SECTION 14 42 16

VERTICAL WHEELCHAIR LIFTS

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\*\* NOTE TO SPECIFIER \*\* Garaventa Lift; Genesis Vertical Platform Wheelchair Lifts.  
.  
This section is based on the products of Garaventa Lift, which is located at:   
  
United States  
P.O. Box 1769  
Blaine, WA 98231-1769  
  
Canada   
18920 36th Ave.  
Surrey, BC V3Z 0P6  
  
Toll Free: 800-663-6556  
Tel: (604) 594-0422  
Fax: (604) 594-9915  
Email: [productinfo@garaventalift.com](mailto:productinfo@garaventalift.com)  
Web: [www.garaventalift.com](http://www.garaventalift.com)  
[ [Click Here](http://www.arcat.com/company/32685) ] for additional information.   
  
Garaventa Lift is an international company specializing in the manufacturing of wheelchair lifts and elevators. A world leader in the accessibility industry with a reputation for reliability, safety and innovation, Garaventa Lift has over 50,000 installations worldwide.  
  
This specification lists 4 models of vertical platform lift: The Genesis Shaftway, Enclosure and Opal models and the Elvoron CPL Model.  
  
The Enclosure Model is a modular, self-contained unit that can serve up to 3 stops and 171 inches (4343 mm) travel. The Shaftway Model is installed within a shaftway (or hoistway) provided by others, that travels up to 3 stops and 171 inches (4343 mm). The Opal Model is a self-contained unenclosed, low-rise lift that travels between 2 stops and up to 63 inches (1600 mm) for floor mounted units.  
  
The Elvoron CPL is a full cab vertical platform wheelchair lift with greater travel range than The Genesis models. Travel for wheelchair lifts is restricted by code.

1. GENERAL
   1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Enclosed Vertical Wheelchair Lift.
    2. Shaftway Vertical Wheelchair Lift.
    3. Unenclosed Vertical Wheelchair Lift.
    4. Full Cab Vertical Wheelchair Lift.
  1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 03 30 00 - Cast-in-Place Concrete.
    2. Section 04 40 00 - Stone Assemblies.
    3. Section 06 10 00 - Rough Carpentry.
    4. Section 09 21 16.23 - Gypsum Board Shaft Wall Assemblies.
    5. Division 16 - Electrical: Dedicated telephone service and wiring connections.
    6. Division 16 - Electrical: Lighting and wiring connections at top of shaft.
    7. Division 16 - Electrical: Electrical power service and wiring connections.
  1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section. Use ASME references as applicable for installations in the United States. Use CSA references as applicable for installations in Canada.

* + 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.
    4. CSA B44 - Safety Code for Elevators and Escalators.
    5. CSA B355 - Lifts for Persons with Physical Disabilities.
    6. ICC/ANSI A117.1 - Accessible and Usable Buildings and Facilities.
    7. NFPA 70 - National Electric Code.
    8. CSA - National Electric Code.
  1. SUBMITTALS
     1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
     2. Product Data: Manufacturer's data sheets on each product to be used, including:
        1. Submit manufacturer's installation instructions, including preparation, storage and handling requirements.
        2. Include complete description of performance and operating characteristics.
        3. Show maximum and average power demands.
     3. Shop Drawings:
        1. Show typical details of assembly, erection and anchorage.
        2. Include wiring diagrams for power, control, and signal systems.
        3. Show complete layout and location of equipment, including required clearances and coordination with shaftway.

\*\* NOTE TO SPECIFIER \*\* