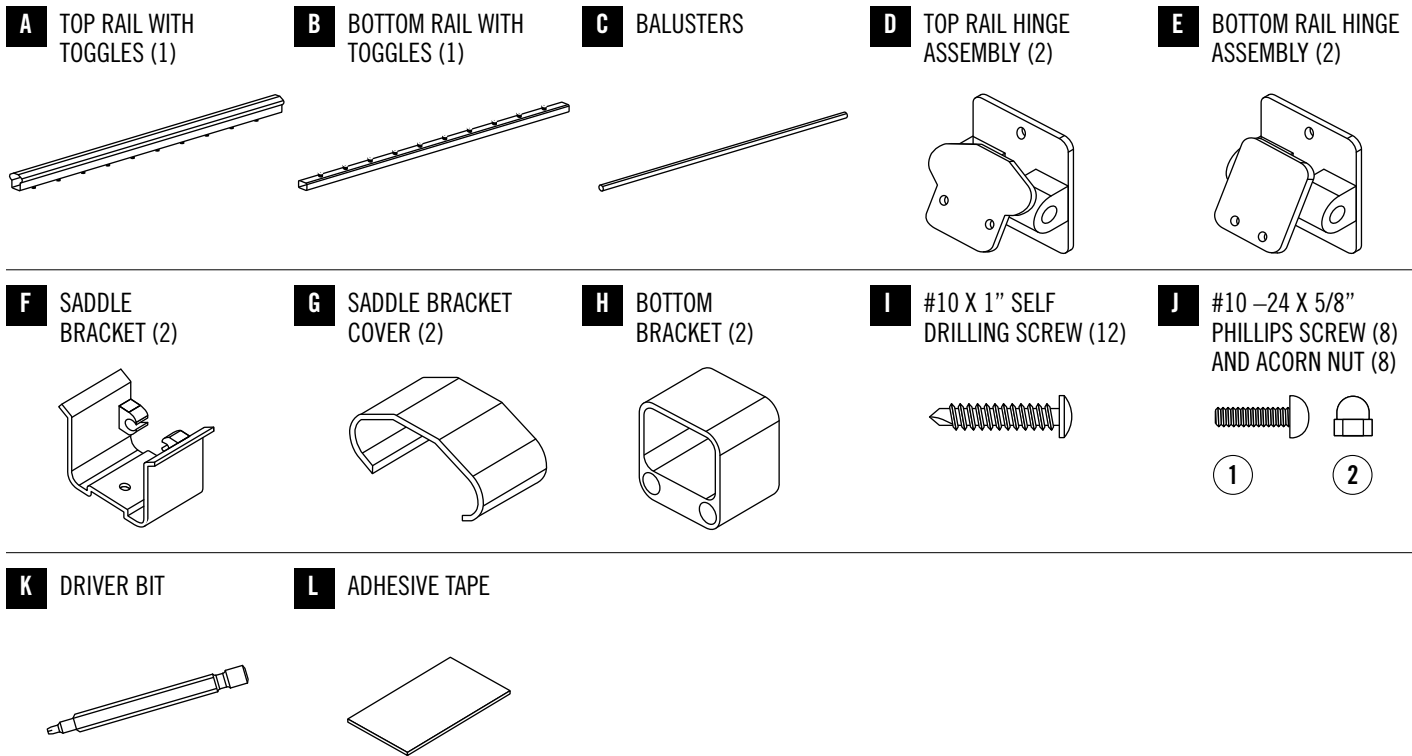


### PARTS INCLUDED:



### TOOLS REQUIRED:

- Drill bit 5/32" (.156")
- Drill (with adjustable clutch, recommended)
- Miter Saw (with metal cutting blade)
- Level
- Phillips Screw Driver
- Rubber mallet
- Tape measure
- Touch-up paint

### NOTES:

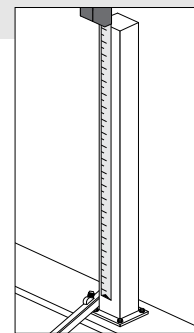
- Post packaged separately.
- Shims may be required to properly level or plumb post for proper installation.

