

# Ascension CLARITY 16E/S Model Series Vertical Wheelchair Lift Product Specifications

## SECTION 14420 AND SECTION 14 42 00

### PART 1 - GENERAL

#### 1.1 SYSTEM DESCRIPTION

- A. The product described herein is an enclosed, self-contained vertical platform wheelchair lift, manufactured by Ascension, intended for use by individuals with disabilities. The product shall provide for independent use by individuals with disabilities and include all applicable operating and safety devices for compliance with ADA requirements. The product shall have a low-profile platform floor to eliminate the need for a pit or access ramp at the lower landing, and to facilitate entry into the lift platform.
  - i. 16E: The product shall consist of a machine cabinet, transparent runway enclosure, and lifting platform. The machine cabinet shall install against the uppermost landing serviced by the lift, providing clear view lines through the transparent runway enclosure on three sides.
  - ii. 16S: The product shall consist of a machine cabinet and lifting platform for installation in a shaft inside a building. The machine cabinet shall install against the uppermost landing serviced by the lift, minimizing the required clear width.

#### 1.2 REFERENCES

- A. The lift shall be designed and tested in accordance with ASME A18.1, ASME A17.5, ADAAG, ANSI A117.1, and NFPA 70 (NEC).

#### 1.3 SUBMITTALS

- A. Submit manufacturer's drawings and product data for approval. Drawings shall show dimensional and wiring requirements.

#### 1.4 QUALITY ASSURANCE

- A. Manufacturer shall maintain a quality management system certified to ISO 9001.
- B. Manufacturer shall have not less than twenty (20) years of experience in the design and manufacture of vertical wheelchair lifts.
- C. Lift shall be installed in accordance with all applicable codes.

#### 1.5 WARRANTY

- A. Manufacturer shall provide a warranty for a period of twenty (20) years on the drive train, five (5) years on all other components, and one (1) year on labor, starting from the date of installation.
- B. Extended warranty plans are available.

### PART 2 - PRODUCT

#### 2.1 MANUFACTURER

- A. Acceptable Manufacturer: Ascension®, a division of AGM, which is located at 3526 E. Fort Lowell Rd., Tucson, AZ, 85716, Tel: 800-459-0400 or 520-881-3993, Fax: 520-881-4983, WebSales@ascension-lift.com.
- B. Manufacturer must be a registered U.S.-owned company, with manufacturing operations for this product located in the United States of America.
- C. Basis-of-Design Product:
  - i. Ascension **CLARITY 16E** Model Series
  - ii. Ascension **CLARITY 16S** Model Series.
- D. 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 [340 kg] rated capacity.
- B. Vertical speed: 17 feet per minute [5 meters per minute].
- C. Vertical travel: 34" [865 mm] to 168" [4265 mm].

## 2.3 DIMENSIONS

- A. Platform clear space: 36" x 56" [914 mm x 1422 mm].
- B. Required installation space:
  - i. 16E: 48.13" x 67.25" [1225 mm x 1710 mm].
  - ii. 16S: 44.25" x 65.50" [1125 mm x 1665 mm].

## 2.4 MATERIALS

- A. Aluminum alloy guide rails shall be integral to machine cabinet.
- B. Guide rail brackets and cabinet supporting members shall be steel.
- C. Platform frame shall be steel.
- D. Platform grab bar and accent rails shall be stainless steel.
- E. Windows shall be 1/4" [6 mm] thick high impact strength clear thermoplastic.
- F. Enclosure structure shall be aluminum alloy.

## 2.5 FINISH

- A. Accent rails shall be brushed stainless steel.
- B. All exposed metal surfaces except grab bar and accent rails shall be powder coated.
- C. Standard color is silver metallic; contact Ascension for additional color choices.

## 2.6 DRIVE CONFIGURATION

- A. Drive shall be 2:1 chain hydraulic.
- B. Platform shall be supported by two hydraulic jacks with two suspension chains each.
- C. Suspension chain shall be No. 50 roller chain, 6100 lb. minimum breaking strength [2773 kg].
- D. Hydraulic power unit shall be mounted on vibration-isolating supports designed to minimize vibration transmission and reduce frame-borne noise.

## 2.7 ELECTRICAL REQUIREMENTS

- A. Electrical input: 120VAC, 60 hertz, single phase, 10amp (option: international electrical configurations available).
- B. Full-time battery power supplied by 24VDC SLA battery bank.
- C. Motor: 3 hp (2.1kW), 24VDC.
- D. Control circuits shall be 24VDC.
- E. Electrical system shall be certified to ASME A17.5 by an independent testing laboratory.

## 2.8 SAFETY DEVICES AND FEATURES

The lift shall include the following safety features for protection of the passenger and general public.

- A. Grounded electrical system.
- B. 24 VDC operating controls.
- C. Constant pressure operating switches.
- D. Emergency stop button at passenger control station.
- E. Electromechanical door and gate interlocks.
- F. Upper and lower limit switches.
- G. Unobstructed views through transparent panels on three sides of the enclosure.
- H. Grab bar extending full length of inside wall.
- I. Integral emergency lighting with field-selectable modes: "Fade," "Always-On," and "Emergency Only"
- J. Automatic standby power for at least 5 lift cycles (with lift carrying full load), in the event of a power outage.
- K. Slip-resistant platform floor.
- L. Structural safety factors as specified in ASME A18.1.
- M. Self-closing platform gates.
- N. Alarm and lighted alarm switch on platform.
- O. Slack-chain switches to automatically stop the platform if any suspension chain slackens.
- P. Low-profile platform floor.
- Q. No installation pit or access ramp at the lower landing.
- R. ADA-compliant hands-free phone with auto dialer for two way communication from platform.

## **2.9 OPERATING CHARACTERISTICS**

- A. Lift shall include three (3) constant pressure operating switches, two (2) for remote mounting outside of the platform and one (1) located inside the platform.
- B. The passenger control station shall be provided with a separate "PUSH TO STOP" emergency button. The emergency stop button shall prevent any operation of the lift when actuated.

## **PART 3 - EXECUTION**

### **3.1 EXAMINATION**

- A. Verify suitability of substrate preparation in accordance with approved manufacturer's drawings.
- B. Verify correct space requirements in accordance with approved manufacturer's drawings.
- C. Verify electrical service is of correct type and at correct location.

### **3.2 INSTALLATION**

- A. Lift shall be installed in accordance with architect's approved plans and specifications, manufacturer's instructions, and all applicable regulatory requirements.
- B. Installation space and substrate shall be of sufficient strength to support the loads imposed on it during operation of the lift. Refer to structural loading diagrams provided by manufacturer to ensure proper provision is made.

### **3.3 FIELD QUALITY CONTROL**

- A. Perform acceptance tests as required by code and the authority having jurisdiction. Place rated load on platform and operate for several cycles to verify correct installation and operation. No mechanical failures shall occur and no wear that would affect the reliability of the lift shall be detected.

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

Patent information is available on the Ascension website: [www.ascension-lift.com/patents](http://www.ascension-lift.com/patents)