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. Refer to railing profile page for a more detailed parts list.

2. The handrail system top rail should be 34” (864 mm) to 38” (965 mm) 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” (38 mm) between the handrail and any obstructions above or behind the handrail.

4. The end loop return at all landings must extend 12” (305 mm) past the end of the ramp or stair application.*

5. The slope of the handrail for the ramp should not exceed 1” (25 mm) rise over a 12” (305 mm) 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. Rails are designed to have a tight fit into other connecting components. It is critical to line these up in the correct orientation BEFORE connecting parts together. If it is necessary to shift or move a component on a rail, wrap with a protective cloth to prevent scratching as you may need to use a wide-mouth wrench to correct this.

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” (51 mm) on each side if this is required.

*Refer to the American Disabilities Act for detailed information with regard to handrail requirements.

SAFETY NOTES

» When cutting metal, ALWAYS wear proper safety eyewear (as well as any other proper safety wear).
» Remove all burrs from cut ends before installation.
» Use of a non-ferrous metal blade is recommended.
TREX® ADA RAILING
Installation Instructions

DESCRIPTION | COLOR
---|---
ADA Handrail 1.375” (34.9mm) Diameter | BK, BZ, WT
ADA Wall Return (screws included) | BK, BZ, WT
ADA Wall Mount (screws included) | BK, BZ, WT
ADA Corner Mount (screws included) | BK, BZ, WT
ADA Internal Connector | BK, BZ, WT
ADA Handrail Return | BK, BZ, WT
ADA Inline Bracket (screws included) | BK, BZ, WT

COLORS:  BK Charcoal Black  BZ Bronze  WT White

DESCRIPTION | COLOR
---|---
ADA 90° Elbow* | BK, BZ, WT
ADA 36°, 34°, and 31° Elbows | BK, BZ, WT
ADA 5° Elbow | BK, BZ, WT
ADA Collar | BK, BZ, WT
ADA End Cap | BK, BZ, WT

HARDWARE

RAIL TO BRACKET ATTACHMENT
Short Metal Screw (#10 x 5/8” [16 mm])

BRACKET TO METAL POST ATTACHMENT
Long Metal Screw (#12 x 1-1/4” [32 mm])

BRACKET TO WOOD POST/POST SLEEVE ATTACHMENT
Wood Screw (#10 x 2” [51 mm])

NOTE: If attaching brackets to 6x6 posts/post sleeves, use #10 x 2-1/2” (64 mm) wood screws (not included).

NOTE: Construction methods are always improving. Please ensure you have the most up-to-date installation instructions by visiting: trex.com

Have Questions?
1-800-BUY-TREX
90° Wall Return

1. If required, cut railing to proper length based on location of wall return(s) or attachment to other components.
2. If desired, collar ring can be used to hide seam of wall return to rail. Slide over rail BEFORE inserting rail into wall return.
3. Slide rail onto wall return until it is fully inserted and seam is hidden under collar (if collar is being used).
4. Attach wall return to post using specific hardware provided (see chart on previous page), ENSURING wall return is at proper angle of alignment to post. (Wall return is designed to have tight fit into rail, thus location of attachment is critical.) If using metal posts, pre-drill post prior to attachment of wall mount.

Wall Mount

NOTE: Refer to Rail-to-Rail Connections section if connecting two or more rails together to make continuous straight run.

1. If required, cut railing to proper length based on location of wall mount(s) or attachment to other components.
2. Attach wall mount to post using specific hardware provided (see chart on previous page), ENSURING wall mount is at proper angle of alignment to angle of rail. If using metal posts, pre-drill post prior to attachment of wall mount.
3. Attach rail to wall mount using specific hardware provided (see chart on previous page).
4. Attach end cap to railing.

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

Rail-to-Rail Connections/Internal Connector

NOTE: When rail-to-rail straight connections are used for longer spans, posts must be installed 6’ OC max. In addition, a wall mount MUST be used at each seam of rail-to-rail connections as close to center of wall mount as possible. If collar is used, this can be offset slightly to allow for the collar to fit.

1. If required, cut railing to proper length.
2. If desired, collar ring can be used to hide seam between rails. Slide ring over rail BEFORE inserting rails into internal connector.
3. Slide internal connector into rail end until metal spacer screw is touching either end of rail or collar, if used.
4. Slide second rail over opposite end of internal connector, until it is touching metal spacer screw.
5. Remove metal spacer screw using #2 square-head screwdriver.
6. Push second rail further over internal connector until it fits in the collar (if used) or fits tightly against rail.
7. Attach wall mount to post per previous instructions.
8. Attach rail to wall mount per previous instructions.
9. Use end caps where required.
TREX® ADA RAILING
Installation Instructions

HOW TO INSTALL TREX ALUMINUM ADA COMPLIANT HANDRAIL/CONTINUED

Elbows (90°, 36°, 34°, 31°, 5°)

1. If required, cut railing to proper length based on location of elbows and other components being used.
2. If desired, collar ring can be used to hide seam of elbow to rail. Slide over rail BEFORE inserting rail into elbow.
3. Slide internal connector into rail end until metal spacer screw is touching either end of rail or the collar, if this was used.
4. Slide appropriate angled elbow onto opposite end of internal connector, until it is touching metal spacer screw.
5. Remove metal spacer screw using #2 square head screwdriver.
6. Push elbow further over internal connector until it fits in the collar (if used) or fits tightly against rail.
7. Attach wall return to post per previous instructions.
8. Attach rail to wall mount per previous instructions.

Handrail Return 180°

1. If required, cut railing to proper length based on location of elbow used as well and other components being used.
2. If desired, collar ring can be used to hide seam of handrail return to rail or elbow being used. Slide this over rail BEFORE inserting rail into other component.
3. Ensure that all components are aligned to both wall mount on post as well as location of elbow on rail BEFORE attachment.
4. Slide internal connector into appropriate elbow being until metal spacer screw is touching either end of elbow or the collar, if this was used.
5. Attach wall return to lower end of handrail return (longer side), ENSURING wall return is at proper angle of alignment to post. (Wall return is designed to have tight fit into rail, thus location of attachment is critical.)
6. Slide opposite end of handrail return onto internal connector, until it is touching metal spacer screw.
7. Remove metal spacer screw using #2 square-head screwdriver.
8. Push handrail return further over internal connector until it fits in the collar (if used) or fits tightly against elbow.
9. Attach wall return to post per previous instructions.
10. Attach rail to wall mount per previous instructions.
11. Use end caps where required.

Corner Mount

1. Pre-drill metal post and install corner post to metal post using specific hardware provided (see chart on previous page).
2. If desired, collar ring can be used to hide seam of elbow to rail. Slide this over rail BEFORE inserting rail into elbow.
3. Slide internal connector into rail end until metal spacer screw is touching either end of rail or the collar, if this was used.
4. Slide appropriate angled elbow onto opposite end of internal connector, until this is touching metal spacer screw.
5. Remove metal spacer screw using #2 square-head screwdriver.
6. Push elbow further over internal connector until this fits in the collar (if used) or fits tightly against rail.
7. Install elbow to corner mount using specific hardware provided.

NOTE: Ramp application shown here. (Appropriate angle elbow also required for stair applications.)