### FOR A SUCCESSFUL INSTALLATION:

- Read the instructions completely before beginning the installation.
- Plan your railing project. Sketch your project with the actual measurements of your deck or balcony complete with post locations.
- Check local building codes to ensure compliance.
- Check carton(s) to determine part count is complete.
- After cutting rails, balusters, or posts, paint exposed metal for maximum protection against the elements.
- Installation is best accomplished with two people.
- Wear personal protection equipment; safety glasses, etc.
- Use care not to over-torque the screws. Pre-drilling is recommended.
- Provided hardware to install Rail is for use with Aluminum Rail posts. If installing to other surfaces the installer must acquire the appropriate hardware as needed for proper installation on any other type of surfaces.

### POST INSTALLATION:

1. Determine the location and position of the upper and lower post based on the project layout. Mark the desired location of the posts. To ensure post location is compatible with railing prior to securing to the deck surface, place both posts in position, and lay the bottom rail along the stairs from top to bottom adjacent to both post (see photo). On the rail side of the post, measure up from the top of the rail and ensure there is a minimum of 34-1/2" for the 36" rail height to the top of the post. Post location may have to be adjusted to ensure minimum is obtained. Repeat this step for the bottom post.



**For railing mounted 36" high use posts 44".**

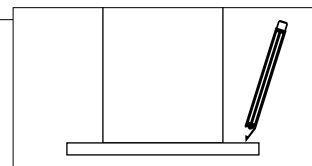
2. The post will be installed by attaching the aluminum mounting flange to the flooring surface. The installer must acquire the appropriate mounting fasteners for the surface material on which the rail post is being mounted. Fasteners should not exceed 5/16" in diameter. If necessary, use wood blocking between the floor joists as reinforcement underneath the decking where the posts are located.

Always check with your local building department for the preferred fastening/blocking method. Engineered drawings for post fastening/blocking are also available at [www.nuvoiron.com/aluminumrailingkits](http://www.nuvoiron.com/aluminumrailingkits). Post mounting fasteners should be able to secure into joists or blocking, not just the decking itself.

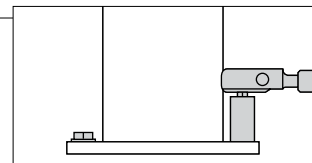
When installing rail post(s) on top of decking, screws must be lagged into wood blocking  
**\*Confirm with your local building codes.**

3. When the final position is determined for the post, mark the hole locations of the four (4) 3/8" diameter mounting holes provided on the base and remove the post assembly.

Drill the marked locations into the decking and reinforcement using the proper size drill bit required for the fasteners being used.



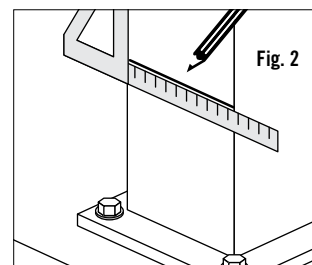
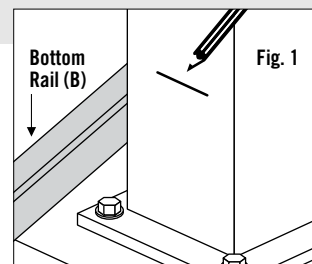
4. Remount the post assembly. Insert the appropriate fasteners then secure the base to the deck structure. Make certain the posts are plumb. If the post requires adjustment, add shims under the base plate. Do not install base post cover at this point. Installing the base post cover will be the final step to this project.



### ADJUSTABLE STAIR INSTALLATION:

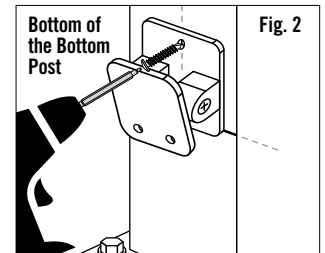
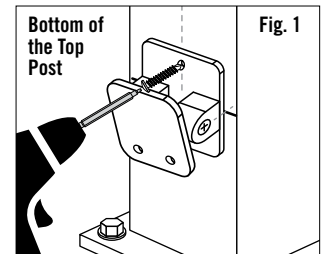
1. Using the bottom rail (B) as a guide, lay it across the edge of the stairs on its side. Mark the top and bottom posts at the top of the rail (B) (Fig. 1).

