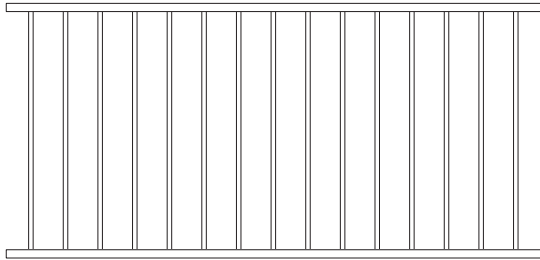
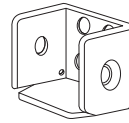


PARTS INCLUDED:

A RAILING PANEL (1)



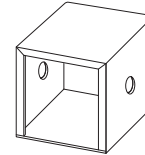
B BRACKETS (4)



B1 SELF-TAPPING SCREWS (16)



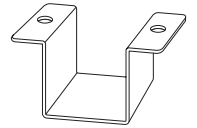
C BRACKET COVERS (4)



C1 SELF-TAPPING SCREWS (8)



D DRINK RAIL BRACKETS (4)



D1 SELF-TAPPING SCREWS (8)



TWO PANEL SIZES AVAILABLE:

34" HIGH STEEL RAILING PANEL (**DSR3470-DB**) DESIGNED FOR A 36" HIGH FINISH RAILING

40" HIGH STEEL RAILING PANEL (**DSR4070-DB**) DESIGNED FOR A 42" HIGH FINISH RAILING

(4) MOUNTING BRACKETS & HARDWARE

* *POSTS SOLD SEPARATELY*

*PARTS SOLD SEPARATELY:

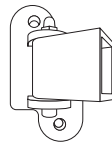


TWO POST SIZES AVAILABLE:

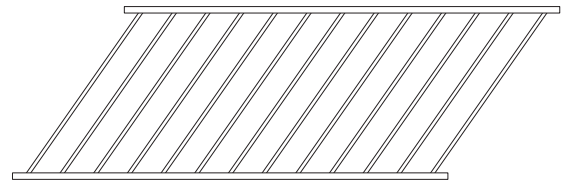
2" x 2" x 44"
STEEL RAILING STAIR POST
(**DSRP2244-B**)

2" x 2" x 38"
STEEL RAILING STAIR POST
(**DSRP2238-B**)

ANGLED BRACKET
(**DSRSB-B**)



STAIR PANEL
(**DSR3470-STB**)



TOOLS REQUIRED:

- Drill
- Socket
- Measuring tape
- Level

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.
- Check local building codes to ensure compliance.
- Check carton(s) to determine part count is complete.
- Installation is best accomplished with two people.
- Wear personal protection equipment; safety glasses, etc.
- Use care not to over-torque the screws.
- After installation, remove all metal shavings and thoroughly clean surrounding areas. This step is essential to protect surfaces such as concrete and deck boards from premature deterioration or rust staining.
- If installing to other surfaces the installer must acquire the appropriate hardware as needed for proper installation on any other type of surfaces.

INSTALLATION INSTRUCTIONS:

Planning Your Project

Begin by mapping out your chosen area for installation.
Ensure that you purchase one additional post than the number of sections needed.

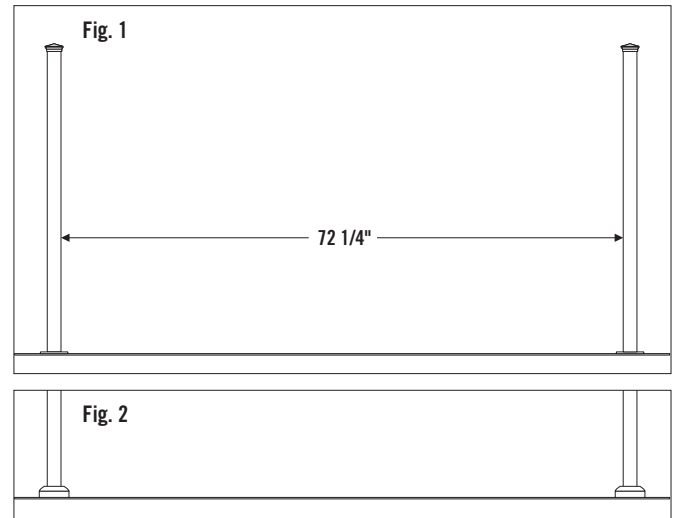
1. Position and Secure Your Posts:

- Set your posts 72 1/4 inches apart. If your railing needs to be shorter to fit a specific space, adjust the placement of the posts accordingly (Fig. 1).
- Ensure that the posts are level.
- Place post base covers on each post (Fig. 2).

