

DekPro™ Prestige Aluminum Rail System Stair Railing Installation Instructions

Stair Railing Installation Guide

- Please read all instructions completely before starting any installation of DekPro™ Prestige Railing Systems.
- **SAFETY:** Always be safe and follow all instructions when using power tools and always wear eye protection!
- Rail sections come in nominal 6ft & 8ft lengths. (Actual rail lengths are 70" and 96.75" respectively).
- Posts are available in RESIDENTIAL rated (3" post w/ flange and 4" Sleeve) and COMMERCIAL (3" post w/ flange)
- Proper blocking must be in place before mounting posts.
- Stair rails are rackable up to 40°
- DekPro™ Prestige Railings should be installed using good building principles in accordance with local building codes and the installation guidelines. Consult your local building code official and check all code requirements before installing railings. DekPro™ or its distributors shall not be held liable for improper or unsafe installations.
- It is the responsibility of the installer to obtain all required building permits and meet code requirements.
- DekPro™ Prestige Railing has been tested by ATI and meets testing standards for IRC and IBC building codes AC273. ATI test report CCRR # 0233.
- For questions contact Absolute Distribution Inc., U.S. National Distributor for DekPro™ Prestige Railing Systems, at 800-335-5909 or www.AbsoluteDist.com

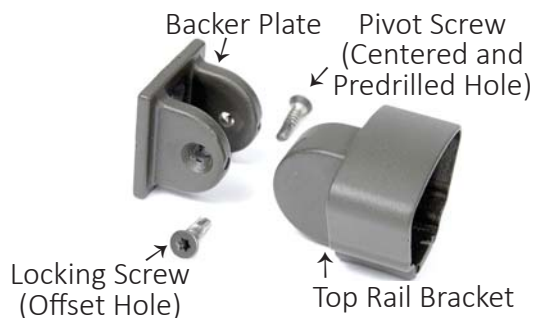


Recommended Tools for Installation

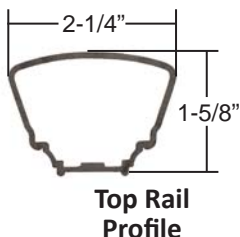
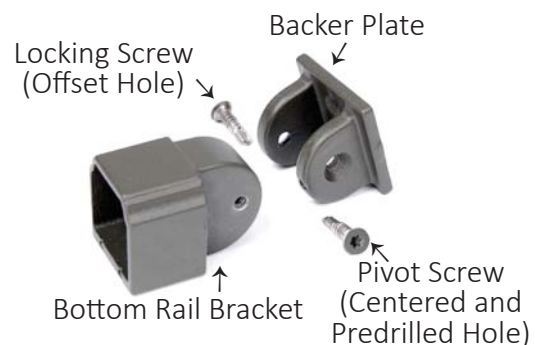
- Level
- Mallet / Hammer
- Speed Square
- Cordless Drill / Impact driver
- Quick clamp grips
- Tape Measure
- Miter saw with high tooth count carbide blade
- T30 Torx screwdriver bit
- Pencil
- 13/64 Drill bit (Optional)

Rail Profiles & Bracket Hardware

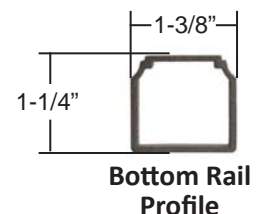
Top Rail Bracket Overview



Bottom Rail Bracket Overview



All fasteners for attaching brackets to posts and rails are included in box kit. Fasteners for post base are **NOT** provided due to varying installation circumstances. #14 T30 Torx, self-drilling screws included with each bracket, 2 screws for backer plate attachment, 1 for pivoting screw, 1 for locking screw and 1 for securing bracket to rail. Use a T30 Torx screwdriver bit for a sure fit.



Post Placement & Installation

Step 1: Layout

Lay out post placement.
Stair rail installation must start with post placement at top of stair run.

Ensure proper blocking is in place before mounting posts.

