



## Aluminum Railing Installation Instructions

### PRE-INSTALLATION CRITICAL POINTS

For a safe and reliable installation of the RailMaster Aluminum Railing System, it is imperative to adhere to the provided instructions and use the proper tools and equipment.

Always wear safety glasses when cutting, drilling, and assembling the product.

The installer is solely responsible for ensuring compliance with all local building codes and safety requirements and obtaining all required building permits. Master Halco® accepts no liability or responsibility for improper or unsafe installation of this product.

The installer is responsible for determining the specific requirements for each unique railing application and for ensuring that RailMaster Aluminum Railing is suitable for the intended use.

RailMaster Aluminum Railing is designed and tested as a complete system and should be used in this manner. It is not meant to be used in combination with other railing systems.

It is essential to always secure the post to the deck framing and never attach it to the deck boards alone.

After cutting, ensure all metal shavings are removed and any sharp edges are filed. Apply two coats of RailMaster Black Touch-up Paint to the cut area, allowing sufficient drying time before proceeding with the installation.

Improper installation of this product can lead to personal injury, impact the performance of the railing system, and void the warranty.



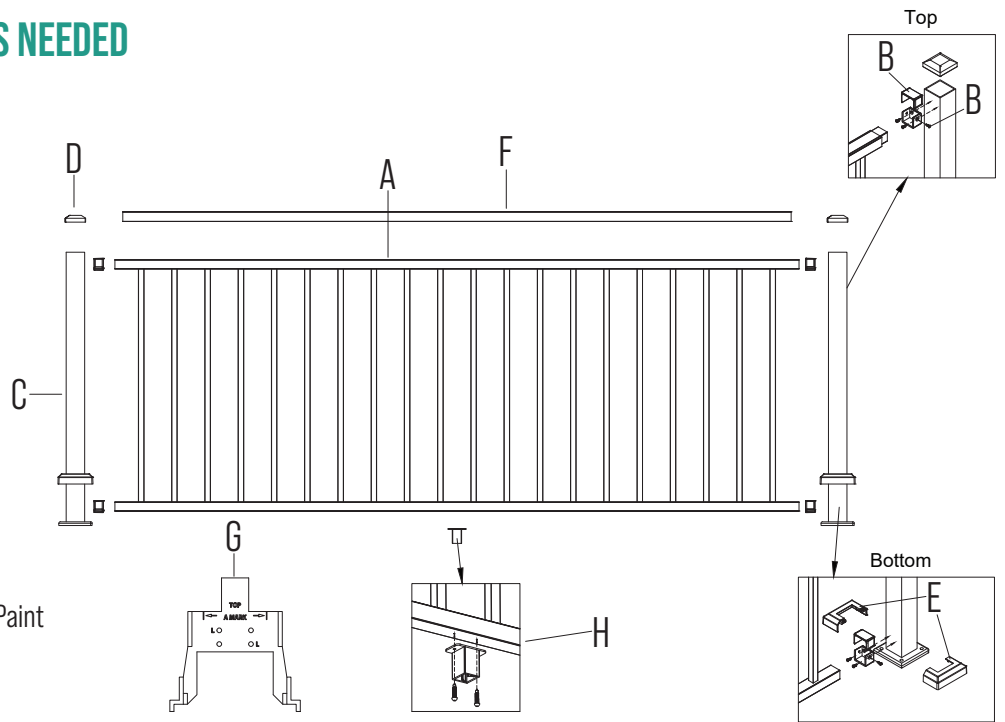
**ESR-5480**

# Aluminum Railing Installation Instructions

## - TOOLS & MATERIALS NEEDED

### TOOLS:

- Safety glasses
- Drill
- Rubber mallet
- T25 Torx bit
- 1/8" Drill bit
- Tape measure
- Metal saw
- Level
- Pencil
- Shims
- 3/8" Diameter fasteners
- File
- RailMaster Black Touch up Paint



### MATERIALS:

- Factory assembled level rail panel (6' or 8')
- Bracket with cover and screws (set of 4)
- Plated Blank Post Kit

Note: All 8' level rail panels come with the required fixed foot block for added support.

