

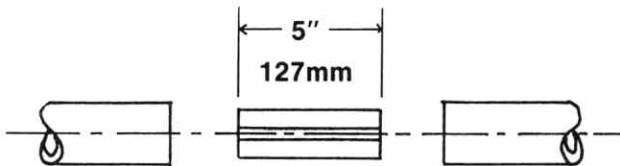
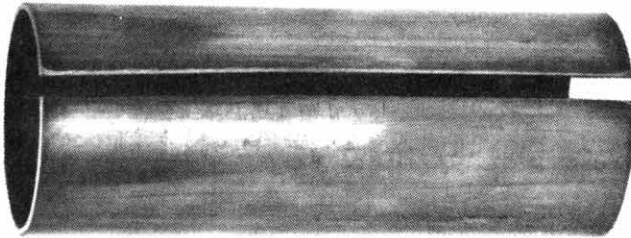
TSM

TUBULAR SPECIALTIES MFG., INC.

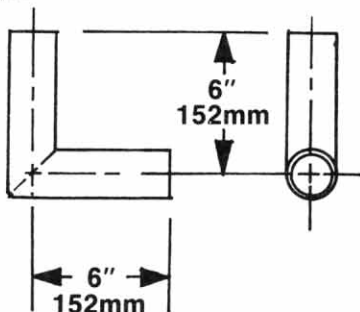
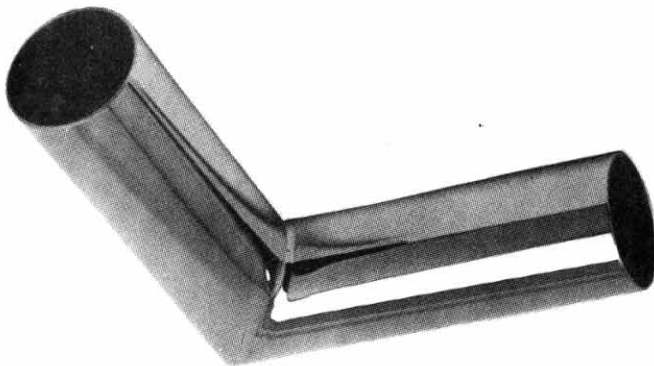
13011 S. SPRING ST., LOS ANGELES, CA 90061-1685 • 213/515-4801 TOLL FREE 800/421-2961 CA ONLY 800/521-7548
DESIGNER SERVICE: 7:00 A.M. TO 5:00 P.M. PACIFIC TIME • TELEX II: 910-346-6362 • FAX: 213/217-0653

**490,491,493,
494,106**

**Model # BH-490
Model # BT-490
Internal Dowel**



**Model # BH-491
Model # BT-491
90° Sharp Miter Bend**



BRASS TUBING AND BENDS



DESIGN CONSIDERATIONS

- TSM brass components (angles, brackets and tubing lengths) can be combined to create upright, wall-hung, stair, and ramp railings which are decorative as well as utilitarian.
- The flexibility of the TSM brass component system gives a custom look to any application.
- Components are simple to work with in the field, making even stairway and ramp configurations easy to install. Brass tubing can be cut with a tube cutter, a circular saw with an abrasive wheel, or a hack saw.
- The natural beauty of the bright brass finish is maintained by regular, frequent cleaning and polishing. For strictly decorative applications or where access for cleaning isn't possible, clear coating is available as an option to prevent oxidation of the finish. However, the clear coating will lose its effectiveness if it becomes scratched. For further information, see Care of Metal Finishes, Reference Section B.
- TSM has the capability of producing custom brass wall hung railing as well as upright, crowd control, and queue rails. Round brass tubing is available in 1" (25mm), 1-1/4" (32mm), 1-1/2" (38mm), and 2" (51mm) O.D. with 12" (305mm) or larger radii.
- TSM can also produce specially designed brass items such as salad bar sneeze guards, slides for buffets/cafeterias, wine bottle storage racks, and custom stemware racks. Please contact the factory with questions regarding custom designs.
- TSM recommends midsupports at maximum 48" (1219mm) intervals for strength in upright and wall hung brass railing.
- It is important to evaluate wall or floor conditions, for any railing is only as strong as its anchoring devices and the surface on which it is mounted.
- TSM recommends that brass handrail work be specified in a separate subsection of Division 5, "Metals," to ensure competent and competitive bids from experienced railing suppliers.

MODEL NUMBERS (select one)

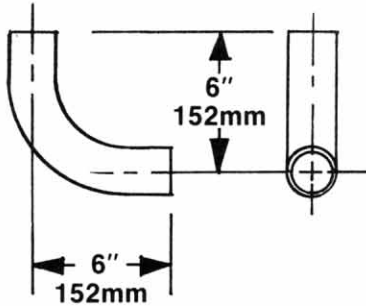
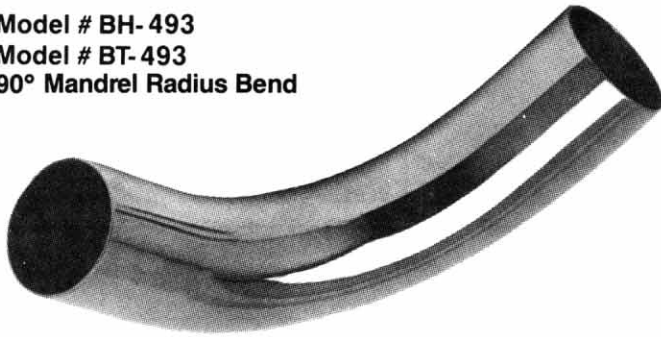
See chart below for description of model numbers.

- | | |
|---------------------------------|-----------------------------------|
| <input type="checkbox"/> BH-490 | <input type="checkbox"/> BT-493 |
| <input type="checkbox"/> BT-490 | <input type="checkbox"/> BH-494 |
| <input type="checkbox"/> BH-491 | <input type="checkbox"/> BT-494 |
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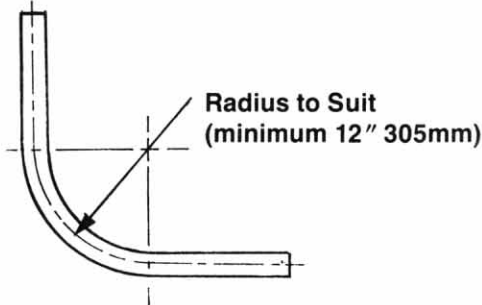
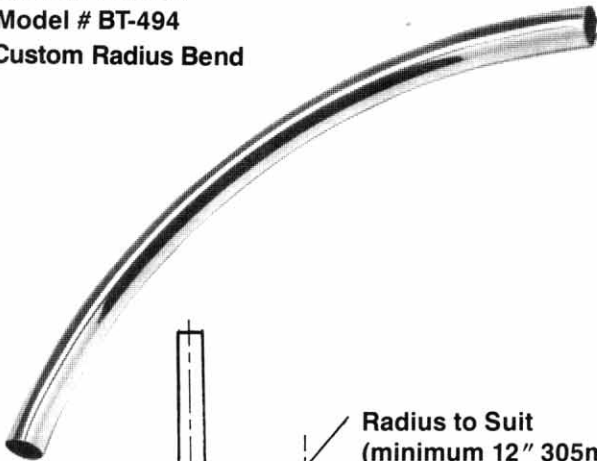


GUARANTEED PRODUCT
SEE PAGE 3 FOR COMPLETE DETAILS

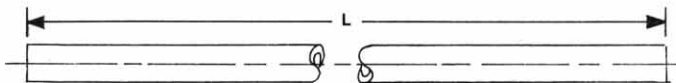
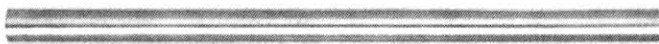
Model # BH-493
 Model # BT-493
 90° Mandrel Radius Bend



Model # BH-494
 Model # BT-494
 Custom Radius Bend



Model # BH-106BB
 Model # BT-106BB
 Straight Tubing



FINISH (select one)

- Uncoated Bright Brass (standard)
- Other (additional charge; see Finish Schedule, Reference Section A, for options)



SUGGESTED ARCHITECTURAL SPECIFICATION

TSM model(s) _____ (fill in model number[s]) Brass Tubing and/or Bend(s) from Tubular Specialties Manufacturing, Inc., Los Angeles, California, (213) 515-4801. Tubing: brass, _____ (1-1/2" [38mm] or 2" [51mm]) O.D. Finish: _____ (select from Finish Schedule).



MATERIAL/WORKMANSHIP

Tubing—Brass (copper alloy—approximately 60% copper and 40% zinc) machined to controlled dimensions. Available in 1-1/2" (38mm) or 2" (51mm) O.D.



INSTALLATION

Component bends are connected to tubing with internal dowels which press fit inside both ends. TSM recommends using Brass Adhesive, TSM model B-Lok, for extra strength.



DISTRIBUTION

TSM maintains a worldwide network of distributors. Call your sales representative listed in Reference Section O for the names of those nearest you.

Tubing and Bend Model Numbers

	1 1/2" O.D.	2" O.D.
Internal Dowel	BH-490	BT-490
90° Sharp Miter Bend	BH-491	BT-491
90° Mandrel Radius Bend	BH-493	BT-493
Custom Radius Bend	BH-494	BT-494
Straight Tubing	BH-106BB	BT-106BB