



Since 1966

Tubular Specialties Manufacturing, Inc.

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Series 600

Aluminum Component Railing System

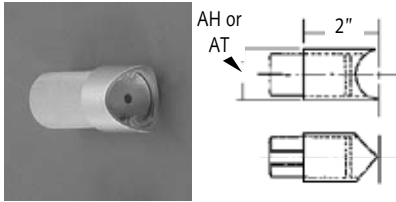
Technical Data

Revised October 2008

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90° Tee Former

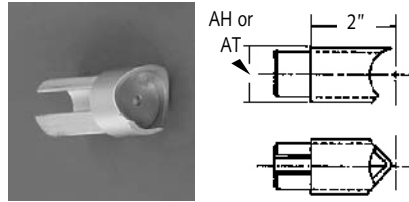
Requires AU-693 and AU-695 for tee connection or AU-696 for cross assembly.



Model #	Schedule 40 Pipe
<input type="checkbox"/> AH-610	1 1/4"
<input type="checkbox"/> AT-610	1 1/2"

90° Corner Tee Former

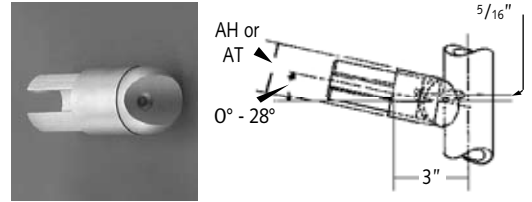
Requires AU-693 and AU-695 for tee connection or AU-696 for cross assembly.



Model #	Schedule 40 Pipe
<input type="checkbox"/> AH-612	1 1/4"
<input type="checkbox"/> AT-612	1 1/2"

Adjustable Tee Former

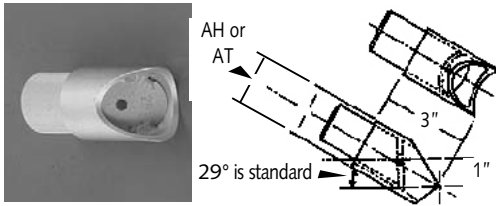
Requires AU-693 and AU-695 for tee connection or AU-696 for cross assembly.



Model #	Schedule 40 Pipe
<input type="checkbox"/> AH-614	1 1/4"
<input type="checkbox"/> AT-614	1 1/2"

Angle Tee Former

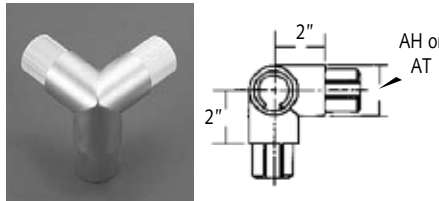
Requires AU-693 and AU-695 for tee connection or AU-696 for cross assembly.



Model #	Schedule 40 Pipe
<input type="checkbox"/> AH-616	1 1/4"
<input type="checkbox"/> AT-616	1 1/2"

Elbow Side Outlet

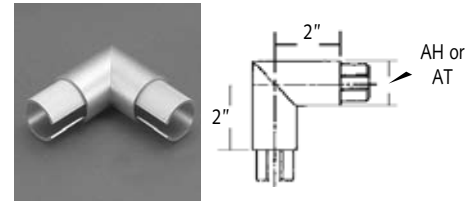
Requires epoxy for use with built-in dowel splice connections.



Model #	Schedule 40 Pipe
<input type="checkbox"/> AH-620	1 1/4"
<input type="checkbox"/> AT-620	1 1/2"

Elbow Mitered

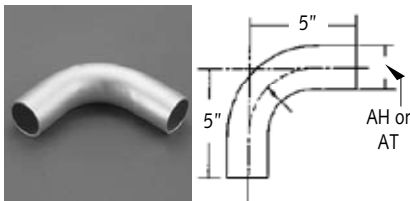
Requires epoxy for use with built-in dowel splice connections.



Model #	Schedule 40 Pipe
<input type="checkbox"/> AH-622	1 1/4"
<input type="checkbox"/> AT-622	1 1/2"

Elbow Rounded

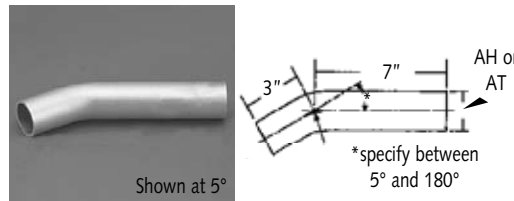
Requires dowels and epoxy for each splice connection.



