

INSTALLATION MANUAL

Install our maintenance free fencing system yourself! About 90% of our residential clientele install our fencing systems themselves. Why hire and pay someone to install it when you can!

All of our fence panels, *if necessary*, can be easily cut-down on-site during the installation process to meet *any* particular fence run footage measurement. Our posts are *pre-punched for you (based upon the height, style of the fence that you choose AND the location of your post) which also makes for easy installation. For example, a LINE post is pre-punched on opposite sides of the post to connect 2 fence panels in straight run. A CORNER post is pre-punched on adjacent sides of the post to connect 2 panels at 90 degrees. Non-90 degree angles are made by using an END post (pre-punched on one side of the post) along with *horizontal swivel mounts*. See [Angles](#).

***We also sell blank, non-punched posts. These are used for:**

1. Gates with no fencing. In this scenario, you will only need hinges on one side and a gate lock on the other.
2. Making Angular fence panel connections. In this scenario you will also order Horizontal Swivel Mounts.
3. Connecting Heavy Racked panels (hills, stairs) to fence panels. In this scenario you will also need to order Vertical Swivel Mounts.
4. Handrailing / Deck Railing. We also carry a heavy duty handrailing product. We never prepunch holes in the handrailing posts because of the unique wide top rail. So, instead we have special handrailing mounts/brackets for level configured and stair configured handrailing panels.

Tools you will find useful:

1. String or chalk line and stakes.
2. Tape measure.
3. Post-hole digger.
4. Wheelbarrow, shovel and hoe to mix and transport concrete.
5. Carpenters level.
6. Hacksaw or electric saw.
7. Rubber mallet.
8. Some clients like to use 12" bungee cords or rubber bands to temporarily secure panels to posts during the installation process.

Necessary Reminders (Pre-installation):

1. Fence footings must not exceed legally established property lines. Please consult real estate agents' line plot or local surveyors. This will determine fence location.
2. Check with local utility companies for locations of underground cables or pipe lines.
3. Check local codes for specifications (or restrictions) in fencing, if they apply.

4. Gates and fence should be installed where the bottom of the pickets are at least 3" above ground level for easy lawn maintenance.
5. It is recommended to install fence sections with screws facing inside to insure the outside continuous beauty of fence.

Note: Soon after delivery of your order, open all your boxes and take a complete inventory of all of your products.

Unpacking Post Sections

Posts are prepunched based on the style, height and number of rails in your fencing system. Fence Panels are inserted into these prepunched holes which makes for any easy, streamlined installation. Never mount Wall Mounts to posts unless you are stair-stepping 2 continuous fence panels on a Hill or Slope. Wall Mounts are typically used for connecting 1 end of a fence panel to a structure (house, column, building).

LINE POST



CORNER POST



END POST



GATE POST



NOTE: 2" GATE POSTS ARE TWICE AS THICK AS 2" Line, Corner, or End Posts

Do not install your posts first. They must be installed with each panel. It's actually faster this way. Once you've installed one panel, your learning curve will skyrocket and then you can install 3, 4, 5, 6, panels at a time.

Lay out posts in each type for each area for installation. At this point, you will need a rubber mallet. Set post cap directly on top of post and gently tap the cap straight onto the post.

**EXERCISE CAUTION
SO YOU DO NOT DAMAGE POST OR FINISH**

Fence Panel On Center Spacing Chart

NOTE: Do not commit to all of your post holes in advance of receiving your products. Panels are inserted into posts; these are approximate measurements to provide you with a guide. The following is only a guide.

Residential

Actual Panel Width	Post Size	On Center	# of Vertical Pickets Styles 1 - 6 and 9 / Styles 7 & 8
72"	2" x 2"	72 1/2"	15 / 30
72"	2.5" x 2.5"	73"	15 / 30
72"	3" x 3"	73 1/2"	15 / 30

Commercial

Actual Panel Width	Post Size	On Center	# of Vertical Pickets Styles 1 - 6 and 9 / Styles 7 & 8
72"	2" x 2"	72 1/2"	15 / 30
72"	2.5" x 2.5"	73"	15 / 30
72"	3" x 3"	73 1/2"	15 / 30
98 3/4"	2" x 2"	99 1/4"	21 / 42
98 3/4"	2.5" x 2.5"	99 3/4"	21 / 42
98 3/4"	3" x 3"	100 1/4"	21 / 42

INDUSTRIAL

Actual Panel Width	Post Size	On Center	# of Vertical Pickets Styles 1 - 6 and 9 / Styles 7 & 8
71 1/2"	2.5" x 2.5"	72 1/2"	14 / 28
71 1/2"	3" x 3"	73"	14 / 28
100"	2.5" x 2.5"	101"	20 / 40
100"	3" x 3"	101 1/2"	20 / 40

Installing Aluminum Fencing “in ground”

Mix the concrete. It is recommended that it be fairly dry to allow additional support to fence sections during installation.

GATE. If possible, begin installing your fence with a gate.