## - Material List for Level Rail Panel Installation

PART NAME	IMAGE	NO.	QTY	REMARK
Level Rail Panel with Top Rail Armor		A, F	1	8' panels includes a foot block (H)
Fixed Bracket with Cover and Screws		B	1 pk	# 10x1" Torx Head Self-Taping Screw 410 SS
Plated Blank Post		C	1	Blank Post Kit Contents x 2
Post Cap		D	1	
Post Skirt		E	1	
Pilot Hole Tool		G	1	

Each assembly requires 1 panel, 1 pack of brackets and 2 post kits.



# Aluminum Railing Installation Instructions

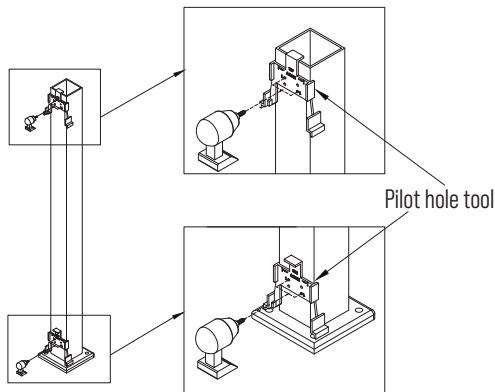
## - Level Rail Panel Installation

NOTE: If using pre-bracketed line post, skip steps 1 and 2

### STEP 1. Mark Position of Brackets on Blank Posts

NOTE: This railing system comes with plated posts with pre-drilled anchor holes for faster installation.

**1.1** Mark posts for bracket height using pilot hole tool (included in blank post kit). Use 1/8" drill bit to pilot hole post. NOTE: The pilot hole tool is designed to help position top and bottom brackets where you place level rail panel. It can be used on both heights (37" and 43") and both profiles (2.5" and 3") of blank posts. It is recommended to drill pilot holes into posts to ensure screw is inserted straight, reducing the possibility of material damage. Precise positioning of pilot holes is crucial for ensuring both structural integrity and aesthetic appeal.

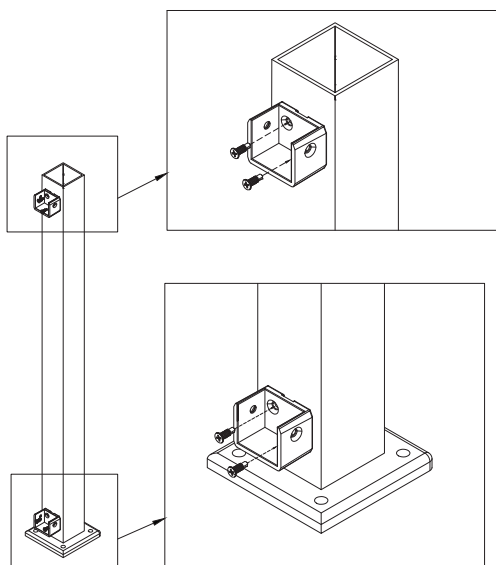


### STEP 2. Attach Brackets to Blank Posts

**2.1** Line up brackets with pre-drilled pilot holes. Using a drill driver with a T25 Torx bit, fasten brackets to top and bottom of posts using Torx head self-tapping screws (included).

NOTE: It is recommended not to fully tighten first screw to allow for adjustments when installing second screw.

**2.2** Ensure brackets are tightly secured to posts before proceeding.



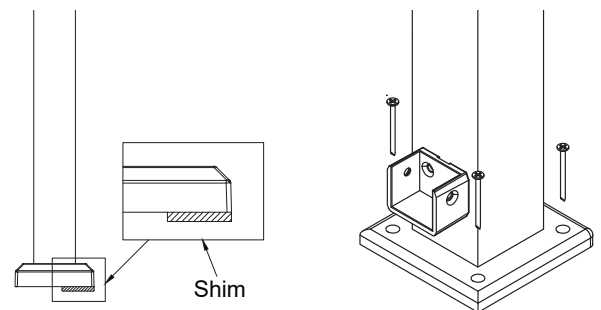
### STEP 3. Measure, Position and Secure Blank Posts To Structure

**3.1** Measure and position posts. Ensure posts are square and plumb. Use shims to adjust posts until they are level.

**3.2** Use 3/8" diameter fasteners (base plate holes are 1/2" in diameter) to fasten posts to structure according to local building codes.

**3.3** Wood blocking must be installed with a minimum thickness of 1-1/2" where subframe doesn't exist. Internal spacing between posts is 71" or 93" if full sections are used. Make sure posts are positioned with panel lengths you are using.