Using a square, draw a line where you marked the post at the top of the stairs (Fig. 2). Again, using the square draw another line where you marked the post at the bottom of the stairs. These lines will be used to install the Bottom Rail Hinge Assembly (E).

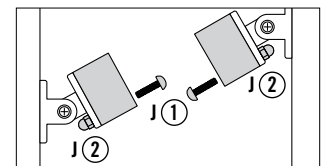


- Now that you've marked where your brackets go, you can attach the Bottom Rail Hinge Assembly (E) to the bottom of each post. Place one bracket on the post at the top of the stairs. Center that bracket on the line you drew as well as on the post (Fig. 1) and attach it with the self-tapping screws provided.

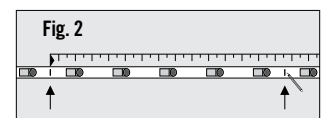
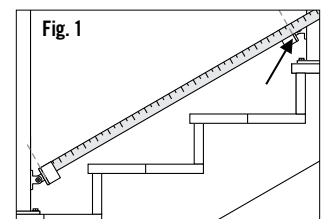
Attach the other Bottom Rail Hinge Assembly (E) on the post at the bottom of the stairs by lining up the bottom of the bracket on the line drawn and centering it on the post (Fig. 2). Attach only the top screw of this bracket for now.



- Install Bottom Brackets (H) to the Bottom Rail Hinge Assembly by using Philips screws and acorn nuts.



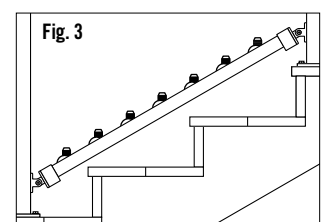
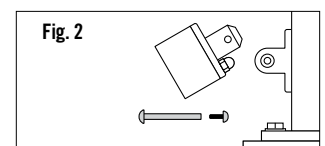
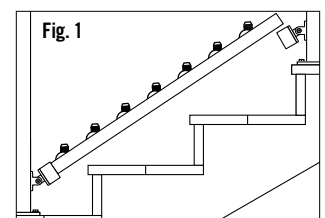
- Next you will need to take the measurement of the rail (B) required. Place the end of your tape measure inside the bracket on one end and measure to the back of the opposite bracket (Fig. 1). With the rail laying down, measure between toggles and mark where to cut the rail. Try to get even spacing on both ends, then cut your rail (Fig. 2).



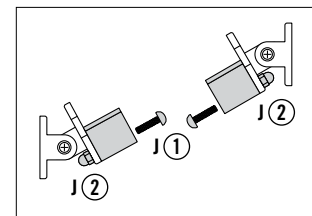
- Once your rail is cut to the proper length, slide it into the bracket attached to post at the bottom of the stairs (Fig. 1).

Remove the front portion of the bracket connected to the post at the top of the stairs by removing the screw and pin (Fig. 2).

Put the other end of your rail into the bracket, slide the bracket back into place and replace the pin and screw (Fig. 3). Your bottom rail is now in place.

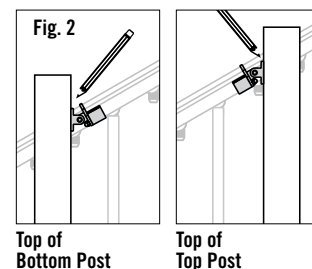
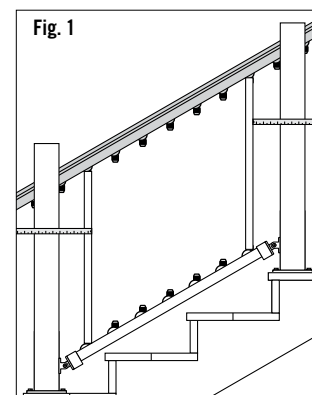


6. Install the saddle bracket (G) to the Top Rail Hinge (D) assembly by using Phillips screws and acorn nuts.



7. Your next step is to install the top rail (A). Take two of the balusters and install one on each toggle on the outer ends of the bottom rail, then attach to the toggles on the top rail (Fig. 1). Measure to make sure you have even spacing between your picket and post at the top and bottom.

