

Part 1 General

1.1 SECTION INCLUDES

- .1 Vertical platform wheelchair lift installed within shaftway.

1.2 RELATED SECTIONS

- .1 Section 03 30 00 – Cast-In-Place Concrete
- .2 Section 06 10 00 – Rough Carpentry
- .3 Section 09 29 00 – Gypsum Board
- .4 Division 26 – Electrical

1.3 REFERENCES

- .1 ASME A17.1 - Safety Code for Elevators and Escalators.
- .2 ASME A17.5 - Elevator and Escalator Electrical Equipment.
- .3 ASME A18.1 - Safety Standard for Platform Lifts and Stairway Chairlifts.
- .4 CSA B44 - Safety Code for Elevators and Escalators.
- .5 CSA B355 - Lifts for Persons with Physical Disabilities.
- .6 ICC/ANSI A117.1 - Accessible and Usable Buildings and Facilities.
- .7 NFPA 70 - National Electric Code.
- .8 CSA - National Electric Code.

1.4 SUBMITTALS

- .1 Submit under provisions of Section 01 33 00.
- .2 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.
- .3 Shop Drawings:
 - .1 Show typical details of assembly, erection and anchorage.
 - .2 Include wiring diagrams for power, control, and signal systems.
 - .3 Show complete layout and location of equipment, including required clearances and coordination with shaftway.
- .4 Selection Samples: For each finished product specified, provide two complete sets of color chips representing manufacturer's full range of available colors and patterns.
- .5 Verification Samples: For each finished product specified, two samples, minimum size 1-3/4" x 2-1/4", representing actual product, color, and patterns.

1.5 QUALITY ASSURANCE

- .1 Manufacturer Qualifications: Firm with minimum 10 years experience in manufacturing of vertical platform lifts, with evidence of experience with similar installations of type specified.

- .2 Installer Qualifications: Licensed to install equipment of this scope, with evidence of experience with specified equipment. Installer shall maintain an adequate stock of replacement parts, have qualified people available to ensure fulfillment of maintenance and callback service without unreasonable loss of time in reaching project Site.
- 1.6 REGULATORY REQUIREMENTS
 - .1 Provide platform lifts in compliance with:
 - .1 CSA B355 - Lifts for Persons with Physical Disabilities.
 - .2 CSA B44.1/ASME A17.5 - Elevator and Escalator Electrical Equipment.
 - .3 CSA - National Electric Code.
- 1.7 DELIVERY, STORAGE, AND HANDLING
 - .1 Store products in manufacturer's unopened packaging until ready for installation.
 - .2 Store components off the ground in a dry covered area, protected from adverse weather conditions.
- 1.8 PROJECT CONDITIONS
 - .1 Do not use wheelchair lift for hoisting Materials or personnel during construction period.
- 1.9 WARRANTY
 - .1 Warranty: Manufacturer shall warrant the wheelchair lift Materials and workmanship for two years following completion of installation.

Part 2 Products

- 2.1 MANUFACTURERS
 - .1 Acceptable Manufacturer: Garaventa Lift
 - .2 Requests for substitutions will be considered in accordance with provisions of in accordance with B7 Substitutions.
- 2.2 SHAFTWAY VERTICAL WHEELCHAIR LIFT
 - .1 Capacity: 750 lbs (340 kg) rated capacity.
 - .2 Mast Height:
 - .1 Model GVL SW -144; 147 inches (3734 mm) maximum lifting height.
 - .3 Nominal Clear Platform Dimensions:
 - .1 Large: 45 inches (1144 mm) by 60 inches (1522 mm).
 - .4 Platform Configuration:
 - .1 Straight Through Entry/Exit: Front and rear openings.
 - .5 Landing Openings:
 - .1 Lower Landing: Door
 - .2 Intermediate Landing: Door
 - .3 Upper Landing: Gate
 - .6 Door Construction:

- .1 Non-Rated Doors: Pre-hung, on an anodized aluminum frame, with a door closer, pull handle, integrated interlock and upper panel as follows:
 - .1 Panels of 1/4 inch (6 mm) laminated safety glass.
 - .2 Door Pull: Rockwood RM2201. Finish: US32D/630. Contract Administrator to coordinate length and position.
- .2 Door Width:
 - .1 Lower Landing: 41-1/8 inches (1046 mm).
 - .2 Intermediate Landing: 41-1/8 inches (1046 mm).
 - .3 Upper landing: 41-1/8 inches (1046 mm).
- .7 Upper Gate Construction
 - .1 42 inches (1067 mm) high, pre-hung on an anodized aluminum frame, fitted with a door closer, pull handle, integrated interlock and upper panel as follows:
 - .1 Panels of 1/4 inch (6 mm) laminated safety glass.
 - .2 Door Pull: Rockwood RM2201. Finish: US32D/630. Contract Administrator to coordinate length and position.
- .8 Power Door Operator: Automatically opens the door/gate when platform arrives at a landing. Will also open at landing by pressing call button.
 - .1 ADA Compliant and obstruction sensitive.
 - .2 Low voltage, 24 VDC with all wiring concealed.
 - .3 Provide power operators at the following locations:
 - .1 Lower Landing: Door.
 - .2 Intermediate Landing: Door.
 - .3 Upper landing: Door or Gate.
- .9 Lift Components:
 - .1 Machine Tower: Custom aluminum extrusion.
 - .2 Base Frame: Structural steel tubing.
 - .3 Platform Side Wall Panels: 16 gauge (1.5 mm) galvanized steel sheet. Custom aluminum extrusion tubing frame.
- .10 Base Mounting and Access to Lift at Lower Landing:
 - .1 Pit Mount: Lift to be mounted in pit with dimensions to meet manufacturers requirements for the platform size specified. Pit construction shall be in accordance to Section 03 30 00.
- .11 Drive Mast Side Wall Panels: Provide 16 gauge (1.5 mm) galvanized panels and mounting hardware to cover the void between both sides of the mast and the side of the shaftway. Panels to cover the front and top of the void area to the height of the top surface of the drive mast.
- .12 Leadscrew Drive
 - .1 Drive Type: Self-lubricating acme screw drive.
 - .2 Emergency Operation: Manual handwheel device to raise or lower platform.

- .3 Battery Powered Emergency Lowering: Battery powered platform lowering device that automatically activates in the event of power failure. Allows passenger to drive platform downward to lower landing. Does not operate lift in up direction.
- .4 Safety Devices:
 - .1 Integral safety nut assembly with safety switch.
 - .2 Shoring device.
- .5 Travel Speed: 10 fpm (3.0 m/minute).
- .6 Motor: 2.0 hp (560 W).
- .7 Power Supply:
 - .1 120 VAC single phase; 60 Hz on a dedicated 20 amp circuit.
- .13 Platform Controls: 24 VDC control circuit with the following features.
 - .1 Direction Control: Illuminated and tactile constant pressure buttons with illuminated "in-use" indicator.
 - .2 Keyless operation.
 - .3 Emergency Telephone: Platform shall be equipped with ADA compliant autodialer telephone with a stainless steel faceplate. Telephone shall operate in the event of power failure. A telephone line shall be supplied to the lift Site as specified under Division 27.
- .14 Call Station Controls: 24 VDC control circuit with the following features.
 - .1 Direction Control: Illuminated and tactile constant pressure buttons with illuminated "in-use" indicator.
 - .2 Safety indicator lamp.
 - .3 Keyless operation.
 - .4 Call Station Mounting: wall mounted recessed at all levels.
- .15 Safety Devices and Features:
 - .1 Grounded electrical system with upper, lower, and final limit switches.
 - .2 At all landings a solenoid activated interlock shall electrically monitor that the door is in the closed position and the lock is engaged before lift can move from landing.
 - .3 Pit stop switch mounted on mast wall.
 - .4 Electrical disconnect shall shut off power to the lift.
- .16 Finishes
 - .1 Aluminum Extrusions: To be selected by Contract Administrator from full range of colours.
 - .2 Ferrous Components: Electrostatically applied baked powder finish, fine textured.
 - .1 Color: To be selected by Contract Administrator from full range of colours.

- .3 Lift Finish: Baked powder coat finish as selected by the Contract Administrator from manufacturer's optional RAL color chart.

Part 3 Execution

3.1 EXAMINATION

- .1 Do not begin installation until substrates have been properly prepared.
- .2 Verify shaft and machine space are of correct size and within tolerances.
- .3 Verify required landings and openings are of correct size and within tolerances.
- .4 Verify electrical rough-in is at correct location.
- .5 If substrate preparation is the responsibility of another installer, notify Contract Administrator of unsatisfactory preparation before proceeding

3.2 PREPARATION

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

3.3 INSTALLATION

- .8 Install platform lifts in accordance with applicable regulatory requirements including ASME A 17.1, ASME A 18.1 and the manufacturer's instructions.
- .9 Install platform lifts in accordance with applicable regulatory requirements including CSA B355, and manufacturer's instructions.
- .10 Install system components and connect to building utilities.
- .11 Accommodate equipment in space indicated.
- .12 Startup equipment in accordance with manufacturer's instructions.
- .13 Adjust for smooth operation.

3.4 FIELD QUALITY CONTROL

- .14 Perform tests in compliance with ASME A 17.1 or A18.1 and as required by authorities having jurisdiction.
- .15 Perform tests in compliance with CSA B355 and required by authorities having jurisdiction.
- .16 Schedule tests with agencies and Contract Administrator, the City, and Contractor present.

3.5 PROTECTION

- .17 Protect installed products until completion of Work.
- .18 Touch-up, repair or replace damaged products before Substantial Performance.

END OF SECTION