**3.4** After confirming all squareness and proper spacing between posts, secure to structure according to local building code requirements.

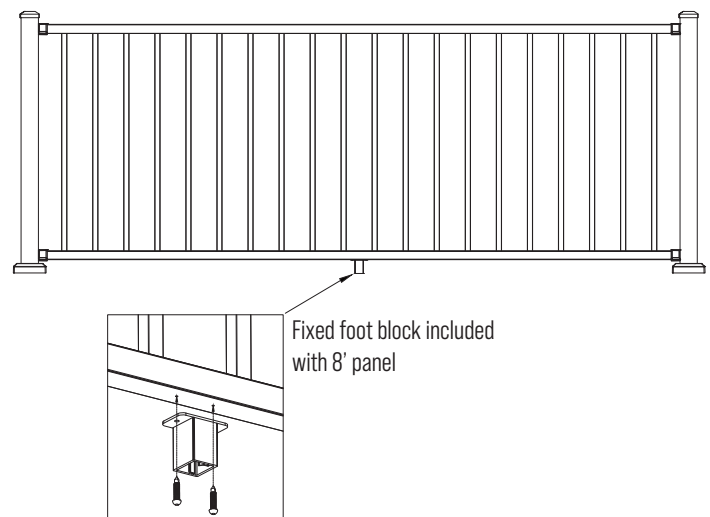


Fasteners to attach posts to deck or concrete are not included.

### STEP 4. Attach Level Rail Panel to Brackets

Before proceeding, ensure posts are square and plumb.

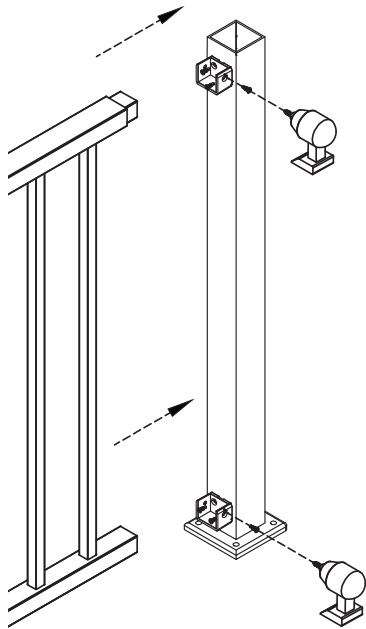
**4.1** If using an 8' level rail panel, attach fixed foot block (included) at bottom of panel using the provided screws. This panel has pre-routed holes in the middle part of the bottom rail for ease of centering. Foot blocks are not needed for 6' panels.



# Aluminum Railing Installation Instructions

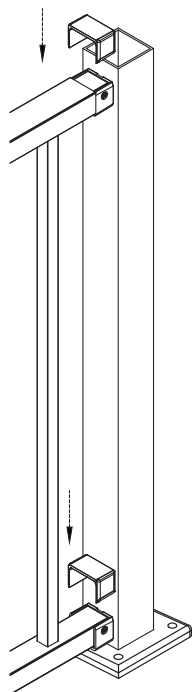
## - Level Rail Panel Installation

**4.2** Place assembled level rail panel in brackets, ensuring they are seated properly in top and bottom brackets.



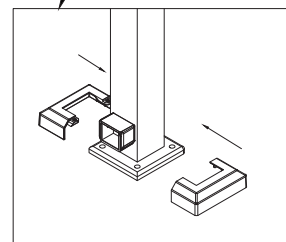
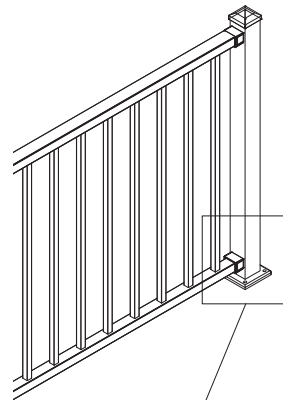
**4.3** Using the #10x1" Torx Head self-tapping screws (included), secure top and bottom rails to brackets through pre-routed holes.

