

**SECTION 14420**

**SCREW DRIVE VERTICAL PLATFORM LIFT**

**1. GENERAL:**

**1.1 DESCRIPTION:**

- A. The product described in this section, APEX 500 from Nationwide Lifts, Inc. is a vertical platform lift designed for either outdoor or indoor applications. The operating system is composed of the tower and the lifting platform. The lift can be used for residential and commercial applications.
- B. Lifts shall be in accordance with local codes and regulations.

**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:  
Permanent 120 VAC, 20 amp single-phase power to operate lift to be provided from a lockable fused/cartridge type disconnect switch. Refer to drawings for permanent power specifications and location of disconnects. Temporary power may be provided to expedite installation of lift.

**1.3 QUALITY ASSURANCE:**

**A. SUBCONTRACTOR QUALIFICATIONS:**

- 1. Execute work of this section only by a company that 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.

**B. MANUFACTURER:**

- 1. Company with not less than 20 years of experience in the design, fabrication and assembly of platform lifts.

**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 MAINTENANCE:**

- A. The lift shall be cleaned regularly and inspected at intervals no longer than every 6 months.

**1.6 WARRANTY:**

- A. Unit shall have a 30-month limited parts guarantee on every component. The warranty doesn't cover labour. Refer to product documentation

**2.0 PRODUCTS:**

**2.1 PLATFORM LIFT:**

- A. Basic specifications for the Nationwide Lifts screw drive vertical platform lift model APEX 500:

1. Rated load.....	750 lb (340 kg)
2. Rated speed.....	±8 f.p.m (0.04 m/s)
3. Usable car dimensions.....	34"W x 54"L (864 x 1,372 mm)
4. Levels serviced .....	2
5. Number of openings.....	2
6. Car access.....	Front/rear or 90 exit

- 7. Travel.....48” (1,219 mm) or 72” (1,827 mm)
- 8. Operations.....constant pressure
- 9. Drive system.....ACME screw and back-up nut
- 10. Power supply (North-America).....120 VAC, 20 AMPS, 1 PHASE, 60 Hz
- 11. Controller.....Electronic-free relay logic
- 13. Side guard panels.....42” (1,067 mm) with metal inserts

**2.2 CAR OPERATION:**

- A. Car operating panel shall consist of constant pressure buttons or rocker switches, an emergency stop button, and an on/off key switch.
- B. Emergency operation- A manual handcrank is used to lower or raise the platform in case of emergency.

**2.3 ACME SCREW DRIVE:**

- A. The screw should have a diameter of 1” and a back-up nut shall be installed for security reasons. No brakes are required.

**2.4 LEVELLING DEVICE:**

- A. All limit switches and levelling device switches shall be located in a position to be inaccessible to unauthorised persons. They shall be located behind the mast wall and be accessible through removable panels.

**2.5 CALL STATIONS:**

- A. Provide a surface, flush, or doorframe mounted call/send station.

**2.6 TERMINAL STOPPING DEVICE:**

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

**2.7 GUIDE RAILS AND BRACKET:**

- A. Guide rails and brackets shall be used to guide the platform and sling. Roller guide shoes are bolted to the platform to make it roll on the rails. 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.

**2.8 CAR SLING:**

- A. Car sling shall be fabricated from steel tubing 44” high (1,117 mm) 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.

**2.9 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 wire ways.

**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 begins.

**C. INSTALLATION:**

1. Install all the components of the lift system that are specified in this section to be provided, and that are required by jurisdictional authorities to license the lift.
2. Trained employees of the lift contractor shall perform all installation work of this section.
3. Adjust lift for proper operation and clean unit thoroughly.
4. Instruct users and owner’s maintenance personnel in proper troubleshooting and maintenance procedures.