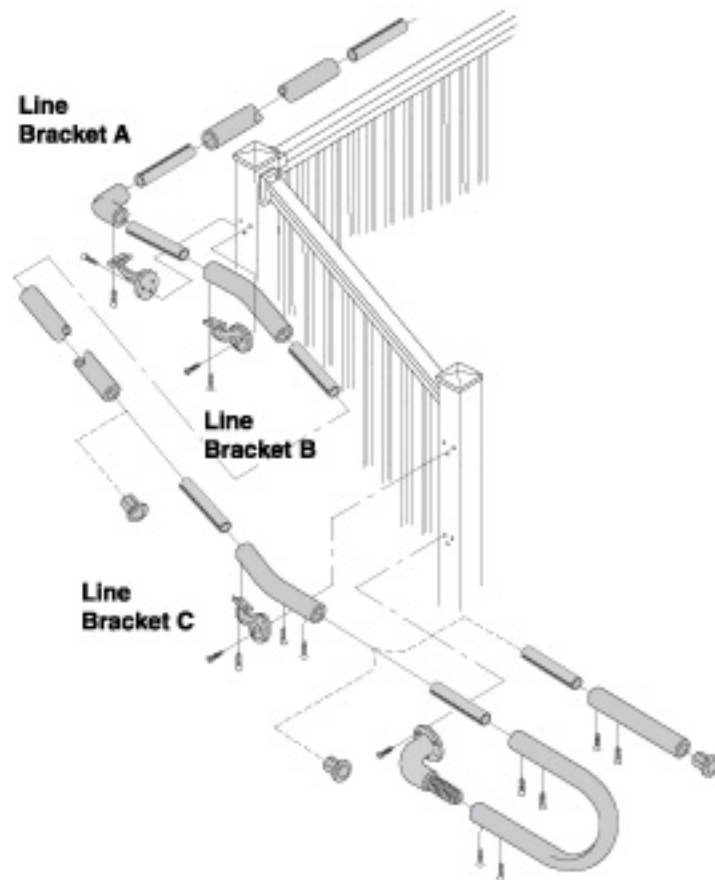


CORNER "C" - Outside Corner



STEP 1

Confirm topside height of Handrail. Install Line Bracket "A" per instructions. Repeat on adjacent face of corner post to install Line Bracket "B".

STEP 2

To determine the length of Handrail from Corner "B" to Corner "C", place a rail section onto Line Bracket "B" so that it extends past Line Bracket "A". Measure from the end of the last section installed to the outer edge of the rail section placed on Line Bracket "B". Subtract 3-1/2" to allow for the Outside Corner piece and cut Handrail to length. Install Handrail section.

STEP 3

Insert, pre-drill and secure Outside Corner to end of last section installed.

STEP 4

To install the next section, begin by installing the next bracket (see Line Bracket "C"), ensuring height requirement relative to stairs or ramp. Based on the slope of the stair or ramp, select the appropriate Angled Elbow (5°, 32°, 36°) and connect without securing to the Outside Corner. Connect to the Angled Elbow a straight Handrail section long enough to extend beyond the next Line Bracket. Do not secure. Rotate the Angled Elbow to align Handrail with slope of stair or ramp and rest it on the Line Bracket "C". Pre-drill and secure the Angled Elbow to the Outside Corner and to Line Bracket "B".

STEP 5

Remove straight Handrail section. To determine the finished length of the Handrail section, the next Angled Elbow must be held in position. Place the next Angled Elbow on the Line Bracket "C" (at the bottom of the stair or ramp) and rotate to align with slope of stair or ramp. Measure the distance between the top and bottom Angled Elbows and cut Handrail section to length. Connect, pre-drill and secure the Handrail section to the Angled Elbows and secure the bottom Angled Elbow to Line Bracket "C". At this point, an End Cap may be used to finish the Continuous Handrail.*

*Note: Current ADA standards require the "P" Loop to extend a minimum of 12" beyond the edge of a ramp or first riser of stairs. Check local Building Codes for details.

STEP 6a



STEP 6b



STEP 6 - "P" Loop Installation

Align the "P" Loop parallel with the Angled Elbow and adjust laterally to achieve the desired extension (Confirm ADA requirements). Mark the "P" Loop for cutting and confirm a minimum 3" straight section to accept the connector. If necessary, the Angled Elbow must be cut. Cut "P" Loop (and Angled Elbow, if necessary) and connect to Angled Elbow. Do not secure.

