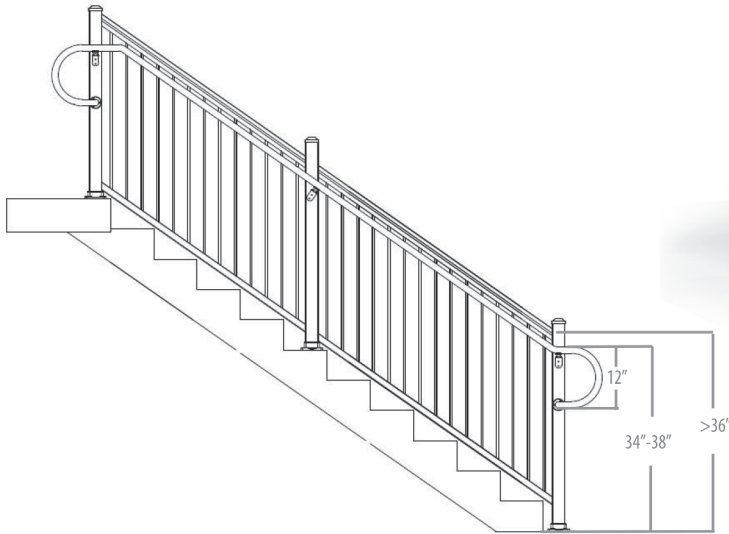


INSTALLATION INSTRUCTIONS

ALUMINUM ADA HANDRAILS

STAIR RAIL CONFIGURATION



RAMP HANDRAIL CONFIGURATION



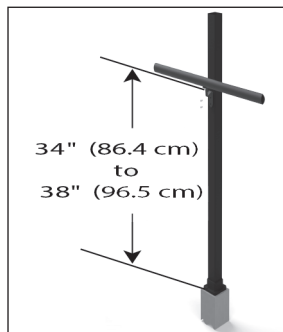
SAFETY NOTES

- » WHEN CUTTING METAL, ALWAYS WEAR PROPER SAFETY EYEWEAR (AS WELL AS ANY OTHER PROPER SAFETY WEAR).
- » REMOVE ALL BURRS FROM CUT ENDS AND APPLY TOUCH UP PAINT PRIOR TO INSTALLATION.
- » USE OF A NON-FERROUS METAL BLADE IS RECOMMENDED.

For questions or other instructions, visit [manufacturer's website](#).

ADA HANDRAIL GUIDELINES

1. ADA Handrails can be installed using various design applications such as those for stairs, ramps, and horizontal applications. Designs include options for straight and 90° wall returns, 90° corners, and adjustable angles. Choose which is best for your needs before installing.
2. The Handrail system top rail should be 34" (86.4 cm) to 38" (96.5 cm) above the surface. However, verifying height requirements with local building code officials before installing is important as codes vary in different areas.
3. Maintain a minimum clearance of 1-1/2" (3.8 cm) between the Handrail and any obstructions above or behind the Handrail.
4. The end loop return at all landings must extend 12" (30.5 cm) past the end of the ramp or stair nose.
5. The slope of the Handrail for the ramp should not exceed 1" (2.5 cm) rise over a 12" (30.5 cm) run.



6. The maximum recommended span between supports is 6' (1.83 m) on center. Thus, placement of posts is critical when installation of railing is being considered.
7. Handrails are designed to fit tightly together. It is critical to line up components in the correct orientation BEFORE connecting them. If it is necessary to shift or move a component, you may have to wrap it with a protective cloth to prevent scratching and use a wide mouth pliers to realign it.
8. At any straight location where internal connector is used, it is CRITICAL to locate these as close to a wall mount as possible.
9. If using metal posts, pre-drill all locations for bracket attachment. (Always use a drill bit slightly SMALLER in diameter than the screw being used for attachment.)
10. All elbow components can be cut down to allow for tighter angles. Cut a maximum of 2" on each side if this is required.

*Refer to the American Disabilities Act for detailed information in regards to ADA Handrail requirements.

