

# Aluminum Railing Installation Guide

## TOOLS & MATERIALS NEEDED

### TOOLS :

- Hacksaw or metal cutting saw
- Drill
- 4mm Drill bit
- Screwdrivers
- Measuring tape

### MATERIALS :

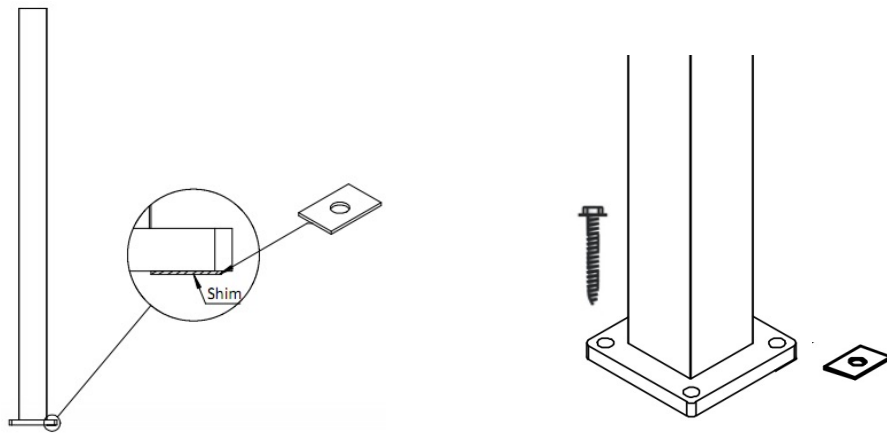
- Post Kits
- Panel Kits
- Brackets Kits

\*Fasteners are included with each component

## Straight Railing Installation

### Step 1: Measure and locate all posts.

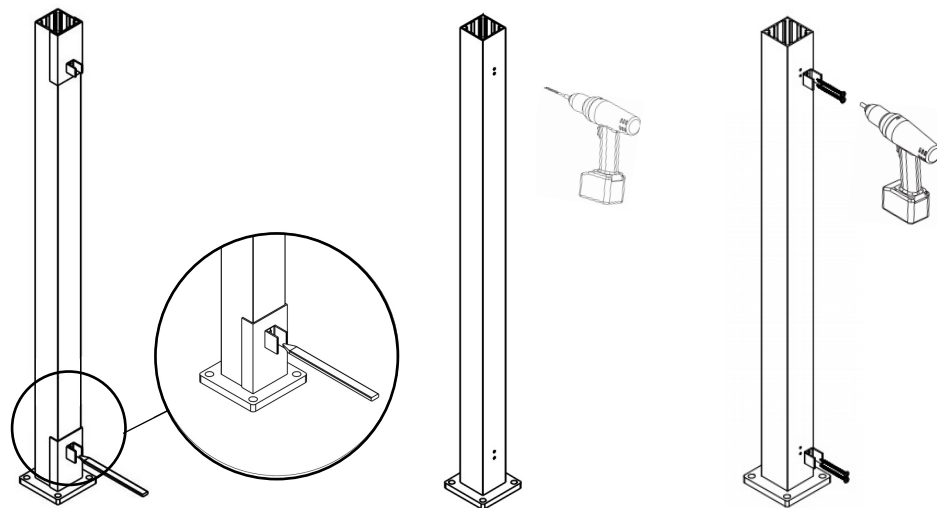
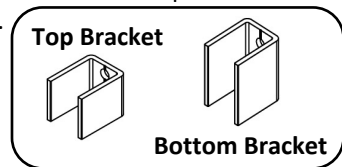
- 1.1 Measure and locate all posts.
- 1.2 Choose the appropriate fasteners to fasten posts according to local building code. Ensure the posts are plumb. Use provided shims to adjust verticality. The internal spacing between posts is 72"(1829mm) or 96"(2438mm) if full sections are used.



### Step 2: Install top and bottom rail brackets.

- 2.1 Use jig to mark the bracket screw holes position on the post. Pre-drill the screw holes on the post with 4mm drill bit, then secure the brackets on post with #10-1.25"(32mm) pan head screws, 2 screws for each bracket.

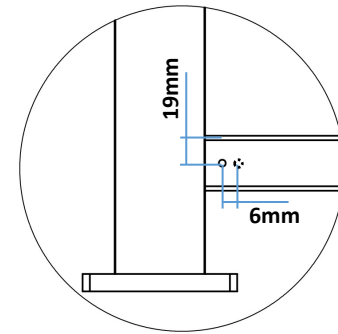
**Note:** Top and bottom brackets are different, bottom bracket is longer.



