Superior

Non-Welded Aluminum Pipe Railing

SERIES 500 550

Meets OSHA, ADA and ICC Safety Criteria

Strong, Durable and Maintenance-Free!

www.superioraluminum.com

Series 500 Pipe & Series 550 Pipe Picket
Non-Welded Aluminum Pipe Railing

Meets OSHA, ADA and BOCA Safety Criteria

Superior Series 500 Pipe Railing and Series 550 Pipe Picket Railing are designed to utilize all the advantages of aluminum, where strength, durability and no-paint maintenance are key. The highest quality aluminum extrusions and castings are used with concealed fasteners to create a clean, contemporary design.

Components are easily assembled without welding by using mechanical fasteners at intersections and epoxy structural adhesive at splice joints.

Superior Pipe and Pipe Picket Railings are factory assembled and made to your exact specifications. Special curves or pipe radius can easily be fabricated to fit your needs. This results in further on-site fabrication savings and makes a practical sound investment for the budget-minded buyer.

Posts and top rails for Pipe and Pipe Picket Railings are assembled to run in continuous lengths. Not only is this system stronger than one with cast tee and cross connections, but it also provides a continuous smooth top rail surface. Furthermore, pipe pickets are factory assembled with a tight drive-in-fit to the top and bottom rails to ensure squareness and rigidity.

Pre-assembled sections up to 24 feet can be shipped factory-assembled or knocked down for reassembly.

Superior Pipe and Pipe Picket Railings are available in standard heights of 32″, 36″, 42″ and 48″ and in custom heights upon request.

Finishes

The clean, contemporary design and smart, decorative finishes of Superior Pipe and Pipe Picket Railing add a distinctive touch to any building. Whether baked-on enamel, anodized or duranodic, these finishes are guaranteed to endure for years of maintenance-free beauty.


500 Pipe Railing & 550 Pipe Picket Railing

Concealed fasteners allow for a smooth surface and create a clean, contemporary design

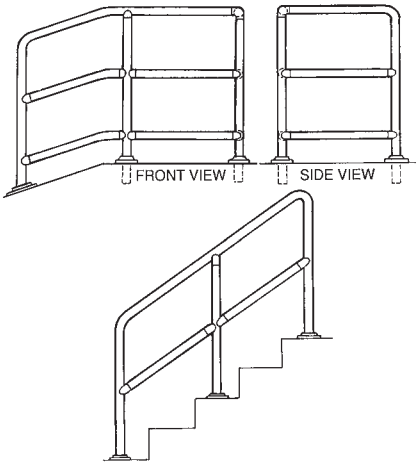

500 Pipe Railing

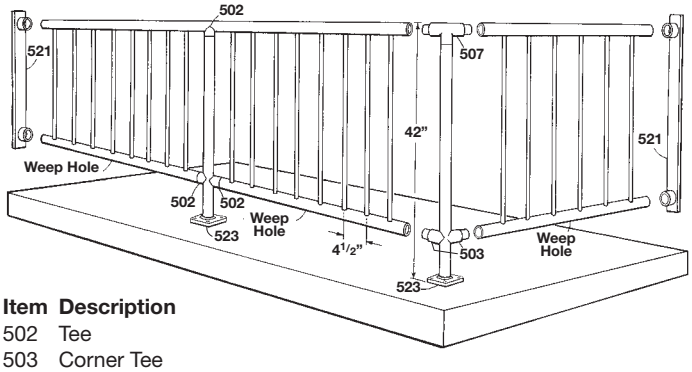

500 Pipe Railing


550 Pipe Picket Railing

Part Applications

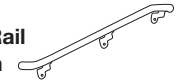
Series 500 Pipe Railing | **Series 550 Pipe Picket Railing**



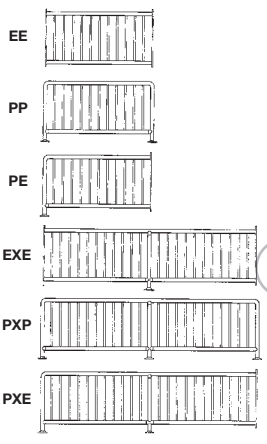


Item	Description
502	Tee
503	Corner Tee
507	90° Three-Way Elbow
521	Wall Plate with Adj. Brackets
523	Heavy-Duty Base with Post

Hand Rail System



Pipe Picket Railing Design Selections



Consider the advantages:

— Strong, Durable and Functional Design
— No Painting – No Rusting
— Unlimited Design Options
— Quick & Easy Installation Without Welding
— Saves on Installation and Maintenance Labor

Quick & Easy Installation. No Welding Required!

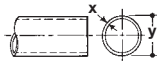
Plus, the possibilities for contractors, builders & architects:

— Handicap Ramps
— Condominiums
— Industrial Buildings
— Stores
— Waste Water Treatment Plants
— Nursing Homes
— Municipal Buildings
— Schools
— Office Buildings
— Motels
— Churches
— Hospitals
— Factories
— Amusement Parks
— Restaurants
— Swimming Pools
— Cafeterias

Component Parts

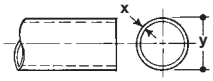
For Series 500 Pipe Railing & Series 550 Pipe Picket Railing

No. 5B Picket



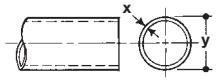
x = .050" y = .750"

No. 500
1-1/2" Schedule 40 Pipe - 24'



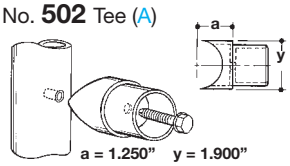
x = .145" y = 1.900"

No. 501 Post (Any Type)



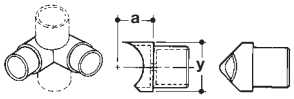
x = .145" y = 1.900"

No. 502 Tee (A)



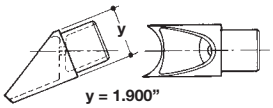
a = 1.250" y = 1.900"

No. 503 Corner Tee (B)



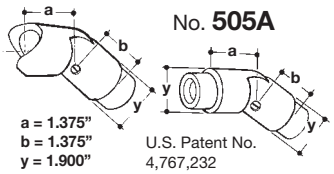
a = 1.250" y = 1.900"

No. 504 Angle Tee (C)



y = 1.900"
Specify Required Angle (0° - 41°)

No. 505 Adj. Angle (0° - 38°)

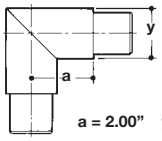


a = 1.375"
b = 1.375"
y = 1.900"

No. 505A

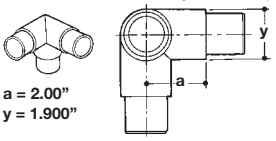
U.S. Patent No. 4,767,232

No. 506 90° Miter Elbow



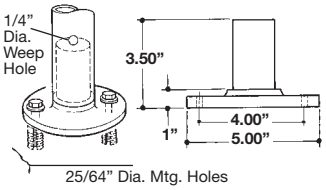
a = 2.00" y = 1.900"

No. 507 90° 3-Way Elbow (F)



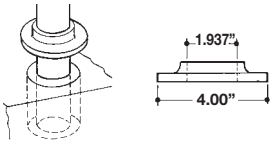
a = 2.00"
y = 1.900"

No. 508 Floor Flange (G)

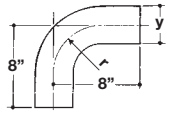


25/64" Dia. Mtg. Holes

No. 509 Cover Flange (H)

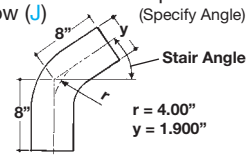


No. 510 90° Radius Elbow (I)



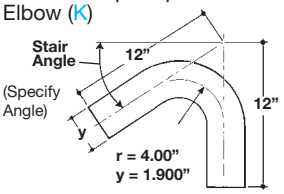
r = 4.00"
y = 1.900"

No. 511 Bottom Step Post Elbow (J)
(Specify Angle)



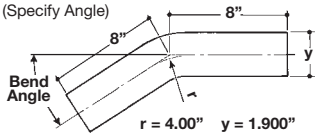
r = 4.00"
y = 1.900"

No. 512 Top Step Post Elbow (K)



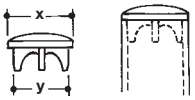
r = 4.00"
y = 1.900"

No. 513 Rail Elbow (L)
(Specify Angle)



