



SECTION 08 31 13

Fire-rated ceiling access door with integral folding stairway

PART 1: GENERAL

1.01 SUMMARY

- A. 2 hour fire-rated ceiling access system including access panel and attached disappearing stairway. Assembly shall meet ASTM E-119 and UBC 43-7 requirements and carry a 2 hour Warnoc-Hersey label or equivalent UL label. Unit shall also comply with the requirements of A.N.S.I. A14.9-2004.
- B. Products Required, But Not Supplied Under This Section.
 - 1. Required fasteners.

1.02 SYSTEM DESCRIPTION

- A. The system requires a ceiling opening per the following: Ceilings Heights up to 9'-9" require opening size of 30" X 54"; Ceiling Heights 9'-10" - 12'-0" require opening size of 30" X 64"; Ceiling Heights of 12'-1" – 13'-6" require opening size of 22-1/2" X 72".

1.03 DELIVERY, STORAGE AND HANDLING

- A. Examine stairway when it arrives on site. Notify the carrier and manufacturer of any damage.
- B. Store stairway until installation under roof, if possible; or, if stored outside, under a tarp or suitable cover.

1.04 WARRANTY

The unit shall carry a limited warranty of 1 year against defective material and workmanship covering parts only, no labor or freight. Defective parts, if deemed so by the manufacturer, will be replaced no charge, freight excluded, upon inspection at manufacturer's plant which warrants same.

1.05 MAINTENANCE

- A. Under normal usage, the stairway shall require no preventive maintenance.
- B. No spare Parts shall be required.

PART 2: PRODUCTS

2.01 MANUFACTURER

Any who meet the other requirements of this specification.

2.02 MATERIALS

A. Door

20 gauge steel door attached to frame with continuous piano hinge, flush with the bottom of the frame when in the closed position.

B. Stairway

1. Stringers

- 1.1 6005-T5 Extruded aluminum channel 5" X 1" X 1/8"
- 1.2 Tri-fold design
- 1.3 Steel blade type hinges
- 1.4 Adjustable foot with plastic Mar-guard.
- 1.5 Pitch 63ø (standard). Other pitches optional.

2. Treads

2.1 6005-T5 Extruded aluminum channel 5 3/16" X 1 1/4" X 1/8".

2.2 Length 21 1/4" is standard for ceilings 12' 0" & less (lengths to 30 1/4" available). For ceilings 12' 1" & up (to max of 13' 6"), treads shall be 13 3/4" long.

2.4 Deeply serrated top surface.

2.5 9 1/2" riser height (standard).

2.6 500 lbs load rating on units for ceiling heights of 12' or less; 300lbs load rating for ceiling heights of 12' 1" and above.

C. FRAME

- 1/8" Steel, formed channel, 6" deep, 90° both ends.

OR if ceiling to floor above is greater than 12"

- 1/8" steel formed channel, 63° on hinge end, 90° on the other end, custom depth to fill the distance from finished ceiling below to finished floor above. This frame shall have stationary, built-in steps to continue the climb at the same angle as the folding portion of the stair.

D. HARDWARE

1. Steel blade type hinge connecting stringer sections, zinc plated & chromate sealed, bolted to stringers.
2. Steel operating arms, cadmium plated & chromate sealed, both sides.
3. Double acting steel springs and cables, both sides.
4. Rivets rating at 1100# shear strength each.

E. SAFETY

1. Aluminum handrail riveted to stringers, upper section, both sides standard.
2. Steel section alignment clips at stringer section joints.

F. ACCESSORIES

1. Steel pole to aid opening and closing stairway. The pole is equipped with a hook on one end and bicycle grip on the other (supplied).
2. Keyed lock for door (supplied).

H. FABRICATION

The stairway shall be completely fabricated ready for installation before shipment to the site.

I. FINISHES

1. Mill finish on aluminum stairway components.
2. Prime coat on frame and door panel.
3. Mill finish handrail.

J. SOURCE QUALITY CONTROL

All products tested in factory test jig for proper operation before shipment.

Part 3: EXECUTION

3.01 EXAMINATION

Examine rough opening in ceiling for opening size and squareness.

3.02 INSTALLATION

Install per the manufacturer's installation instructions.