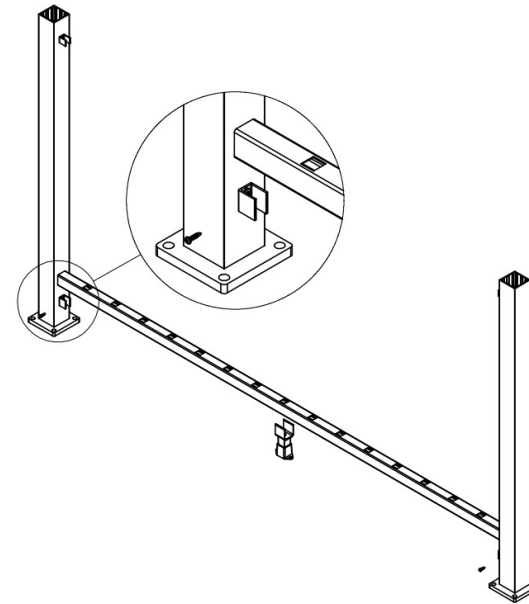
### Step 3: Install bottom rail and rail support.

- 3.1 Pre-drill two screw holes at each end of bottom rail with 4mm drill bit.
- 3.2 Slide bottom rail onto the bottom brackets, and secure the rail with #8-3/4"(19mm) pan head screws, 2 screws for each end.
- 3.3 Put the rail support on the ground, then install the bottom rail into the support.

**Note:** The drilled holes should be on different sides of the rail and distributed staggered

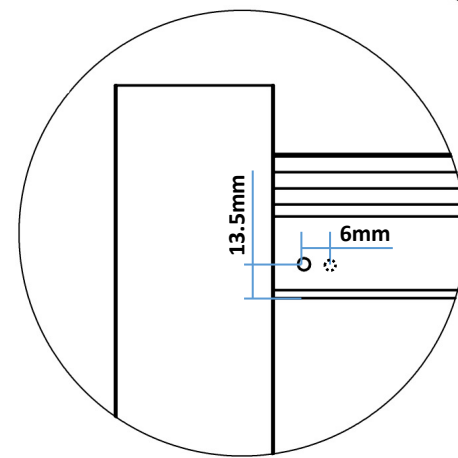


Bottom Rail

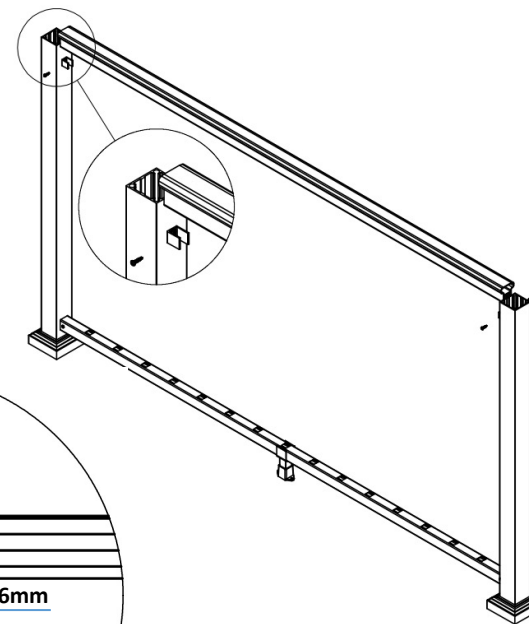


### Step 4: Install top rail.

- 4.1 Install the top rail, the same as Step 3



Top Rail

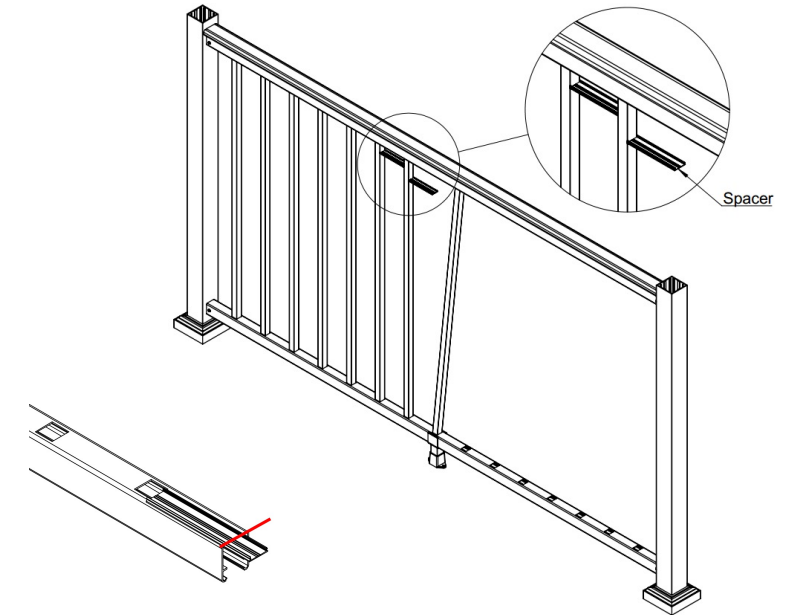


### Step 5: Install pickets and spacers.

#### Note:

The size of the spacer for each rail end is different. (Special round labels will be used to identify the end spacer)  
Cut end spacers to fit the rails if necessary. To ensure equal picket spacing at each post, cut first and last spacers to equal lengths.

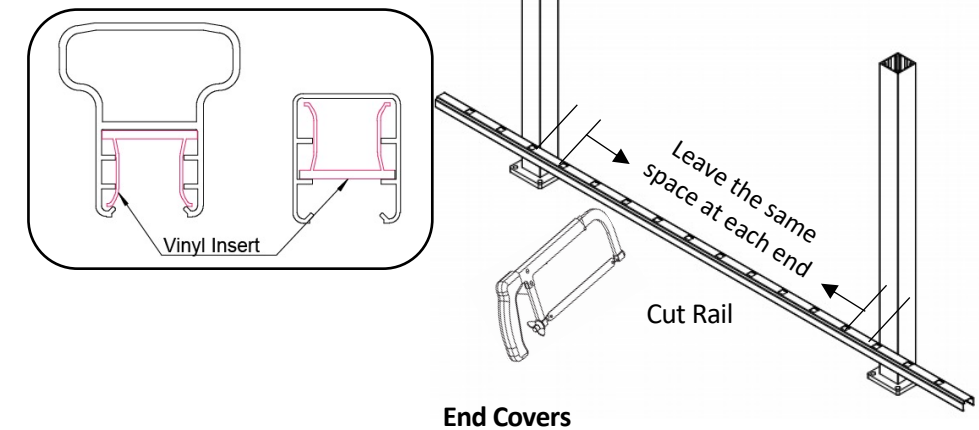
- 4.1 Starting from either post but skipping the first spacer, insert pickets into top and bottom rail and snap in spacers one by one as shown below. **Do not snap in spacers for the last 4 pickets. Insert last 4 pickets as a group and adjust the picket distance, then snap in the spacers.**
- 4.2 Making sure that all pickets are plumb, install end spacers.



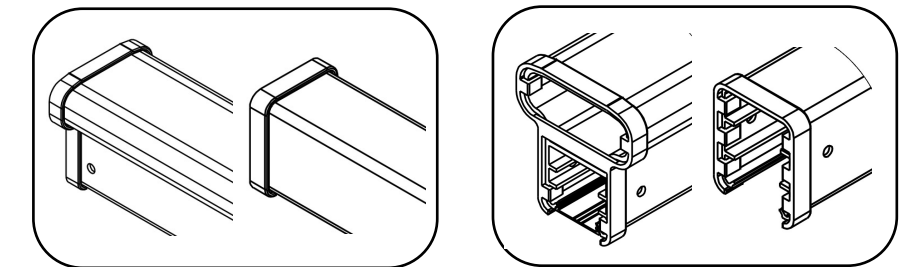
## Adjustable Top and Bottom Rail

For shorter sections, cut the top and bottom rails to fit between the posts. Keep the rail length 3.5mm shorter than the distance between two posts. Put the end cover at each end before install the top and bottom rails.

