SPECIFICATIONS

Thompson's Aluminum TUFLADDER

A. Specifications for Aluminum Ladder

1. Ladder shall be ***TUFLADDER*** as manufactured by Thompson Fabricating Company (Birmingham, Alabama) or approved equal.

2. **Rung Description**
   The rung shall be designed to provide a non-slip power grip surface with a flat 1" wide striated top surface and a semi-circular bottom. The straight sides and semicircular bottom shall have striations at approximately 5/16" centers for gripping surface. The rung shall be an aluminum extrusion, alloy 6063-T6, of sufficient section modulus and moment of inertia to withstand the design loads.

3. **Side Rail Description**
   The side rail shall be 1 1/2" Schedule 40 pipe, alloy 6063-T6, 6105-T5 or 6061-T6. Pipe shall conform to ASTM-B-429 or ASTM-B-221.

4. **Codes**
   The ladder shall meet the requirements of OSHA and ANSI-A14.3.

5. **Design Loads**
   a) Ladder rungs shall be designed to withstand a concentrated load of 250 pounds plus 30% impact. Maximum rung deflection shall not exceed L/360. The design load shall be applied at the center of the rung on a 4" wide area.
   b) Ladder side rails shall be designed to withstand a minimum live load of two 250 pound loads plus 30% impact concentrated between any two consecutive attachments.

6. **Testing**
   Submit test reports for the Engineer's approval to verify design loads and deflections on the rungs and rung to side rail attachments.Testing to be verified by an independent testing laboratory. The design load, 325 pounds (250x1.3), shall be applied at the center of the rung on an area 4" wide. The test rung will be attached to the side rails in the same manner as the production ladder. Design loads shall be applied and released a minimum of 200,000 times to demonstrate fatigue resistance and a safe extended service life. Deflection shall be checked periodically and shall not exceed L/360 at any time under full design load. At completion of testing the rung and attachments to the side rail shall be inspected for cracks, looseness, distortion, bending (permanent set) or other obvious damage.

7. **Finish**
   Pipe for side rails shall have the same finish as handrail if the ladder is located at an opening in handrail. Rungs, cage and brackets are to be "mill" finish.

8. **Guarding Floor and Wall Openings and Holes [OSHA 1910.23(a)(2)]**

   The ladder walk-through may require a self-closing gate in accordance with OSHA 1910.23.

   Every ladderway floor opening or platform shall be guarded by a standard railing with standard toe board on all exposed sides (except at entrance to opening), with the passage through the railing either provided with a swinging gate or so offset that a person cannot walk directly into the opening. Self-closing gates are required only where shown on plans.

B. Specifications for Aluminum Ladder Cage.

1. Cage general design and size shall be in accordance with ANSI-A14.3. The cage shall be shipped knocked down for field assembly.

2. The prefabricated horizontal bands shall be aluminum bars, alloy 6061-T6, 3"x1/4" for the top and bottom bands and 2"X1/4" for the intermediate bands.

3. The pre-cut, pre-drilled vertical bars shall be aluminum bars 1 1/2"x3/16", alloy 6061-T6.

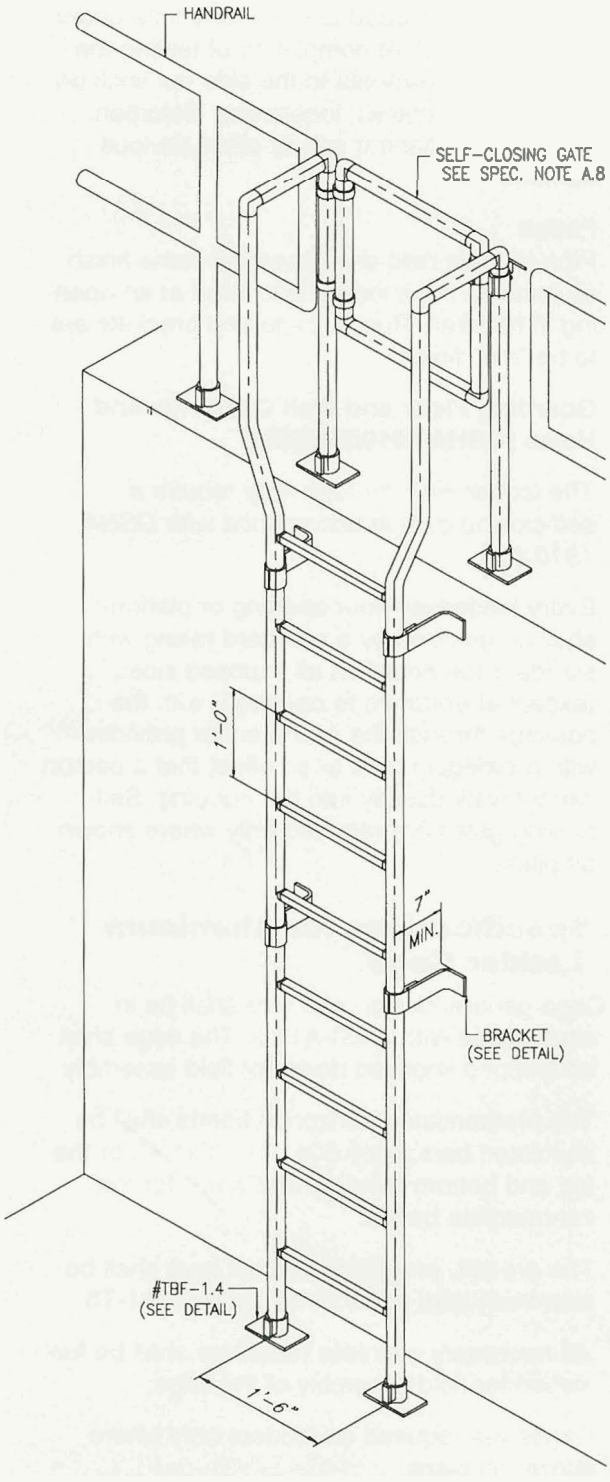
4. All necessary stainless hardware shall be furnished for field assembly of the cage.