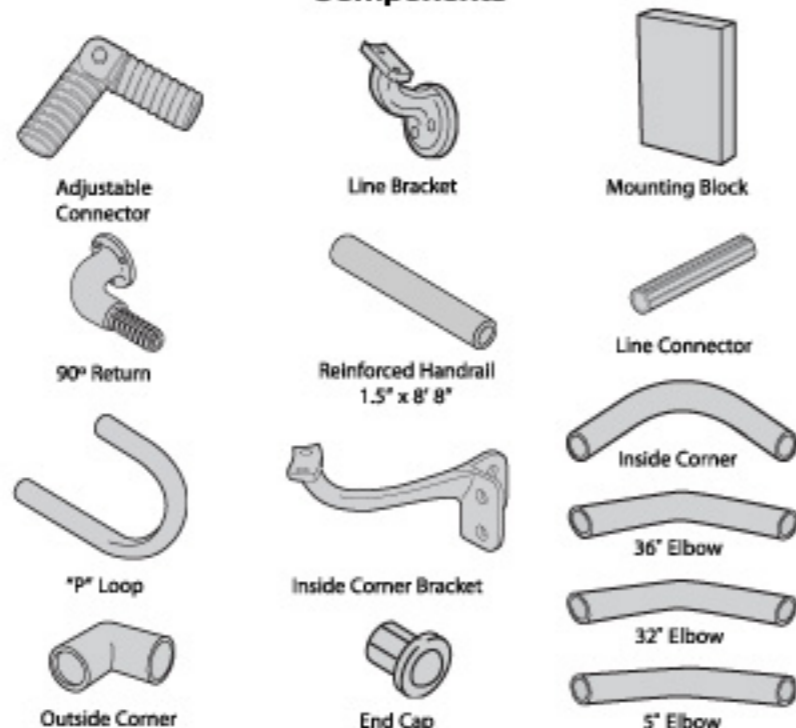
STEP 7

A 90° Return is required to connect the bottom of the "P" Loop to the post. With the "P" Loop in position, center the 90° Return on the post and align it vertically with the "P" Loop. Mark the post, drill 7/32" pilot holes and install the 90° Return using #14 x 1-1/2" screws (supplied).

STEP 8

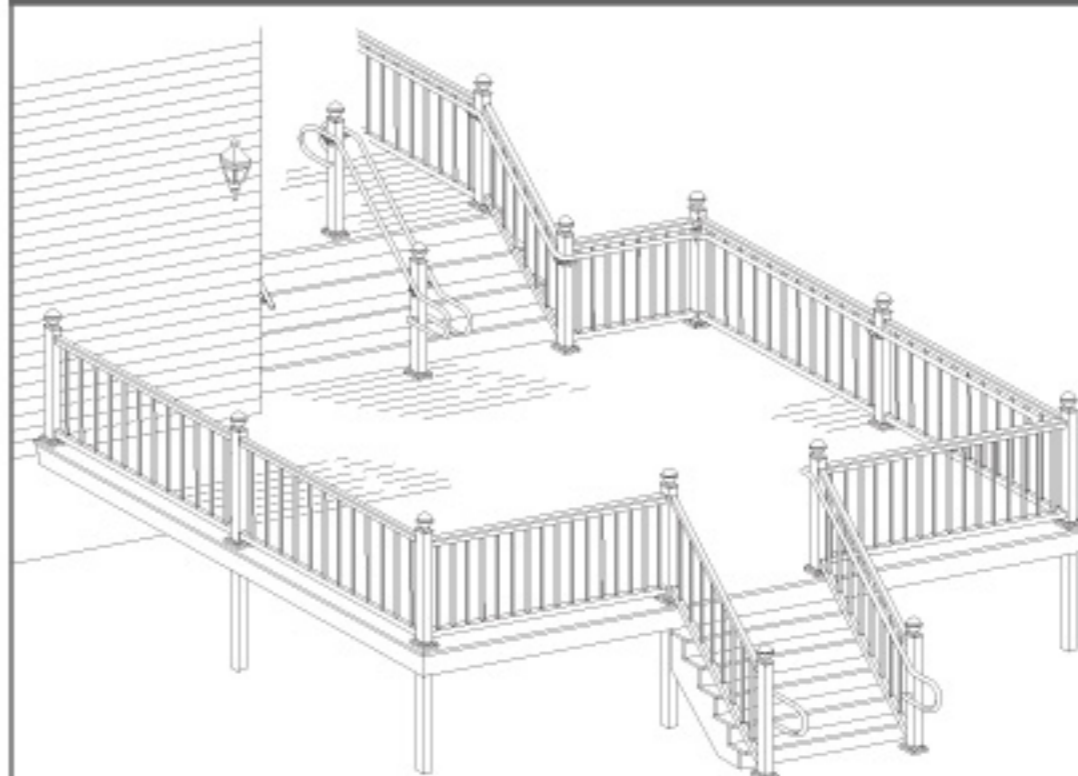
Connect and secure the "P" Loop to the Angled Elbow and the 90° Return by inserting the aluminum connectors, pre-drilling 5/32" pilot holes and fastening with #8 x 1" screws (supplied).