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.

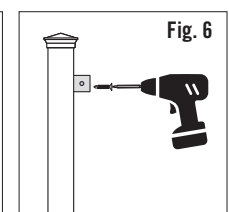
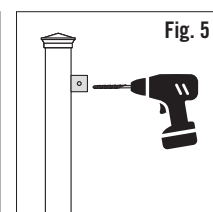
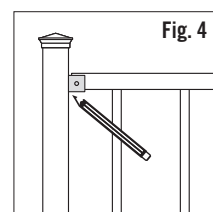
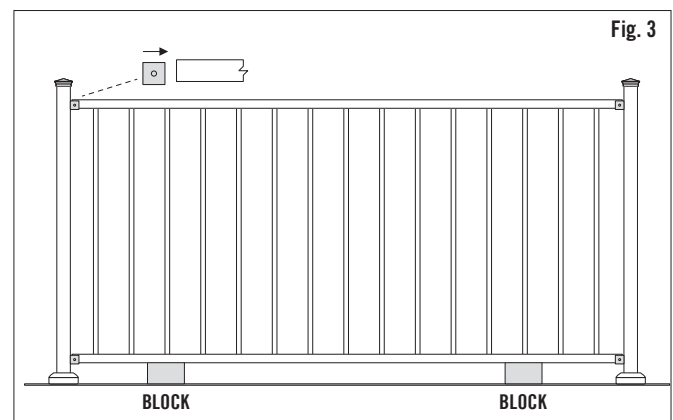
Always check with your local building department for the preferred fastening/blocking method. Engineered drawings for post fastening/blocking are also available at www.nuvoiron.com/aluminumrailingkits. Post mounting fasteners should be able to secure into joists or blocking, not just the decking itself.

When installing rail post(s) on top of decking, screws must be lagged into wood blocking.



2. Align Railing and Attach Brackets:

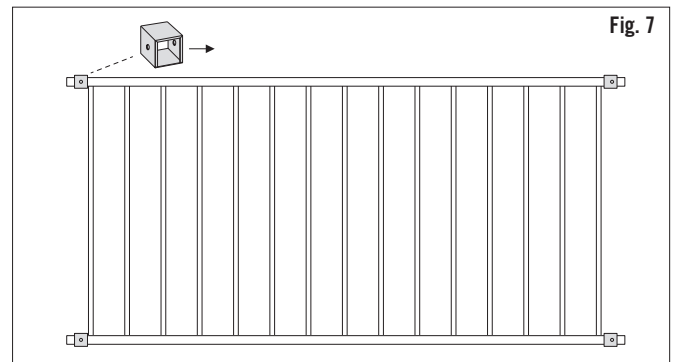
- Position the railing on two 2-inch blocks and align it with the center of the posts (Fig. 3).
- Slide each (B) bracket onto the ends of the top and bottom rails (Fig. 3).
- Mark the bracket positions on the post for all (4) four brackets (Fig. 4).
- Remove the panel, then pre-drill all marked locations using a 1/8" inch drill bit (Fig. 5).
- Then secure the (B) bracket to the posts at the marked locations using (4) four (B1) screws (Fig. 6).



3. Install the Bracket Covers:

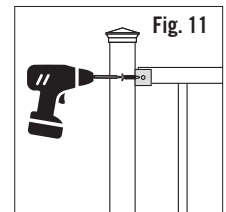
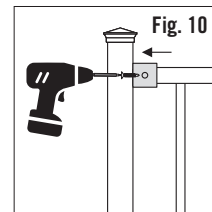
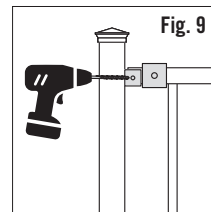
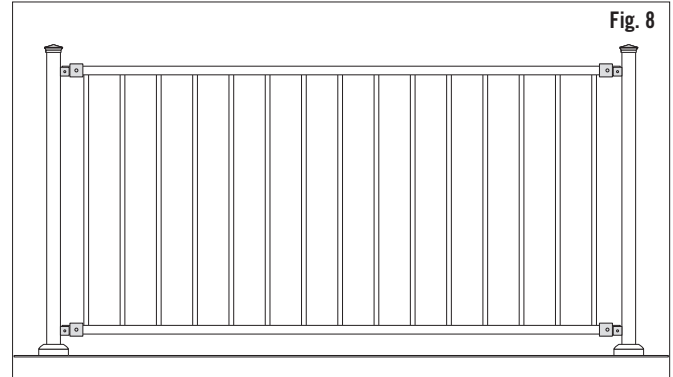
** If installing a top rail using the (D) Drink Rail Brackets, do not attach bracket covers on the top rail.*

- Each (B) bracket cover has two sides - one with no lip, and one with 3 lips or edges (Fig. 7).
- Ensure the side with three lips faces the rail, while the side with no lips rests against the post. This applies to all (4) four bracket covers.



