VPL-3100 Residential Vertical Platform Lift
Technical Specifications

rev: 03-24-2010
ILS-00834

MODEL NUMBER: **VPL-3100 Series: Models VPL-3153 and VPL-3175 (AC-powered units)**
Models VPL-3153B and VPL-3175B (DC-powered units)

U.S. F.D.A. CLASSIFICATION: **Class II**
CLASSIFICATION NUMBER: **890.3930**
PRODUCT CODE: ING
CSA/C-US Listed: File Number 208135

PERFORMANCE STANDARDS: **USA Food & Drug Administration: None**
ANSI/ASME: A18.1-2008, 2005, 2003, 1999 Safety Standards for Platform Lifts and Stairway Chairlifts
CSA B613-00 (JAN 2002) Private Residence lifts for Persons with physical Disabilities
ANSI/ASME: CSA B44.1-04/ASME-A17.5-2004 Elevator and Escalator Electrical Equipment

RATED LOAD: **750 lbs maximum**

NUMBER OF PASSENGERS: **1 passenger with mobility device**

DRIVE:

- **AC-powered units: 1 hp motor; 1750 rpm, single phase, 120 VAC, 60 Hz, 13.4 full load amps, 1.15 service factor, continuous duty**

- ***DC battery-powered units*:**
  - ***Primary drive: ½ hp motor, 1750 rpm, 24 VDC permanent magnet, 20 full load amps, continuous duty***
  - ***5A 24 VDC output internal battery charger, 120 VAC 60 Hz 3A maximum input power required***

INTERMEDIATE REDUCTION: **Dual 4L style Poly-V belts and pulleys, 3.94:1 pulley reduction**

FINAL DRIVE: **1" DIA. ACME screw w/bronze nut and bronze safety back up nut**

***MOTOR CONTROLLER*:**

- **AC-powered units: 24 VAC relay control with 15A circuit breaker**

- ***DC battery-powered units*: *24 VDC relay control with 35A circuit breaker***

BRAKING:

- **AC-powered units: Precision landing control with solenoid-actuated screw braking**

- ***DC battery-powered units*: *Precision landing control***

STANDARD CONTROL: **Separate up and down pushbutton switches or paddle controls, continuous operation, key switch control**

EMERGENCY STOP SWITCH: (Standard) **Red, sealed, 1.55" diameter mushroom head, push to stop, pull to reset.** ***(Optional)*** **Red, sealed, 1.55" diameter mushroom head, illuminated with audio alarm, push to stop, pull to reset**

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SPEED:

- **AC-powered units: 9 feet per minute maximum**

- ***DC battery-powered units*: *10 feet per minute maximum***

LIFTING HEIGHT: **Model VPL-3153 has a 53" maximum floor to floor height, model VPL-3175 has a 75" maximum floor to floor height and a 28" minimum floor to floor height**

MAIN FRAME CONSTRUCTION: **Welded steel tubular guide construction w/formed sheet steel guarding**

CARRIAGE CONSTRUCTION: **Welded carriage with 2.0" dia. front and back sealed dual ball bearing wheels and adjustable low friction plastic side stabilizer guide pads**

PLATFORM CONSTRUCTION: **Totally enclosed side walls consisting of 1" tubular framing and sheet metal siding**

UNDER CARRIAGE SAFETY: **Totally enclosed bottom formed steel safety pan**

AUTOMATIC LOWER RAMP: **16" long self lowering ramp**

MANUAL LOWER DEVICE: **Optional. Manual hand crank to lower device available. Access to adaptive shaft via safety interlocked machine top cap**

FINISH: **Exterior grade powder coat paint**

LIMIT SWITCHES: **Adjustable upper and lower limit switches and upper final limit switch**

REMOTE CONTROL: **Optional. Station includes a seperate landing call and send pushbutton switches or paddle controls and a keyed on/off switch**

TOP LANDING GATE: **Optional. Includes Bruno mechanical interlock which releases door, only when platform is at upper landing. Electronic sensors stop platform from operating unless door is closed. Also includes call/send pushbutton switches or paddle controls and keyed on/off switch mounted into gate frame.**

PLATFORM GATE: **Optional. Includes Bruno mechanical interlock which releases door, only when platform is at lower landing. Electronic sensors stop platform from operating unless door is closed.**

WEIGHT OF UNIT:

- **AC-powered units:**
  - **Model VPL-3153: 777 lbs**
  - **Model VPL-3175: 850 lbs**

- ***DC battery-powered units*:**
  - ***Model VPL-3153B: 777 lbs (without batteries) (with batteries +40 to 80 lbs)***
  - ***Model VPL-3175B: 850 lbs (without batteries) (with batteries +40 to 80 lbs)***

- **All Models:**
  Platform Gate Option: 80 lbs
  Top Landing Gate Option: 99 lbs
  Top Landing Wide Gate Option: 108 lbs

TESTING PERFORMED:

1) **Life cycle test performed at manufacturer's location.**
2) **ASME A18.1/CSA B613-00 code tests performed at manufacturer's location.**

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VPL Job Site Preparation

The following is a list of general operations designed to prepare the job site for installation of the VPL. This list is provided as a guide to help the installer. For a complete list of requirements check the installation site's applicable local codes.

Electrical Requirements:

- **AC-powered units:** require a dedicated GFI 120 Volt, 15 amp, 60 Hz single phase circuit to operate. Check applicable local codes for all electrical and wiring requirements.

- ***DC battery-powered units:*** *require a dedicated GFI 120 Volt, 3 amp (max.), 60 Hz single phase circuit to operate the internal battery charger. Check applicable local codes for all electrical and wiring requirements.*

Platform Pathway Requirements:

Make sure the pathway that the platform runs in is clear of any electrical conduit and wire ways. Make sure no liquids, steam or gas piping discharge into the pathway, and make sure that there is sufficient headroom clearance (minimum of 80") throughout floor to floor travel. Make sure the area is sufficiently lit.

Floor Recommendations:

4" thick, 3500 PSI minimum compressive strength, reinforced concrete slab. Refer to VPL-3100 technical drawing for minimum slab dimensions.

Floor Attachment:

VPL must be fastened to concrete slab using four (4) 1/2" (3/8" bolt) x minimum 2 ½" long concrete anchors suitable for the environment. Refer to VPL-3100 technical drawing for mounting hole locations. Follow selected concrete anchor manufacturer's guidelines and applicable codes.

Housing Attachment:

None required. Can use 5/16-18 tapped holes on tower frame work to fasten the tower housing to a vertical wall for additional stability. Note: Housing must remain intact.

Top Gate Attachment:

Refer to VPL gate technical drawing (see below).

Space Requirements:

Refer to VPL-3100 technical drawing (see below).

Platform-to-Top Landing Sill Clearance:

ASME code indicates the platform floor-to-sill clearance at the upper landing shall not be less than 3/8" (9.5 mm) nor exceed 3/4" (19 mm). Follow applicable local codes.

Fascia Wall Requirements:

ASME code indicates that fascia should be smooth and non-perforated that guards the full length and width of the platform. The fascia shall be securely fastened from the upper landing sill down to the lower landing sill. It should also be able to withstand a 125-pound side load over any 4-inch square area. Follow applicable local codes.

Technical Drawings (*available at www.bruno.com*):

- ILS-00932 Straight-Through Platform (No Pit)
- ILS-00933 Straight-Through Platform With Platform Gate (Pit Application)
- ILS-00934 90º/Adjacent Exit Platform (No Pit)
- ILS-00935 90º/Adjacent Exit Platform With Platform Gate (Pit Application)
- ILS-00938 Top Landing Gate Detail

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