**Note:** The vinyl inserts for top and bottom rails must be 65mm shorter than rails.



End Covers

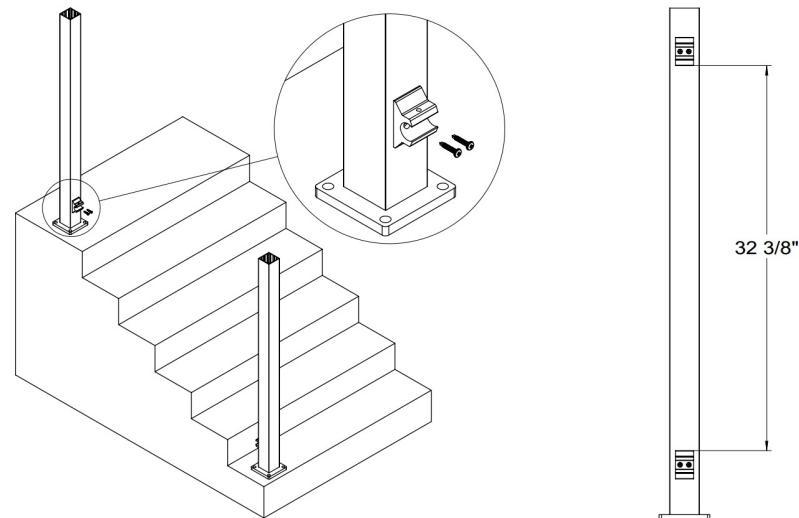


# Aluminum Railing Installation Guide

## Stair Railing Installation

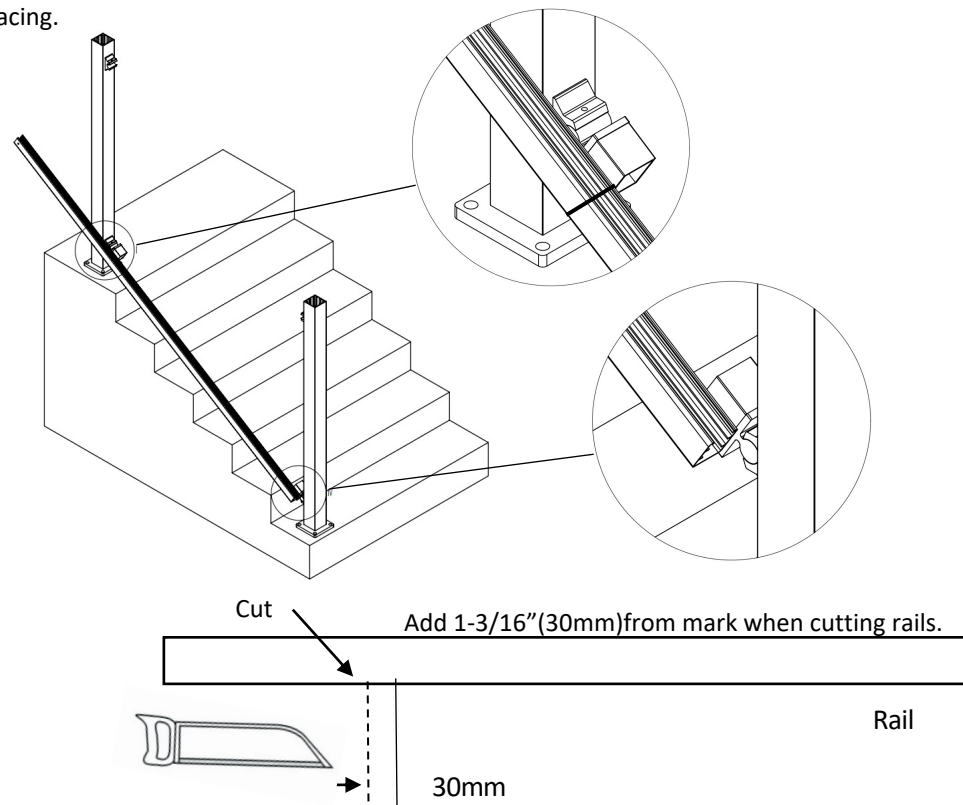
### Step 1: Locate and install stair rail post and install stair bracket base.

- 1.1 Measure and locate all posts.
- 1.2 Choose the appropriate fasteners to fasten the posts according to local building code. Ensure the posts are plumb. Use provided shims to adjust verticality.
- 1.3 Use max. 1" (25mm) thick wood board to position bottom stair bracket base. Secure bracket base to post using (2) #10 1" (25mm) pan head self-drilling screws.
- 1.4 Position the top brackets measuring from the top of the bottom bracket to the bottom of the top bracket using the measurements below.



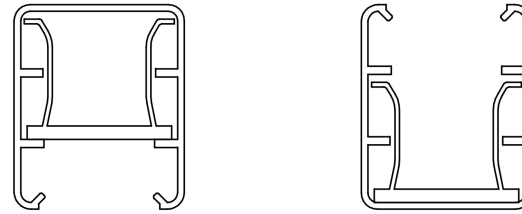
### Step 2: Cut and install top and bottom rail.

- 2.1 Insert rail into lower bracket and mark rail to the edge of upper bracket. Add 1-3/16" (30mm) to measurement and make cut. When cutting the bottom rail, make sure to leave the same amount of space at each end to ensure equal picket spacing.