Actual Railing Lengths:

- 70" for 6' rail
- 96-3/4" for 8' rail

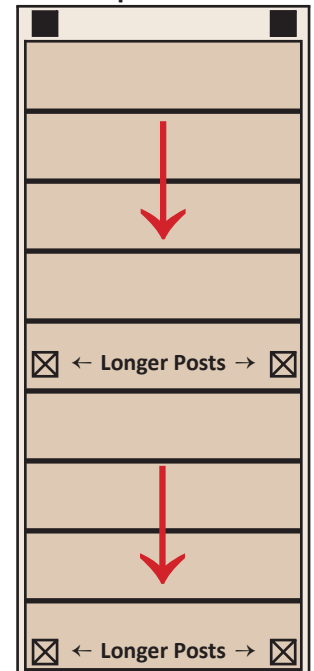


Mark and
Pre-drill Holes



Fasten Post to
Deck Surface

Start Here
Top of Stairs



Bottom of Stairs

Step 2: Reference Diagram

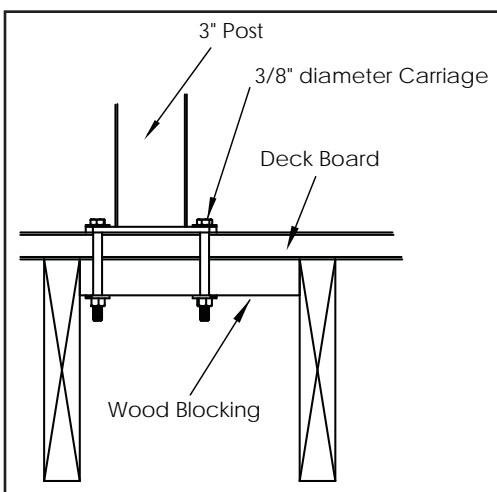
Step 2: Mount Posts

- Start with top post (■). Set into place and mark four mounting holes.
- Pre-drill holes for mounting hardware, then fasten post with mounting hardware (Not Included). See below for mounting options.
- Check that post is plumb and shim if necessary (shims included).
- **Note: Optional Quick jig can be used to plumb posts using the attached 2 way level.*
- After top posts (■) are installed, temporarily place lower post(s) (☒) on tread to allow for adjustment to ensure proper baluster spacing between post and baluster. Lower posts may need to be removed to allow for lower bracket installation (Ref. Step 5) and/or trimming of post to appropriate height. Lower posts must be longer to allow for flexible post placement.
- After rails are set all posts can be permanently mounted.

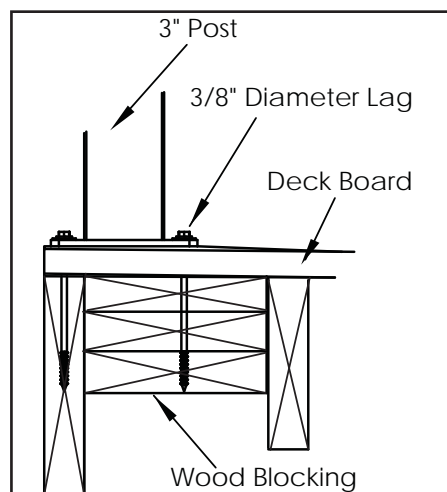
- For 4" sleeve - Slide sleeve over existing wood 4x4 and furr-out as necessary

Post Mounting Options

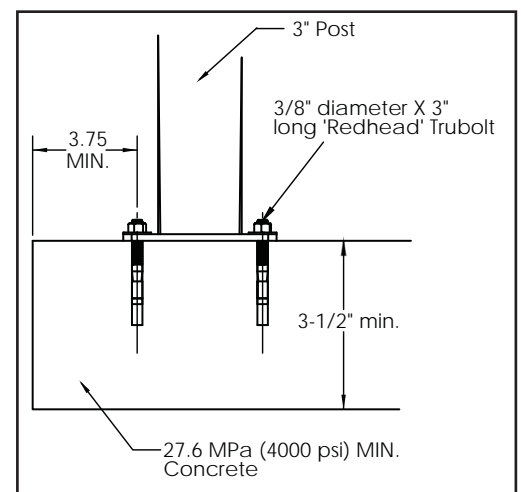
Surface Mount using Carriage Bolt



Surface Mount using Lag Bolt



Surface Mount using Concrete Anchor



DekPro™ Prestige Aluminum Rail System

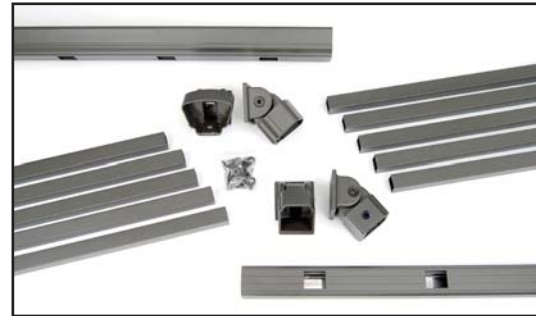
Stair Railing Installation Instructions

Stair Rail Kit

Kit Includes:

- 1 - Top Rail (Pre-Slotted for Balusters)
- 1 - Bottom Rail (Pre-Slotted for Balusters)
- 2 - Bottom Rail Brackets
- 2 - Top Rail Brackets
- Aluminum Balusters
 - 15 Balusters with 6' kit
 - 21 Balusters with 8' kit