**4.4** Put bracket covers over top and bottom brackets.



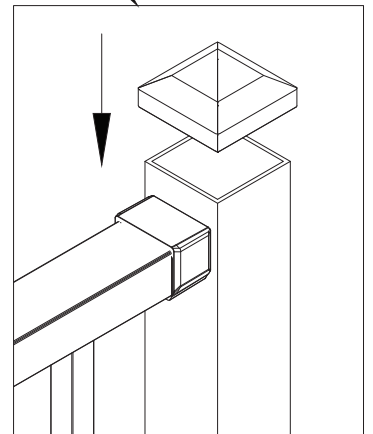
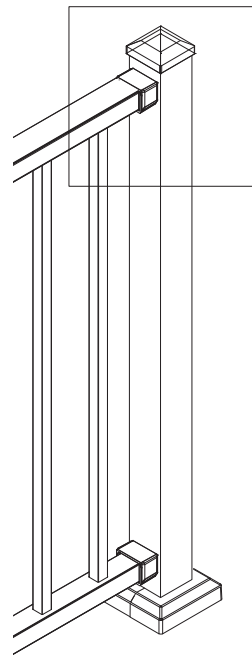
## STEP 5. Attach Post Skirts and Post Caps

**5.1** Assemble the two sides of the post skirt over base of plated post and press together. We recommend attaching the two halves of post skirt in parallel with rail direction (see image below).



The post skirts do not need screws; the two halves will wedge together with a few gentle hits of a rubber mallet.

**5.2** Place post cap on top of post and use a rubber mallet to tap it into place until it is securely fitted.



Continue to install each section of railing following your layout.

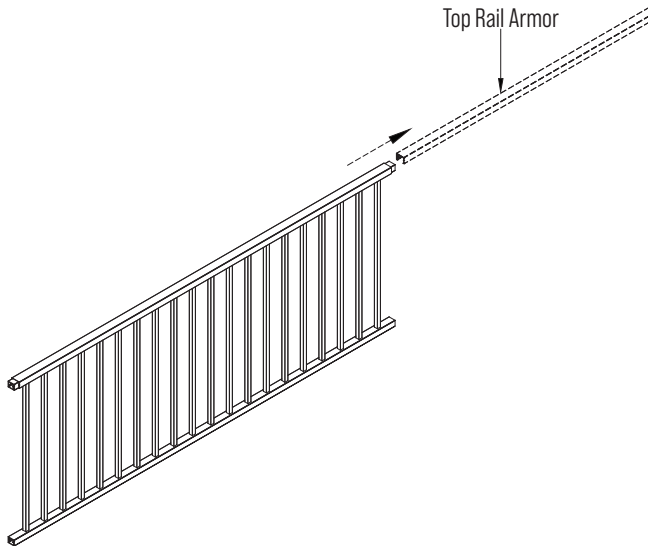


# Aluminum Railing Installation Instructions

## - Cutting Level Rail Panel (if required)

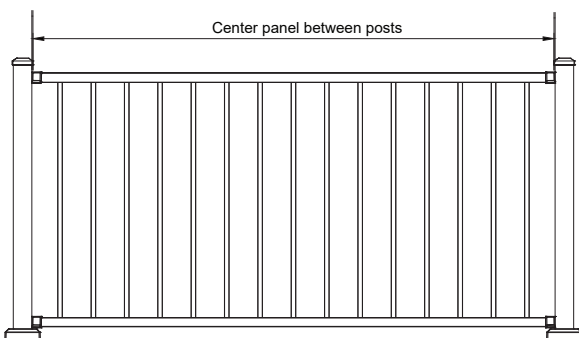
### STEP 1.

Remove top rail armor from level rail panel by sliding it off of top rail.



### STEP 2.

Center the panel between the posts with less distance than a full panel (whether 6' or 8'). Once centered, cut equal amounts from each side to ensure proper spacing of balusters to posts.

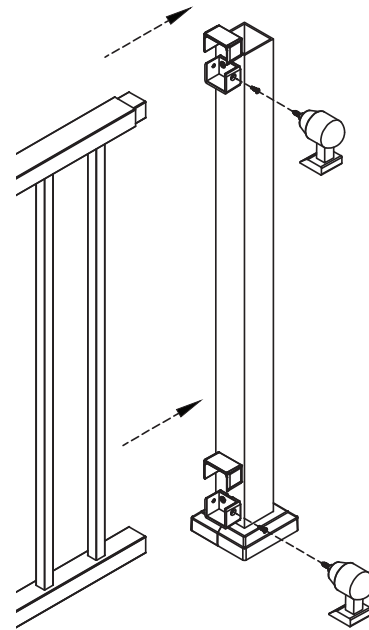


### STEP 3.

File all rough edges. Remove all debris from cut area and paint with RailMaster Touch up paint, allowing area to dry completely.

