## profencesupply

Years of installation experience behind every sale! toll free 866.415.6609

American Fence Association, Inc. MEMBER


## Call 811 before you dig!

Illusions vinyl fence is designed to be installed with 'hollow' posts
Post centers for V300 (all heights) is 95-1/2 inches. Different Illusions styles use different measurements.

We set up our string line in the desired location after the underground utilities are marked. A call to 811 is free and so is the mark out of buried hazards owned by the utility company.


We use nails to mark the centers of the holes because we will dig them all first.


As stated before, V300 centers are $95-1 / 2$ inches. Nails are pressed into the ground and we measure from there to the next 'center'. Measuring from nail to nail is the best assurance that we are marking accurately. 'Centers' that are off by as little as $1 / 2$ an inch can lead to holes that are dug in the wrong spot and can be especially frustrating on a long 'run' of panels. Re-digging a hole is never any fun.

After all the holes are located with nails, we go back to where our first post will be set and measure back from the center and place a nail through a piece of bright plastic two feet from where the SIDE OF THE POST will be. Since the posts are 5 inches square, we measure back from the center $26-1 / 2$ inches. This mark will be important later on.


We then mark each hole with a large $X$ approximately $2-1 / 2$ inches off the string and as square to the line as possible. A small mark will be obliterated as soon as the auger bit is dropped.



ASTM F-1999 (Standard for PVC fence installation) recommends a hole that is 3 times in diameter the width of the post. Since we are installing $5 \times 5$ posts, this means a 15 inch wide hole. If this seems excessive, bear in mind that solid privacy fence will have a heavy wind load. In areas prone to high winds a hurricane kit is suggested.


The string is removed and the holes are dug. It is important to have a machine that allows for side to Side as well as front to back movement of the auger power head. This allows the bit to be manipulated around rocks. A large $X$ helps to get the bit back in the correct spot when digging.


When all the holes have been dug, the string is reattached to the stakes. We then check the location of the hole in relation to the string.


A stake is placed between each hole to hold the line straight as we work. As each section is installed, we remove the stake.


Holes are cleaned out to remove any loose soil at the bottom.


The most important part of the hole is the bottom. Using the flat end of a digging bar, we tamp the bottom to provide a firm base for the post footing.


As with the hole, the post should be prepared also. We cut a small triangle out of one of the corners of the post about 12-14 inches from the bottom to give the concrete a place to grab. We NEVER put dirt back into the hole! If the hole is dug too deep, we'll drop a short piece of 4 inch drainage into the post BEFORE the rail ends are inserted. In areas where the ground freezes, it is suggested that the frost line be penetrated. We think that leaving the bottom of the post open for drainage is a good idea. Condensate and rain water can accumulate inside the post and when it freezes it will expand and can push the post straight up and loosen it from the footing. Four inch drainage pipe 'extends' the length of the post where deep holes are necessary. It is reasonably priced and readily available at the local hardware store or lumber yard.


When we use the nail that we placed in the ground $26-1 / 2$ inches past the starting posts center as a reference point. We now measure back 24 inches to the edge of the post and we can be confident that the 'centers' will be in the right location. We use our digging bars to hold the post as we pour the concrete and we can adjust the post plumb with them.



Rail ends come with notched tabs that will hold the rail in place after it is inserted into the post. If sections need to be cut you MUST leave 1-1/2 inches beyond the 'field' (pickets) on each end to go into the post. Additionally, the tabs must be re-cut with a notch tool. Rail removal after installation can be difficult and most often requires the use of a special tool.


Top and bottom rails both have tabs, but with Illusions fence the bottom rail has a galvanized stiffener to prevent sagging.


Rail ends are inserted into the hole on the post, the panel bottom is supported to the desired height above grade and the concrete is poured to just below the triangle we cut.


We plumb each post using our digging bar when necessary and maintain approximately $1 / 16$ of an inch space from the string line. We now move on to the next section as we allow the concrete to harden a little which depends on weather conditions. If a slight adjustment to the height must be made, we can tap the post down. It is preferable to set the post slightly higher and have to push down than to set it lower and have to pull it up. Of course placing the post and not having to touch it at all is the best. When we have the post where we want it, we can add more concrete to cover the triangle cutout. Concrete should be left about 8 to 10 inches below grade to allow grass to root and in colder climates as a deterrent to heaving. Remember - the ground freezes from the grade down. Leaving the top of the footing below grade will keep the soil from pushing up on the concrete as it freezes and expands.



The process is repeated until the panel installation is complete. On the last panels of a straight run we like to use a piece of scrap PVC inside the post on the top rail positioned perpendicular to it and secured in place with a screw. Since the posts are hollow PVC some sway occurs in windy conditions. This is normal and securing the rail ends as described is done as a precaution. We will only glue the caps in place in areas of high foot traffic where passersby are tempted to use them as a Frisbee. Whenever caps are glued, we select one corner to place a dab on and the same corner is used at every post. This will facilitate access to the rail ends should the panel ever need to be removed.


A hand wash with car wash soap twice a year is suggested to keep the material free of environmental dirt and grime which can lead to mildew and premature degradation of the PVC.


## profencesupply is a proud distributor of these quality fence products

 Illusions Vinyl Railing System Eastern Ornamental Aluminum Fence Products, Eastern White Cedar Brand Wood Fence Products, System 21 Chain Link Fence, Ameristar Montage Steel Fencing, OnGuard Fence Systems Aluminum Fence.

MIITHST

We gladly accept:


[^0] manufacturer within a reasonable period of time. No claims for defects or damage to gates will be honored after delivery is complete.

## DISCLAIMER OF LIABILITY

profencesupply makes no specific recommendations as to proper installation. The techniques described herein are those used by our installation technicians and may not be appropriate for all locations and ground conditions. profencesupply assumes no liability regarding the improper installation, misuse, or misapplication of any fence product purchased from us. It is the buyer and/or installer's responsibility to check for proper installation.


[^0]:    Illusions gates feature 'welded' corners and are considered the best in the business. At the time of delivery, please open gate packaging and inspect both sides of every corner for defects. Gates with defects or damage should be refused and will be replaced by