Continuous Handrail Components



INSTALLATION GUIDE

CONTINUOUS HANDRAIL



*Tools Required

- Compound Miter Saw with 'triple cut' or metal blade
- Hand Drill
- High speed steel drill bits: 5/32", 7/32"
- Driver bits: 4" Phillips #3, Square #2
- Tape Measure
- Level
- Carpenter's Square
- Rubber mallet
- Pencil
- Safety Glasses
- Work Gloves

Prior to beginning:

- Check with local building authorities for code compliance requirements
- Sketch a layout of your handrail system project
- List all the components
- Ensure you have all the necessary tools*

To begin:

Check local building code for Secondary or Continuous Handrail requirements.

- Determine height of the Handrail (top side). Note: Most building codes require handrail to be 34" – 38" above the floor or deck surface. Some codes further require handrail height to be 2" – 4" below the top of an existing guardrail. Check local building codes before beginning installation.
- Verify Handrail height at stairs and adjust as required for code compliance.
- Choose a starting point. Note: Installations must start with an Inside Corner, if one exists in the layout. Where no Inside Corner exists, start at the top of a stair or ramp.
- Installations proceed by installing Handrail sections from one bracket to the next.

Installing Brackets

Inside corner brackets:

- Subtract 4-1/4" from pre-determined Handrail height and mark height on post.
- Position bracket with bottom left screw hole at marked height, mark and pre-drill all pilot holes with 7/32" bit.
- Install bracket using #14 x 1-1/2" screws (supplied).

Line Brackets:

- Subtract 4-9/16" from pre-determined Handrail height and mark height on post.
- Position bracket with bottom screw hole at marked height, mark and pre-drill all pilot holes with 7/32" bit.
- Install bracket using #14 x 1-1/2" screws (supplied).



CORNER "A" - Inside Corner

STEP 1

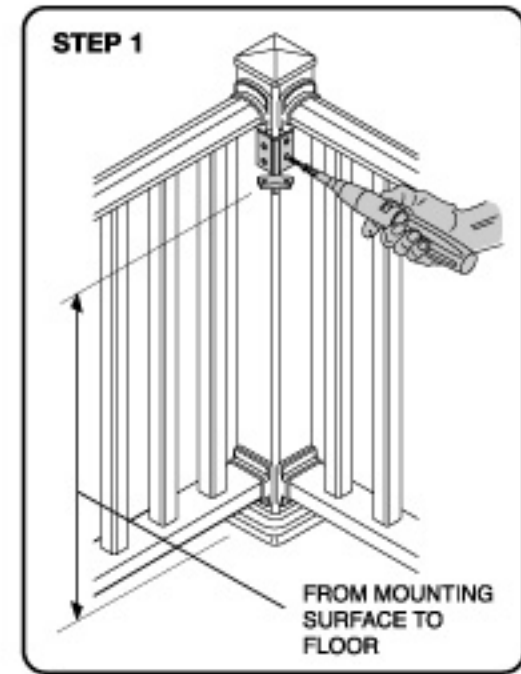
Determine topside height of Continuous Handrail. (34" - 38")
Install Inside Corner Bracket per instructions. (see pg 1)

STEP 2

Center and level Inside Corner on Bracket. Gaps on both sides between Handrail and existing guardrail should be approximately 4".

STEP 3

Mark Inside Corner and drill 7/32" pilot holes. Install using #14 x 1-1/2" screws (supplied).



CORNER "B" - Inside Corner

STEP 1

Confirm topside height of Continuous Handrail.
Install Inside Corner Bracket per instructions.

STEP 2

Center and level Inside Corner on Bracket. Gaps on both sides between Handrail and existing guardrail should be approximately 4".