### STEP 4.

Place assembled level rail panel in brackets, ensuring they are seated properly in top and bottom brackets.



### STEP 5.

Using the #10x1" Torx Head self-tapping screws (included), secure top and bottom rails to brackets through pre-routed holes.

### STEP 6.

After confirming level rail panel is set, you will need to cut top rail armor you removed in STEP 1. To do this, attach bracket covers on brackets, and measure inside to inside measurement from edge of brackets. Once length is confirmed, measure and cut only one end of top rail armor.



# Aluminum Railing Installation Instructions

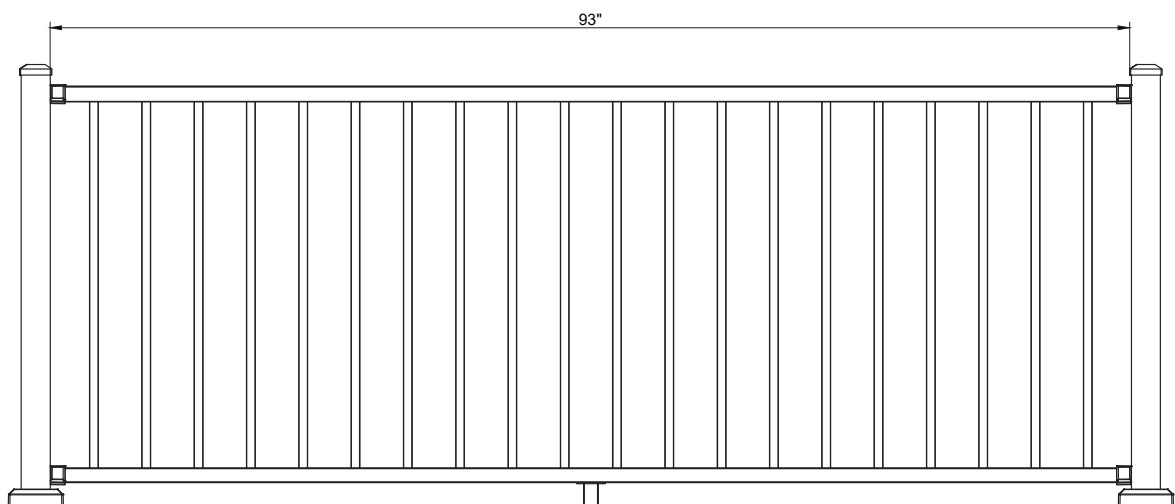
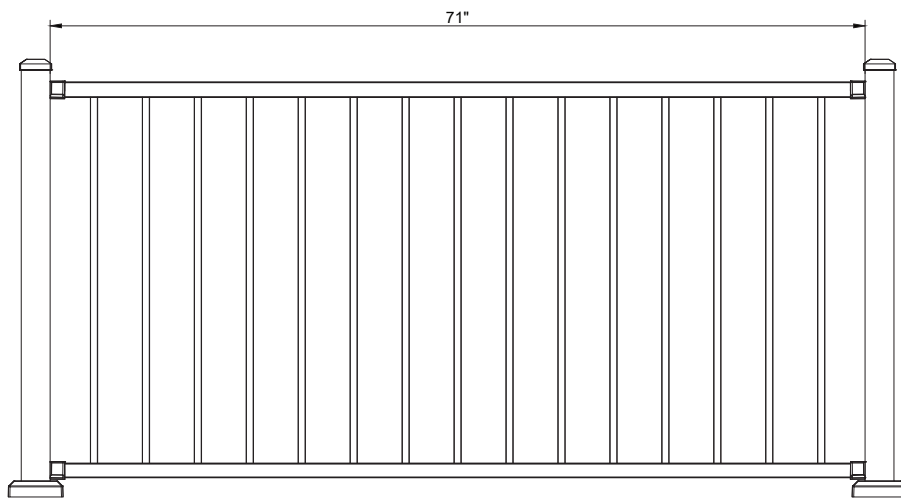
## - Cutting Level Rail Panel (if required)

### STEP 7.

File all rough edges. Remove all debris from cut area and paint with RailMaster Touch up paint, allowing area to dry completely.