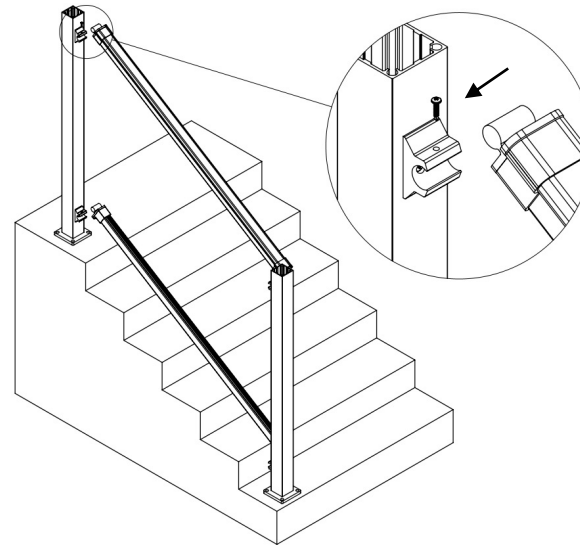


### IMPORTANT NOTICE:

When installing bottom rail of a stair railing section, remove the vinyl insert and install in opposite direction as shown:



- 2.2 Insert top rail into top stair bracket and slide into base bracket slot. Align the top bracket and base, then screw the top bracket to base using (1) #8-3/4" (19mm) pan head self-drilling screws.



### Note:

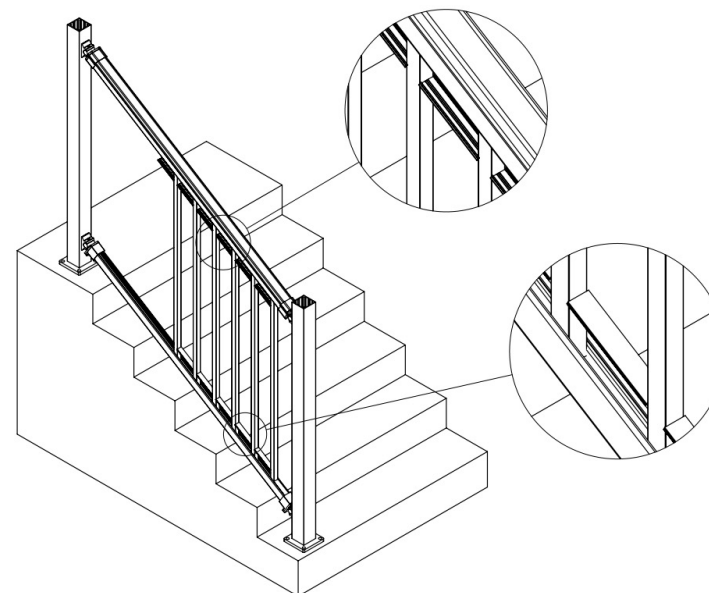
Pre-drill screw hole with 1/8" (3mm) drill bit when screwing top bracket to base. Push the top rail into the bottom of top stair bracket, screw top brackets to rail using (2) #8-3/4" (19mm) pan head self-drilling screws.

### Step 3: Install pickets and spacers.

- 3.1 Starting from either post but skipping the first spacer, insert pickets into top and bottom rail and snap in spacers one by one as shown below. **Do not snap in spacers for the last 4 pickets. Insert last 4 pickets as a group and adjust the picket distance, then snap in the spacers.**
- 3.2 Making sure that all pickets are plumb, install end spacers.

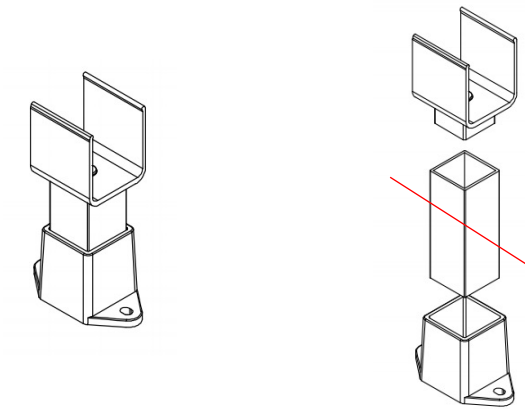
### Note:

Extra spacers may be needed. The size of the spacer for each rail end is different. (Special round labels will be used to identify the end spacer) Cut end spacers to fit the rails if necessary. To ensure equal picket spacing at each post, cut first and last spacers to equal lengths.



## Adjustable Bottom Rail Support

Adjustable bottom rail support consists of 3 parts, cut middle part to adjust height if necessary.



## Install Post Cap and Post Trim

Install post cap and post trim after all other components are installed.

Post cap locks into post, use a rubber mallet or similar tool until tight

Install the post trim as following :

Apply glue to holes of post trim (do not overflow)

Assemble 2 sides of post trim and press together for approximately 6 seconds.

