2. Working along the string line, stake out the positions of all line posts. Line posts should be spaced 8' on-center starting at one end and working forward post by post.

Step 3. Dig all line post holes so that they are spaced 8 Foot on-center.

Note: *On-center is a customary form of measurement relating to the distance from the center of one post to the center of another. A simple method to calculate this is to measure from one side of one post to the same side on the next adjacent post.*

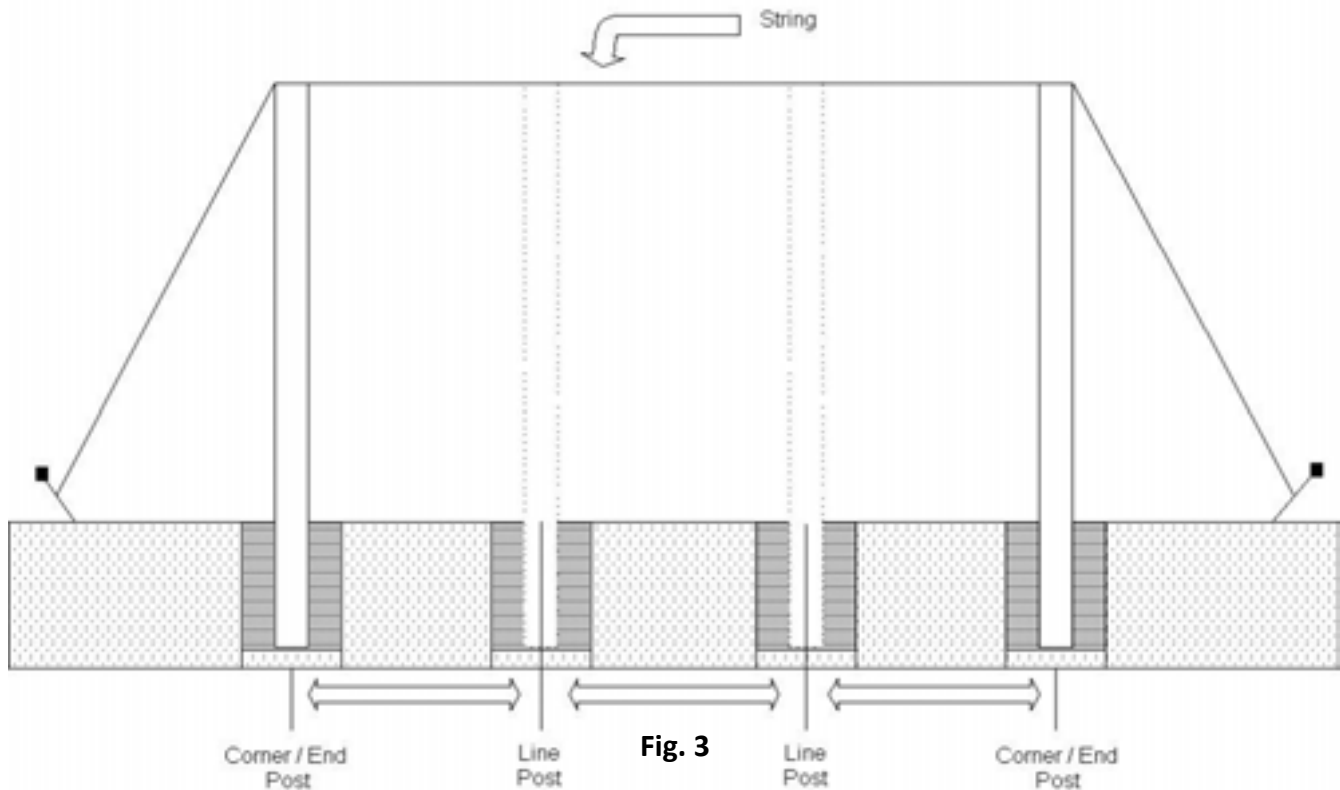
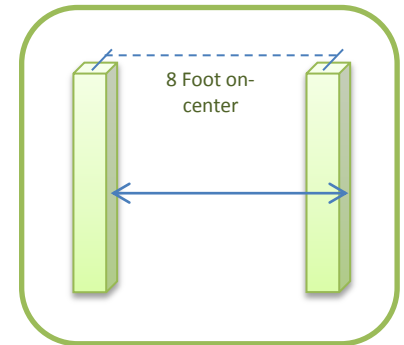


Fig. 3

Installing Rails:

Step 1. If post spacing is less than 8' on center, cut an equal piece from the ends of both the top and bottom rails to achieve the desired length while also maintaining uniform picket spacing. The length of the top and bottom rails should be $\frac{1}{2}$ " less than the on-center measurement of the posts, which allows for expansion.