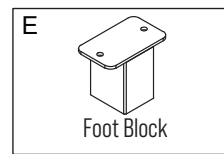
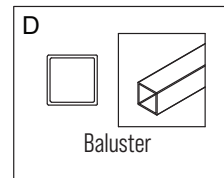
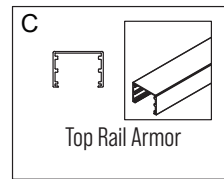
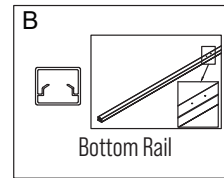
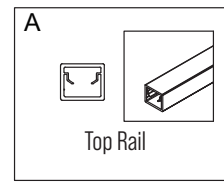
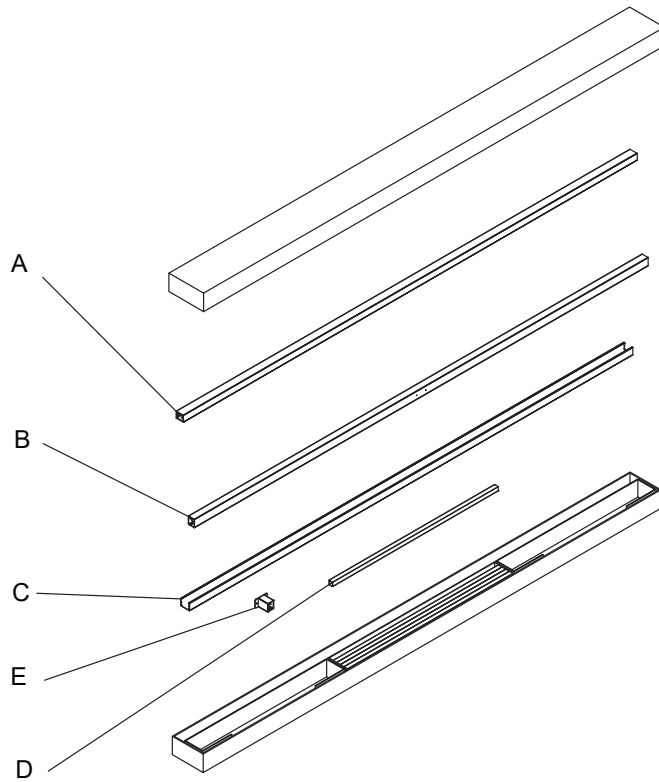
### STEP 8.

Use rubber mallet to re-attach top rail armor over top rail.



# Aluminum Railing Level Rail Kit Assembly Instructions

## - Level Rail Components



## - Material List for Level Rail Components

PART NAME	IMAGE	NO.	QTY	REMARK
Top Rail		A	1	
Bottom Rail		B	1	
Top Rail Armor		C	1	Goes on top of Top Rail
Square Balusters		D	1	15 for 6' kit 20 for 8' kit
Fixed Foot Block		E	1	Included in 8' Rail Kit

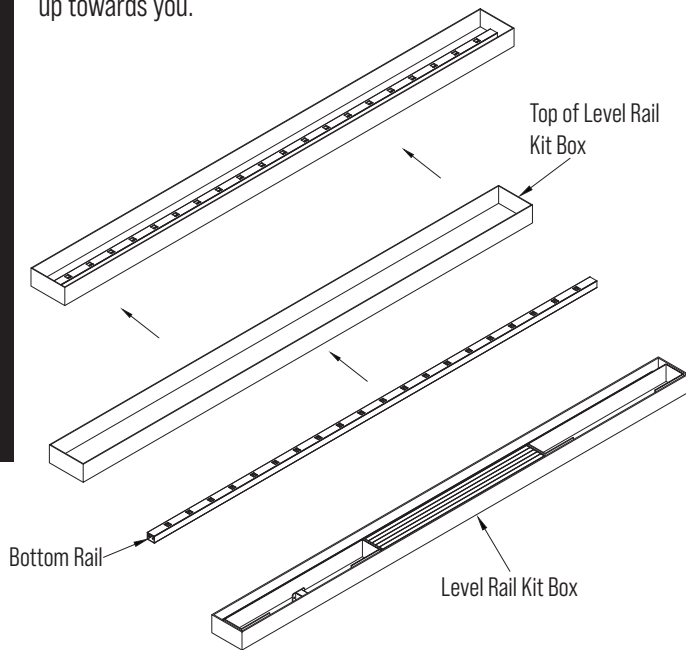
# Aluminum Railing Level Rail Kit Assembly Instructions

## - Assembling the Level Rail Panel

Before you start, make sure you have a clean, level surface that won't damage the product's coating. You can use the cardboard from the kit if necessary.

