

SECTION 14420

TYPICAL HYDRAULIC VERTICAL PLATFORM LIFT SPECIFICATIONS SAVARIA MODEL V1504-TL

1.0 GENERAL

1.01 RELATED DOCUMENTS:

A. Drawings and general provisions of the Contract, including instructions to Bidders, Supplementary instructions to Bidders, General Conditions, Supplementary Instructions to Bidders, General Conditions, and Division 1 Specification Sections apply to work of this Section.

1.1 DESCRIPTION:

A. Work described in this section includes providing equipment, incidental material and labor required for complete, operable hydraulic platform lift installation. Where singular reference is made to lifts or lift components, such reference shall apply to number of lifts or components required to complete installation. This specification provides a broad outline of required equipment and does not describe the details of design and construction. Lifts shall be erected, installed, adjusted, tested and placed in operation by lift system manufacturer, or manufacturer's authorized installer. **AUTHORIZED INSTALLER: MOBILITY ELEVATOR & LIFT CO.**

B. Lifts shall be in accordance with the ASME A17.1 Section 2000, ADA compliant including local codes and regulations except where specked otherwise.

1.2 PREPARATORY WORK BY OTHERS:

A. The following preparatory work to receive the lifts specified in this section is part of the work by others:

1. Permanent 115 Volt 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. Refer to drawings for permanent power specifications and location of disconnects. Temporary power may be provided to expedite installation of lift.
2. Provide rough openings as per lift contractor's shop drawings.
3. Provide substantial level pit floor slab as indicated on the drawings.

1.3 QUALITY ASSURANCE:

A. SUBCONTRACTOR QUALIFICATIONS:

1. Execute work of this section only by a company who has adequate product liability insurance.
2. Skilled tradesmen must be employees of the installing contractor approved by the lift manufacturer, with demonstrated ability to perform the work on a timely basis.

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B. REQUIREMENTS OF REGULATORY AGENCIES:

1. Fabricate and install work in compliance with applicable jurisdictional authorities.
2. File shop drawings and submissions with local authorities as the information is made available. Company pre-inspection and jurisdictional authority inspections and permits are to be made on timely basis as required.
3. Submit certification that platform lift system complies with current ADA requirements.

1.4 SUBMITTALS:

- A. SHOP DRAWINGS - the shop drawings shall show a complete layout of lifting equipment detailing dimensions and clearances as required.
- B. Submit physical samples of all items requiring selection of color or finish.

1.5 GUARANTEE:

- A. The lift contractor shall provide three (3) months free service from date of substantial completion. The entire lift and all component parts shall carry a one (1) year guarantee. The guarantee shall be for the replacement, at no cost, of defective parts and shall include labor required to replace the defective part or parts.

2.0 PRODUCTS

2.1 PLATFORM LIFT:

A. Basic of specifications is Savarla hydraulic vertical platform lift model V1504-TL by:

Mobility Elevator, 4 York Ave, West Caldwell, NJ - PH: (800) 441-4181 or (973)618-9545 - FAX: (973)618-9638.

This product has the following characteristics:

1. Rated Load -- 750 lbs.
2. Rated Speed -- 20 f.p.m. (nominal)
3. Usable Car Dimensions -- 34' W x 54' L
4. Levels Serviced -- 2
5. Number of Openings -- 2
6. Car Access -- See drawings
7. Travel -- See drawings
8. Operations -- Constant pressure, anti-creep feature
9. Power Supply -- 110V, 1 Phase
10. Drive System -- 1 to 2 Chain hydraulic
11. Paint -- Urethane finish
12. Emergency Power -- Battery Operation/Down Direction
13. Controller -- Electronic free relay logic
14. Car Enclosure Type -- Dry Walls or Block (By others)

- B. 1. The enclosure shall have a clean and smooth surface to a minimum of 42' above the upper landing.
2. No platform gate required, to allow for ease of operation.
 3. Upper gate shall be 42' high x 34' clear open width, with steel inserts and shall be equipped with interlock, spring hinges and kick plate on both sides. Lower door shall be 80' high x 34' clear open width, with acrylic panel and shall be equipped with interlock, hydraulic closer and kick plate on both sides. The inside kick plates shall be made of stainless steel.
 4. Lift shall have manufacturer's standard non-skid flooring.
 5. The upper gate shall have an adjustable fascia with steel frame and metal insert that runs down to the pit.
 6. Doors and gates shall be flush mounted inside the hoistway as to

avoid pinch points and shear hazards.

