SECTION  – vertical wheelchair lift

1. General

SPEC NOTE: Due to the complexity of this Section, it is recommended that it is edited by or in conjunction with the Specifications Leader.

* 1. SUMMARY
     1. Furnish labour, materials, and equipment necessary or required to complete the installation of an unenclosed vertical wheelchair lift as indicated on the drawings and specifications.
     2. Include all materials and fitments required for the operation of any unit furnished, in the manner, direction and performance shown on the shop drawings and specified herein.
  2. PREPARATORY WORK BY OTHERS
     1. The following preparatory work to accommodate/receive the lift is to be done by other:
        1. Permanent 120 VAC, 20-amp single phase power to operate lift to be provided from a lockable fused/cartridge type disconnect switch with auxiliary contacts for battery operation.
        2. Provide clear access to lift installation location and remove all obstacles before lift delivery and installation.
        3. Provide adequate overhead clearances as required by the applicable code and as per drawings.
        4. Provide a substantial level floor (pit) slab as indicated on lift contractor's shop drawings.
        5. Provide adequate lighting at lift areas as required by applicable codes.
  3. REFERENCE Standards
     1. American Society of Mechanical Engineers (ASME):
        1. ASME A18.1 - Safety Standard for Platform Lifts and Stairway Chairlifts.
     2. Canadian Standards Association (CSA):
        1. CSA B355 - Lifts for Persons with Physical Disabilities.
     3. American National Standards Institute (ANSI):
        1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
  4. SUBMITTALS
     1. Provide required information in accordance with Section 01 33 00 – Submittal Procedures.
     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. The shop drawings shall show a complete layout of the lifting equipment detailing dimensions, clearances, and location of lift equipment; Including, but not limited to the following:
         1. Drawings showing the dimensions including plans, elevations, and sections to show equipment locations and their relationship to surroundings.
         2. Anchorage and clearance requirements.
         3. Load and reaction drawings shall be provided by the lift manufacturer and detailed on drawings.
    1. Selection Samples: For each finished product specified, provide two complete sets of colour chips representing manufacturer's full range of available colours and patterns.
  1. QUALITY ASSURANCE
     1. Manufacturer Qualifications: Firm with minimum ten (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.
     3. Requirements of the Regulatory Agencies:
        1. Fabricate and install work in compliance with all applicable jurisdictional authorities.
        2. File shop drawings and submissions to local authorities as the information is made available. Company pre-inspection and jurisdictional authority inspections and permits are to be made on a timely basis as required. Work will include all inspections and re‑inspections required to ensure licenses are issued.
  2. REGULATORY RQUIREMENTS
     1. Provide platform lifts in compliance with:
        1. ASME A18.1 - Safety Standard for Platform Lifts and Stairway Chairlifts.
        2. ASME A17.1 - Safety Code for Elevators and Escalators.
        3. ASME A17.5 - Elevator and Escalator Electrical Equipment.
        4. CSA B355 - Lifts for Persons with Physical Disabilities.
        5. CSA B44.1/ASME A17.5 - Elevator and Escalator Electrical Equipment.
  3. 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.
  4. MAINTENANCE SERVICES
     1. Provide maintenance of lift equipment for a period of twelve (12) months from date of Final Certificate of Completion.
        1. Include systematic quarterly examinations, cleaning, adjustment, and lubrication.
        2. Repair or replace electrical and mechanical parts of lift equipment as required due to defect and normal wear and tear.
        3. Use only genuine standard parts produced by manufacturer of equipment.
        4. Perform work by competent personnel under supervision and in direct employ of lift manufacturer.
        5. Proof of successful experience in complete maintenance of specified lifts. Maintain locally, adequate stock of parts for replacement or emergency purposes and provide qualified men to ensure fulfillment of this service without undue loss of time in reaching job site.
        6. At each inspection, maintenance personnel to sign in and out with building personnel.
  5. WARRANTY
     1. Warranty: Provide a three (3) year limited warranty, from date of shipment, for wheelchair lift parts that fail due to defective material or workmanship.
        1. Warranty does not cover labour charges for the removal, repair or replacement of warranty parts.
        2. Provide warranty and maintenance services through one company to ensure compatibility of services and documentation are maintained by one source.

1. Products
   1. unENCLOSED VERTICAL WHEELCHAIR LIFT
      1. Hydraulic vertical platform lift consisting of a hydraulic tower with a lifting platform. The platform is made to accommodate a wheelchair user or a person with impaired mobility, in accordance with CSA B355.

SPEC NOTE: Adjust the information below with the Basis of Design Materials.

* + - 1. Basis of Design Materials: Savaria V1504 Vertical Platform Lift.

SPEC NOTE: Adjust the following five (5)paragraphs below with the characteristics of the Basis of Design Material identified above.

* + 1. Capacity: 750 lbs (340 kg) rated capacity.
    2. Mast Height: As indicated on the Drawings.
    3. Nominal Clear Platform Dimensions: 1067mm W by 1524mm D (42” W by 60” D).
    4. Platform Configuration: 90 Degree Entry/Exit: Front and side openings.
    5. Levels Served: Two (2).
    6. Doors and Gates: Doors and gates shall be self closing type.
       1. Door Height: Flush mount, 2140mm (84-1/4").
       2. Door Construction: Aluminum frame with plexiglass infill.
    7. Lift Components:
       1. Machine Tower: Custom aluminum extrusion.
       2. Base Frame: Structural steel.
       3. Car Enclosure: Side Guards of platform shall have a steel frame with a powder coat finish and steel panel inserts to a minimum of 1067mm (42”) high.
    8. Hydraulic Drive:
       1. Drive Type: Roller chain hydraulic.
       2. Emergency Operation: Manual device to lower platform and use auxiliary battery power to raise or lower platform.
       3. Safety Devices:
          1. Slack chain safety device.
          2. Shoring device.

SPEC NOTE: Adjust the following three (3) paragraphs below with the characteristics of the Basis of Design Material identified above.

* + - 1. Travel Speed: 17 fpm (5.2 m/minute).
      2. Motor: 3.0 hp (2.2 kW); 24 volts DC.
      3. Power Supply:
         1. 110 VAC single phase; 60 Hz on a dedicated 20-amp circuit.
         2. Powered by building continuous mains converted to 24 VDC and equipped with auxiliary battery backup power system capable of running lift up and down for a minimum of 5 trips with rated load. Required for high use lifts and lifts equipped with a fan and ventilation system.
      4. Controller: Relay logic-based controller.
      5. Motor/Pump: 1HP (112 kw), gear type
      6. Manual Lowering: Outside the hoistway at lower landing.
    1. Platform Controls: 24 VDC control circuit with the following features.
       1. Direction Control: Constant pressure rocker switch.
       2. Illuminated and audible emergency stop switch shuts off power to lift and activates audio alarm equipped with battery backup.
       3. Keyless operation.
       4. Arrival Gong and Digital Floor Display.
    2. Call Station Controls: 24 VDC control circuit with the following features.
       1. Direction Control: Constant pressure rocker switch.
       2. Keyless operation.
       3. Call Station Mounting:
          1. Lower: Wall mounted recessed.
          2. Upper: Wall mounted recessed.
    3. Safety Devices and Features:
       1. Grounded electrical system with upper, lower, and final limit switches.
       2. Tamper resistant interlock to electrically monitor that the door is in the closed position and the lock is engaged before lift can move from landing.
    4. Finishes: As selected by the Consultant from the manufacturer’s standard product line.
    5. Doors and Gates:
       1. First Landing Door:
          1. Door type: 2029mm (80”) low profile aluminum door with a concealed electro/mechanical interlock.
          2. Flush closing operation with enclosure side.
          3. Operation: Manual, complete with hydraulic closer.
          4. Door Width: 1067mm (42”).
       2. Upper Landing Door/Gate:
          1. Door type: 2029mm (80”) low profile aluminum door with a concealed electro/mechanical interlock.
          2. Flush closing operation with enclosure side.
          3. Operation: Manual, complete with hydraulic closer.
          4. Door Width: 1067mm (42”).

1. Execution
   1. EXAMINATION
      1. All site dimensions shall be taken to ensure that tolerances and clearances have been maintained and meet local regulations.
   2. PREPARATION
      1. Re-inspect the construction and service requirements for 'Work by Others'. These requirements will be included in drawings, diagrams, engineering data sheets and special instructions before the work commences.
      2. Clean surfaces thoroughly prior to installation.
      3. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
   3. INSTALLATION
      1. Install lifts in accordance with applicable regulatory requirements including CSA B355 and the manufacturer's instructions; plumb, true, level, and rigid.
      2. Install system components and connect to building utilities.
      3. Arrange equipment to facilitate for repairs or replacement to major components without dismantling or removing other major components.
      4. Restrict access to machine and electrical control equipment to authorized persons only, using integral locks and keys.
      5. Provide protective coverings for finished surfaces.
      6. Install guide rails continuously with no gaps at joints. Provide support brackets at required spacing.
      7. Set entrances in perfect alignment with car openings and true with plumb hatch lines.
      8. Prior to final acceptance, remove protection from exposed surfaces, clean and polish surfaces, with due regard to type of material.
   4. FIELD QUALITY CONTROL
      1. Perform tests in compliance with CSA B355 and required by authorities having jurisdiction.
      2. Schedule tests with agencies and Consultant, Owner's Representative, and Contractor present.
   5. DEMONSTRATION AND TRAINING
      1. After the installation is completed, the contractor shall instruct the Owner in the proper use, operation, and maintenance requirements of the lift. Instructions to also include emergency procedures and safety rules and precautions. The contractor shall also supply the Owner with an Owner's Manual detailing the operating, safety, and maintenance procedures of the lift.

END OF SECTION