### STEP 1.

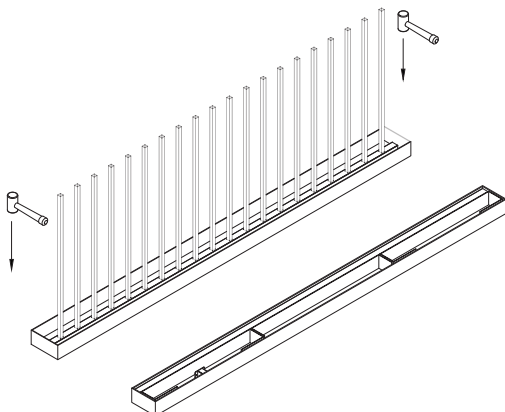
Lay bottom rail on a level surface with the pre-routed holes facing up towards you.



### STEP 2. Position Brackets and Mark Location

Using a rubber mallet, firmly hammer the balusters down into the holes in the bottom rail until they bottom out in the rail. The balusters are designed to go into the holes easily. It will make a distinct 'ting' type sound as the baluster hits the bottom of the rail. Ensure that each baluster is hammered all the way down. Once properly installed, the balusters should be standing straight up.

One person can do this, but it's faster if a second person hands the balusters to the person securing them into the bottom rail.



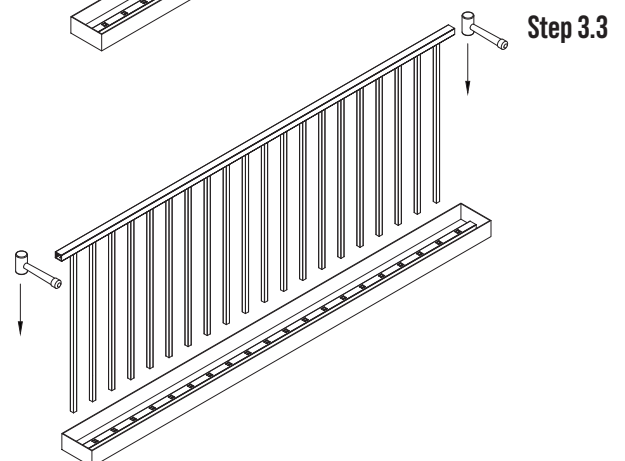
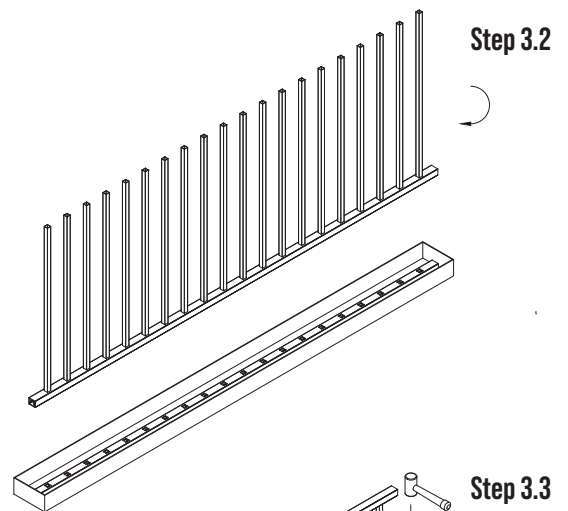
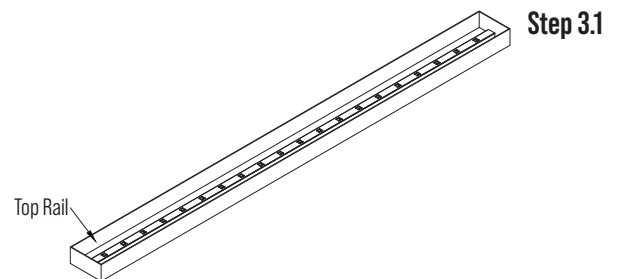
### STEP 3.