7. Handrail: A single handrail with both ends returned to the wall shall be located on the control wall of the carriage.

ALTERNATE: Lower and upper door and door frame with 1 1/2 hour ULC Fire rating, Heavy duty hinges, Door vision panel, flush mounting of door inside the hoistway and adjustable hydraulic door closer on door frame.

2.2 CAR OPERATION:

A. Car Operating Panel shall consist of constant pressure buttons or rocker switches, an emergency stop/alarm button, an on/off key switch and emergency light mounted on a removable stainless steel panel (Type 304 #4 Stainless Steel Finish).

B. Emergency Operation - The car shall be equipped with a battery operated light fixture, emergency battery lowering device and alarm in case of normal building supply failure. The battery shall be the rechargeable type with an automatic recharging system.

2.3 PUMPING UNIT AND CONTROL:

A. The pumping unit and control shall be enclosed in the tower. The controller and pump unit shall be prewired and tested prior to shipment. The controller is to be electronic free with relay logic operations for ease of maintenance and service. This pump unit shall incorporate the following features:

1. Smooth stops at each landing shall be an inherent feature.
2. Adjustable pressure relief valve.
3. Manually operable down valve to lower lift in the event of an emergency. This valve shall be activated from outside of the hoistway through a keyed box.
4. Pressure gauge isolating valve, manually operable.
5. Gate valve to isolate cylinder from pump unit.
6. Electrical solenoid for down direction control.
7. Emergency lowering by battery power, from the car control.

2.4 CYLINDER AND PLUNGER:

A. The cylinder shall be constructed of steel pipe of sufficient thickness

and suitable safety margin. The top of the cylinder shall be equipped with a cylinder head with an internal guide ring and self-adjusting packing.

B. The plunger shall be constructed of a steel shaft of proper diameter machined true and smooth. The plunger shall be provided with a stop electrically welded to the bottom to prevent the plunger from leaving the cylinder.

2.5 ROLLER-CHAINS

A. Two(2) No.50 roller chains with 5/8' pitch. Minimum breaking strength 6100 lb. each.

2.6 LEVELLING DEVICE:

A. The lift shall be provided with an anti-creep device which will maintain the carriage level within 1/2' of the top landing.

B. All limit switch and levelling device switches shall be located in a position to be inaccessible to unauthorized persons. They shall be located behind the mast wall and be accessible through removable panels. Micro-switches shall not be used.

2.7 GUIDE YOKE:

A. The 1 to 2 guide yoke/sprocket arrangement shall be supplied with two(2) sprockets, roller guide shoes, bearings and guards.

2.8 CALL STATIONS:

A. Provide door frame mount key controlled call stations for upper level and lower level on a stainless steel plate (Type 304 #4 stainless steel finish).

2.9 TERMINAL STOPPING DEVICES:

A. Normal terminal stopping devices shall be provided at top and bottom of runway to stop the car positively and automatically. Micro-switches

shall not be used.

2.10 GUIDE RAILS AND BRACKETS:

A. Steel 'C' guide rails and brackets shall be used to guide the platform and sling. Guide rails shall form part of the structural integrity of the unit and be integral to the mast enclosure, ensuring stability and minimum platform deflection when loaded.

2.11 CAR SLING:

A. Car Sling shall be fabricated from steel tubing 44' high with adequate bracing to support the platform and car enclosure. Roller guide shoes shall be mounted on the top and bottom of the car sling to engage the guide rails. Guide shoes to be roller type with 3' diameter wheels. The car sling arms shall be detachable.

2.12 WIRING:

A. All wiring and electrical connections shall comply with applicable codes. Insulated wiring shall have flame retardant and moisture proof outer covering and shall be run in conduit, or electrical wireways outside the unit enclosure. Quick disconnect harnesses shall be used.

3.0 EXECUTION

A. EXAMINATION: All site dimensions shall be taken to ensure that tolerances and clearances have been maintained and meet local regulations.

B. PREPARATION: Pre-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.

C. INSTALLATION:

1. Install all the components of the lift system that are specked in this Section to be provided, and that are required by jurisdictional authorities to license the lift

2. All installation work of this section shall be performed by trained employees of the lift contractor.

3. Adjust lift for proper operation and clean unit thoroughly.
4. Instruct Owner's Operations and Maintenance personnel in proper trouble- shooting and maintenance procedures. Submit three (3) copies of operating and maintenance manual.