SECTION 14420

WHEELCHAIR LIFTS

PART 1 GENERAL

1.01 SUMMARY

A. A vertical platform (wheelchair) lifting device, manufactured by ThyssenKrupp Access, designed to provide access to or within a building for mobility impaired persons. Lift consists of machine tower and lifting platform selected and dimensioned to provide adequate lifting height to suit building access requirements indoors and out.

1.02 REFERENCES

A. Lift shall be designed, manufactured and installed in accordance with the following standards:
   1. American National Standards Institute (ANSI).
   2. American Society of Mechanical Engineers (ASME).
   3. ADA Accessibility Guidelines (ADAAG).
   4. Underwriters Laboratories (UL).
   5. International Building Code (IBC).
   6. National Electrical Code (NEC).
   7. American Society for Testing Materials (ASTM).
   8. American Welding Society (AWS).

1.03 SYSTEM DESCRIPTION

A. Drive: (specify:)
   1. AC powered ballscrew drive; 1/2 hp, 120 V, 60Hz, instant reversing motor.
   2. Battery powered ballscrew drive; 1/2 hp, VDC, instant reversing motor with two 12 V, 33 AH, sealed no maintenance batteries with 24V 1.7 amp “smart charge” battery charger.
   3. Battery powered 1:2 roped hydraulic drive; 3/4 hp, 24 VDC pump motor with two 12 V, 33 AH, sealed no maintenance batteries with 24 V 3.3 amp “smart charge” battery charger.

B. Number of Stops: (specify:) Two or three.

C. Platform Configuration: (specify:) straight-thru, 90° exit or enter/exit same side.

D. Maximum Travel: (specify:) 39", 53", 75", 99", 123", 147" or 171".

E. Rated Load: 750 lbs. with minimum safety factor of 5X.

F. Rated Speed: 9-12 fpm (ballscrew drive) or 18-21 fpm (hydraulic drive) with rated load.

G. Platform Size: (specify:) 36"x48", 36"x56" or 36"x60" with 42" high guard panels.

H. Main Power Supply Wiring: Electrical contractor shall provide 115 VAC, single phase, 20 amp, 60 Hz power circuit.

I. Operating Features:
   1. Platform Controls: Directional paddle switch, on/off key switch, emergency stop switch with alarm and illuminated alarm button.
   2. Landing Controls: Directional paddle switch and on/off key switch (specify options:) emergency stop switch with alarm, mounted inside gate/door frames.
   3. Constant pressure operation.
   4. Grounded electrical system with upper, lower and final limit switches and 24 V operating controls.
   5. Platform underpanel equipped with obstruction sensors (optional).
   6. Fixed ramp with incline of 1:12 (specify:) fixed or automatic (required if lift is not installed in a pit).
   7. Non-slip surface on platform floor and ramp.
   8. Grab rail on platform.
   9. Manual lowering device.

10. Remote emergency lowering switch (optional on hydraulic drive).
11. Integral ballscrew safety device and electromechanical brake (ballscrew drive).
12. Broken rope safety device and flow control valve (hydraulic drive).
13. Pit switch (where required by code).
14. Telephone jack on platform (optional).
15. Upper Landing Gate/Door: (specify:)
    a. 42" high, self-closing gate with VDR™ mechanical interlock and (specify:) steel sheet or acrylic insert panel.
    b. 6'-8" self closing, flush mount, 1-1/2 hour fire rated door with VDR™ mechanical interlock and 3"x26" glass vision panel.
    c. 6'-8" self closing, flush mount, non-fire rated aluminum door with VDR™ mechanical interlock and 27"x67" bronze tinted acrylic vision panel.
16. Lower/Middle Landing Door: (specify:)
    a. 6'-8" self closing, flush mount, 1-1/2 hour fire rated door with VDR™ mechanical interlock and 3"x26" glass vision panel.
    b. 6'-8" self closing, flush mount, non-fire rated door with VDR™ mechanical interlock and 27"x67" bronze tinted acrylic vision panel.
17. Automatic Gate/Door openers (optional).

