SECTION  – scissor lift platforms

1. General
   1. SUMMARY
      1. Furnish labour, materials, and equipment necessary or required to complete the installation of the 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.
      3. Related Requirements:
         1. Section 03 30 00 – Cast-In-Place Concrete.
         2. Section 04 20 00 – Unit Masonry.
         3. Section 05 50 00 – Metal Fabrications.
         4. Section 07 16 16 – Crystalline Waterproofing.
         5. Section 09 29 00 – Gypsum Board.
   2. reference standards
      1. Comply with applicable building codes and elevator codes at the project site, including but not limited to the following:
         1. CAN/CSA C22.1, Canadian Electrical Code.
         2. CAN/CSA-B44, Safety Code for Elevators and Escalators.
         3. Model Building Codes.
         4. All other local applicable codes.
   3. PREPARATORY WORK BY OTHERS
      1. The following preparatory work to accommodate/receive the lift is to be done by others:
         1. Permanent power supply to operate the lift to be provided to a Lockable Fused Disconnect switch, lockable in the off position with a secondary switch within the main Disconnect. Provide auxiliary contact/switch for emergency battery lowering.
         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 finish grouting, and masonry around walls, ceilings, and doors.
         6. Provide adequate lighting at lift areas as required by applicable codes.
   4. design criteria
      1. The lift assembly shall consist of a platform, guide system, panels, and gates, 1:2 cable hydraulic lifting device, control system, signals and alarms, electrical wiring and parts and accessories necessary to provide required performance operation, code, and safety requirements.
      2. The lift shall meet or exceed applicable regulations of all governing agencies and be in conformance with the Canadian Standards Associations, CSA-B355M, Lifts for Persons with Physical Disabilities, Public Safety.
   5. submittals
      1. Provide required information in accordance with Section 01 33 00 – Submittal Procedures.
      2. Action Submittals: Provide the following submittals before starting any work of this Section:
         1. Product Data: Submit manufacturer's product data for each type of product specified. Data shall indicate compliance with specification and installation recommendations of manufacturer of products being used.
         2. 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:

Drawings showing the dimensions including plans, elevations, and sections to show equipment locations and their relationship to surroundings.

Anchorage and clearance requirements.

Load and reaction drawings shall be provided by the lift manufacturer and detailed on Drawings.

* + - 1. 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 that are required to ensure licenses are issued.
  1. warranty
     1. Manufacturer/installer shall guarantee materials and workmanship of equipment installed under these specifications and make good, defects not due to ordinary wear or to improper use, which may develop within 1 year after substantial completion.
  2. MAINTENANCE SERVICE
     1. Scissor lifts shall receive regular maintenance on each unit for period of 12 months after Substantial Completion.
     2. Trained employees shall make periodic examinations and perform work including necessary adjusting, greasing, oiling, and replacing parts to keep scissor lifts in operation, except parts that require replacement because of accidents, vandalism, misuse, or negligence by parties other than manufacturer/installer.
     3. Manufacturer/installer shall perform all Work during regular working hours.
     4. Should Owner request that examinations, cleaning, lubrication, adjustments, repairs, replacements, or emergency minor adjustment call-back service, unless specified herein, be performed on other than manufacturer/installer's regular working hours of regular working days, manufacturer/installer shall absorb straight-time labor charges and Owner will compensate manufacturer/installer for overtime premium, and expense at normal billing rates.

1. Products
   1. MANUFACTURERS
      1. Basis of Design Products: Products named in this Section were used as the basis of design for the project; additional manufacturers offering similar products may be incorporated into the work of this Section.
      2. Acceptable Materials Manufacturers: Subject to compliance with requirements specified in this Section, manufacturers offering products that may be incorporated into the Work include but are not limited to, the following:
         1. Pentalift.
   2. MATERIALS
      1. Lift Platform Description:
         1. Rated Load: 2500 lbs.
         2. Platform Dimension: 60" x 84".
         3. Travel Distance: Max 180" high.
         4. Low Table Height: 22 to 28".
         5. Operation: Hydraulic.
      2. Control:
         1. Pre-wired NEMA 12 motor control
         2. Remote Control: Wall mounted push button control, complete with an emergency stop switch, alarm button, and an ON/OFF key switch, a minimum of 48" above finished floor.
         3. The key shall only be removable when the key is in the OFF position.
      3. Accessories:
         1. Straight toe guard suitable for surface mounting.
         2. Top and bottom roller retainers.
         3. Cross bracing between legs.
         4. Aluminum frame side guards and handrail located on wall of the carriage.
      4. Finish:
         1. Baked electrostatic powder, factory finished in standard gray enamel.
      5. Basis of Design Materials: Pentalift TSL-Series Lift Table by Pentalift Equipment Corporation.
2. 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. 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.
   3. INSTALLATION
      1. Work shall be performed by manufacturer's forces, and only by mechanics skilled in installation of hydraulic lifts.
      2. Install lift machinery and controls by skilled mechanics, to provide a quiet, smoothly operating installation free from site sway vibration.
      3. Install guide rails continuously with no gaps at joints. Provide support brackets at required spacing.
   4. DEMONSTRATION AND TESTING
      1. After the installation is completed, perform the following:
         1. Check, test and adjust hydraulic lift, to ensure smooth and efficient operation.
         2. Instruct the Owner on the proper use, operation, and maintenance requirements of the lift.
      2. Instructions shall include emergency procedures and safety rules and precautions.

END OF SECTION