**VERTICAL WHEELCHAIR LIFTS 14 42 16**

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This 3-part spec uses the Construction Specification Institute (CSI) Project Resource Manual (PRM), including MasterFormat™, SectionFormat™ and PageFormat™.

**14 42 16**

**VERTICAL WHEELCHAIR LIFTS**

**PART 1 GENERAL**

**1.1 SUMMARY**

This section includes vertical wheelchair lifts (vertical platform lifts) specifications.

**Specifier Note:** Revise Paragraph below to suit project requirements. Add section numbers and titles per CSI MasterFormat and specifier practice.

Related Requirements:

**Specifier Note:** Include in this paragraph only those sections and documents that directly affect the work of this section. If a reader of this section could reasonably expect to find a product or component specification, but it is actually specified elsewhere, then the related section number(s) should be listed in the Subparagraph below. Do not include Division 00 documents or Division 01 sections since it is assumed that all technical sections are related to all project Division 00 documents and Division 01 sections to some degree. Refer to other documents with caution since referencing them may cause them to be considered part of the Contract.

1. Division 26 – Electrical; for rough-in and connections.

2. [ ].

**1.2 REFERENCES**

**Specifier Note:** Define terms that are unique to this Section and are not provided elsewhere in the contract documents. Include in this Article terms that are unique to the work specified that may not be commonly known in the industry.

**Specifier Note**: Paragraph below may be omitted when specifying manufacturer’s proprietary products and recommended installation. Retain References Paragraph when specifying products and installation by an industry reference standard. List retained standard(s) referenced in this section alphabetically. Indicate issuing authority name, acronym, standard designation and title. Establish policy for indicating edition date of standard referenced. (Continue

Contract Conditions Section 01 42 00 - References may establish the edition date of standards. This paragraph does not require compliance with standard(s). It is a listing of all references used in this section. Only include standards that are referenced in the body of the specified in PARTS 1, 2 and/or 3. Do not include references to building codes at any level.

1. Reference Standards:
2. American Society of Mechanical Engineers (ASME); latest editions:
	1. ASME A17.1 Safety Code for Elevators and Escalators.
	2. ASME A17.5 Elevator and Escalator Electrical Equipment.
	3. ASME A18.1 Safety Standard for Platform Lifts and Stairway Chairlifts.
3. Canadian Standards Association (CSA); latest editions:

a. CSA B44.1 Elevator and Escalator Equipment

b. CSA B3555 Platform Lifts and Stair Lifts for Barrier-Free Access

**Specifier Note:** Article below includes submittal of relevant data to be furnished by Contractor before, during or after construction. Coordinate this article with Architect’s and Contractor’s duties and responsibilities in Contract Conditions and Section 01 33 00 – Submittal Procedures.

* 1. **SUBMITTALS**
1. Product Data: Manufacturer’s standard specifications, descriptive literature and certifications, including:
2. Catalog cut-sheets.

2. Sample warranty.

3. [ ].

4. [ ].

B. Shop Drawings: Graphic information specifically prepared for this project, including:

1. Dimensioned plans, elevations, sections and construction details indicating full extent of work required for vertical wheelchair lifts.

2. Verify dimensions.

3. [ ].

**Specifier Note:** Specify submittals to document manufacturer’s storage, installation and other instructions.

C. Manufacturer’s Written Instructions, including:

1. Delivery, storage and handling.

2. Preparation and Installation.

3. Maintenance.

4. [ ].

**Specifier Note:** Coordinate Article below with Contract Conditions and with Section 01 78 36 – Warranties.

D. Warranty: Fully executed, issued in [Owner’s] name, and registered with manufacturer, including:

1. Manufacturer’s [2-year] limited warranty, from date of substantial completion, covering defects in materials and workmanship for major components.

2. Manufacturer’s [1-year] limited warranty, from date of substantial completion, covering defects in materials and

3. [ ].

**1.4 QUALITY ASSURANCE**

A. Installer: Acceptable to manufacturer, experienced in performing work of this section and specialized in installation of work similar to that required for this project.

B. [ ].

**1.5 DELIVERY, STORAGE AND HANDLING**

A. Deliver materials in accordance with manufacturer’s written instructions.

B. Deliver materials in manufacturer’s original unopened packaging with identification labels intact.

C. Store materials protected from exposure to harmful weather conditions and at temperature conditions in accordance with manufacturer’s written instructions.

**Specifier Note:** USGBC’s LEED® certification includes credits for the diversion of construction waste from landfill Diversion can be tracked by either weight or volume but must be consistent for all materials. Manufacturer may reclaim packaging and delivery materials for recycling.

