

Division 14 42 00 (14420)**California Vertical Platform Lift Model HBC 42"-168" Lift Heights****Technical Specifications**

July 2010

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. All materials and labor necessary to complete the installation of the vertical platform lift.
- B. Obtain all information affecting work at job site. Include verification of field dimensions, anchoring and storage. Verify voltages and outlets on electrical drawings.

1.02 REFERENCES

- A. The lift shall be designed and tested in accordance with ICC/A117.1, NEC and ASME A18.1-2003 Guidelines.
- B. All designs, clearances, construction, workmanship and installation shall be in accordance with ASME A18.1-2003 as modified by California Title 8, Section 3142.1 and Title 24. The platform lift shall be subject to local, city and state approval prior to and following installation.

1.03 SYSTEM DESCRIPTION

- A. The product described herein manufactured by National Wheel-O-Vator, is a vertical platform lifting device consisting of a machine tower with lifting platform, selected and dimensioned to provide adequate lifting height to suit the individual building requirements. The lift can be used either indoors or outdoors to vertically transport a wheelchair user or mobility impaired person up and over a barrier thus creating access to or within a building.
- B. Performance

1. Rated Load: 750 pound capacity
2. Travel Speed: 20 feet per minute
3. Lifting Height _____
4. Platform Size: 36" x 54" clear, with non skid-surface

1.04 SUBMITTALS

- A. Submit drawings or manufacturers literature for approval. Drawings shall show dimensional and wiring requirements.

1.05 QUALITY ASSURANCE

- A. Manufacturer: Company with not less than twenty (20) years of experience in the design and fabrication of vertical platform lifts.
- B. Technical Services: Manufacturer and authorized dealer shall work with architects, engineers and contractors to adapt the platform lift product to the design and structural requirements of the building, site, and code requirements.

1.06 WARRANTY

- A. Unit shall have a four (4) year limited parts warranty on the basic unit, including all electrical and drive system components.

1.07 MAINTENANCE

- A. Maintenance of the platform lift unit shall consist of regular cleaning of the unit and regular inspection at intervals not longer than every 6 months. Section 3094.5 California Title 8 and Rule 10.2.1 of ASME A18.1 require all Vertical Platform Lifts be inspected every six (6) months.

PART 2 - PRODUCT

2.01 MANUFACTURER

- A. National Wheel-O-Vator, a division of ThyssenKrupp Access, Model HBC as distributed by McKinley Elevator Corporation at (800) 229-7275.

- B. No substitution shall be considered unless written request for approval has been submitted and received by the architect at least ten (10) days prior to the bid date.

Each substitution request shall include the name of the material for which it is to be substituted and a complete description of the proposed substitutions including drawings, performance and test data, a list of projects similar in scope, photographs of existing installation, design differences and other information necessary for evaluation.

2.02 FABRICATION

- A. Platform shall be constructed of 12-gauge minimum zinc clad steel. If unit is not installed in a 3-inch pit, a stationary ramp shall be provided that extends under the lower landing gate/door.
- B. Platform side panels must be 42" high. Side panel framework shall be a minimum of 1"x 1½" steel or aluminum. Solid infill panels shall be a minimum of 18-gauge zinc clad steel.
- C. The mainframe support tubing shall be a combination of square and rectangular steel tubing with a minimum .120 wall thickness.
- D. Carriage platform supports shall be a minimum of 1" x 2" steel flat bar and carriage uprights shall be a minimum of ½" thick steel flat bar uprights. Cam rollers shall be used for axial carriage guidance and cam followers with wear pads shall be used for horizontal stability. Cam rollers shall be supported by a minimum 6.25#/ft. "T" rail.
- E. Loaded fasteners shall be grade five or higher. Locking fasteners shall be used in all critical locations.
- F. The removable machine tower sides shall be of 18 gauge zinc clad steel, front and back covers of a minimum of 18 gauge zinc clad steel minimum. The machine tower shall be one piece. As an option the tower can be split at 69" from the bottom.
- G. Drive means shall be 1:2 roller chain hydraulic equipped with a type "A" instantaneous slack chain safety device. The safety device linkage shall be made of stainless steel.
- H. The hydraulic connections shall be metal and have rated pressures that withstand the working pressure with the appropriate safety factor.
- I. The operating control circuit shall be 24 volt.
- J. Finish shall be electro statically applied powder coating, oven baked to cure.
- K. The control system and optional batteries shall be serviceable with platform at bottom landing without need to remove platform side panels.
- L. Color shall be selected from manufacturer's standard color or optional colors.
- M. A constant pressure up/down control switch shall be installed at each landing level and on the platform.
- N. When not installed with a runway enclosure, the platform shall be equipped with an obstruction panel that will stop the downward travel if an obstruction is encountered.
- O. An emergency stop / illuminated alarm switch shall be provided on the car as a means of signaling for assistance in the event of an emergency.
- P. A grab rail shall be provided on the platform.
- Q. The lift shall use 120V single phase as its standard power supply. 208V or 240V single phase input is also available as its power source.
- R. The hydraulic pump unit shall include a 24 Volt DC motor with an adequate size oil reservoir for full piston stroke.