INSTALLATION INSTRUCTIONS

ALUMINUM ADA HANDRAILS

INSTALLATION PROCEDURES

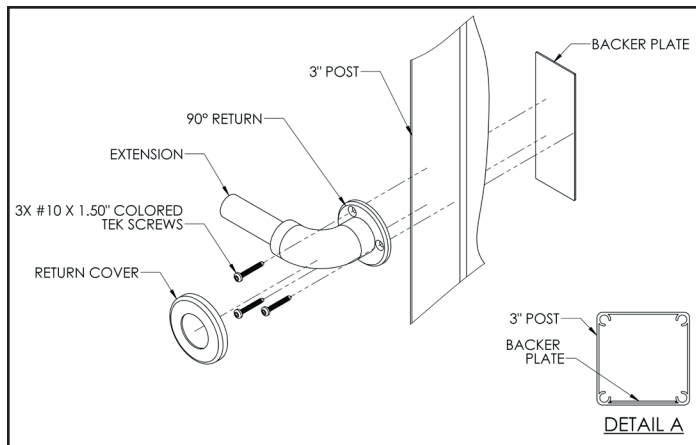
90° WALL RETURN

1. Determine desired location of 90° Wall Return.
2. If required, cut Handrail pipe to proper length based on location of wall return(s) or attachment to other components.
3. Slide Joiner Ring onto Wall Return extension, followed by Handrail pipe.
4. Prior to installing support bracket, insert post backer plate into post, between screw chases, where Wall Return attach screws will be applied. Ensure 90° Wall Return is parallel to angle of railing system. See Detail A for placement of backer plate.

TIP: Tape post backer plate to inside of post so that it does not slide down inside post.

TIP: To help with angled attachment place one screw into bottom hole of bracket and pivot wall mount to proper position.

5. Attach 90° return to 3" post using 3x #10 x 1.50" colored Tek Screws.
6. Slide return cover over 90° Wall Return before continuing installation.



ADA SUPPORT BRACKET

1. Determine desired location of Support Bracket.
2. Prior to installing support bracket, insert post backer plate into post, between screw chases, where Support Bracket attach screws will be applied. Ensure Support Bracket is at proper angle of alignment to angle of railing panels. See Detail A for location of backer plate.

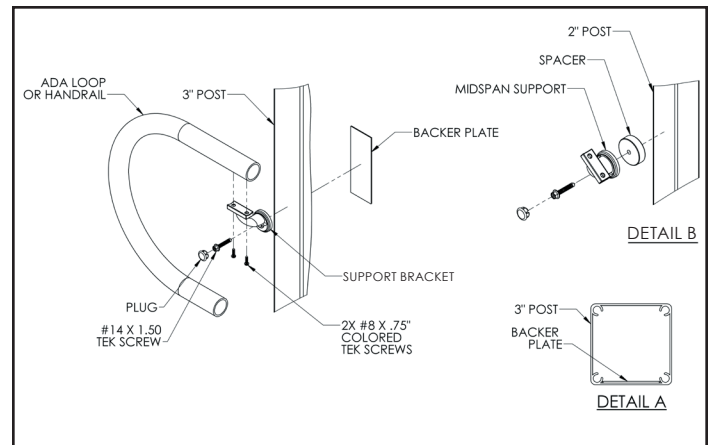
TIP: Tape post backer plate to inside of post so that it does not slide down inside post.

TIP: To help with angled attachment place one screw into bottom hole of bracket and pivot wall mount to proper position.

3. Attach Support Bracket to 3" post using #14 x 1.50" Tek Screw as shown.

Note: if attaching to a 2" post, be sure to use spacer as shown in Detail B.

4. Install plug into Support Bracket.
5. Secure ADA Loop or Handrail to Support Bracket with 2x #8 x 3/4" colored Tek Screws from bottom of Support Bracket.