Be sure that the gate is centered properly over the walkway/driveway. The width of the gate would correspond to space needed between posts...i.e. a 48" wide gate fits a 48" wide opening or two 5' gates for a driveway fit a 10' wide opening.

****exercise caution when setting posts for slot locations****

POST. Set posts and fill concrete as recommended above.

It is recommended to fill hole with concrete up to 2" under surface level.

GATE. Attach gate after concrete has hardened.

Be sure to verify that the posts and gate are level, and correct distance apart.

POST. When gate post installation is complete, you may now proceed to installation of straight run fence. Be careful installing post caps! Gently TAP caps on.

FENCE. Install post into hole as described above, and insert fence in slot of post (premachined).

Self-tap stainless steel fence-panel connection screws through each post AND horizontal rail. These screws are automatically included with your purchase. Be sure to check the level of the fence before concrete hardens. Continue this process for remaining full sections of fence. For the most aesthetic appearance, we recommend checking the level and alignment after every 4 sections of fence installed. Pour concrete into holes. Some of our clients use rubber bands or short bungee cords to temporarily hold the panel into 2 posts...so that you can make sure that everything is level....PRIOR to setting the screws and the cement. There is a high learning curve on this.

FENCE. For areas where pre-fabricated 6' sections will not fit, it will be required to cut the section with a hacksaw.

Since you will be cutting pre-cut notches off ends of the stringer, it will be necessary to cut a 1/8" x 5/8" notch so you can fasten the section to the post. Refer to any other pre-assembled section for detail on necessary cuts.

FENCE. Corner sections will require a 45 degree miter on stringer (fence rail) to fasten into post.

SLOPE. The fence can follow the contour of the ground condition because of its ability to rake.

You may raise or lower the post in steep conditions.

Installing Aluminum Fencing “on top of a cement, tile or wood deck”

Most posts are cemented in the ground. However, we do offer an option whereby we will weld a plate onto the bottom of your post. This is only available for panels or gates up to 6 feet high. For 7ft., 8ft., 9ft., and 10ft. high panels/gates you will need to core drill your posts. The welded plate differs in size and thickness based upon your post size and these dimensions are listed on the website. Each plate comes with 4 pre-drilled holes enabling you to mount the post on top of an existing hard surface (cement, wood...etc.). Anchor bolts for any welded plated post will need to be purchased locally... based upon your, specific material that you're mounting the post on top of. We strongly recommend waiting until you receive your order, then taking one of your posts with you to obtain the proper mounting hardware.

Welded Plate Option*

ADD Plate to 2" x 2" Post - Centered - NO COVER(S) (+ \$21.99) ▼

Plate is welded on to the bottom of your post(s) with 4 pre-drilled holes 7/16" diameter. The Plate for the 2" x 2" post is 4" x 4" x 1/4". **DO NOT use 2 x 2 Posts + Plate for 72 inch high fencing. You must upgrade to 2.5" Posts.**



Aluminum Fence Angles

Many jurisdictions require that you must have less than 4 inches of spacing between the vertical pickets. Therefore, you may need to trim/cut the horizontal rails on each end of any aluminum fence panel that you plan to use along with Horizontal Swivel Mounts. That's because the use of swivel mounts extends the panel out from the post (or structure) as opposed to when you insert a fence panel into a post. Using Blank Posts with Swivel Mounts will allow you to make any degree of angle you need to on-site because you'll be mounting the 2 sets of swivel mounts to 2 sides of a blank post. If, however, you're mounting a fence panel to a structure (house, building, wall, column, gate post), you will only be able to achieve about a 30 - 35 degree angle.

Installing Gates and Hardware

All gate widths include the spacing for the hinges and the lock. i.e. gate widths are the opening measurement from inside to inside of two gate posts. Tru-Close Hinges are packaged separately. You, or whomever installs the gate, decide on-site, during installation, which way the gate swings and which post to hinge the gate off of. Gate Posts and your gate are not pre-drilled at the factory. For wider gates, the Heavy Duty Gate Hinge Receiver is welded onto the gate at the factory; however, the J-bolt, 4x4 plate and nylon bushings are packaged separately. If ordering Heavy Duty Gate Hinges, please refer to the separate Heavy Duty Gate Hinge (pdf) located at www.greatfence.com > Installation.

You must verify spacing on-site prior to setting your gate posts.

- 1. It is important not to mount the hinges on the gate post higher than the top horizontal rail of the fence or lower than the bottom horizontal rail of the fence.** The hinge pins must be in line with each other or the gate will not operate properly.
- 2. Position the hinges on the gate post and drill holes using a #32 drill bit.** Fasten each hinge by using the self-tapping screws provided.
- 3. Locate the current position of the hinge on the gate leaf and fasten gate with the screws provided.**
- 4. If you have a Double Drive Gate Unit, install Drop Rod on inside of gate opposite the leaf which has the Latch attached.** Drop rod catch must be installed high enough so that rod will not drag on the ground while gate is in operation.

Complete Installation

Complete your installation after all sections are firmly in place, and the concrete has hardened. Drill holes into horizontal rails through the posts and fasten rails with #8 x 1" stainless steel TEK screws that are provided.