1.04 QUALITY ASSURANCE

A. Manufacturer: Provide wheelchair lift manufactured by a firm with a minimum of 25 years experience in fabrication of wheelchair lifts equivalent to those specified.
B. All designs, clearances, workmanship and material, unless specifically accepted, shall be in accordance with all codes having legal jurisdiction.
C. All load ratings and safety factors shall meet or exceed those specified by all governing agencies with jurisdiction and shall be certified by a professional engineer.
D. Lift shall be subject to applicable state, local and city approval prior to installation and subject to inspection after installation. Determination of and adherence to these regulations is the responsibility of the lift contractor.
E. Welders certified in accordance with requirements of AWS D1.1 shall perform all welding of all parts.
F. Substitutions: No substitutions permitted.

1.05 WARRANTY

A. Warranty: Manufacturer shall warrant the Porch-Lift® vertical platform lift's drive system for a period of two years after installation and all other components for one year after installation.
B. Extended Warranty (optional): Manufacturer shall warrant the Porch-Lift® vertical platform lift for a period of (specify:) 3 or 5 years after installation with the purchase of a preventative maintenance program from lift contractor for an equal number of years.

1.06 MAINTENANCE

A. The Porch-Lift® vertical platform lift must be maintained in accordance with manufacturer's instructions.

PART 2 PRODUCT

2.01 MANUFACTURER

A. Provide Porch-Lift® vertical platform lift model PL-S manufactured by ThyssenKrupp Access.
    1. Contact: 4001 E. 138th Street, Grandview, MO; Telephone: 800-925-3100; Fax: 816-763-4467; Email: archassist@accessind.com; Web site: www.accessind.com

2.02 MATERIAL

A. Machine Tower: 14 ga. steel sheet.

B. Guide Rail: 3" x 2" x 1/8" ASTM A500 grade B steel tubing.
C. Base Frame: 2" x 2" x 1/4" structural steel tubing and angle.
D. Lift Weldment: 3/8" hot rolled steel plate and 2" x 2" x 1/4" wall structural steel tubing.
E. Side Guard Panels: 18 ga. galvanealed steel sheet in 1" x 2" x 14 ga. steel tubing frame.
F. Front Access Panel: 20 ga. galvanealed steel sheet.
G. Platform: 11 ga. steel plate.
H. Access Ramp: 11 ga. steel plate.

2.03 FINISHES

A. Components shall be prepared with 1)alkaline detergent wash, 2)clear water rinse, 3)iron phosphate coating, 4)clear water rinse and finished with electrostatically applied thermostatic powder coat finish for indoor or outdoor use. Standard color is ivory.

2.04 ELECTRICAL SYSTEMS

A. The electrical contractors shall provide a 115V, single phase, 20 amp, 60 Hz electrical power source connection.
B. Electrical piping and wiring supplied by others.
C. Final electrical connections performed by lift contractor.

PART 3 EXECUTION

3.01 ACCEPTABLE INSTALLERS

A. Installers shall be experienced in performing work of this section who have specialized in work comparable to that required for this project.
B. Installers shall be certified and trained by the manufacturer.

3.02 EXAMINATION

A. Use field dimensions and approved manufacturer's shop drawings to examine substrates, supports and other conditions under which this work is to be performed. Do not proceed with work until unsatisfactory conditions are corrected.

3.03 INSTALLATION

A. The Porch-Lift® vertical platform lift shall be installed in accordance with manufacturer's instructions and as specified and approved by architect.
B. Landing gates and doors shall be installed by others. Electrical piping and wiring by others. Final electrical connections and lift adjustments by lift contractor.

3.04 DEMONSTRATION

A. The lift contractor shall make a final check of the lift's operation with the Owner or Owner's representative present prior to turning the lift over for use. The lift contractor shall determine that operating and safety devices are functioning properly.

END OF SECTION

Notes: Intent of specification is to broadly outline equipment required but does not cover details of design and construction.

Dimensions and specifications are subject to constant change and continually evolving codes and product applications. For additional technical information, contact ThyssenKrupp Access at (800) 925-3100 or www.accessind.com.