Model #	Schedule 40 Pipe
<input type="checkbox"/> AH-624	1 1/4"
<input type="checkbox"/> AT-624	1 1/2"

Transition Elbow

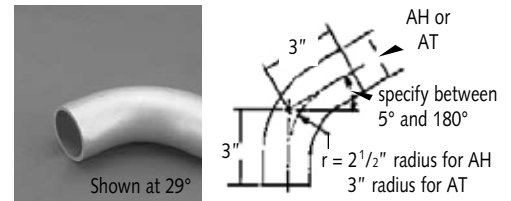
Specify angle desired between 5° and 180°. Requires dowels and epoxy for each splice connection.



Model #	Schedule 40 Pipe
<input type="checkbox"/> AH-630	1 1/4"
<input type="checkbox"/> AT-630	1 1/2"

Lower Post Elbow

Specify angle desired between 5° and 180°. Requires dowels and epoxy for each splice connection.



Model #	Schedule 40 Pipe
<input type="checkbox"/> AH-632	1 1/4"
<input type="checkbox"/> AT-632	1 1/2"

Manufacturer reserves the right to alter design or dimensions without formal notice and without incurring obligation.

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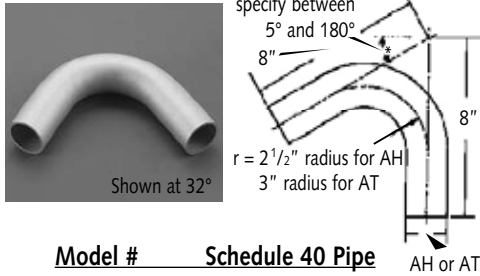


Guarantee

TSM Series 600 Aluminum Component Railing System is guaranteed against defects in workmanship and material for one year from shipping date.

Upper Post Elbow

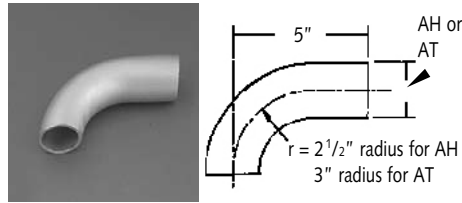
Specify angle desired between 5° and 180°. Requires dowels and epoxy for each splice connection.



Model #	Schedule 40 Pipe
<input type="checkbox"/> AH-634	1 1/4"
<input type="checkbox"/> AT-634	1 1/2"

90° Radius Wall

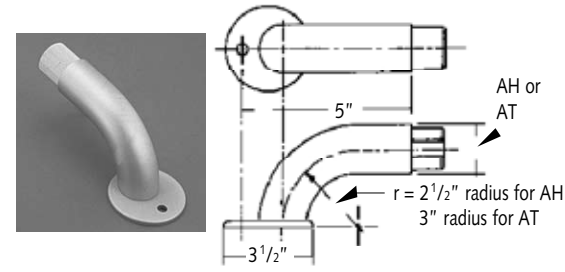
Requires dowels and epoxy for each splice connection.



Model #	Schedule 40 Pipe
<input type="checkbox"/> AH-640	1 1/4"
<input type="checkbox"/> AT-640	1 1/2"

Wall Return With Flange

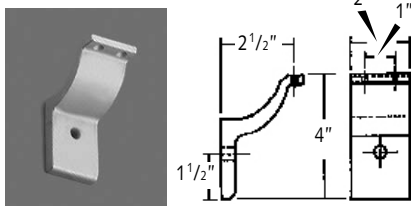
Terminates rail into side wall.



Model #	Schedule 40 Pipe
<input type="checkbox"/> AH-642	1 1/4"
<input type="checkbox"/> AT-642	1 1/2"

Extruded Wall Bracket

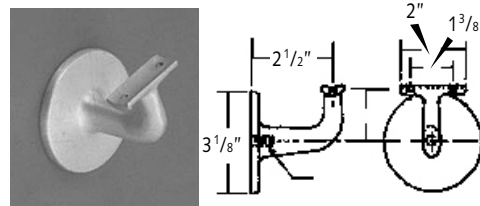
Universal application; fits both 1 1/4" and 1 1/2" Schedule 40 Pipe.



Model #	Schedule 40 Pipe
<input type="checkbox"/> AU-650	Fits both 1 1/4" & 1 1/2"

Cast Wall Bracket

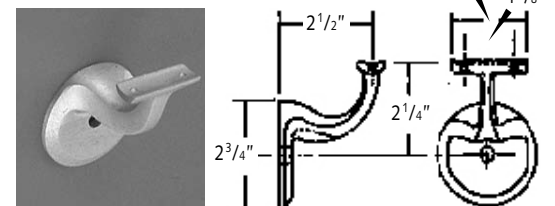
Universal application; fits both 1 1/4" and 1 1/2" Schedule 40 Pipe.