D. Remove packaging materials from site and dispose of at appropriate recycling facilities.

E. [ ].

**PART 2 PRODUCTS**

**Specifier Note:** Retain Article below for proprietary method specification. Add product attributes, performance characteristics, material standards and descriptions as applicable. Use of such phrases as “or equal”, “approved equal” or similar phrases may cause ambiguity in specifications. Such phrases require verification, (procedural, legal and regulatory) and assignment of responsibility for determining “or equal” products.

2.1 VERTICAL WHEELCHAIR LIFTS

**Specifier Note:** Include in the following paragraph the following: manufacturer’s name, address, phone number, email address and website URL.

1. Manufacturer: Bruno Independent Living Aids, Inc.; 1780 Executive Dr.; Oconomowoc, WI 53066; Tel: 877-778-699, Email: commercialvlp@bruno.com ; Website: [www.bruno.com/cvpl.](http://www.bruno.com/cvpl)

1. Single Source Responsibility: Provide components and materials in this section from a single manufacturer.

**Specifier Note:** Substitution procedures must either be in the Contract Conditions or in Section 01 25 00 – Substitution Procedures. Do not include substitution procedures here.

1. Substitutions: In accordance with [Contract Conditions] [Section 012500 – Substitution Procedures] [No substitutions permitted].

**Specifier Note:** Include an overall description of the system, assembly, product or material. Include required properties or characteristics that do not obviously belong under other titles. Examples: Configurations, size and color.

1. Product: VPL-3300B Series Vertical Platform Lifts; designed to lift single passenger with wheelchair, scooter or motorized chair to maximum height of 53 inches (1346mm); weatherproof for interior or exterior use.

**Specifier Note:** VPL-3300B Series lift is available in as per specifications below:

1. Type:
2. Unenclosed: Designed with minimum floor space required; including, drive tower, platform, platform gate, upper landing gate, automatic folding ramp, and controls.

**Specifier Note:** VPL-3300B Series lift is available in 4 platform sizes. Select platform size to meet project requirements.

1. Platform size: [Standard 36 by 54 inches (914 by 1372 mm)] [36 by 48 inches (914 by 1219 mm)] [36 by 60 inches (914 by 1524 mm)] [42 by 60 inches (1067 by 1524 mm)].
2. Finish and color: Powder coat fi unless noted otherwise, with non-slip additive on walking surfaces; champagne color.

**Specifier Note:** Rated capacity is standard for the VPL-3300B Series.

1. Rated capacity: 750 pound (340 kg).

**Specifier Note:** VPL-3300B Series lifts can be installed with or without a 3 inch (76 mm) deep pit. Select installation method to meet project requirements.

1. Installation method: [With pit] [Without pit].
2. Model: VPL-3353B

**Specifier Note:** Select type to meet project requirements, using VPL-3353B

1. Type: [Unenclosed]
2. Number of stops: Two.

**Specifier Note:** VPL-3353B is available with 2 platform configurations. “Straight through” refers to entrance at front of lift in lowered position, with exit at back of lift in raised position, or the opposite. “90 degrees, adjacent side” refers to entrance at front of lift in lowered position and exit at side of lift opposite drive tower in raised position, or the opposite. Select configuration to meet project requirements.

1. Platform configuration [Straight through] [90 degrees].
2. Minimum travel height: 11 inches (279 mm).
3. Maximum travel height: 53 inches (1346 mm).
4. Weight: 897 pounds (407 kg).

**Specifier Note:** Select common components, including drive tower and platform for each type of VPL-3353B.

1. Components:
2. Drive tower, including:
3. Main frame: Steel tube guides with formed steel sheet back; welded construction.
4. Travel carriage: Steel tube and plate fabrication with 21⁄4 inch (57 mm) diameter front and back sealed dual-ball- bearing wheels, and adjustable low-friction plastic side stabilizer pads.
5. DC battery-powered drive system, including:
6. Primary drive: 1⁄2 hp motor, 1750 rpm, 24V DC permanent magnet, 20 full-load amps, continuous duty.
7. Intermediate reduction: Dual 4L style poly-V belts and pulleys with 3.94:1 reduction.
8. Final drive: 1 inch (25 mm) diameter Acme screw with bronze nut and safety back-up nut.
9. Motor controller: 24V DC relay control with 35A circuit breaker and disconnect.
10. Braking: Precision landing control.

**Specifier Note:** Batteries are available in 2 sizes. Select batteries to meet project requirements.

1. Batteries (2): [12V DC; 17Ah] [12V DC; 34Ah].
2. Internal battery charger: 5A, 24V DC output with 120V AC, 3A 60 Hz input.
3. Emergency lowering: Manual hand crank.
4. Limit switches: Adjustable upper and lower limit switches; upper and lower final limit switches.
5. Drive tower cabinet: Formed steel sheet enclosure with top; bolted assembly.