Note: If the rail ends are cut to shorten the fence section, a tabbing (crimping) device can be purchased at any local hardware store to re-crimp the rail ends (Fig. 4).

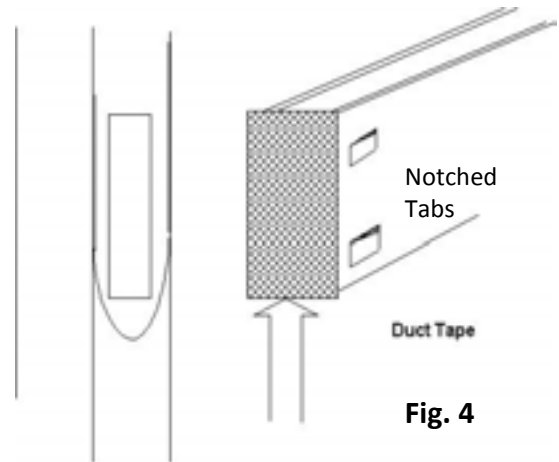


Fig. 4

Step 2. Rails are pre-tabbed and ready to be inserted into the 8' on-center post. The tabs are designed for easy insertion and to lock the rails into the post and may be difficult to remove once inserted. Make sure all work and measurements have been completed before installing.

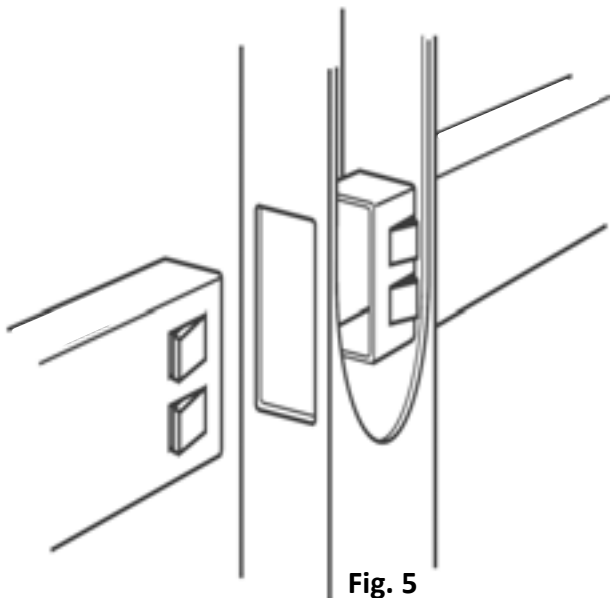


Fig. 5

Step 3. Slide the rail into the bottom hole in the post (Fig. 5). Proceeding down the fence line, place the next rail into the next hole and insert the bottom and top rail into each post.

Step 4. Fill the post hole with concrete. Check to make sure that the post is set at the correct height, is plumb and level and square to the fence line. Block and support as necessary to keep the posts stable as installation continues. **Repeat these steps until all posts are set with the bottom and top rails installed.**

Note: Cut Two 2 x 4's to 90.5" Long and use as spacers between posts to ensure accurate distance. Place one at the top between the posts and one at the bottom between the posts for best results.

Fill Posts With Re-Bar & Concrete (Optional):

Re-Bar placed in the corners of the post for extra strength maybe required in some areas or conditions. For ranch rail we recommend back filling the corners, ends and gate post(s) with concrete (Fig. 5). For gate posts you must attach the gate hardware (hinges and latches) to the post before back filling the post with concrete (Fig. 6).