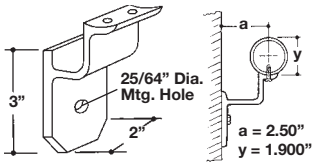
r = 4.00" y = 1.900"

No. 514 Post Cap



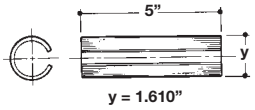
x = 1.90"
y = 1.60"

No. 515 Wall Bracket



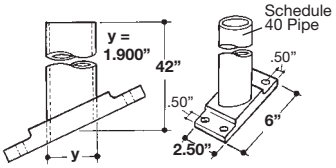
a = 2.50"
y = 1.900"

No. 517 Splice



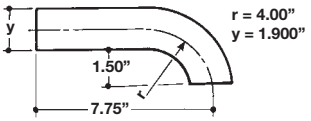
y = 1.610"

No. 518 Angle Flange with Post (M)
(Specify Angle)



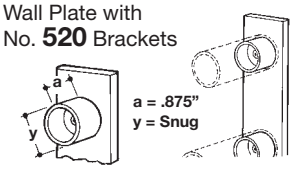
25/64" Dia. Mtg. Holes

No. 519 Wall Return Bend



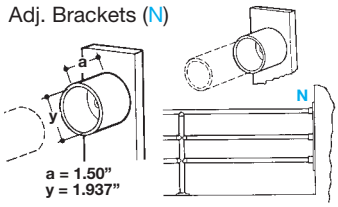
r = 4.00"
y = 1.900"

Wall Plate with No. 520 Brackets



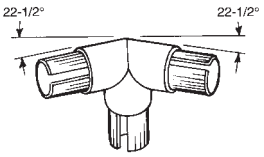
a = .875"
y = Snug

Wall Plate with No. 521 Adj. Brackets (N)

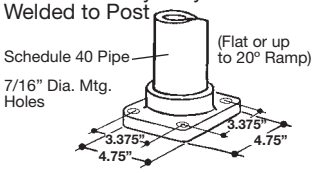


a = 1.50"
y = 1.937"

No. 522 135° 3-Way Elbow

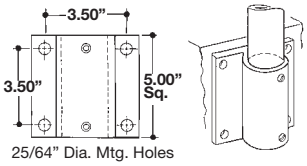


No. 523 Heavy Duty Base Welded to Post



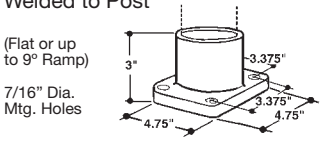
Note: Set screws can be used on bases in lieu of welding.

No. 540 Side Mount Flange



25/64" Dia. Mtg. Holes

No. 541 Heavy-Duty Base Welded to Post

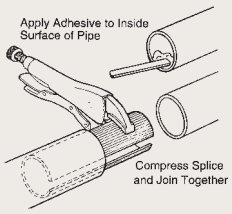


Note: Set screws can be used on bases in lieu of welding.

Easy Assembly and Installation! *No welding required.*

Railing Splices

Railing splices are designed for a tight press fit and must be compressed with a pliers to permit them to slip into the pipe. The areas to be joined should be cleaned thoroughly. Mix adhesive according to manufacturer's directions. Mix only enough that you can use within 1/2 hour. Apply adhesive to inside surface of pipe. Compress splice sleeve with a pliers, then slip into the pipe. Wipe off excess adhesive after components are properly joined. The areas connected together should be left undisturbed for eight hours, longer in cold weather.



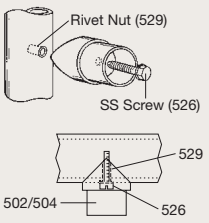
Tee Fittings & Hardware Options

To attach a 502 tee or 504 angle tee to a post, a stainless steel screw (526) is positioned through the fitting and into a stainless steel rivet nut (529) in the tubular post. ***Note: A stainless steel rivet nut CAN NOT be used at any location mounting into a reinforcement rod.***

When mounting a 502 tee or 504 angle tee into a location with a reinforcement rod, a stainless steel screw (527) must be used.

