

Specifications



SECTION 14 42 13

INCLINE WHEELCHAIR LIFTS

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PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Stair Lift for Straight Stairs.

1.2 RELATED SECTIONS

- A. Section 03 30 00 - Cast-in-Place Concrete: Anchor placement in concrete.
- B. Section 04 20 00 - Unit Masonry: Anchor placement in masonry.
- C. Section 06 10 00 - Rough Carpentry: Blocking in framed construction for lift attachment.
- D. Section 09 21 16 - Gypsum Board Assemblies: Stair walls.
- E. Section 26 31 00 - Photovoltaic Collectors: Building Fire Alarm Integration system to connect the lift control system with the building fire alarm system.
- F. Division 26 - Electrical: Electrical power service panel and wiring connections.
- G. Division 26 - Electrical: Concealed low voltage control wiring.
- H. Division 26 - Electrical: Intercom and wiring.

1.3 REFERENCES

- A. ASME A17.5 - Elevator and Escalator Electrical Equipment.
- B. ASME A18.1a 2001 - Safety Standard for Platform Lifts and Stairway Chairlifts.
- C. ICC/ANSI A117.1 - Accessible and Usable Buildings and Facilities.
- D. NFPA 70 - National Electric Code.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01 30 00.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Submit manufacturer's installation instructions, including preparation, storage and handling requirements.

2. Include complete description of performance and operating characteristics.
 3. Show maximum and average power demands.
- C. Shop Drawings:
1. Show typical details of assembly, erection and anchorage.
 2. Show complete layout and location of equipment, including required clearances.
- D. Selection Samples: For each finished product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
- E. Verification Samples: For each finished product specified, two samples, representing actual product, color, and patterns.
- 1.5 QUALITY ASSURANCE
- A. Manufacturer Qualifications: Firm with minimum 10 years documented experience in manufacturing of inclined wheelchair platform lifts of installations of type specified.
- B. Installer Qualifications: Firm licensed to install equipment of this scope, with evidence of experience with specified equipment. Installer shall maintain an adequate stock of replacement parts and have qualified people available to ensure timely maintenance and callback service at the project site.
- 1.6 REGULATORY REQUIREMENTS
- A. Provide platform lifts in compliance with:
1. ASME A18.1 - Safety Standard for Platform Lifts and Stairway Chairlifts.
 2. ASME A17.5 - Elevator and Escalator Electrical Equipment.
 3. NFPA 70 - National Electric Code.
- 1.7 DELIVERY, STORAGE, AND HANDLING
- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Store components off the ground in a dry covered area, protected from adverse weather conditions.
- 1.8 PROJECT CONDITIONS
- A. Do not use wheelchair lift for hoisting materials or personnel during construction period.
- 1.9 WARRANTY
- A. Warranty: Provide a two year limited warranty covering replacement of defective parts and excluding labor. Preventive maintenance agreement required.
- 1.10 MAINTENANCE SERVICE
- A. Furnish service and maintenance for elevator system and components for the following period from Date of Substantial Completion.
1. One year.
- B. Include systematic examination, adjustment, and lubrication of elevator equipment. Repair or replace parts whenever required. Use parts produced by manufacturer of original equipment. Replace wire ropes when necessary to maintain required factor of safety.
- C. Provide emergency call back service for this maintenance period.

- D. Perform maintenance work using competent and qualified personnel approved by elevator manufacturer or original installer.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Garaventa Lift; United States - P.O. Box 1769, Blaine, WA 98231-1769. Toll Free: 800-663-6556. Tel: (604) 594-0422. Fax: (604) 594-9915. Web www.garaventlift.com. Local dealer: Lift Aids, Inc. 1500 Westpark Way Euless, Texas 76040 Phone 817-835-0035; Richard Davis rdavis@lift-aids.com
- B. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00.

2.2 BATTERY POWERED STAIR LIFT FOR STRAIGHT STAIRWAYS

- A. Inclined Platform Lift: Garaventa Lift Stair-Lift Model X3 to serve one flight of straight stairs, with two landings and two stops. Lift consists of an extruded aluminum guide rail, a folding platform that is moved along the guide rail by an integrated rack and pinion drive system, overspeed safety system and call stations at each landing. Conform to the following design requirements:
1. Application: Indoor.
 - a. Commercial. (Installed in an area open to the public)
 2. Platform Load Rating: 550 lbs. (250 kg).
 3. Travel Speed: 13 fpm (4 m/min) traveling up; 16 fpm (5 m/min) traveling down.
 4. Platform Deck: Surface shall be slip resistant with the following features:
 - a. Platform Size A (ADA Compliant): 31-1/2 inches (800 mm) wide by 48 inches (1220 mm) long.
 5. Platform Operation:
 - a. Automatic Fold: Folded and unfolded electrically from the call station.
 - b. Emergency Manual Fold: When left in the open position, platform may be manually folded and retained in the closed position.
 6. Under Platform Obstruction Sensing:
 - a. Provide under-platform sensing device to stop platform from traveling in the downward direction when encountering 4 lb./f (20 N) of pressure.
 - b. Platform is permitted to travel in the opposite direction of the obstruction to allow clearing.
 7. Passenger Curved Safety Arms:
 - a. Platform equipped with retractable passenger restraining arms.
 - b. Arms stop moving when an obstruction causing 4 lb./f (20 N) of pressure is encountered and immediately retract when signal is removed.
 - c. Arms folded and unfolded electrically from the call stations or platform controls.
 - d. Provide with means to manually unlock and open the restraining arms for passenger emergency evacuation.
 - e. Top of arms mounted 37-3/8 inches (948 mm) above platform deck. When in guarding position arms are located above the perimeter of the platform.
 - f. Gaps between ends of the arms shall not exceed 4 inches (100 mm).
 8. Boarding Ramps:
 - a. Provide boarding sides of platform with retractable ramps positioned for travel at a height of 6 inches (150 mm) measured vertically above platform deck.
 - b. Ramps lock in guarding positions during travel. When platform is at the landing, only the retractable ramp servicing the landing shall be operable.
 - c. Ramps folded and unfolded electrically.
 - d. Retractable ramps, in the guarded position, shall withstand a force of 125 lb./f (550 N) applied on any 4 inches (100 mm) by 4 inches (100 mm) area. This force shall not cause the height of the ramp, at any point in its length, to be less

3. Provide overspeed governor and brake on upper carriage drive, containing mechanical overspeed sensor and lock, with electrical drive cut-out protection.
 4. Provide with manual handwheel for emergency operation.
 5. Provide platform with folding seat.
- C. Call Stations:
1. Provide wireless call stations at both landings.
 2. Call stations shall be provided with directional control buttons for call and send.
 3. A one-touch control system shall be used to automatically fold/unfold the platform, boarding ramps and passenger safety arms.
 4. Provide Attendant remote control call station.
- D. Finish:
1. Design and fabricate lift to manufacturer's standard design for indoor and outdoor locations.
 - a. Aluminum guide rails and ramps to be anodized aluminum. Steel components shall be painted with electrostatically applied and baked powder coat as follows:
 - 1) Fine Textured Silver Moon (RAL 7047).
 - b. Electrical printed circuit boards and control transformers to be treated with a conformal coating for resistance to ambient moisture.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. Verify required supports are correct.
- C. Verify electrical rough-in is at correct locations.
- D. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

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

3.3 INSTALLATION

- A. Install platform lifts in accordance with in compliance with regulatory requirements specified and the manufacturer's instructions.
- B. Install system components and connect to building utilities.
- C. Accommodate equipment in space indicated.
- D. Startup equipment in accordance with manufacturer's instructions.
- E. Adjust for smooth operation.

3.4 FIELD QUALITY CONTROL

- A. Perform tests in compliance with regulatory requirements specified and as required by

authorities having jurisdiction.

- B. Schedule tests with agencies and Architect, Owner, and Contractor present.

3.5 PROTECTION

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

END OF SECTION