Model #	Schedule 40 Pipe
<input type="checkbox"/> AU-652	Fits both 1 1/4" & 1 1/2"

Cast Wall Bracket

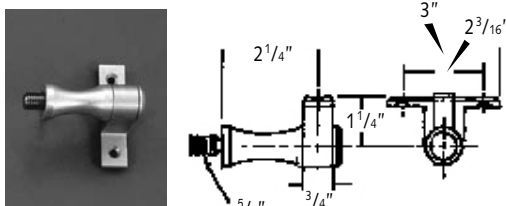
Universal application; fits both 1 1/4" and 1 1/2" Schedule 40 Pipe.



Model #	Schedule 40 Pipe
<input type="checkbox"/> AU-654	Fits both 1 1/4" & 1 1/2"

Post Bracket

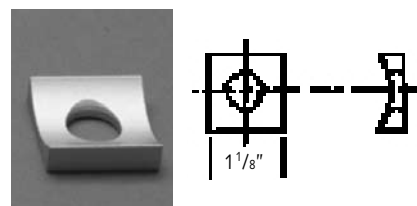
Includes 10/32 stainless steel set screws. Mounts to post. Can be used in conjunction with 678.



Model #	Schedule 40 Pipe
<input type="checkbox"/> AU-656	Fits both 1 1/4" & 1 1/2"

Adapter for Post Bracket

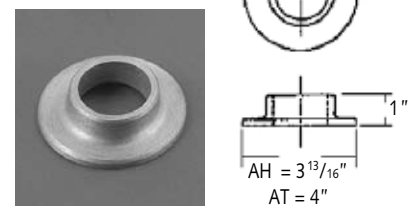
Allows 656 Post Bracket to fit snugly onto pipe.



Model #	Schedule 40 Pipe
<input type="checkbox"/> AH-658	1 1/4"
<input type="checkbox"/> AT-658	1 1/2"

Cover Flange

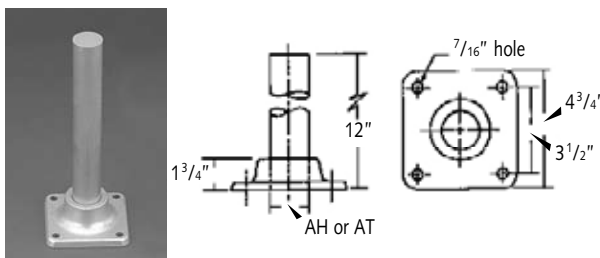
Collared floor flange.



Model #	Schedule 40 Pipe
<input type="checkbox"/> AH-660	1 1/4"
<input type="checkbox"/> AT-660	1 1/2"

Heavy Duty Floor Flange

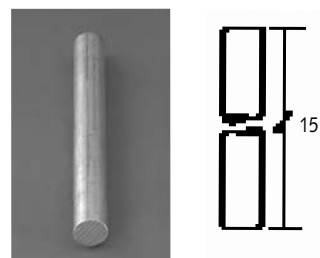
For surface mounting. Includes 12" Reinforcing Post Insert.



Model #	Schedule 40 Pipe
<input type="checkbox"/> AH-662	1 1/4"
<input type="checkbox"/> AT-662	1 1/2"

Reinforcing Post

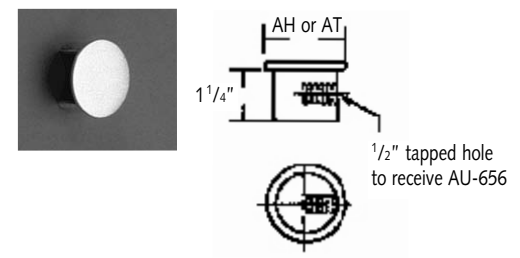
Recommended for all embedded post floor mounted installations.



Model #	Schedule 40 Pipe
<input type="checkbox"/> AH-672	1 1/4"
<input type="checkbox"/> AT-672	1 1/2"

End Cap

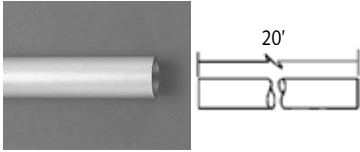
Press fits into end of pipe. Can be used in conjunction with 656 and 658.