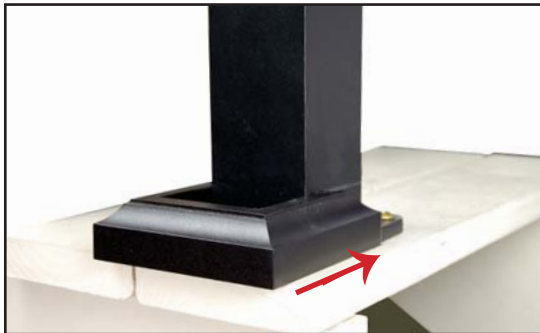
(All hardware is included to complete rail kit assembly)



Stair Rail Installation

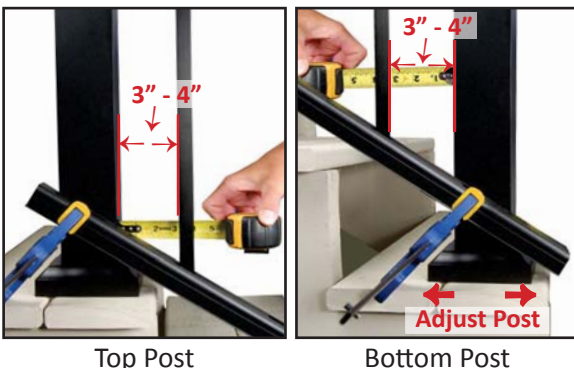
Step 3: Place Post Skirt

Slide post skirt into place at base of top post to ensure proper clearance of lower rail and bracketry.



Step 5: Baluster to Post Spacing

Place a baluster into hole closest to each post. Ensure equal spacing from baluster to post at top and bottom of stair. Allow minimum 3" and maximum 4" space between post and baluster to accommodate bracket. Adjust bottom post for 3" - 4" spacing, then bottom post can be permanently fastened.



Top Post

Bottom Post

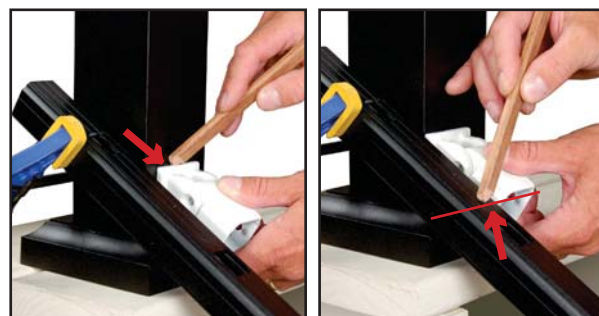
Step 4: Clamp Bottom Rail to Posts

Clamp bottom rail to top and bottom posts, following same angle as stairs. Bottom post is loosely placed at this point. **NOTE:** Ideal installation would have the lower rail rest on the nose of each step, but you may have to install temporary blocks to raise rail slightly to allow clearance of post skirt and bottom rail brackets.



Step 6: Mark Lower Rail Bracket Locations

Hold bracket in place directly behind rail and position bracket to the same angle, position and height of the stair rail. Mark top of bracket on post (a) and also mark where the bracket ends on the rail (b). Do this for both bottom rail brackets. *(White brackets shown for clarity)*



(a) Mark Post

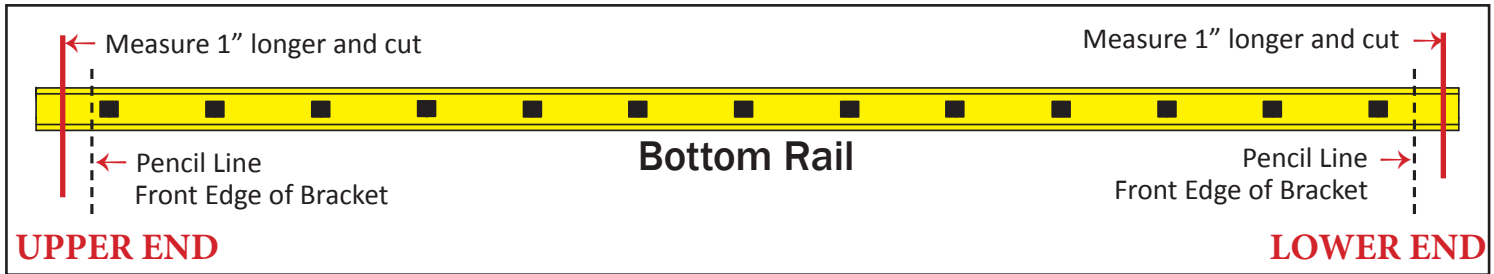
(b) Mark Rail

DekPro™ Prestige Aluminum Rail System Stair Railing Installation Instructions

Stair Rail Installation (Continued)