5. Cages are required on ladders only where shown on plans.

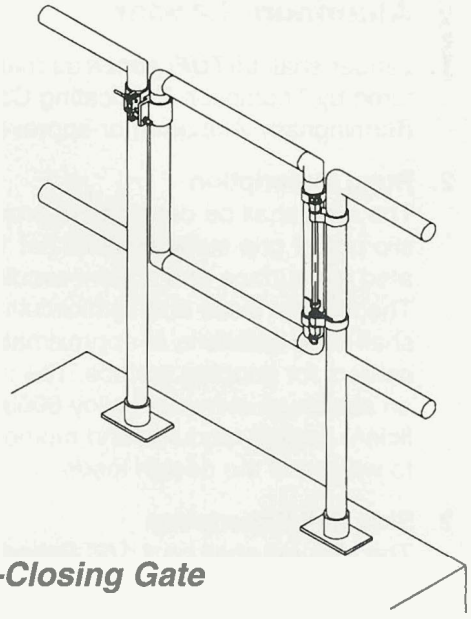
THOMPSON FABRICATING COMPANY
P.O. BOX 170160, BIRMINGHAM, ALABAMA 35217-0160. 205/841-0441
TOLL FREE: 1-800-824-6182

Details

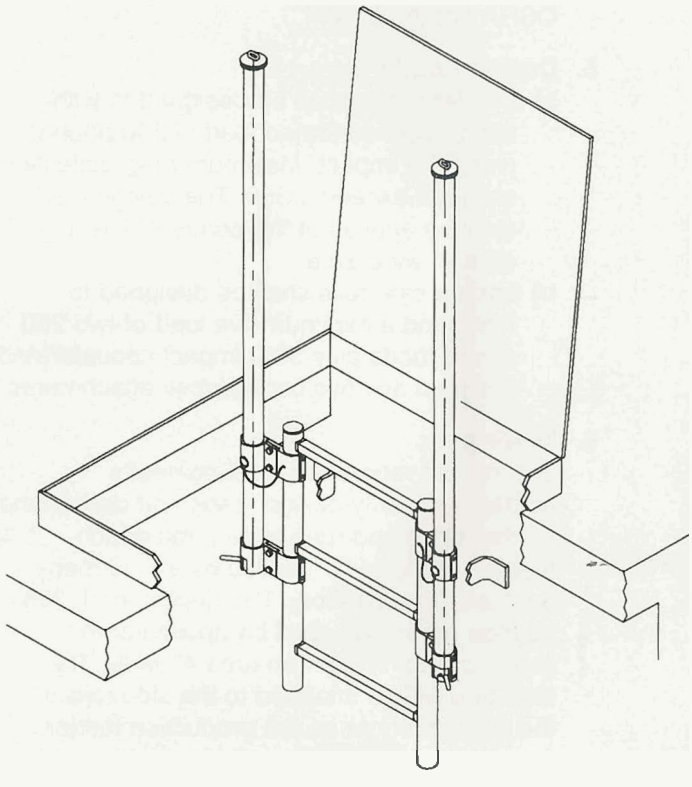
Thompson's Aluminum TUFLADDER



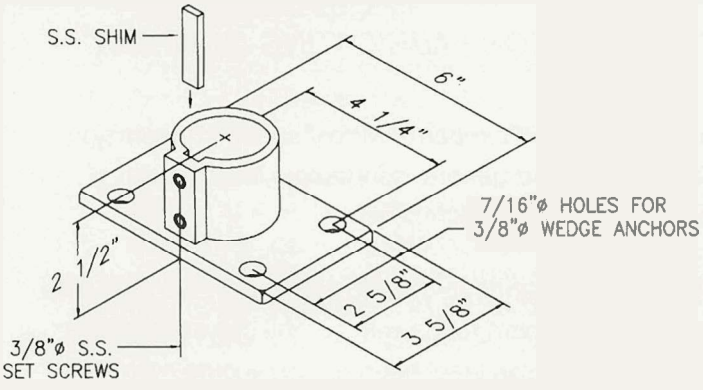