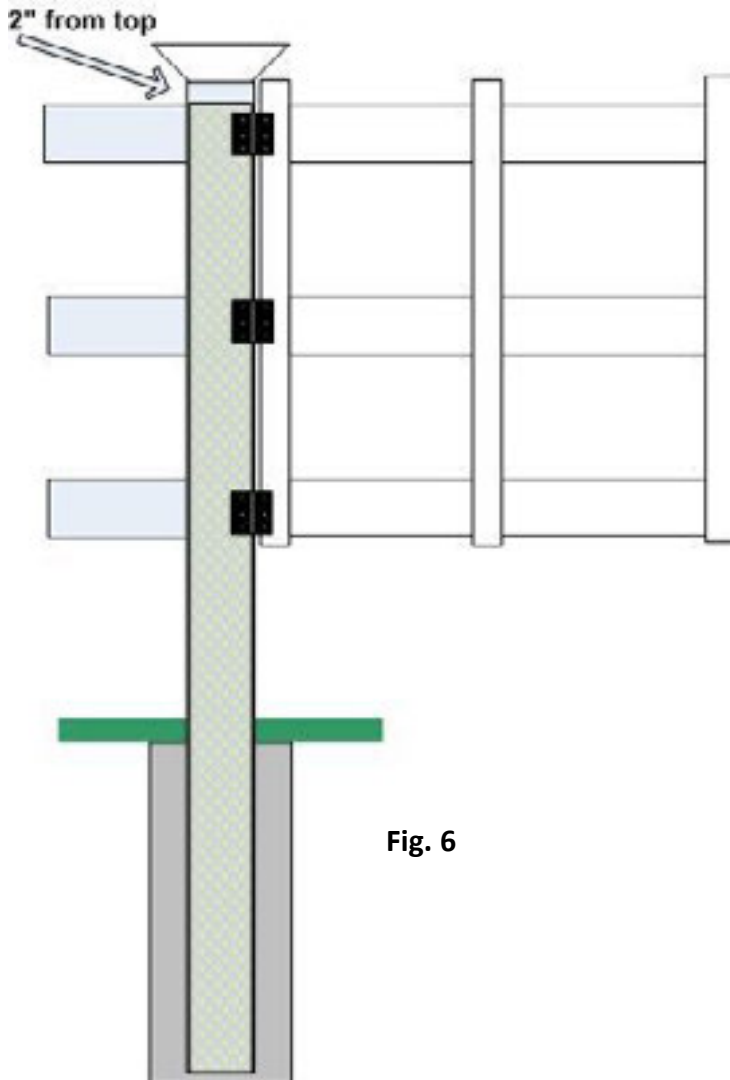


Fig. 6

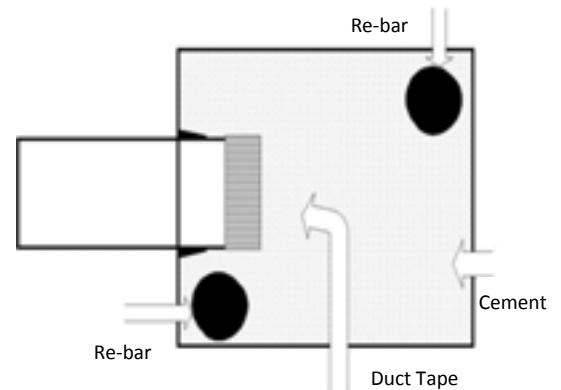


Fig. 5

Step 1. If Re-Bar is not being used, proceed to Step 2. For each corner, end and gate post, cut two pieces of #4 Re-Bar shorter than the post length. Drop two pieces into each post at opposing corners (Fig. 5).

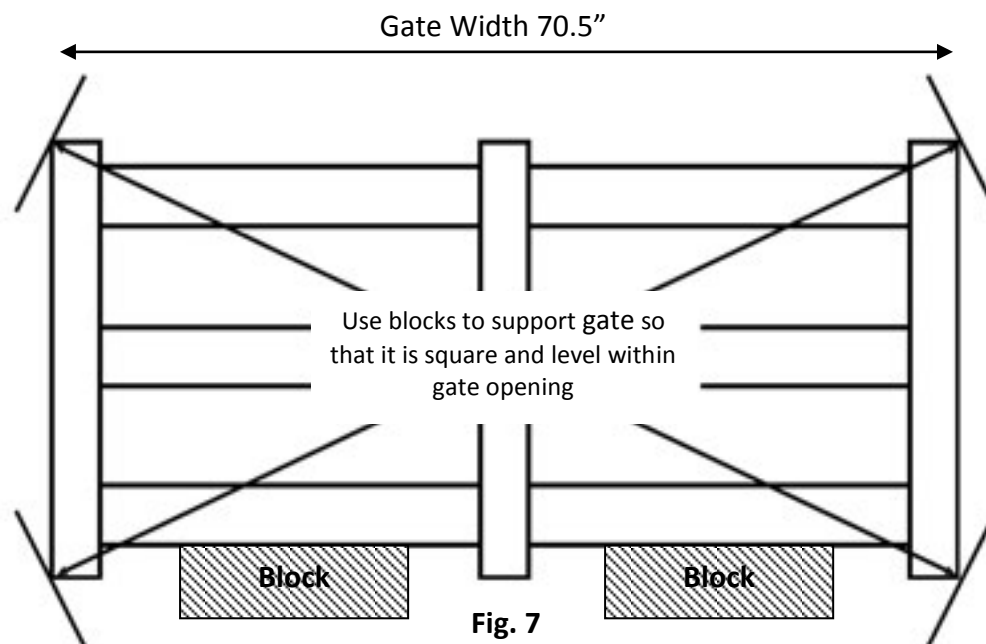
Step 2. Before filling the post hole(s) with concrete, re-check to make sure that the post is set at the correct height and is plumb and level, and square to the fence line. Block and support as necessary to keep the post stable as installation continues.