Step 7: Cut Bottom Rail

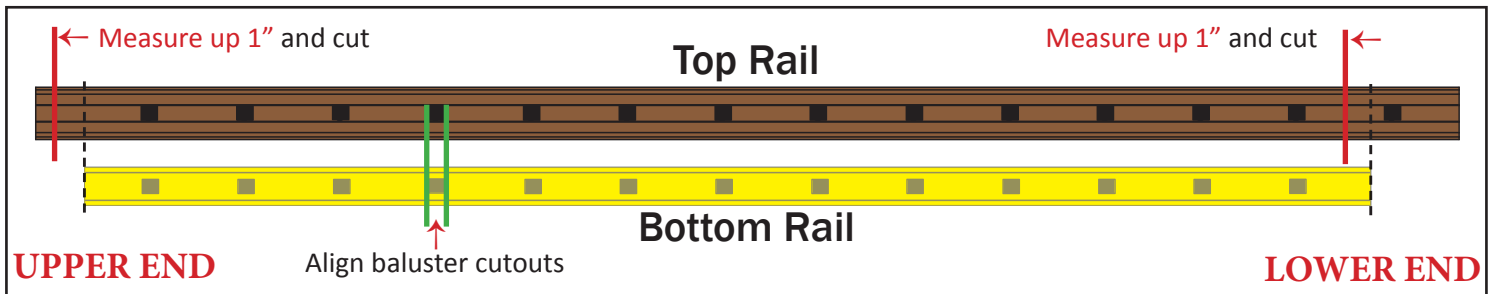
Remove clamps and bottom rail from posts. Measure 1" outward from the marks you made on the bottom rail from Step 6b and cut. 1" measurement accounts for bottom rail bracket depth. **Make sure to mark which side is upper and which is lower.** All cut ends must be painted to prevent oxidation.



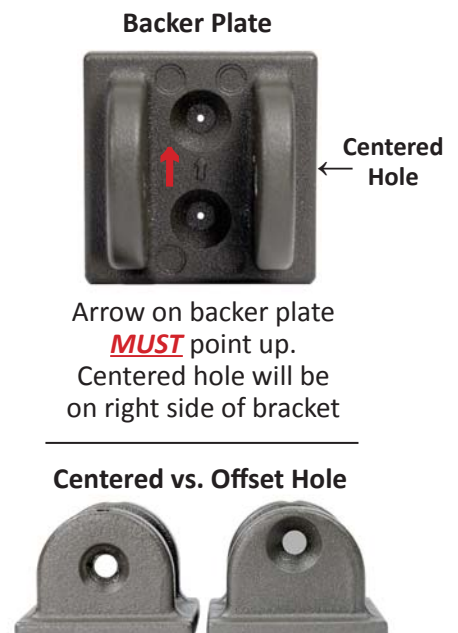
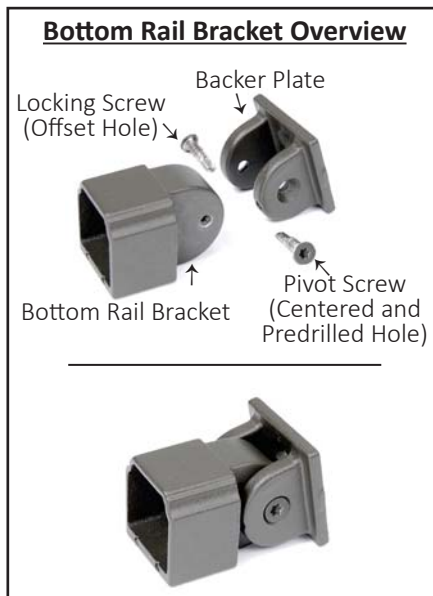
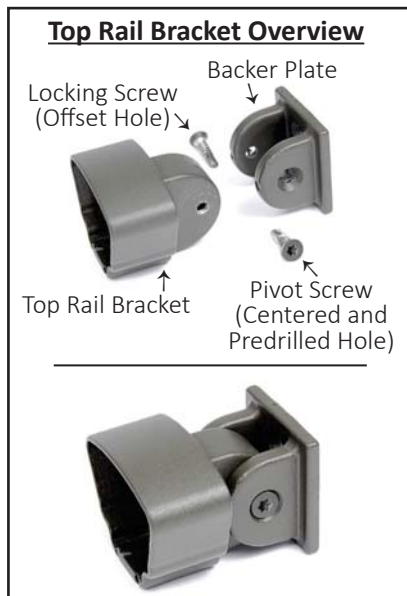
*** IMPORTANT ***