INSTALLATION INSTRUCTIONS

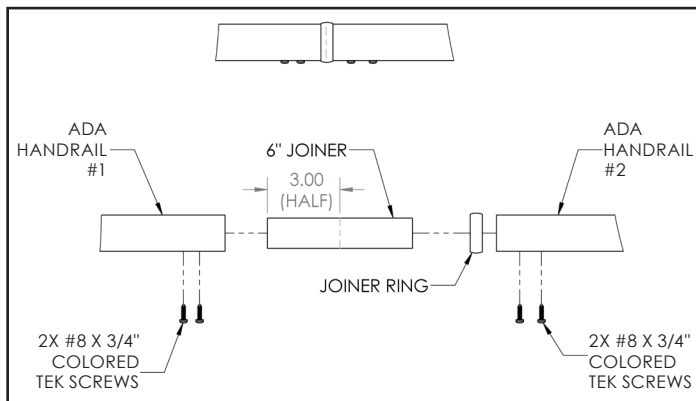
ALUMINUM ADA HANDRAILS

INSTALLATION PROCEDURES

CONNECTING ADA HANDRAILS

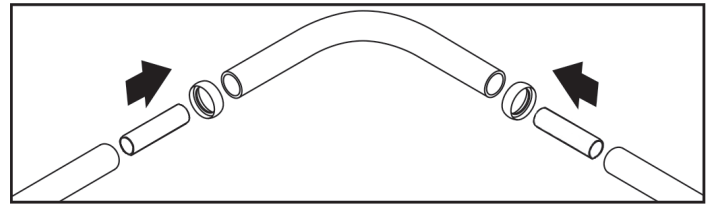
NOTE: When rail to rail straight connections are used for longer spans, posts and Support Brackets must be installed a maximum of 6' on center. In addition, a Support Bracket **MUST** be used at each seam of rail to rail connections slightly off center to allow for the Joiner Ring to fit properly.

1. If required, cut Handrail pipe to proper length based on location of wall return(s) or attachment to other components.
2. Slide Joiner Ring over end of ADA Handrail #2 as shown.
3. Slide half of the 6" Joiner into ADA Handrail #1.
4. Secure 6" Joiner to ADA Handrail #1 by screwing 2x #8 x 3/4" colored Tek Screws into the bottom of ADA Handrail #1 as shown.
5. Slide ADA Handrail #2 over Joiner until the Joiner Ring covers the end of ADA Handrail #1.
6. Secure 6" Joiner to ADA Handrail #2 by screwing 2x #8 x 3/4" colored Tek Screws into the bottom of ADA Handrail #2.
7. Attach Support Bracket to post, then ADA Handrail to Support Bracket per previous instructions.



ELBOWS (90°, 36°, 34°, 31°, 5°)

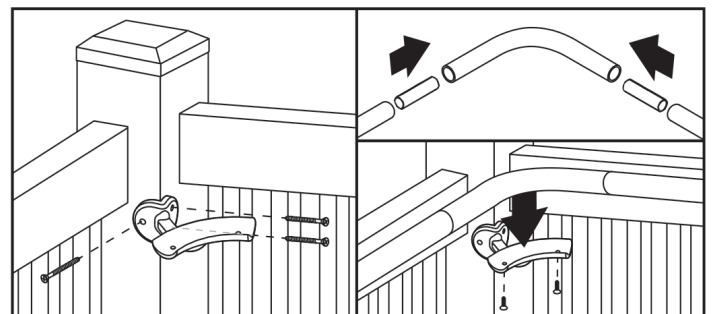
1. If required, cut Handrail pipe to proper length based on location of wall return(s) or attachment to other components.
2. Slide Joiner Ring over end of first ADA Handrail as shown.
3. Slide half of the 6" Joiner into first ADA Handrail.
4. Secure 6" Joiner to first ADA Handrail by screwing 2x #8 x 3/4" colored Tek Screws into the bottom of ADA Handrail.
5. Slide appropriate angled Elbow onto opposite end of Joiner, until the Joiner Ring covers the end of the Elbow.
6. Repeat steps 1-5 for other side of Elbow.
7. Attach Corner Mount or Support Bracket to post, then ADA Handrail to Corner Mount or Support Bracket (see other sections within instructions).



CORNER MOUNT

Corner Mount can **ONLY BE USED ON METAL POSTS** and only for horizontal applications, such as stair landings.

1. Prior to installing Corner Mount, insert two post backer plates into post, between screw chases, where Corner Mount screws will be applied.
2. Install Corner Mount to metal post using screws provided (see parts list).
3. If required, cut Handrail pipe to proper length based on location of wall return(s) or attachment to other components.
4. Slide Joiner Ring over end of first ADA Handrail as shown.
5. Slide half of the 6" Joiner into first ADA Handrail.
6. Secure 6" Joiner to first ADA Handrail by screwing 2x #8 x 3/4" colored Tek Screws into the bottom of ADA Handrail.
7. Slide appropriate angled Elbow onto opposite end of Joiner, until the Joiner Ring covers the end of the Elbow.
8. Attache Elbow to Corner Mount using specific hardware provided (see parts list).