**Specifiers Note:** Platform controls are available with rocker or paddle type up-down switches. Select type of switch.

1. Platform: Formed steel floor with fully enclosed bottom safety panel (unenclosed application only); 42 inch (1067 mm) high sidewalls with 1 inch (25 mm) metal tube frames fitted with sheet metal panels; grab bar; lighted, platform controls with keyed on-off switch, continuous pressure up-down [rocker] [paddle] switch, and emergency stop with audio visual alarm.

**Specifier Note:** Select type of specific components, including platform gate, upper landing gate, and automatic folding ramp for unenclosed type of VPL-3353B.

1. Platform gate: 42 inch (1067 mm) high; 11⁄2 inch (38 mm) metal tube frame fi with 16 gauge steel panel, hinges, latch plate, and pull handle; electro-mechanical interlock releases gate with platform at lower landing; electronic sensors stop platform from operating unless gate is locked.

**Specifier Note:** Upper landing gate is available in 36- or 42-inch widths. Select width to match platform configuration.

**Specifier Note**: Upper landing gate is available with steel panel.

**Specifier Note**: Upper landing gate is available with electro-mechanical (not available for 42” x 60” platform) or electric strike interlock. Select type of interlock.

**Specifier Note**: Landing controls are available built into gate post or remotely located. Select location.

**Specifier Note:** Landing controls are available with rocker or paddle type up-down switches. Select type of switch.

1. Upper landing gate: [36 inch (9914 mm)] [42 inch (1067 mm)] wide by 42 inch (1067 mm) high; 11⁄2 inch (38 mm) square by 12 gauge, steel tube frame with 16 gauge steel insert panel, hinges, latch plate, cam locking actuator, and pull handle; 3 inch (76 mm) by 11⁄2 inch (38 mm) by 12 gauge steel gate posts welded to 5 inch (127 mm) by 43⁄4 inch (121 mm) by 3⁄16 inch (5 mm) thick steel mounting fl [electro-mechanical] [electric strike] interlock releases gate with platform at upper landing; electronic sensors stop platform from operating unless gate is locked; landing controls, [built into gate post] [remotely located], with keyed on-off switch and continuous pressure up-down [rocker] [paddle] switch.
2. Automatic folding ramp: 16 inch (406 mm) long by width of platform; self-lowering.

**Specifier Note**: Select lift accessories to meet project requirements. Schedule accessories for each lift on drawings or in PART 3 ATTACHMENTS.

**2.2 ACCESSORIES**

A. [Power assisted platform gate operator]

B. [Power assisted landing gate operator]

C. [Cold weather package recommended for operating temperatures below 20 degrees F (-7 degrees C)]

D. [Pit switch]

E. [Flood sensor]

F. [Manual hand crank]

G. [Flood zone tower (electronics mounted in top section)].

**PART 3 EXECUTION**

**3.1 EXAMINATION**

A. Verify that conditions of work previously installed under other sections or contracts are acceptable for installation of vertical wheelchair lifts in accordance with manufacturer’s written instructions and approved submittals.

1. Notify [Architect] of unacceptable conditions upon discovery.

1. Do not proceed with preparation and installation until unacceptable conditions have been corrected.

B. [ ].

**Specifier Note**: Specify actions required to prepare the surface, area or site for incorporation of the section’s primary products. Describe requirements for exposure or removal of existing assemblies, components, products or materials.

**3.2 PREPARATION**

**Specifier Note:** Specify preparatory work required prior to installation/application/erection of primary products.

A. Prepare mounting locations for installation in accordance with manufacturer’s written instructions and approved submittals

B. [ ]

**3.3 INSTALLATION**

A. Install vertical wheelchair lifts in accordance with manufacturer’s written instructions and approved submittals.

B. [ ].

**3.4 CLEANING**

A. Clean-up waste and debris daily during installation.

B. Upon completion, remove surplus materials, remaining debris, tools and equipment.

C. Collect recyclable waste and dispose of as specifications

D. [ ].

**Specifier Note:** Specify protection methods completed after installation, but prior to acceptance by the owner. Protection of surrounding areas and surfaces during application or installation is included under PART 3, Preparation. Include only statements unique to this Section.

**3.5 PROTECTION**

A. Protect installed products from damage during subsequent construction.

B. Repair damage to adjacent materials caused by installation of vertical wheelchair lifts.

C. [ ].

**3.6 ATTACHMENTS**

**Specifier Note:** Schedules are sometimes placed in the specifications other than on drawings. Include schedules that indicate item/element/product/equipment, location and other coordinating data.

**Specifier Note:** Lift components are adaptable to meet project requirements. Schedule components and accessories for each lift.

A. Vertical Lift Schedule:

B. [ ].