Install Handrail Section

With Inside Corner "B" held in place, measure distance from Inside Corner "A" to "B"

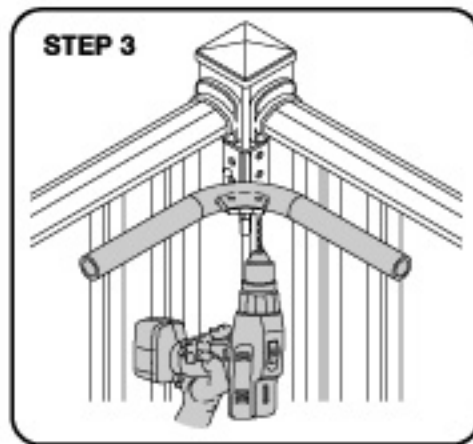
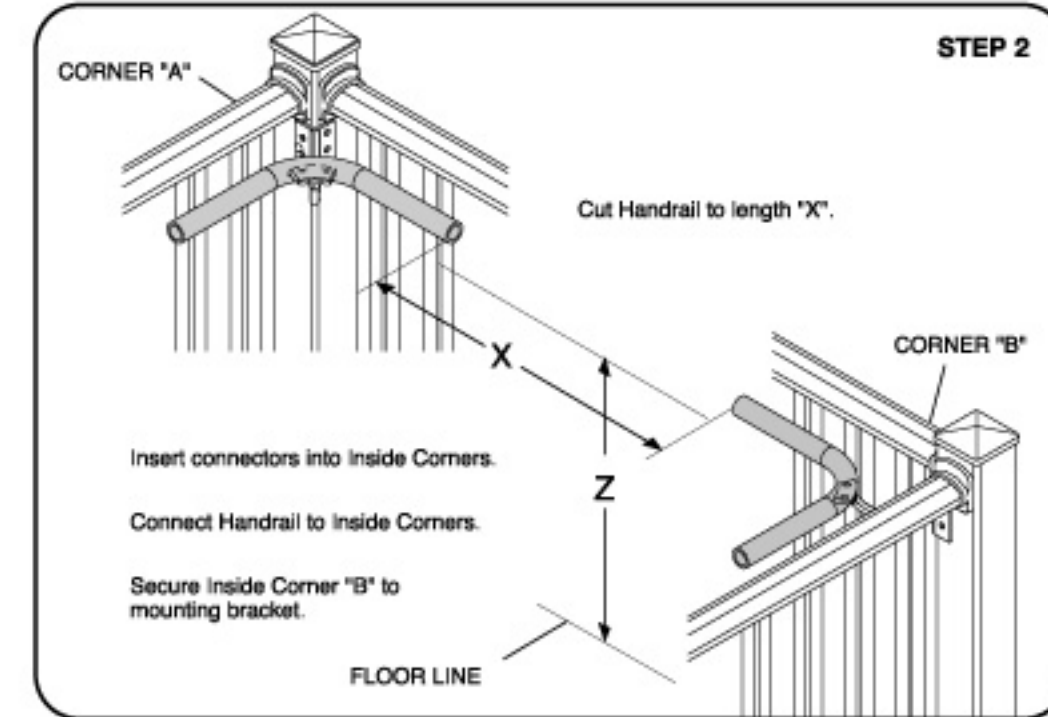
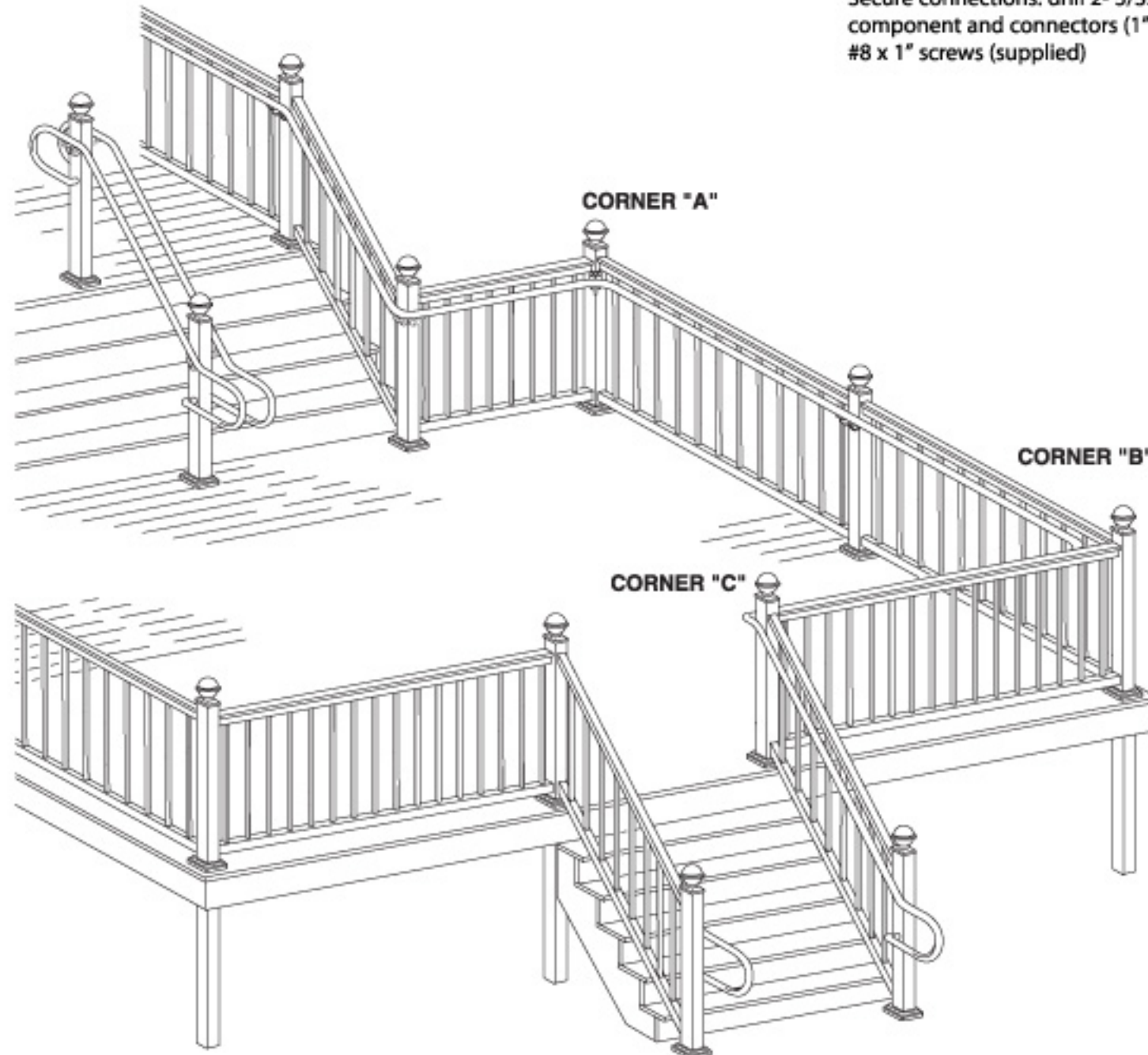
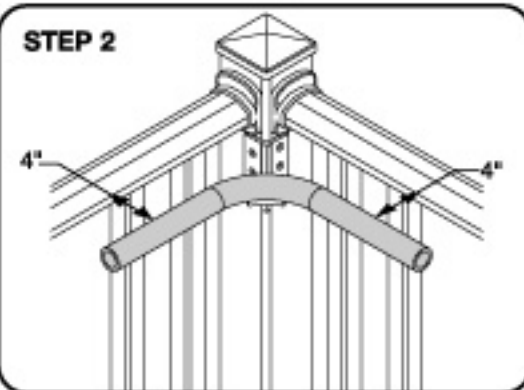
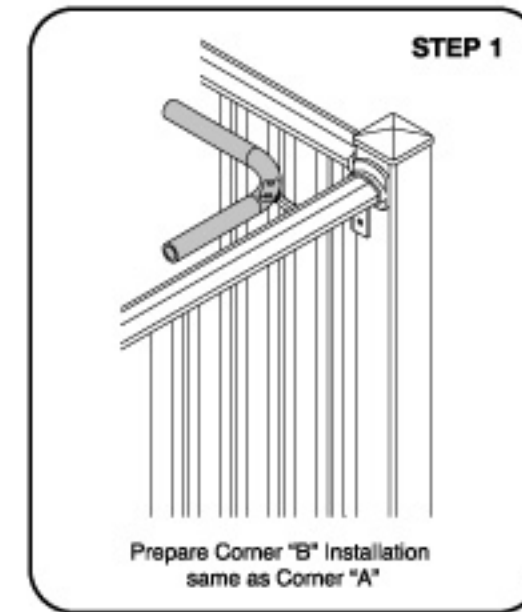
Cut Handrail to length and insert Line Connectors (see INSERTING CONNECTORS)

Connect Inside Corner "B" to Handrail section

Connect Handrail section to Inside Corner "A"

Fasten Inside Corner "B" to bracket

Secure connections: drill 2 - 5/32" pilot holes through underside of component and connectors (1" and 2" from ends) and fasten with #8 x 1" screws (supplied)



INSERTING CONNECTORS

Insert Line Connectors 3" into the component using vice grips or pump pliers.
Into the underside, drill 2 - 5/32" pilot holes through component and connector at 1" and 2" from ends.
Secure with 2 - #8 x 1" screws.
Ensure screw heads are smooth.

