

Aluminum Stair Railing

Installation Guide

Stair Railing Installation Guide

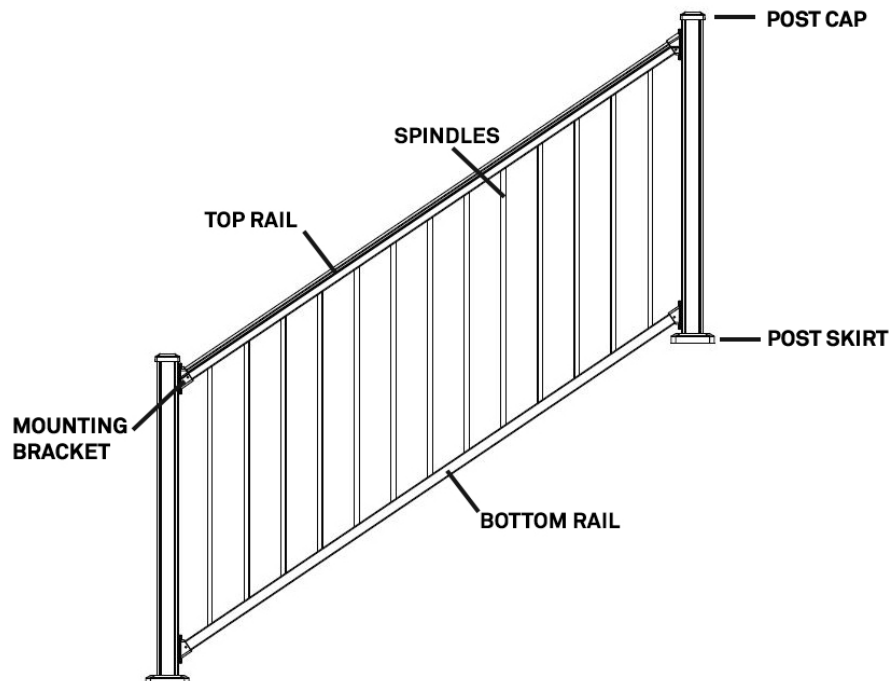
THE BEST CHOICE FOR STRONG & DURABLE RAILING SYSTEMS

Our exclusive manufacturing process ensures our aluminum railing will provide superior strength plus it is virtually maintenance free. This guide will help make your installation easy.

Please note:

It is the responsibility of the installer to conform to local building codes and safety requirements. It is also the installer's responsibility to obtain all necessary building permits. These instructions are guidelines and do not cover every installation scenario. The purchaser and installer should review the intended use of the products with a licensed professional engineer to determine code compliance. Durables® or its distributors shall not be held liable for improper or unsafe installations.

These instructions are guidelines and do not cover every installation scenario. Review all instructions before starting railing installation. The installer may need to modify the exact installation method to meet unique site requirements.



Note:

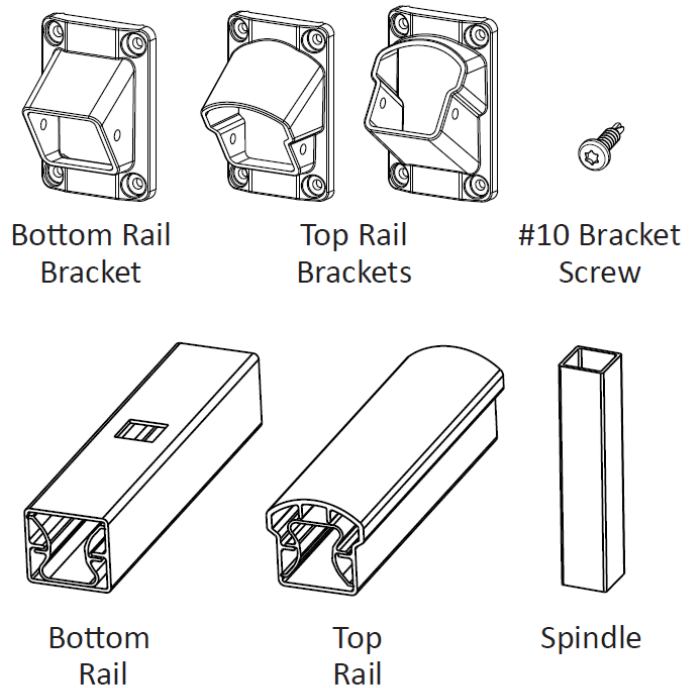
The stair brackets can accommodate angles of 32°-36°.

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Installation Tips:

1. Since you are installing at an angle the actual width of the stair section will be less than the length of the rails.
2. A miter saw with high tooth count carbide blade can be used to cut the aluminum rails and vinyl insert at the same time. Cut slowly and use all safety precautions.
3. If your installation requires that the rails be cut, be sure to double check all measurements before cutting
4. Only use the fasteners provided in the railing kit. Do not overtighten the screws.
5. Applying paint, other than manufacturer's touch up paint, will void the warranty.
6. The screws included require a T25 torx drive bit, which is not included in the railing kit
7. While marking the angle on the bottom rail, ensure the spindles are equally spaced from each post.
8. For some installations, the post at the bottom of the stairs may need to be taller.
9. All fasteners are self-tapping, we recommend drilling pilot holes with a 1/8" bit (not included).

Included Components



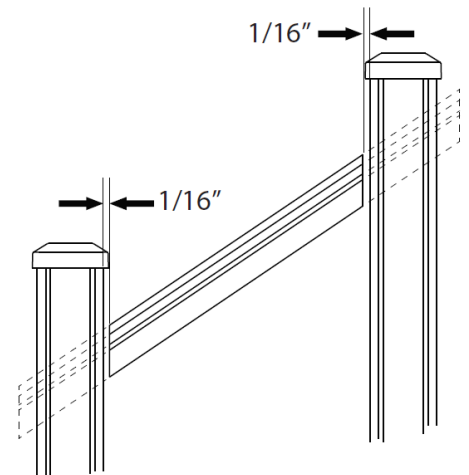
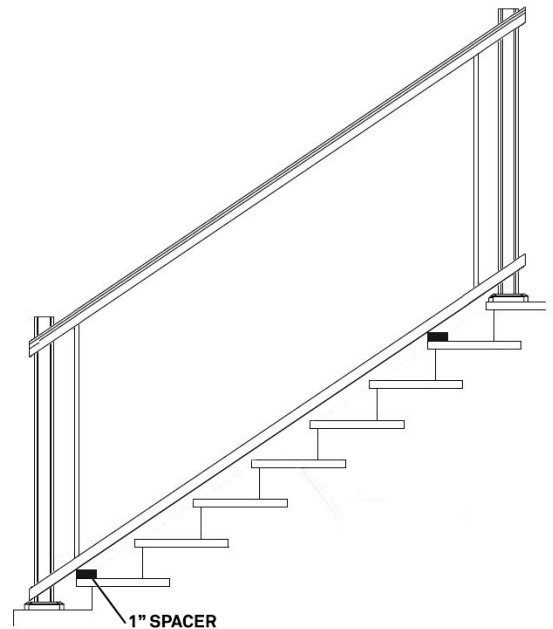
Recommended Tools:

- Safety Glasses
- Level
- Tape Measure
- Miter Saw with high tooth count carbide blade
- Rubber Mallet
- Power Drill
- Phillips Drive Bit
- T25 Torx screwdriver Bit
- Quick Clamp Grips

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Section 1

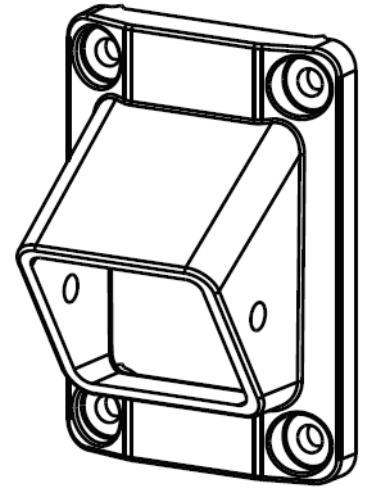
1. Install posts (see post instructions included with the post). Ensure that posts are installed with the one-piece post skirt in place. It's important that the post skirts are in place prior to installing the railing sections since they are one-piece they cannot be added after the railing is installed.
2. Place a 1" spacer on the step closest to the bottom post and another on the step closest to the top post. Ensure the spacers sit at the nose of the steps and are secured so they do not slide.
3. Place the bottom rail alongside the posts on top of the 1" spacers. Remember, the stair brackets can accommodate angles between 32° and 36°.
4. Install a spindle on each end of the bottom rail closest to the posts. Next, set the top rail in place on top of the spindles ensuring the larger opening of the H-channel aluminum insert faces the spindles.
5. Lightly clamp the top and bottom rails to the post at the bottom of the stairs so that the section stays in place.
6. Adjust the railing section to ensure there is equal space between the spindles and the post on each end. Measure the distance between the post and the first spindle at the top and the bottom of the railing section to ensure the spindle is straight.
7. Using a pencil, place a mark on the rails where the post and rails intersect.
8. Remove the panel and disassemble it.
9. To avoid scratching the posts during installation, make a second mark 1/16" in from the original mark on each side of the rails.
10. Cut the aluminum rails at the second mark, assuring that the vinyl insert is cut to the same length and angle as the aluminum rail.
11. In areas with freezing temperatures, drill a 1/8" weep hole around 3 inches on the bottom of the bottom rail (downward end) with a 1/8" bit being sure it goes through the plastic insert.



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Section 2

1. Slide the brackets on to each end of the bottom rail, ensuring the back of the bracket is facing the posts.
2. Position the bottom rail between the posts, on top of the spacers.
3. Align the self-centering brackets and secure them to the post, screwing the #10 screws into the holes on the bracket. Be sure that you do not overtighten the screws.
4. Fasten the bottom rail to the brackets using the #10 screws provided.



Section 3

1. Insert the spindles down through the routed holes in the bottom rail.
2. Holding the top rail at an upward angle, slowly line the spindles up with the routed holes in the top rail while lowering the rail into place.
3. Slide the brackets on to each end of the top rail, ensuring the back of the bracket is facing the posts.
4. Align the self-centering brackets and secure them to the post, screwing the #10 screws into the holes on the bracket. Be sure that you do not overtighten the screws.
5. Next, fasten the top rail to the brackets using the #10 screws provided.
6. If needed, reduce the post height and install the post caps