Step 8: Cut Top Rail

Once cut to size, the bottom rail can be used as a template to cut the top rail. Transfer bottom rail length to top rail ensuring that baluster cutouts are in alignment. Mark top rail for reference. From that point, **measure over 1" towards upper end of top rail and cut.** Repeat at opposite end of rail. (See diagram below) **Make sure to mark which side is upper and which is lower.** (Note: Shifting of the cut line 1" compensates for stair angle to ensure balusters are plumb for standard rail pitches between 32° and 36°) All cut ends must be painted to prevent oxidation.



Step 9: Rail Bracket Overview



DekPro™ Prestige Aluminum Rail System Stair Railing Installation Instructions

Stair Rail Installation (Continued)

Step 10: Mount Bottom Rail Backer Plate

Separate bottom rail brackets into two pieces by removing the pivot screw, then attach backer plate to the post using mark made from Step 6a. Ensure arrow on backer plate points up and centered hole is on the right side for both top and bottom posts.



Step 12: Partially Assemble Rail

At this point, bottom rail is in place and secured with pivot screws. Top rail brackets should be placed temporarily onto top rail but not secured. Tape can be used to keep top rail brackets from sliding off. With 3 balusters (top, middle, & bottom), set into lower rail, place top rail into position to partially assemble rail.



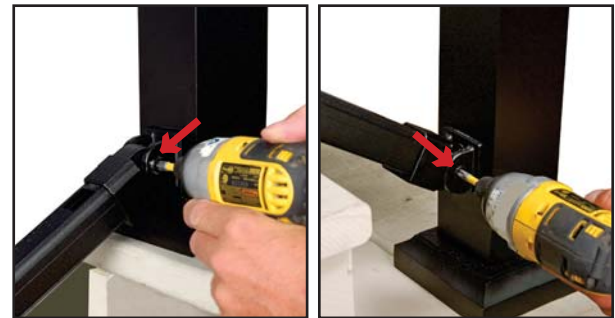
Step 14: Mount Top Rail Backer Plate

Separate top rail brackets into two pieces by removing the pivot screw, then attach backer plate to the post using mark made from Step 13a. Ensure arrow on backer plate points up and centered hole is on the right side for both top and bottom posts.



Step 11: Install Bottom Rail and Bracket

Slide rail brackets onto the bottom rail and use pivot screws to secure rail into place.

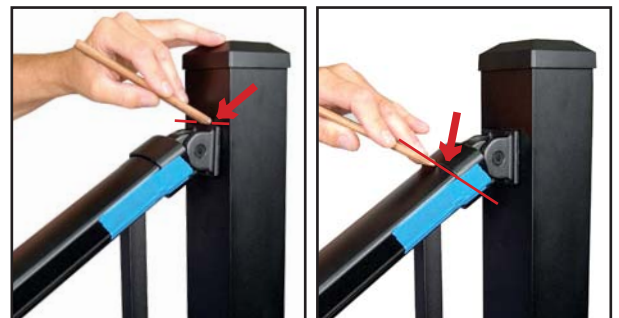


Top Post

Bottom Post

Step 13: Mark Top Rail Bracket Location

Ensure balusters are fully engaged and plumb to accurately locate your top rail brackets. Mark location of top rail bracket both on post (a) and on top rail (b). After marks are made, disassemble the top rail and remove 3 balusters.



(a) Mark Post

(b) Mark Rail

Step 15: Attach Top Rail Bracket to Rail

Attach rail bracket to top rail. Ensure it lines up with the mark you made in Step 13b.



Stair Rail Installation (Continued)

Step 16: Insert Balusters into Bottom Rail

Insert all balusters into bottom rail with firm downward pressure until they “click” into place. (Slight tap down with rubber mallet may help)



Step 18: Insert Balusters into Top Rail

Slowly lower upper rail and continue inserting balusters for entire rail. Ensure all balusters are firmly seated in the rails. (Slight tap down with rubber mallet may help)



Step 20: Finishing Touches

Install all remaining screws to complete rail installation. If additional stair rails are being installed, continue same process.

Install post cap and 2 pc. skirt.

Installed Cap



Installed Skirt



Step 17: Attach Top Rail

First, insert baluster nearest to the lower post (a), then secure bracket into place (b) using the pivot screw. Do not use locking screw yet.



(a) Insert Baluster

(b) Anchor Bracket
w/ pivot screw

Step 19: Secure Top Rail into Place

With bracket and backer plate in line, secure rail into place with pivot screw.

