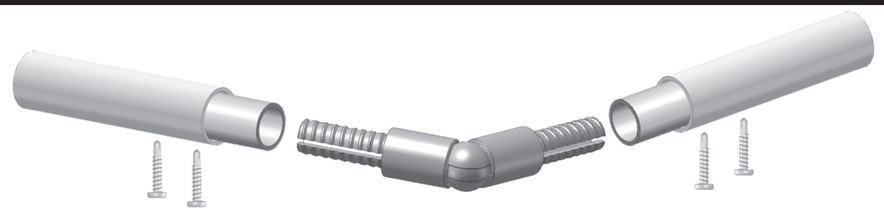
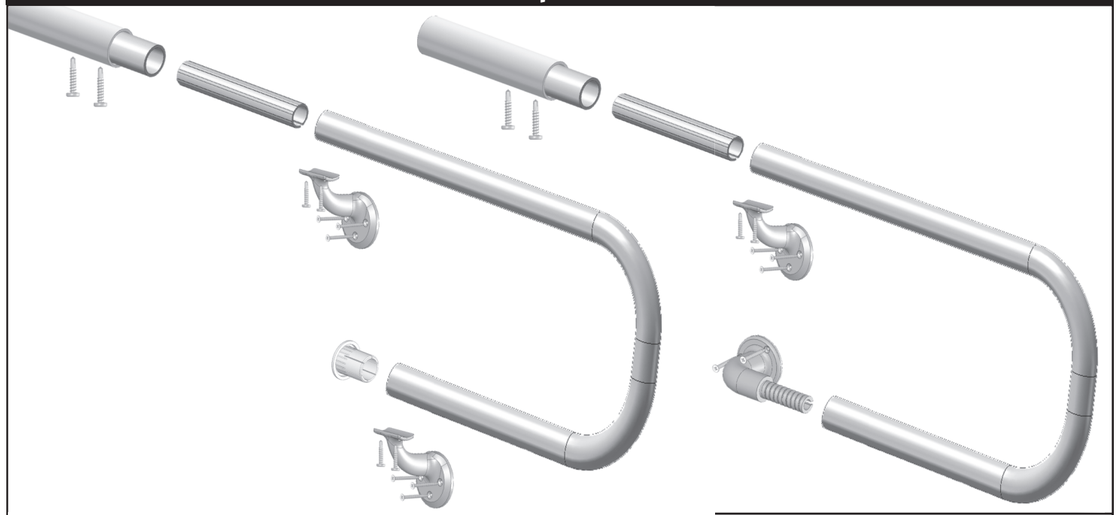
External Swivel - 0 to 60°



External Swivel Used for Step Degree Angles

a) Adjust external swivel to desired angle and install set screw.
b) Cut ADA tube with aluminum to desired length.
c) Insert external swivel bracket into the ADA tube.
d) Pre drill aluminum reinforced ADA tube and bracket with drill bit and install self tapping screw provided.

