

# Ascension Virtuoso 5460P Model Series Vertical Portable Wheelchair Lift Product Specifications

## SECTION 14420 AND SECTION 14 42 00

### PART 1 - GENERAL

#### 1.1 SYSTEM DESCRIPTION

A. The product described herein, manufactured by Ascension, is a portable lifting device intended for the exclusive use of individuals with disabilities. The lift shall be used only by individuals who are unable to negotiate stairs. The lift shall be unenclosed and self-contained, requiring no additional components or modifications of the using facility. The lift shall consist of a platform supported on an electro-hydraulic lifting mechanism with built-in casters for portability. The casters shall permit easy movement of the unoccupied lift over hard, level surfaces. With the casters removed, the lift shall rest firmly on any hard, level surface, and provide a stable base for operation of the lift. The lift shall be low profile (no machine tower) to maintain viewing lines. The lift shall provide for independent use by individuals with disabilities and include all applicable operating and safety devices for compliance with ADA requirements. The lift shall have a slim profile platform frame to eliminate the need for a pit or access ramp on the lower landing side and facilitate easy entry into the lift directly at floor level by patrons. The lift shall provide adequate lifting force to raise the platform and occupant to a height suitable for access to most stages, platforms, or similar elevated surfaces.

### PART 2 - PRODUCT

#### 2.1 MANUFACTURER

A. Ascension Virtuoso 5460P Model Series vertical portable wheelchair lift, manufactured by Ascension, 3526 E. Fort Lowell Rd., Tucson, AZ, 85716, Tel: 800-459-0400 or 520-881-3993, Fax: 520-881-4983, sales@wheelchairlift.com.  
B. Acceptance of other products is subject to compliance with specified requirements and owner or architect approval.

#### 2.2 PHYSICAL CHARACTERISTICS

A. Lifting capacity: 750 pounds [341 kg].  
B. Weight of lift: 1025 pounds maximum [465 kg].  
C. Vertical speed: seven (7) fpm (feet per minute) [2.1 m/min (meters per minute)].  
D. Vertical travel: 12" to 60" [304 mm to 1524 mm], infinitely adjustable.  
E. Standard platform gate configuration: the upper landing platform gate shall be left-hinged when facing the lift from the upper landing; the lower landing platform gate shall be right-hinged when facing the lift from the lower landing. Contact Ascension for custom platform gate configurations.

#### 2.3 DIMENSIONS

A. Platform size: 36" x 54" [914 mm x 1372 mm] with 43" [1092 mm] high sidewalls and platform gates.  
B. Space requirements (operational, storage, and transport): 44" [1117 mm] high (in the down position), 66" [1677 mm] long, 48" [1219 mm] wide.  
C. No part of the lift shall stand over 44" [1117 mm] high when the platform is on the ground (with the exception for when the optional stage guard is being used).

#### 2.4 MATERIALS

A. The platform, base frame, and lifting device shall be constructed from ASTM A 36, AISI 1018, or AISI 1020 Steel.  
B. The windows shall be fabricated from 1/4" [6.35 mm] thick high impact strength clear thermoplastic.  
C. The safety skirt shall be constructed from rigid plastic.

#### 2.5 FINISH

A. All metal components shall be thoroughly cleaned to remove any foreign substance. Exposed metal surfaces shall be finished with an oven-baked powder coating.  
B. Standard color is black; contact Ascension for custom color selection.

#### 2.6 DRIVE TYPE

A. Drive shall be direct-acting hydraulic.

## 2.7 ELECTRICAL REQUIREMENTS

- A. Electric power requirements shall be compatible with 120VAC, 60 hertz, single phase, 15 amp service (option: international electrical configurations available).
- B. The lift shall be supplied with a three prong grounded electrical cord (20' [6.1 m] in length).
- C. The lift shall contain a Ground Fault Circuit Interrupter (GFCI).
- D. The hydraulic pump shall be directly coupled to a capacitor start 1/2 hp motor.
- E. Other than the motor, all control and operating circuits shall be serviced by a 12 VDC solid state linear power supply.
- F. Electrical components shall be UL listed and CSA registered.
- G. Electrical system shall be certified to ASME A17.5 by an independent testing laboratory.

## 2.8 SAFETY DEVICES

The lift shall be constructed to meet the applicable requirements of ADAAG, ASME A17.1-1996 or older (PART XX, SECTION 2000), ASME A18.1, and ANSI A117.1 as they would apply to a portable lifting device. The lift shall include the following safety features for protection of the passenger and general public.

- A. Grounded electrical system.
- B. 12 VDC operating controls.
- C. Constant pressure operating switches.
- D. Emergency stop button at passenger control station.
- E. Electro-mechanical interlock to prevent accidental opening of lower landing platform gate.
- F. Gate switches to prevent platform movement if either platform gate is open.
- G. Lift platform stop height switch.
- H. Safety skirt that completely encloses and protects the area under the lift platform.
- I. 43" [1092 mm] high sidewalls and platform gates.
- J. Unobstructed view through transparent sidewalls and platform gates.
- K. Grab bar extending full length of inside wall.
- L. Slip resistant surfaces on platform floor and dock plate.
- M. Structural safety factors as specified in ASME A18.1.
- N. Self-closing platform gates.

## 2.9 PORTABILITY

A. Casters shall be easily attached to the platform for portability and stored in the base frame when not in use. Casters shall be 3½" [89 mm] in diameter and fabricated from hard rubber. The casters shall be capable of being installed without tools. When the casters are installed, the lift shall roll easily over any hard, smooth, level surface. The lift shall be capable of being moved by fork lift or truck.

## 2.10 OPERATING CHARACTERISTICS

- A. Lift shall include three (3) constant pressure "UP/DOWN" switches, located outside of the platform at both ends and inside the platform.
- B. The passenger control station shall be provided with a separate "PUSH TO STOP" emergency button. The emergency stop button shall lock when pushed and require manual reset before operation can resume.
- C. The platform stop height shall be adjustable without the use of tools.
- D. Opening the upper landing platform gate shall deploy a dock plate that rests on the upper landing surface. The dock plate shall provide a smooth transition between the platform and the upper landing. Closing the upper landing platform gate shall retract the dock plate.
- E. The lower landing platform gate shall be provided with a mechanical interlock that prevents the platform gate from being opened whenever the platform is more than 2" [50 mm] above the full down position.

## 2.11 COMPRESSION CAPABILITY

A. The lift shall be capable of being compressed to 33" [838 mm] wide to facilitate relocation through a 36" [914 mm] wide doorway. Requires additional tool kit from Ascension.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

A. Set up lift for operation as described in manufacturer's operating manual.

### 3.2 MAINTENANCE

A. Maintenance of the lift shall consist of regular cleaning as deemed necessary by the using facility. General inspection, maintenance, and lubrication shall be specified in the manufacturer's service manual.

### **3.3 WARRANTY**

A. Manufacturer shall provide a twenty (20) year drive train, five (5) year all other parts, one (1) year labor limited warranty, starting from the date of shipment.

NOTE: This specification has been written to assist in preparing a detailed description of a portable wheelchair lift. Additional technical information may be obtained from Ascension. Specifications are also available electronically at [www.wheelchairlift.com](http://www.wheelchairlift.com). Specifications are subject to change.

U.S. Patent No. 6,182,798. Other U.S. and foreign patents pending.