Model #	Schedule 40 Pipe
<input type="checkbox"/> AH-678	1 1/4"
<input type="checkbox"/> AT-678	1 1/2"

Schedule 40 Pipe

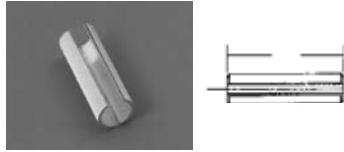
1 1/4" Pipe = 1.66" O.D. x .140" Tubing
1 1/2" Pipe = 1.9" O.D. x .144" Tubing



Model #	Schedule 40 Pipe
<input type="checkbox"/> AH-670	1 1/4"
<input type="checkbox"/> AT-670	1 1/2"

Internal Dowel

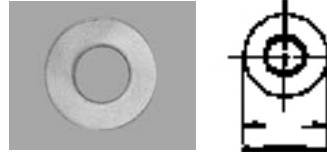
Required for splice connections; however, note that many components have dowel built-in. Serrated for pressure fit into component pipe sections. Specify with epoxy.



Model #	Schedule 40 Pipe
<input type="checkbox"/> AH-674	1 1/4"
<input type="checkbox"/> AT-674	1 1/2"

Decorative Flange

R-1D is a disk with no screw holes. Optional, for finishing purposes only.



Model #	Schedule 40 Pipe
<input type="checkbox"/> AH-R-1D	1 1/4"
<input type="checkbox"/> AT-R-1D	1 1/2"

Manual Rivet Header



Model #
<input type="checkbox"/> AU-692

Epoxy Structural Adhesive

For use with dowels.



Model #	Capacity
<input type="checkbox"/> AU-690A	1 quart (.95 litre)
<input type="checkbox"/> AU-690B	4 oz. (.12 litre)

Threaded Rivet

Use with 695 Stainless Steel Machine Screw for forming tee.



Model #
<input type="checkbox"/> 693

St. St. Machine Screw

With lock washer, 1/4"-20 x 1". Use with 693 Threaded Rivet for forming tee.



Model #
<input type="checkbox"/> 695

St. St. Through Bolt

With lock nut, 1/4"-20 x 3". Use to form a cross assembly (two 90° tees mounted opposite each other.)



Model #
<input type="checkbox"/> 696

Steel Sleeve Anchor Bolt

3/8" x 3". Recommended for use with 662 Floor Flange.



Model #
<input type="checkbox"/> 698



Architectural Specification

Suitable for indoor or outdoor use. Acceptable for ADA ramp applications.

Aluminum Railing Components _____ [fill in model names and numbers] shall be aluminum alloy 6063, clear anodized finish. Schedule 40 pipe shall be _____ [1 1/4" | 1 1/2"]. Connection system shall be internal with concealed mechanical fasteners at intersections and epoxy at splice joints, and shall allow posts and top rails to run in continuous lengths with no welding or grinding.

Aluminum Component Railing System shall be Series 600 Models _____ as manufactured by Tubular Specialties Manufacturing, 13011 South Spring Street, Los Angeles, California 90061, tel (800)Grab Bar.



Materials/Workmanship

Pipe 1 1/4" or 1 1/2" Schedule 40 pipe, aluminum alloy 6063, clear anodized finish.
Components Aluminum alloy 6063, clear anodized finish. Fit 1 1/4" or 1 1/2" Schedule 40 pipe.



Installation

1. TSM recommends maximum support spacing of 60" (1524mm) center to center.
2. It is important to comply with local codes in mounting railings.
3. The recommended method of installing floor mounted railing is to embed the posts 4" - 6" into concrete (102-152mm). The posts may be left as is, or a decorative flange (AH-R-1D or AT-R-1D) may be added for finishing purposes only to conceal the grout surrounding posts.
4. **Assembling Components:** Assembly of components at jobsite is with concealed mechanical fasteners at intersections and epoxy at splice joints (order epoxy model AU-690A or AU-690B). Many components have dowels built-in; if not, order one model 674 Internal Dowel per connection. For adhesive connections, apply bead inside female component openings and insert dowels to form a hairline joint.
5. **Tee Connections:** Use threaded rivet (model 693) and stainless steel machine screw with lock washer (model 695) to form tees. Manual Rivet Header (model AU-692) is available.
6. **Cross Assemblies:** Where two 90° tees are mounted opposite each other to form a cross assembly, use a stainless steel through bolt with lock nut (model 696).
7. **Heavy Duty Floor Flange (model 662):** Use steel sleeve anchor bolt (model 698).
8. **R-1D Decorative Flange:** R-1D is a disk with no screw holes. To install, place R-1D on the cement while it is wet. For a dry installation, apply epoxy, silicon adhesive or caulking material to the underside of the R-1D.
9. All railing systems should be inspected periodically to make sure their attachment to the wall is not loosening.