When two tees (502 tee or 504 angle tee) are located directly opposite each other to form a cross at 12° or less, a stainless steel thru bolt (524) and locknut are used. ***Note: This method can be used in locations with or without reinforcement rods.***

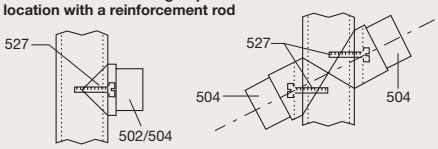
Attachment of tee fitting to post



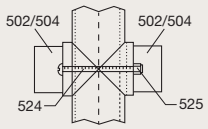
Parts Description

- 502 - Tee Fitting
- 504 - Angle Tee Fitting
- 524 - S.S. Thru Bolt (1/4" x 3-14")
- 525 - S.S. Locknut
- 526 - S.S. Screw (1/4" x 1-14")
- 527 - S.S. Screw (1/4" x 1")
- 529 - S.S. Rivet Nut

Attachment of tee fitting to post in a location with a reinforcement rod

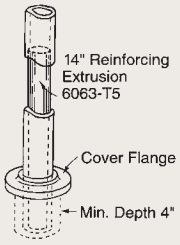


Attachment of tee fittings that form a cross at 12° or less in a location with or without reinforcement rods

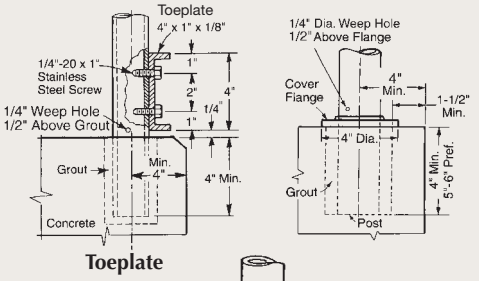


Mounting Options

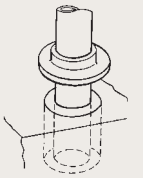
Pipe or picket railing can be embedded in concrete and grouted, or mounted on decks and platforms with base flanges, or side-mounted on facia or stringer by means of facia flanges.



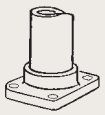
Reinforcing Extrusion



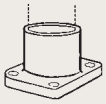
Toeplate



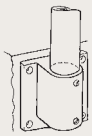
Base Mounting



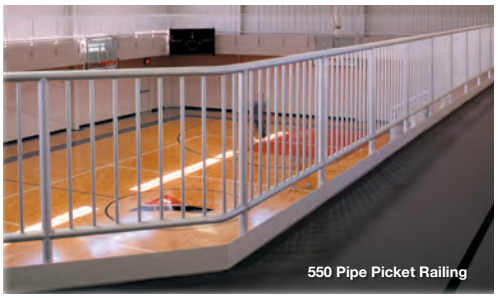
523 Heavy-Duty Base



541 Heavy-Duty Base



540 Side Mount Flange



TECHNICAL SUPPORT -

For continuous spans in excess of 40 feet, expansion joints should be provided. To make an expansion joint, one end of the spliced joint should not have structural adhesive applied so that it is free to move in or out of the pipe. If a joint is provided every 30 feet, the width of the gap should allow 1/8" expansion for each 40°F of expected temperature rise. All pipe railing splices should be made no more than 12" from the nearest post.

MATERIALS -

All rails and posts shall be formed from extruded 6063-T6 aluminum of 1-1/2" Schedule 40 pipe size, except where there are formed elbows, whereby, 6063-T4 is used. All pickets are 3/4" round, formed from extruded 6063-T5 aluminum. All railing accessories shall be cast from ANSI 713 alloy. All fasteners used in the system shall be aluminum or stainless steel.

RIGIDITY -

Post spacing shall not exceed 6' 0" center-to-center. All posts will be unspliced single pipe length. Lower rails shall be a single unspliced length between posts. All top rails shall be continuous whenever possible. All fasteners shall be tightened so that completed railing is rigid and free of play at joints and component attachments.

WORKMANSHIP -

All pipe cuts shall be square and accurate for minimum joint-gap. Cuts shall be clean and free of chamfer, from deburring, nicks and burrs. Holes shall be drilled the proper size for a tight flush fit of rivets and screws. All posts grouted in concrete must have one 1/4" diameter weep hole, 1/2" above post collar, in the plane of the rail.

SCOPE OF WORK -

Superior Aluminum Series 500 railing meets federal safety requirements as determined by an independent testing laboratory. Test results available upon request.

Superior Aluminum Products, Inc.

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