

# INSTALLATION GUIDE 

 IN-GROUND POSTAPPLICATION
## BEFORE BEGINNING

- Check with the governing body for building/fence codes in your area.
- Have your in-ground utilities marked before digging.
- Plan, measure and map your fence run.
- Clear desired fence-run area of any obstructions.


## TOOLS REQUIRED

- Tape measure
- Level(s)
- Post hole digger or auger
- Drill
- Phillips head screwdriver
- Ratchet bit or driver for self tapping screws
- Hacksaw or metal cutting saw
- Ground stakes
- String line


## STEP ONE

## SETTING GROUND STAKES AND STRING LINE

Determine where you want each end post to be set for each run. Set your ground stakes just beyond where the end posts will be located, and then set your string line. Make sure your stakes are high enough to ensure an adequate height for the string line. Ensure that the string line is tight enough to maintain a firm, perfectly even line.


## STEP TWO

## ALUMINUM POST INSTALLATION

(In-ground application, see surface mount installation guide for surface mount posts)

Dig an 8"-10" diameter by 36 " deep post hole (check your local frost line depth to ensure proper post depth).

Insert the first end post in the middle of hole and using a level, make sure the post is plumb (level) each way, that the front side of the post is in line with your string line and that the post measures above ground the desired height (at least 75 in height for a 6 ft high, 11 picket privacy fence).


Finally, gradually set each post by filling each post hole with cement, making sure that that each post stays plumb (level) on all sides while cement cures so that your fence line is perfectly straight and vertical.

Next, measure 74" from the center of the first post to the center of the next hole to be dug. Repeat the above process for setting second post.

Make sure the post is plumb (level) each way, posts are straight and parallel to each other and the front sides of the posts are perfectly aligned with your string line.

To ensure that the measurement is 74 " from center post to center post, use a bottom rail with insertion brackets attached, allowing for $1 / 8^{\prime \prime}$ of play on each side. DO NOT FULLY TIGHTEN INSERTION BRACKETS.

Then insert bottom rail into adjacent post channels. These can be held in place (above ground level) with zip ties, painter's tape, or on boards to keep out of the way of the concrete fill.

Repeat, as necessary, to complete your run of posts.

## ALUMINUM POST INSTALLATION <br> (EXAMPLE: BASIC APPROACH FOR 30 LINEAR FEET)



At the end of a normal run, the end post will typically measure less than 74" from center post to center post, making the last section of the run less than 6 ' in width. Using a wood blade for the composite material and a metal blade for the aluminum rails, cut each piece to a width that custom fits your last section. Leave 3/8" play in total composite length (3/8" less than fully filling the post slots with composite) for any potential thermal expansion.

## STEP THREE

## LEVELING THE BOTTOM RAIL

Because most terrains are not perfectly level, the surface spacers will need to be individually set to keep the bottom rail (and your fence) level.

Note: There are two methods to consider, see below.

Using the aluminum side covers, cut 2" aluminum spacers for each aluminum post slot channel in your fence run. Drill 2 holes into each of these aluminum spacers, insert into post slot channels and slide them down to ground level.

## LEVELING METHOD A:

(SEE EXAMPLE BELOW)
Set your string line to your desired height of the top of the bottom rail. Second, raise your surface spacers and bottom cover (rail) up to the string line. Use a level to ensure that the bottom rail is perfectly level then drill the surface spacers into the posts using two self-tapping screws for each spacer.

## LEVELING METHOD B:

(REQUIRES MORE THAN ONE PERSON)
After all composite boards and top rail are installed, level each fence section to desired height by carefully lifting entire section from the bottom rail. Because the load is heavier, a crowbar or lever may be needed to accomplish this. Once the desired height/look is achieved, move the bottom surface spacers in place to support the bottom rail and drill them in place using two self-tapping screws per spacer.

## LEVELING THE BOTTOM COVER (RAIL)

(EXAMPLE: LEVELING METHOD A)


Install insertion brackets on both ends of the bottom cover using a drill or Phillips head screwdriver, leaving about $1 / 8$ " of play.
DO NOT COMPLETELY TIGHTEN.

Slide the bottom rail (groove side down, tongue side up) down the post channel until it is resting on the surface spacers.


## STEP FOUR

INSTALLATION OF THE COMPOSITE BOARDS
Insert each end of the composite picket in the post slots of each post (groove side down, tongue side up). Lock each board in place and repeat with:

- Boards
- Top rails (with insertion brackets LEAVING 1/8" PLAY)
- Spacers (custom cut from aluminum side covers)
- Optional middle rails (same as bottom rail with insertion brackets)
to achieve desired height and design.

1. INSERT A WPC BOARD INTO THE INTERIOR POST SLOT. MAKE SURE THE GROOVE SIDE OF THE BOARD IS FACED DOWN AND SLIDE TO WHERE THE BOARD LOCKS INTO THE ALUMINUM BOTTOM RAIL.
2. CONTINUE TO INSERT EACH BOARD WITH GROOVE SIDE FACED DOWN TO WHERE BOARD LOCKS INTO TOP SIDE OF PREVIOUS BOARDS. REPEAT THESE STEPS UNTIL YOU REACH DESIRED HEIGHT OF ALUMINUM MIDDLE COVER.


## STEPS FIVE \& SIX

## INSTALLATION OF SIDE POST COVERS AND ADJUSTING THE POST HEIGHT

Fill any exposed portions of the post slots with spacers to complete the intended design.

Note: There are two methods to choose from.

## METHOD A:

Insert side covers into all open slots you wish to cover (likely quite a short piece above the top rail to top of post and a rather long piece to fill the potentially open slot not filled with fencing).

Using a metal cutting saw, all together, cut the tops of posts (and all side covers) down to your desired height.

## METHOD B:

Using a metal cutting saw, cut the tops of posts down to your desired height before inserting side covers. Measure the height of the unused open slots in the aluminum posts, cut side post covers to size and slide into each open channel.


## STEP SEVEN

## POST CAP

Press post cap on top of each post to complete installation. Optional silicone may be used for an additional adhesive.