INSTALLATION INSTRUCTIONS

ALUMINUM ADA HANDRAILS

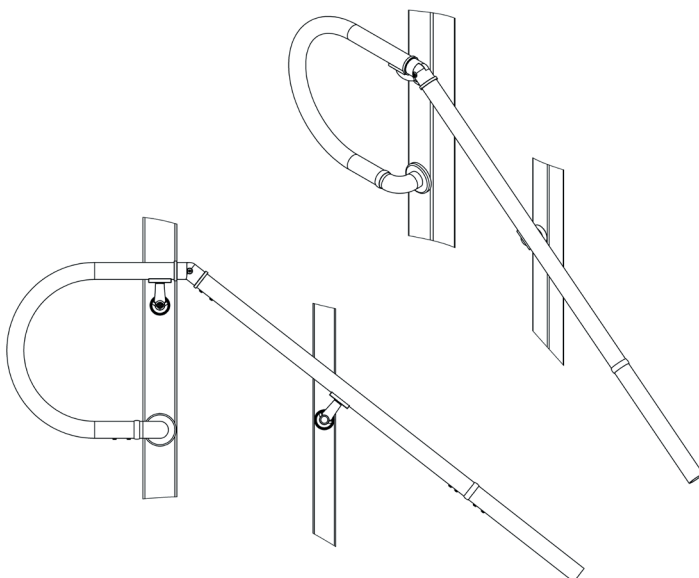
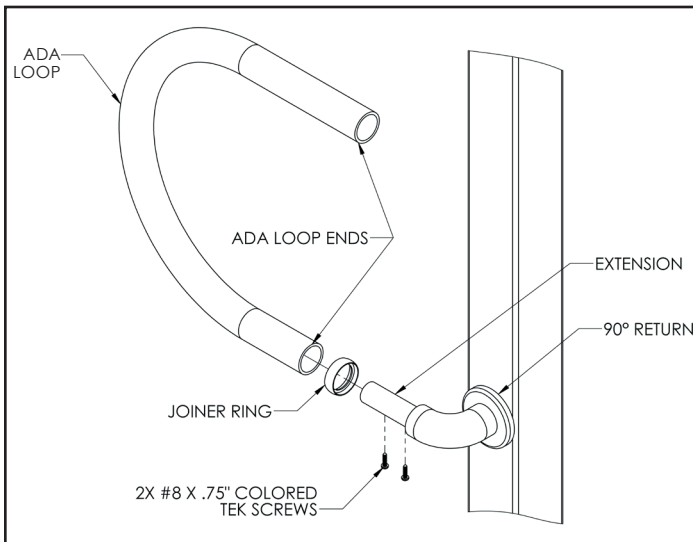
INSTALLATION PROCEDURES

RETURN LOOP WITH 90° RETURN

1. Cut ADA Loop ends as necessary to ensure that Support Bracket will align properly with 3" post after installation.

NOTE: ENSURE 90° Return is at proper angle of alignment to post. 90° Return is designed to have tight fit into ADA Handrail, thus location of attachment is critical.

2. Slide Joiner Ring over end of ADA Loop as shown.
3. Slide ADA Loop onto extension until Joiner Ring covers end of 90° Return.
4. Secure ADA Loop to 90° Return by screwing 2x #8 x 3/4" colored Tek Screws into bottom of ADA Loop.
5. Attach 90° Return to post per previous instructions.



RETURN LOOP WITH ADJUSTABLE ELBOW

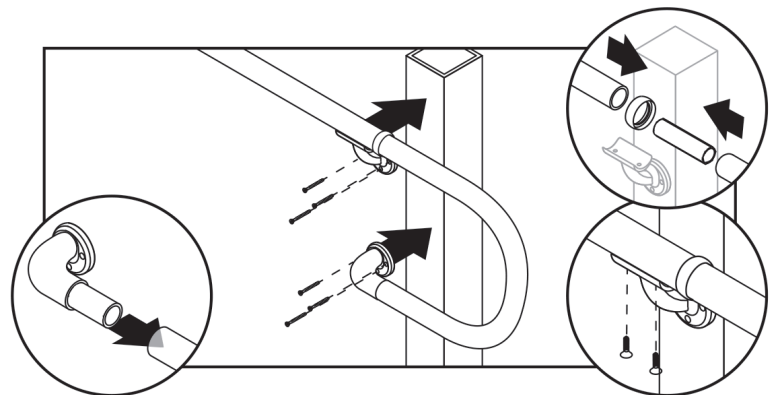
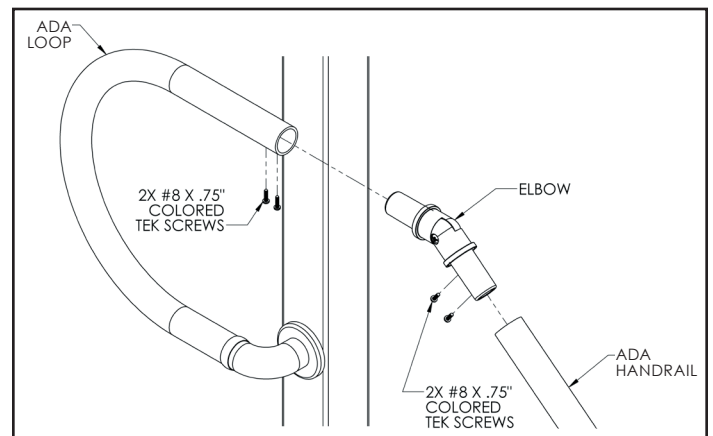
1. If required, cut ADA Handrail pipe to proper length based on location of wall return(s) or attachment to other components.
2. Slide Adjustable Elbow into ADA Loop as shown.