Step 3. Using a large funnel, fill the post with concrete (Fig. 6). Tap lightly on the sides of the post to help void air pockets in the concrete. Repeat these steps until all posts are set.

Note: Clean off the excess concrete that has spilled onto the post as soon as possible.

Installing Gates:

Gates come preassembled and ready to hang at 70.5" with a post opening being 1.5" larger than the gates which allows room for the hinges and latches. The gates are designed to coordinate and match the style of fence and rails. **The actual opening from post to post should measure 72".**



Step 1. To ensure your gate is square and supported during the installation process, position your gate within the gate opening and place two 2" block supports (or similar support to line up gate horizontally) under the gate to hold it at the proper height, and level to line up with the rails of the fence (Fig. 7).

Step 2. If you have elected to utilize 1 heavy duty post per gate opening, be sure to align the "hinges" side of the gate to attach to this post. If you have elected to utilize 2 heavy duty posts per gate opening, select your preferred post, and align the "hinges" side of the gate to attach to the post.

Note: Standard fence sections and gates are designed for level terrain. Significant slopes in the terrain will require modifications to panel, gates and post.

Step 3. Once you have determined your hinge locations, use a pencil to clearly mark where you need to drill. Be sure to leave a $\frac{3}{4}$ " space between the gate and the post. Pre-drill $\frac{1}{16}$ " diameter holes per your pencil markings on both the gate and the post.

Step 4. Using the eight 8-3/4" screws provided (for each hinge), attach both hinges as marked, and firmly fasten into place (Fig. 8).

Step 5. At the opposing post, determine where you would prefer to install your latch, firmly hold your latch against the post and gate and use a pencil to clearly mark where you will need to drill. Be sure to leave a $\frac{3}{4}$ " space between the gate and the post. Pre-drill $\frac{1}{16}$ " diameter holes per your pencil markings on both the gate and the post.

Step 6. Using the eight 8-3/4" screws provided attach your latch as marked, and firmly fasten into place (Fig. 9).

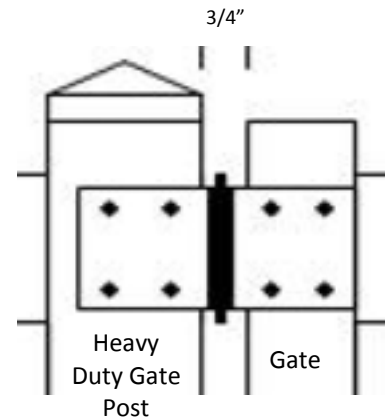


Fig. 8

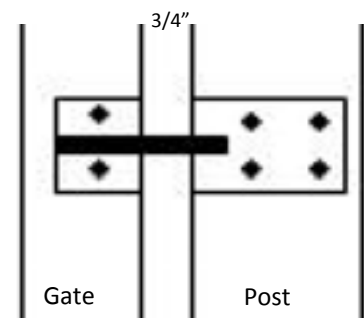


Fig. 9

Installing Post Caps:

Apply a small amount of PVC glue (two part epoxy found in most local hardware stores) to the inside of all four sides of the cap and press cap completely onto the top of the post and hold for a few seconds and you are completed (Fig. 14). Be sure to only apply a small amount, just a little dab on each side is sufficient for a firm hold.

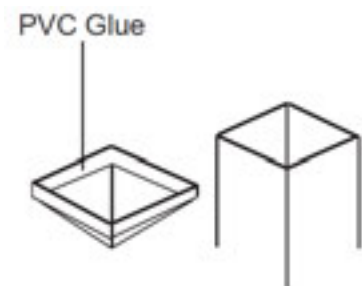


Fig. 14

Cleaning Your Fence:

Your new PVC fence is easily cleaned up with soap and water. For stubborn stains, you can use Simple Green® or mild detergent and water.