Now take your top bracket (from Step 6) and line up the top edge with the top of the flat portion of the rail (A). Mark the post at the top of the bracket. Repeat this step for the post at the bottom of the stairs (Fig. 2).

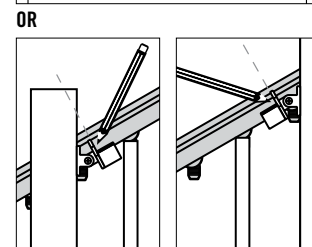
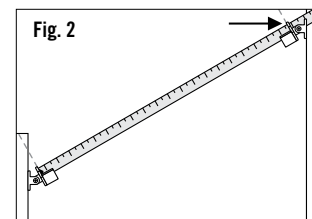
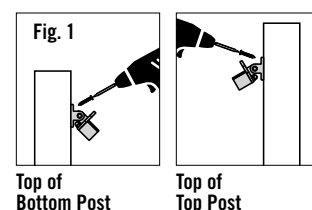


8. After you marked where the brackets are going to go, you can install the top brackets by lining up the top of the bracket with the line you made on the posts (Fig. 1).

Once your brackets are installed, you can take your tape measure and measure the distance from the inside of one bracket to the inside of the other (Fig. 2).

**OR**

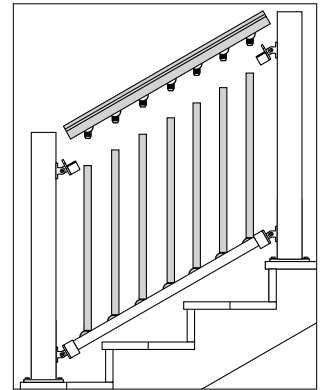
You could also line up the bracket with the rail and mark the rail on each end.



9. Remove the top rail and mark the rail 3/8 of an inch to the inside of each mark you previously made to compensate for the hardware.

You can now go ahead and cut your top rail.

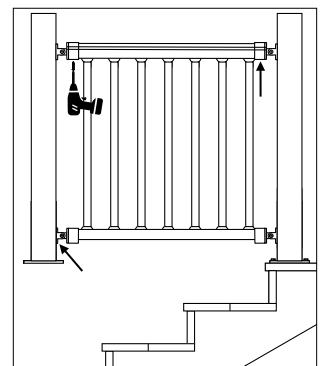
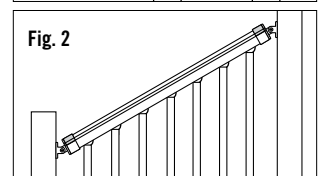
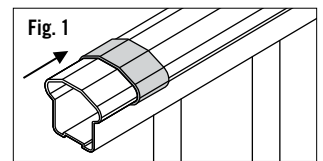
Install the balance of your balusters on the bottom rail and then attach the top rail to those balusters.



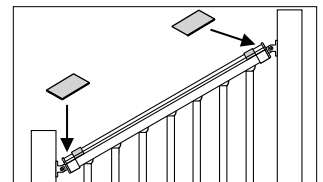
10. Once the balusters and top rail are assembled, slide the saddle bracket covers (G) over the rail. You may want to hold them in place as they slide down (Fig. 1).

Put the rail into the saddle brackets on each end and slide the bracket covers over the brackets (Fig. 2).

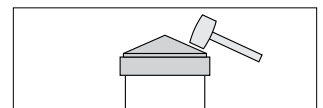
Once this is done, unbolt the bottom post from the step. Elevate the post, putting some pressure against it to ensure the rail doesn't slide out. Install a self-tapping screw into the hole at the bottom of each of the top saddle brackets. Also install a self-tapping screw into the bracket on the bottom of the post that you left out earlier in Step 2 when installing the bottom rail. When done you can re-anchor your bottom post back into its original location.



11. Each kit includes adhesive tape (L), this is to go between the rail and the saddle bracket cover (G) to keep the saddle bracket cover from sliding down the rail.



12. To install the post cap, set post cap in place on top of the post and tap lightly with a rubber mallet to drive the post cap onto the post.



13. Finish by installing the base trim to the bottom of the post to cover the mounting flange. To install the post base cover, connect the two pieces together, one on top of the other. This will keep them locked into place.