S. A gate with a minimum height of 42" and a combination mechanical lock with a positive opening electric contact shall be provided at the upper landing.

T. A door or gate with a minimum height of 42" above the upper landing, vertical clearance of 80" and a combination mechanical lock with a positive opening electric contact shall be provided at the lower landing. The inside face of the door or gate shall be smooth, unperforated and mounted within 3/8 to 3/4 inch of the platform sill. (Title 8 and ASME A18.1-2003, Rule 2.1.1)

U. A manual lowering device shall be located at top of tower on upper landing side.

V. Unit to be equipped with the "simplex" base and carriage design, which allows the carriage to be folded to reduce the shroud and carriage width to 19", for ease of installation, without removal of any carriage attaching bolts.

W. Unit must be assembled and tested in factory before shipment.

2.03 ACCESSORIES

SPECIFIER PLEASE NOTE - Due to different applications of Vertical Platform Lifts, please strike the optional items shown if not used.

A. A CDP-1000 - Fire Rated (B Label) flush mounted steel door and frame shall be provided. Door shall include wire mesh vision panel with delay action door closure, dead latch, dummy trim door handle and electric strike. (If used at upper landing, delete 2.02 S. If used at lower landing, delete 2.02 T.)

B. A CDP-2000 - Low profile flush mounted steel door and frame shall be provided. Door shall include mesh vision panel with delay action door closure, dead latch, dummy trim door handle and an electric strike. (If used at upper landing, delete 2.02 S. If used at lower landing, delete 2.02 T.)

C. A CDP-3000 - Flush mounted, solid core oak laminated door and (oak) frame shall be provided. Door includes wire mesh vision panel with delay action door closure, dead latch, dummy trim door handle, lock plate cover and electric strike. (If used at upper landing, delete 2.02 S. If used at lower landing, delete 2.02 T.)

D. A CDP-4000 - Flush mounted, 42 inches high, solid core oak laminated gate and (oak) frame shall be provided at the upper landing. Gate includes spring hinges, dead latch, dummy trim gate handle, lock plate cover and electric strike. (If used, delete 2.02 S.)

E. A 24V DC, fail secure electric strike that contains electric contacts to insure the door is both closed and locked shall be provided. (This option is required when flush mounted door and frames are provided by others. Modify or delete 2.02 S and/or 2.02 T.)

F. 90 degree, enter exit platform (42 x 60 clear). (Modify or delete 1.03B4) (Title 24, Rule 1116.B4 and ICC/ANSI A117.4-2003 Rule 410.)

G. Power door/gate operators are required on all but straight through layouts. When strike clearance is less than 18" (24" outdoor) or with reveals over 8" a power operator is required for that door or gate. (Title 24, Rule 1116B.4 and ICC/ANSI A117.4-2003 Rule 410.)

H. If building attendant is not continuously available to take action when emergency signal is activated, add remote alarm or

ADA telephone. (Title 8 and ASME A18.1-2003, Rule 2.11.)

Electrician to wire from junction box on lift to remote alarm.

I. Optional batteries for standby lowering only or standby raise/lower can be supplied. A 3 stage waterproof charger shall keep batteries ready for standby.

J. The battery system shall have a lockable DC rated disconnect between the batteries and pump. (provided by mfg. or dealer at extra cost.)

K. Furnish emergency light for platform. Light to have 2 bulbs and backup power for 4 hours. (Title 8 and ASME A18.1-2003, Rule 2.6.6.3).

L. Low Profile Carriage (LPC) option is available on all BC lifts installed in runways by others. This option will shorten the required ramp from 30" to 10" in existing construction or to 16" in new construction. If pitted, reduce pit depth from 3" to 1.5". (Modify 2.02 D.)

PART 3 - EXECUTION

3.01 ACCEPTABLE INSTALLERS

A. Subcontractor Qualifications: A company that is listed as an authorized National Wheel-O-Vator dealer and Certified by Cal/OSHA-Elevator Division.

B. Electrical devices, services and final connections shall be by a qualified electrician.

3.02 INSTALLATION

A. Unit shall be installed and operated in accordance with the ICC/AI 17.1, NEC and ASME A18.1-2003, Section 2.1.1; and 3904 Title 8 Guidelines.

B. A dedicated 120 VAC, 20 Amp, electrical circuit with a lockable service disconnect switch shall be supplied by the electrical contractor at job site. For 208V or 240V units, a 15amp dedicated circuit shall be supplied. (Depending on local electrical codes, a G.F.I. device may be required.)

C. Coordinate work with general contractor.

D. Leave standard electrical connection drawings with electrical contractor to make final electrical connection.

E. The installation of the vertical platform lift shall be made in accordance with the approved plans and specifications and the manufacturers installation instructions.

3.03 FIELD QUALITY CONTROL

A. Load the vertical lift unit to rated capacity and test for several cycles to insure proper operation. No mechanical failures shall occur and no wear that would affect the reliability of the unit shall be detected.

3.04 TRAINING

Conduct training in accordance with 3094 Title 8 & furnish operating permit from the Elevator Division. Conduct owner training at time of inspection.

For more details, call National Wheel-O-Vator's Design Line 800-968-5438