

SECTION 14 42 29
RISING OUT OF THE FLOOR WHEELCHAIR LIFT

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes: Rising Out of the Floor Wheelchair Lifts.

1.2 REFERENCES

- A. ADAAG Accessibility Guidelines for Buildings and Facilities.
- B. ASME A18.1 – 2005 or later Safety Standard for Platform Lifts and Stairway Chairlifts.

1.3 SUBMITTALS

- A. Product Data: Manufacturer's data sheets on the product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- B. Shop Drawings: Show dimensions and locations of all items including attachment to supporting structure.

1.4 CLOSEOUT SUBMITTALS

- A. Approvals from authorities having jurisdiction.
- B. Operations and Maintenance Manuals.

1.5 QUALITY ASSURANCE

- A. Comply with ASME A18.1 standard for lifts in public installations.
- B. Installer Qualifications: A company regularly engaged in the business of manufacturing, installing and servicing wheelchair lifts of the type specified for at least 5 years, and with a history of successful installations acceptable to the Architect.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.7 FIELD CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.8 WARRANTY

- A. Limited 1-year warranty parts only.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Lift-U Division of Hogan Mfg, Inc., 1520 First Street, Escalon, CA 95320. Tel: 209-838-2400. Sales Tel: 937-836-6900. Sales Fax: 937-836-6901. Web Site: <http://liftu.hoganmfg.com> E-mail: information@hoganmfg.com
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Division 01 Section "Product Requirements".

2.2 RISING OUT OF THE FLOOR WHEELCHAIR LIFTS

- A. Provide "Hidden Access Lift (HAL)", i.e., a lift that stows beneath the floor until needed.
 - 1. Comply with the following:
 - a. ASME A18.1 standard for lifts in public installations.
 - b. ADA requirements for wheelchair lifts.
 - 2. Rated Load: 750 lbs. (340 kg) rated capacity with a weight safety factor of not less than 5 based upon the rated load.
 - 3. Vertical Platform Speed: 10 feet (3 m) per minute nominal.
 - 4. Maximum Travel: 36 inches (900 mm).
 - 5. Space Requirements:
 - a. Provide a recessed area (i.e., pit) adjacent to the top landing fascia that measures at least 72 inches (1800 mm) wide by 72 inches (1800 mm) long by 24 inches (600 mm) deep for stowage of the lift assembly below the lower landing floor surface. Refer to drawing for site-specific pit dimensions.
 - b. Provide closet space below the top landing near the lift for storage of the electro-hydraulic control unit. Refer to drawing for envelope dimensions.
 - 6. Top Landing: Equip landing fascia with a power-operated barrier that extends at least 12 inches (300 mm) above the top landing. Provide barrier with both mechanical and electrical contacts, which prevents operation of the platform unless barrier is in guarding position.
 - 7. Lower Landing: Equip platform with a power-operated barrier at least 12 inches (300 mm) high. Provide barrier with both mechanical and electrical contacts, which prevents operation of the platform unless barrier is in guarding position.
 - 8. Platform Side Guards: Equip platform with power-operated folding side guards at least 38 inches (965 mm) high. A grab bar extending the full length of either side guard shall be provided at a minimum height of 34 inches (850 mm). Provide folding side guards with both mechanical and electrical contacts, which prevent operation of the platform unless side guards are in the upright guarding position.
 - 9. Underside of Platform: Enclose with metal roll-up bellows or similar device.
 - 10. Lift Mechanism: Provide lever-hydraulic system, wherein an electrically controlled hydraulic power unit actuates two (2) hydraulic cylinders coupled to scissor-type lifting lever arms.
 - 11. Power Requirements: Install dedicated breaker protected service 208/230 VAC, 3-wire, 20 amp, single phase service supplied from building power source. Dedicated breaker protected service supplied by Owner or Owner's Representatives.

12. Conceal From View: Mechanical mechanisms, hydraulic power unit, and electrical control devices.
- B. Fabrication: Construct lift of steel or aluminum panels and frames with welded or bolted connections.
- C. Operation: Utilize low voltage (24 VDC) constant pressure control switches, designed for operation by persons with limited dexterity according to ADA requirements.
 1. Controls: Equip lift with controls at top and bottom landings and platform. Provide a security key switch to prevent unauthorized use.
 2. Emergency Stop Button: Provide an illuminated emergency stop button on each control panel.
 3. Emergency Alarm System: Include an audible alarm that is automatically activated when the emergency stop button is depressed.
 4. Limit Switches: Equip lift with redundant upper and lower limit switches. Provide mechanical stops to limit travel in both directions.
 5. Battery: Provide backup battery.
 6. Manual Operation: Provide device to manually lower or raise platform.
- D. Finishes:
 1. Apply metal surfaces with a corrosion resistant powder coating.
 - a. Color: Visible panels; textured black finish.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared. Verify the following:
 1. Pit conforms to dimensions indicated on the drawings.
 2. Anchor bolt size and placement conforms to specifications indicated on the drawings.
 3. Lower landing floor surface adjacent the pit is level.
 4. Closet space for electro-hydraulic control unit conforms to envelope dimensions indicated on the drawings.
- B. Check power requirements supplied by Owner / Owner Representatives.
- C. Should the examination reveal preparation deficiencies:
 1. Prepare report documenting unacceptable conditions.
 2. Submit report to Contractor.
 3. Do not proceed with work until corrective measures have been completed.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using methods recommended by manufacturer to achieve the best result for project conditions.

3.3 INSTALLATION

- A. Install in accordance with the following:

1. Manufacturer's instructions.
2. Approved shop drawings.
3. Applicable regulations and codes.

3.4 FIELD TESTING

- A. Upon completion of installation and as a condition of acceptance, provide necessary equipment and personnel to perform tests required.

3.5 CLOSEOUT ACTIVITIES

- A. Secure required approvals from authorities having jurisdiction.
- B. Provide training of Owner's personnel on proper use and operation of Lift.

3.6 PROTECTION

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

3.7 MAINTENANCE

- A. General: Provide maintenance services using qualified personnel for the following time period:
 1. For period between Substantial Completion and Final Completion.
 2. For one year following Substantial Completion.
 3. For one year following Final Completion.
- B. Perform maintenance in accordance with manufacturers recommended procedures.
 1. Perform additional maintenance as needed to assure proper and safe operation and as needed to avoid damage.
- C. Perform the maintenance according to the following schedule:
 1. Cycle Testing for Special Access Lifts: Weekly.
 2. Routine Maintenance: Every 6 months or as required by authority having jurisdiction, whichever is more frequent.
 3. Periodic Maintenance: Every 5 years or as required by authority having jurisdiction, whichever is more frequent.
 4. Submit maintenance logs to Owner immediately upon completion of each inspection.

END OF SECTION