Typical Ladder Elevation



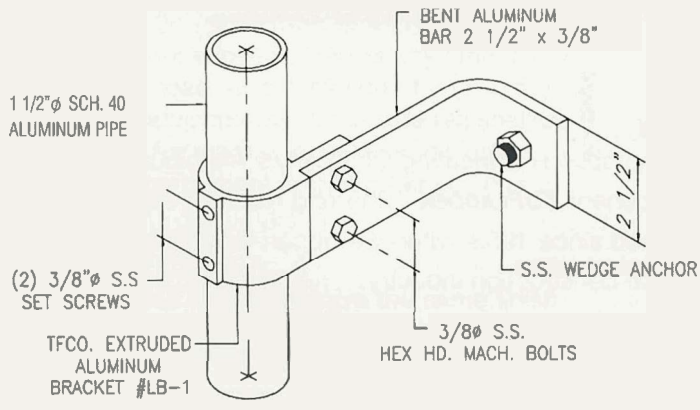
Self-Closing Gate



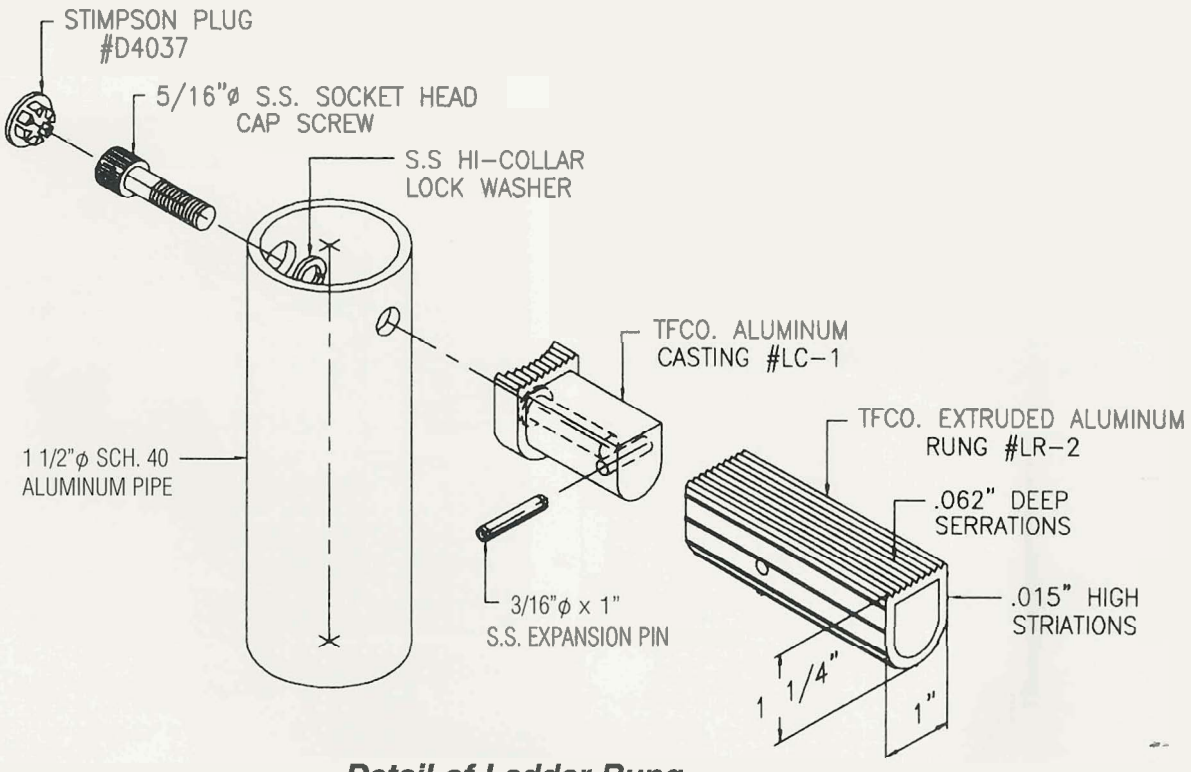
Ladder Climb-out Device



Detail of #TBF-1.4 Base Flange



Detail of Ladder Bracket



Detail of Ladder Rung

THOMPSON FABRICATING COMPANY

P.O. BOX 170160, BIRMINGHAM, ALABAMA 35217-0160. 205/841-0441

TOLL FREE: 1-800-824-6182