NOTE: Reference Support Bracket installation section.

3. Secure Elbow to ADA Loop by screwing 2x #8 x 3/4" colored Tek Screws into bottom of ADA Loop.

NOTE: Ensure Elbow is in line with ADA Handrail before attaching.

4. Slide ADA Handrail into Elbow and secure by screwing 2x #8 x 3/4" colored Tek Screws into bottom of ADA Handrail.
5. Attach Support Bracket to post, then ADA Handrail to Support Bracket per previous instructions.



ALUMINUM ADA HANDRAIL KITS AND PARTS



ADA PIPE RAIL AND 90° RETURN KIT

Kit includes:
 1 - 94in Pipe
 2 - 90° Wall Returns and Covers
 2 - 3in Post Backer Plates
 2 - Joiner Rings
 6 - #10 x 1.5in Self-tapping Screws
 4 - #8 x 3/4in Color Matched Self-tapping Screws
 Installation Instructions

P/N: AD901102
 B=Black, W=White, Z=Bronze



ADA PIPE RAIL EXTENSION KIT

Kit includes:
 1 - 94in Pipe
 2 - 6in Joiners
 2 - Joiner Rings
 2 - Rail Support Brackets with adapters and caps
 2 - 3in Post Backer Plates
 6 - #10 x 1-1/2in Self-tapping Screws
 8 - #8 x 3/4in Color Matched Self-tapping Screws
 Installation Instructions

P/N: AD901103
 B=Black, W=White, Z=Bronze



ADA 90° RETURN KIT

Required when Pipe Rail is cut into two pieces. Does not include 94in pipe rail.

Kit includes:
 2 - 90° Wall Returns and Covers
 2 - 3in Post Backer Plates
 2 - Joiner Rings
 6 - #10 x 1-1/2in Self-tapping Screws
 4 - #8 x 3/4in Color Matched Self-tapping Screws
 Installation Instructions

P/N: AD901101
 B=Black, W=White, Z=Bronze



ADA HANDICAP LOOP KIT

Kit includes:
 2 - Handicap Loops
 2 - Rail Support Brackets with adapters and caps
 2 - Adjustable Elbows
 2 - 3in Post Backer Plates
 12 - #8 x 3/4in Self-tapping Screws
 6 - #10 x 1-1/2in Self-tapping Screws
 Installation Instructions

P/N: AD901104
 B=Black, W=White, Z=Bronze



ADA 1.5in x 94in Pipe Rail
 P/N AD903194



90° Wall Return
 P/N AD905118



ADA Support Bracket
 Use on 2in and 3in Posts.
 P/N AD908102



Inside Corner Mount
 P/N AD908599



ADA 6in Pipe Joiner
 P/N AD905178



ADA Handicap Loop
 P/N AD905168



Straight End Wall Mount
 P/N AD905128



ADA 90° Elbow
 P/N AD905158



ADA Adjustable Elbow
 P/N AD958204
 Order 4X #8x3/4in screws for each elbow (sold separately).



ADA 1.5in Joiner Ring
 P/N AD905188



ADA End Cap
 Available in black only.
 P/N AD905198



3in Post Backer Plate
 P/N AD905248



Rail to Bracket Attach Screws
 #8 x 3/4in Self-tapping Screw. 20-pack. P/N ST091820
 B=Black, W=White, Z=Bronze



Bracket to Metal Post Attach Screws
 #10 x 1-1/2in Self-tapping Screw. 20-pack. P/N ST091020



Support Bracket Attach Screws
 #14 x 1-1/2in Self-tapping Screw. 20-pack. P/N ST099520