4. Install the Section onto Posts:

- Once all covers are installed, set the rail onto the brackets (Fig. 8).
- Pre-drill with a 1/8" bit (Fig. 9).
- Slide the covers to the post and then secure your bracket covers with (2) two (C1) screws, one on each side of each bracket (Fig. 10).
- If Drink Rail Brackets are being used, and you did not install your covers, still install (2) two (C1) screws as this still is required to secure your railing to your brackets (Fig. 11).



For Cut Sections:

If a section of the railing needs to be trimmed, first measure the distance between the posts to determine the required length. Subtract an additional 1/4" from this measurement from the total length of the railing section to calculate the amount that needs to be cut. Aim to center your cuts between pickets as precisely as possible. This positioning is crucial for properly fitting the brackets onto the rail.

If a cut panel is used, make sure to leave 1 1/8" on each side of the picket to ensure space for your bracket.

If a cut panel is used, make sure to do the following:

- 1) Sand down all cut ends.
- 2) Clear all metal shavings from the rail, posts, brackets, and surrounding area.
- 3) Apply touch-up paint to all exposed cut edges. Use exterior enamel with rust-inhibiting properties. Place cardboard or a protective sheet behind to prevent overspray.
- 4) Allow time before install to let paint dry.

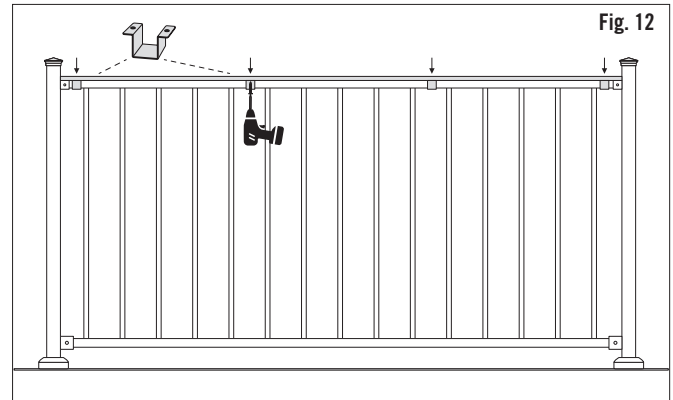
General Safety & Surface Protection:

- Thorough cleaning and proper surface protection are essential. Leaving even small amounts of shavings can compromise and cause premature deterioration or staining. Always ensure the work area is clear before proceeding to the next step.
- Do not cut railing directly on the deck surface (wood, composite, etc.). Always cut on a separate stable, protected work surface away from the finished deck.
- Hot shavings can embed into finishes, causing permanent damage or staining.
- Any remaining steel particles are susceptible to natural oxidation if left when exposed to the elements and appear as rust spots.

Drink Rail Instructions:

Included in your kit are (4) four additional (D) drink rail brackets that allow you to add a top rail, often referred to as a Drink Rail Bracket.

- If using the (D) drink rail bracket, evenly space them between your rail for maximum support, place one on each end and then two in the middle of the section (Fig. 12).
- Depending on the material you're using for your top rail, you may want to pre-drill. Install using (2) two (D1) screws per bracket.



SIDE TO SIDE SWIVEL BRACKET FOR ANGLED SECTIONS:

(4) Mounting Brackets and Hardware

- When using side-to-side brackets, ensure that the top and bottom rails of the section are cut at least 1" to maintain a gap between the post and picket that complies with code, not exceeding 4 inches.
- When planning the distance between your posts for angled sections, add 1" to each side that requires side-to-side brackets to account for the hardware.

Example: If you have angled brackets on both sides, add a total of 4 1/2" between posts.

Complete **Step 1** for post installation, then follow the remainder of the instructions for installing a level rail. Set your posts first. For angled sections, your cuts will be determined as you go.

