# **Aluminum Rod Straight Railing Installation Guide**

# **TOOLS:**

# **MATERIALS:**

- Hacksaw or metal cutting saw
- Post Kits Panel Kits

• Drill bits 5/32"

• Drill with Phillips tip

- Measuring tape
- Level

- All fasteners are included with each component
- We have 3 standard lengths, please check the lengths before installing. They are 72", 93.5" and 96".

# **Straight Railing Installation**

## Step 1: Measure and locate all posts

- 1.1 Measure and locate all posts.
- 1.2 Choose the appropriate 3/8 in. fasteners to fasten the posts according to local regulations. Ensure the posts are plumb. Use shims to adjust verticality.



### Note: The internal spacing between 2 posts.



### Step 2: Install the side frame connector

2.1 Three connectors need to be installed for the 6ft rail, and the edge of the connectors at both ends of the rail should be marked 3 5/16 "from the end of the rail. The middle connecting piece is located in the center of the rail, and the spacing between the two packaging sections is the same. Use #81 "pan head screws to fix the connecting piece to the rail. Four connectors need to be installed for the 8ft rail. Similarly, the edge of the connectors at both ends of the rail should be marked 3 5/16 "from the end of the rail. The two connectors in the middle are evenly distributed. Ensure that the spacing between the three sections is the same.



### Step 3: Install top rail and top brackets.

- **3.1** Locate and install bottom rail support.
- 3.2 Cut bottom rail to fit between posts if necessary.

3.3 Insert the bottom rail into bottom bracket at both ends, then positon the bottom rail between posts, secure the brackets on the post with 2 - #10 - 1 in.



# Step 4: Install top rail brackets.

**4.1** Position the top brackets according to the bottom brackets. Height is as following instruction :

Note: Screw top brackets into post using 3 - #10 - 1" screws.



# Step 5: Install rod and frame.

5.1 First, assemble the rod and side frame, and then fit the assembled parts onto the plastic parts of the bottom rail.



# Step 6: Install top rail.

6.1 The top bracket cover shall be installed at both ends of the top rail, and the plastic parts installed on the top rail shall be fitted into the frame. After matching, use four #8 3/4 "pan head screws to fix the top rail and bracket.



# Cut rail



make it tight.

Install the post trim as following: Drop the glue into the holes of post trim (Do not overflow.) fasten the post trim and press it tight about 6 seconds.



When the installation dimension is less than 6ft or 8ft, it is necessary to cut the length of the rail and the rod. The rail length is the posts spacing minus 5/8 " The length of the rod is the length of the rail minus  $63/4^{\circ}$ .





# 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

Post cap is pre-assembled onto your post. If loose use a plastic hammer or similar tool to

Install the post trim after all other components are installed.

# **Aluminum Rod Stair Railing Installation Guide**

# **Stair Railing Installation**

# Step 1: Locate bracket to confirm the rail length

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** Put 1" in. thickness plank on the stairs. The rail is placed on the plate and then fixed to the post with quick clips.

1.4 The swivel bracket shall be preassembled first, then placed on the board, and the position of the bracket and the cutting position of the rail shall be marked with a pencil .

**1.5** Add 1 9/16 "as the top and bottom rail according to the marked position dimension, and cut the main top and bottom rail at the same time.



## Step 2: Install bracket base and top/bottom rail

2.1 Use two # 10 1 "pan head drilling screws to install the bracket base according to the marked positions. 2.2 Use a ruler to measure the position of the bracket base, and respectively use two # 101 "pan head drilling screws to fix the upper base.

2.3 After the base is fixed, the top and bottom rail shall be preinstalled. The rails and bracket shall not be fixed with screws. Do not fully tighten the nuts.



### Step 3: Locate frame and connector position

3.1 Use quick clips to fix the side frame on the rail, with the spacing between the two ends L1=L2 and less than 4 ", and mark the position of the connector. The edge of the connector is flush with the edge of the side frame. (Pay attention to the direction of the connector)

3.2 Cut the rod according to the length of the position marked on the rail by the side wall frame. The length of the rod is equal to the length of the marked position plus 3/4 '



## Step 4: Cut frame

4.1 Disassemble one end of the frame, assemble two cut round pipes (upper and lower), then install the side frame back, adjust the position and lock the quick clip again. 4.2 Mark the side frame cutting position with a pencil

**4.3** Cut the side frames according to the marked positions



reversely).



rail.





### Step 5: Install the frame connector and the bottom rail

5.1 Use two # 8 1 "pan head drilling screws to install the stair connectors to the rail according to the marked positions. (Pay special attention not to install the connector

### Step 6: Install the bottom rail and the rod frame

6.1The bottom rail is well matched with the swivel brackets , and two # 8 3/4 "pan head drilling screws are used to fix the brackets and rail, and nuts are used to fix the base and base and swivel brackets

1.2 The frame and rod shall be preassembled first and then assembled to the connecting piece of the bottom

### Step 7: Install the top rail and screw fixed frame

7.1 After the top rail is fitted to the panel, use two # 10 1 "pan head drilling screws to fix the top rail and brackets, and use the nuts and bolts to fix the movable swivel brackets and base.

7.2 Use six # 8 5/8 "pan head drilling screws to fix the side frame and plastic connector respectively.