P-Loop Return



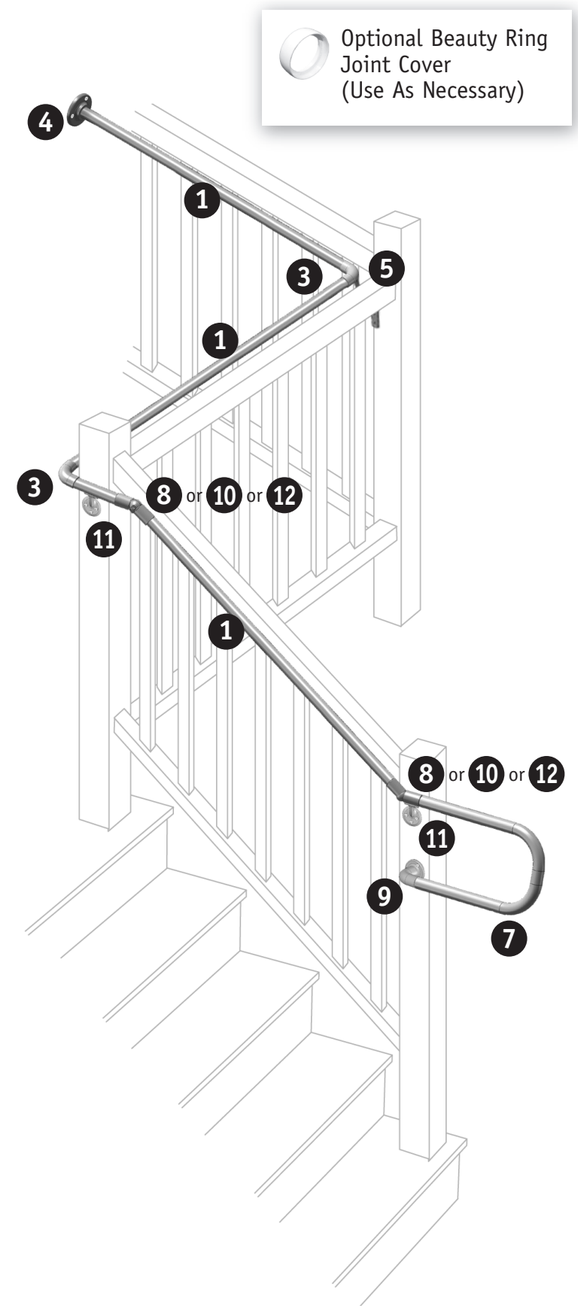
P-Loop Return is Used at the Bottom of Steps or Handicap Ramps

a) Attach top bracket at desired location using appropriate connectors.
b) Cut P-Loop to desired length.
c) Connect P-Loop to ADA tube using the appropriate joiners (Straight, Adjustable joiners or External swivel).
d) Set P-Loop on top of bracket and pre drill with drill bit and install self tapping screw provided.
e) Install desired lower bracket.

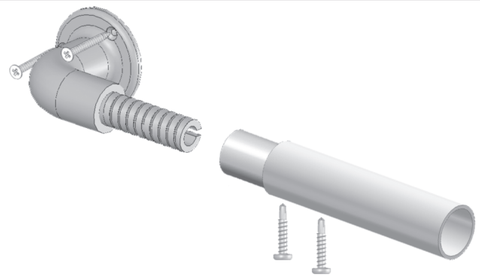
Typical ADA Railing Installation

Components:

1. ADA Handrail w/Aluminum Insert
2. 6" Straight Joiner
3. 4" Inside/Outside Corner
4. Straight End Wall Bracket
5. Inside Corner Bracket
6. End Cap
7. P-Loop Return
8. 6" Adjustable Joiner
9. 90° Quick Return Bracket
10. External Swivel
11. Stand Off Bracket
12. 5°, 32°, or 38° Radius Bend



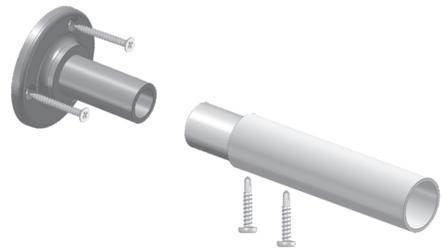
90° Quick Return Bracket



90 Degree Quick Return Bracket Used for Both Post and Wall Returns

a) Cut ADA tube with aluminum to desired length.
b) Insert 90 degree quick return bracket into the ADA tube.
c) Install counter sunk screws provided through the bracket.
d) Pre-drill aluminum reinforced tube and bracket with drill bit and install self tapping screw provided.

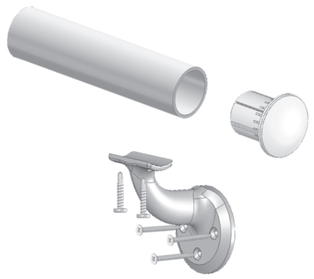
Straight End Wall Bracket



Straight End Wall Bracket Used for Straight Wall Connections

a) Cut ADA tube with aluminum to desired length.
b) Insert straight end bracket into the ADA tube.
c) Install counter sunk screws provided through the bracket.
d) Pre-drill aluminum reinforced tube and bracket with drill bit and install self tapping screw provided.