Replace dirt and grass around all posts for a neater appearance.

Installation Tip

This tip only applies to customers who will be using in-ground posts and posts with welded plates. Unlike regular in-ground posts which can be cut-down on-site (if necessary), posts with welded plates are set. You cannot adjust these posts on-site. Therefore, you will always want to install these posts first. This will set the spacing (between the bottom of each fence panel/gate and the ground). Then you can cut down your in-ground posts to the appropriate height so that all fence panels and gates are in-line and the same height off of the ground. Posts are prepunched in advance for fence panel insertion.

Note: For fast and efficient installation, we recommend at least two people install the fence.

Important:

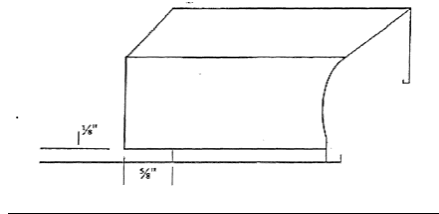
Local municipalities may require a setback from property line to fence line; otherwise, it is important to find out all the requirements before installing your fence.

** Always check your local city ordinances and/or your Homeowner's Association for any fencing restrictions.**

Note:

If a fence section is less than 6' long, a hacksaw or metal blade saw can be used to quickly trim down the width of any panel on site. Gates are welded into a frame and cannot be modified on-site. Also, a 1/8" x 5/8" notch is required for the newly cut ends.

Horizontal Rail



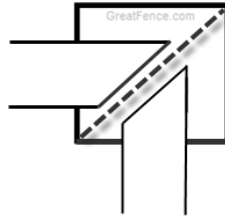
Important:

In order for two sections of fence to fit into a 2" x 2" corner post, a 45 degree miter on the fence rail must be cut. For **2.5" x 2.5" posts used with Residential panels**, you do **not** need to make any cuts.

For Commercial and Industrial panels used with 2.5" x 2.5" posts, you **will** have to miter the ends of the rails a little bit.

Corner Post

(Top View)



POST HOLES

How wide should I make the holes for my posts?

- 2" x 2" Posts = hole should be (minimum) 6" in diameter min.
- 2.5" x 2.5" Posts = hole should be (minimum) 6" in diameter min.
- 3" x 3" Posts = holes should be (minimum) 8" in diameter min.
- 4" x 4" Posts = holes should be (minimum) 8" in diameter min.

Cement

How much cement should I use for each post hole?

We do not provide the cement for "in ground" post installation. However, the amount of cement you will use will depend on the size of the posts (and size of the hole...see above) and how much clearance you have (you decide this on-site) between the bottom of the fence panels/gates and the ground. Most cement bags will have a chart which will tell you how much cement to use for each hole (again, based upon the hole depth and hole diameter).

Clearance

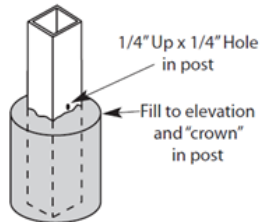
How much clearance should I have between the bottom of each fence panel/gate and the ground?

Most people decide on 2" of clearance. However, we have seen clients use 1" or even 3" or 4". You get to decide this on-site for "in ground" applications and applications where you are using Deck Mounts. Welded plated posts are set and therefore the clearance is set when the posts are fabricated. For welded plated posts, you will need to let us know during checkout (Special Instructions text field) how much spacing you would like.

Some jurisdictions have restrictions regarding clearance and it is your responsibility to find out if there are any restrictions in your area. Many urban areas do have clearance restrictions when installing a swimming pool fence so make sure you check on that.

WARNING!!!

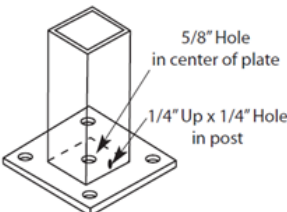
In locations subject to freezing, where posts are grouted into core-drilled holes or plated for surface mounting by anchor bolts, a 1/4" diameter "weep" hole should be drilled approximately 1/8" to 1/4" above elevation. This allows for drainage of moisture from condensation, ground water seepage, leakage through post tops or attachment holes, etc. In the case of core-drilled holes, grout must fill inside the post cavity to ground elevation and the area outside the post should be "crowned" slightly to ensure that water runs away from the post rather than settling at the base. In the case of plated posts, a larger hole in the center of base plate will suffice in lieu of the "weep" hole. We will not be responsible for failures in the post or in surrounding grout or masonry when an appropriate drainage space (weep hole) was not provided for during installation.



1/4" Up x 1/4" Hole in post

Fill to elevation and "crown" in post

Core-Drilled Hole



5/8" Hole in center of plate

1/4" Up x 1/4" Hole in post

Plated Post

BOCA SWIMMING POOL FENCING

Most jurisdictions in the United States require that the spacing between the vertical pickets on any pool fence and/or gate barrier be less than 4 inches.

Our pool fencing and gates meet this requirement. However, when connecting fence panels to a house, building, wall, wood post or column... you may have to trim the ends of the horizontal rails during the installation process.