**3.1** Lay the top rail on a clean, level surface with the holes facing up towards you. You can use the cardboard from the kit if necessary.

**3.2** To complete the assembly, lift up the bottom rail that you just attached the balusters to and flip it over.

**3.3** Align the balusters with the corresponding holes in the top rail.

Having a second person to help line up and place the balusters into the holes in the top rail will be helpful as you hammer on the top of the bottom rail from one side to the other. Once all of the balusters are in the holes, firmly hammer across the bottom rail from one side to the other to ensure they are all properly inserted.



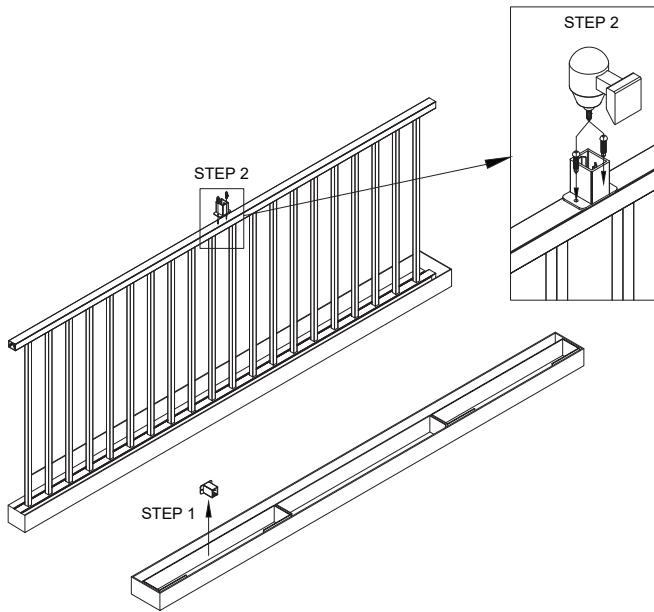


# Aluminum Railing Level Rail Kit Assembly Instructions

## - Assembling the Level Rail Panel

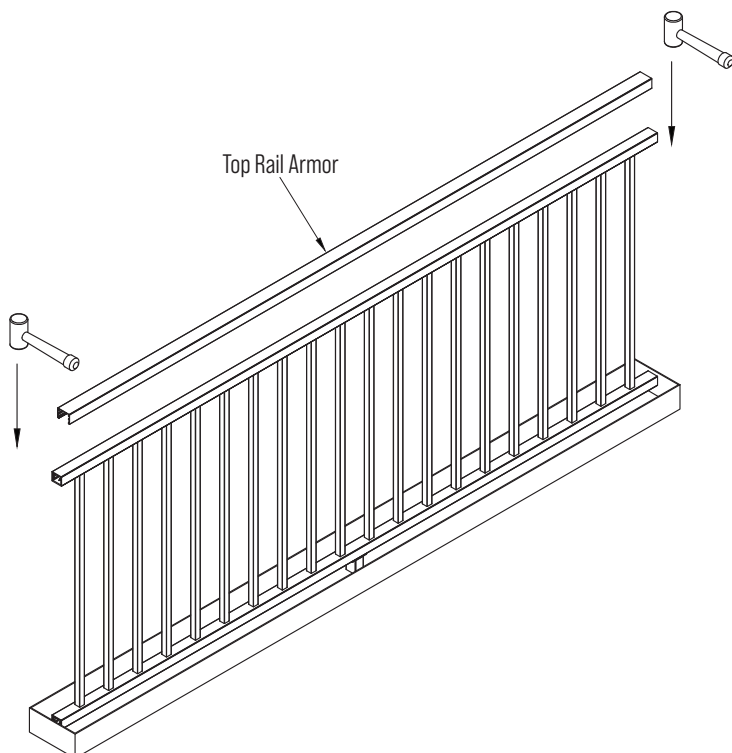
### STEP 4.

If you are using an 8' rail kit, attach the fixed foot block on the bottom rail.



### STEP 5.

After ensuring that the balusters are properly inserted into both the top and bottom rails, flip panel over so that top rail is now right side up. Using a rubber mallet, firmly install the top rail armor on top of the top rail.



### STEP 6.

Proceed to Level Railing Installation Instructions.