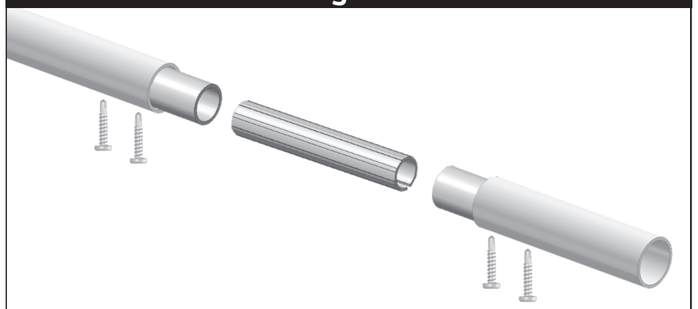
Stand Off Bracket



Stand Off Bracket Used for Rail Applications on Walls or Posts

a) Install counter sunk screws provided through the bracket into the mounting surface.
b) Place rail at appropriate location on the bracket.
c) Pre-drill aluminum reinforced ADA tube with drill bit and install self tapping screw provided.
d) Place end cap on rail.

6" Straight Joiner



Internal 6" Straight Joiner Used to Connect 2 ADA Tubes or 4" Inside/Outside Corner

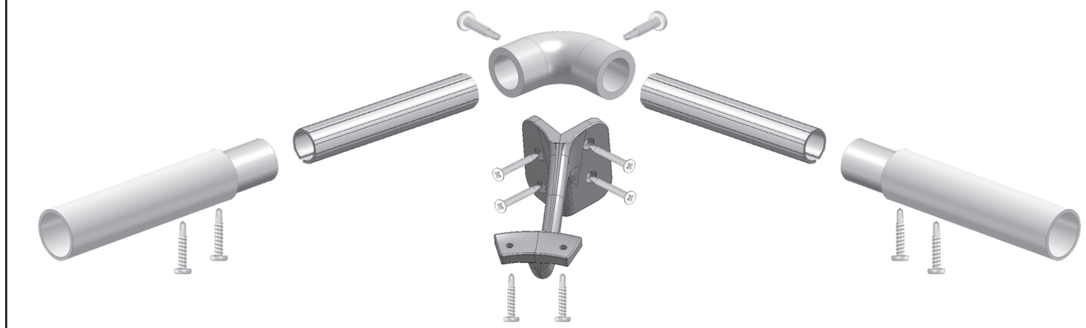
a) Cut ADA tube with aluminum to desired length.
b) Pre drill aluminum reinforced ADA tube and joiner with drill bit and install self tapping screw provided.

6" Adjustable Joiner - 0 to 90°

Internal 6" Adjustable Joiner Used for Degree Angles

a) Miter cut ADA tube with aluminum to desired length.
b) Install adjustable joiner inside both ends of the tube.
b) Pre drill ADA tube and adjustable joiner with drill bit and install self tapping screw provided.

4" Inside/Outside Corner with Inside Corner Bracket



4" Corner Can Be Used for Both Inside and Outside Corners

a) Install 2 straight joiners into the 4" inside/outside corner.
b) Pre drill 4" inside/outside corner and straight joiner with drill bit and install self tapping screw provided.
c) Cut ADA tube with aluminum to desired length.
d) Pre drill aluminum reinforced ADA tube and joiner with drill bit and install self tapping screw provided.

4" Inside/Outside Corner Bracket

a) Install counter sunk screws provided through the bracket into the mounting surface (corner of post).
b) Place 4" inside/outside corner at appropriate location on the bracket.
c) Pre drill 4" inside/outside corner with drill bit and install self tapping screw provided.