Patriot ${ }^{\text {TM }}$ Ornamental Wire Fence Installation Instructions

Please read these instructions thoroughly before attempting to install your Patriot Fence. While installation of the fence is relatively easy, this instruction sheet should eliminate any guess work. If you have any questions or problems installing the fence, please call us weekdays at 1-800-344-2242.

## Materials Needed:

- Stakes
- String
- Measuring Tape
- Post Hole Digger
- Level
- Concrete Mix
- $5 / 16^{\prime \prime}$ socket $11 / 64^{\prime \prime}$ and 3/8" Drill Bits and Driver
- Reciprocating or Band or Hack Saw


## Before You Begin Installing Your Fence:

- Establish your fence line by staking out the area to be enclosed and attaching a guide string to the stakes. Make sure the fence is set back from the property line as required by local codes.
- Gates and sections should be installed so that the bottom of the fence is about 2" above ground level. This will allow the grass under the fence to be easily trimmed.

Caution: Panels may be cut on site to adjust fence length. Always cut flush with vertical wire for safety and to allow vertical to be secured to fence post with cable tie. Adjustment can be made in multiples of $13 / 4$ " or $31 / 2$ " depending on style of fence. All cut pieces must be seal-coated with zinc rich primer (known as "Cold Galvanizing" or "Cold Galv") and then painted with Jerith's custom touch-up paint. This two step process should also be done in any place where the finish has been damaged. Failure to follow this procedure may void the warranty!

## Fence Installation:

1. Start at a terminal post (end, corner, or gate post). Gate locations may take priority depending upon gate widths or location. If so, start with gate posts (see "Gate Installation" below for Gate post spacing). Other fence lines may take priority due to restriction of panel lengths (see Adjustment Caution above). Spacing from face to face of posts will be actual length of panel plus $1 / 4$ " for the rail end flanges.
2. After the terminal post is set, you may proceed by installing a section and a post at a time, or by setting all the line posts making sure they are set at proper spacing (see Spacing note in Caution above). Remember, if shortened, the section should always be cut flush with the vertical wire so that it will abut post and allow cable ties to secure that vertical to the post. Heights of posts above ground level should be 4" longer than height of fence section to allow for 2 " space over grade and 2 " over top rail. (If on a slope, add the length of the drop to the lower post. If drop too severe, go to next longer post). Regardless of preference for post setting, one rail end should be slid into each open end of top and bottom rails (See Figure 1).

Caution: The concrete footings must extend below the frost line in areas where freezing of the ground can cause the posts to "heave". The posts themselves do not have to go below the frost line for proper installation.
3. Continue in this manner until all fence posts and sections are installed.
4. If the grade is too steep, there may be too much space under the bottom rail of the section. If so, it may be necessary to cut the section in half and use an extra post to reduce the space beneath the section or add fill dirt under the fence section. Cold galvanize and touch up cut ends.
5. Sections will proceed from post to post using 4 rail ends per section (see Figure 1). Attach rail ends as shown with TEK screws. When using posts heavier than 14 ga, predrill holes for rail ends. Flanges of rail ends point toward wire and rail ends can be adjusted for angles in lines. Cable ties for vertical rigidity are added as you proceed or after all the fence sections have been installed. It is only necessary to secure one of the four corners of each section by using one tech screw through the rail and into the rail end. One end of the section should be allowed to float freely to allow for expansion and contraction.
6. Fill in the top of the post holes with dirt and grass so the fence will look like it's been there for years. Your fence installation is now complete!

## Gate Installation:

## Caution: The proper operation of the gate depends upon the correct installation of the gate posts. Make certain that posts are plumb.

1. Gates are available in either kit form for residential and light commercial use, or as prefabbed heavy duty welded frames for heavy commercial or industrial use. All gate openings are "nominal", meaning a gate opening may vary from stated width due to the location of the vertical wires. (A "4 foot" gate opening may actually measure $3^{\prime} 10^{\prime \prime}-4^{\prime} 2^{\prime \prime}$ ). Openings for each gate type are always measured from inside face of gate post to inside face of gate post. Gate openings will be affected by which type of gate is specified and what hardware is used. Each will require some fabrication on site and any standard gate hardware that will fit the gate frames and posts can be used.
2. For gate kits the gate opening should be determined before setting posts. Openings are computed by adding the actual section width plus $2^{11 / 4}$ " for gate verticals, plus allowances for hinges and latches. Jerith's standard hardware will add another 4 " ( $2^{\prime \prime}$ for hinges, $2^{\prime \prime}$ for latch) to the opening. If other hardware is used, consult instructions for hinge and latch allowances. Gate kits are assembled by inserting the stubs welded onto the 1" square gate verticals into the top and bottom rails and fastening with two self-drilling screws at each corner (see figure 2). Use cable ties to secure wire verticals to the uprights. Screw diagonal brace (provided) to the gate vertical near the top end of hinge side of gate, cut to proper length, and then drill $1 / 4 "$ hole, cold galv, and secure with tek screw provided. Gate is complete.
3. Heavy duty gate frames are comprised of 2 " square uprights with $2^{\prime \prime} \times 1^{1 / 2 \prime \prime}$ steel angles welded in place for top and bottom frame members and diagonals welded in place. Angle widths have been predetermined to allow for end verticals of infill sections to abut gate uprights and to enable them to be secured with cable ties (see figure 3). Hardware should be inspected and analyzed to determine allowances for proper gate opening width. For heavy duty gate frames, cut sections as above, slide a rail end into rail and insert finished infill section into frame. If frames are wider than standard section widths extra verticals will be welded into place. Secure rail ends with tech screws and attach vertical wires to gate uprights and diagonals using strap ties.
4. Once the concrete has set around the gate posts, you may install the gates.
5. Attach hinges to the gate frame first and then the gate post. Mount one hinge near the top rail of the gate and the other near the bottom rail to distribute the weight of the gate evenly. The gate should now swing freely.
6. For double drive gates, the drop rod is installed next. Place the drop rod high enough to ensure ground clearance of the drop rod when the gate is opened.
7. Finally, position the latch at a convenient height (or as required by local codes) and fasten the latch onto the side of the gate.


FIGURE 1


FIGURE 2


FIGURE 3

