



SECTION 11 33 00  
RETRACTABLE STAIRS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Manual disappearing stairways.

1.2 REFERENCES

- A. ANSI A14.9: Safety Requirements for Ceiling Mounted Disappearing Climbing Systems.

1.3 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Manufacturer's data sheets on each product to be used, including:
  - 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements and recommendations.
  - 3. Installation methods.
- C. Shop Drawings for Stairs:
  - 1. Plan and section of stair installation.
  - 2. Indicate rough opening dimensions for ceiling and/or roof openings.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Store stairway until installation inside under cover in manufacturer's unopened packaging. If stored outside, under a tarp or suitable cover.

1.5 WARRANTY

- A. Limited Warranty: One year against defective material and workmanship, covering parts only. Defective parts, as deemed by the manufacturer, will be replaced at no charge, freight excluded, upon inspection at manufacturer's plant.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Precision Ladders, LLC, P. O. Box 2279; Morristown, TN 37816-2279; Tel: 423-586-2265; Fax: 423-586-2091; [www.PrecisionLadders.com](http://www.PrecisionLadders.com)
- B. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 MANUAL DISAPPEARING STAIRWAY.

- A. Manual Disappearing Stairway.
  - 1. Standard Model: Super Simplex Disappearing Stairway as manufactured by Precision Ladders LLC. Model SS/AL-\_\_\_\_ (ceiling height in inches).
- B. Performance Standard: Unit shall comply with ANSI A14.9, Commercial Type, for rough openings between 25-1/2 inches to 39 inches. Residential Type for rough openings between 21 1/2" and 25". Stairway capacity shall be rated at 500 lbs.
- C. Accessories:
  - 1. Steel pole to aid opening and closing stairways.
  - 2. Stairs for ceiling heights 9' -10" – 12' -0" shall be equipped with a patented Precision Fold Assist to aid in folding and unfolding of sections. Stairs for ceiling heights 12' 1" – 13'6" shall be equipped with 2 Fold Assists. Precision Fold-Assist is optional on stairways for ceiling heights of 9' 9" and below.

- D. Components:
1. Ceiling Opening
    - a. Ceiling height of 9' 9" or less requires an opening of 30" x 54"
    - b. Ceiling heights from 9' 10" – 12' 0" require opening of 30" x 64"
    - c. Ceiling heights from 12' 1" – 13' 6" require opening of 22 ½" x 72"
  2. Stairway Stringer: 6005-T5 Extruded aluminum channel 5" x 1" x 1/8"; tri-fold design; steel blade type hinges; adjustable feet with plastic Mar-guard. Pitch shall be 63°.
  3. Stairway Tread: 6005-T5 extruded aluminum channel 5 3/16 inches by 1 1/4 inches by 1/8 inch. Depth is 5 3/16 inches. Deeply serrated top surface. Riser Height: 9-1/2 inches. Clear Tread Width for Standard Width: 19-1/2 inches.
  4. Railing: Aluminum bar handrail riveted to stringers, upper section only.
  5. Frame:
    - a. If ceiling to floor (or roof deck) above is 12" or less, frame shall be 1/8" steel formed channel, 6" deep.
    - b. When ceiling to floor (or roof deck) above is greater than 12", the frame shall be 1/8" steel, 63° (with built-in steps) on the hinge end, 90° on the other end, custom depth to fill distance from ceiling to floor above. This custom frame will require a longer opening in the floor above than is required at the ceiling level.
  6. Door Panel
    - a. Standard (non-fire rated) door shall be constructed of 1/8 inch (3 mm) aluminum sheet attached to stairway frame with a steel piano hinge. Door overlaps bottom flange of frame. Eye bolt accommodates pole for opening and closing door.
    - b. On fire-rated models, the door panel shall be constructed of 20 gauge steel and have a 2 hour fire rating for use in fire-rated ceiling assemblies as issued by Warnock-Hersey or other appropriate independent testing/licensing agency.
  7. Hardware:
    - a. Steel blade type hinge connecting stringer sections. Zinc plated and chromate sealed.
    - b. Steel operating arms, both sides. Zinc plated and chromate sealed.
    - c. Double acting steel springs and cable, both sides.
    - d. Rivets rated at 1100 lb (499 kg) shear strength each.
    - e. Steel section alignment clips at stringer section joints.
    - f. Molded rubber guards at corners of aluminum door panel.
  8. Finishes: Mill finish on aluminum stairway components. Prime coat on frame.

## 2.3 FABRICATION

- A. Completely fabricate ladder ready for installation before shipment to the site.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Do not begin installation until rough opening and structural support have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
- C. Examine materials upon arrival at site. Notify the carrier and manufacturer of any damage.

### 3.2 INSTALLATION

- A. Install in accordance with manufacturer's instructions.

### 3.3 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION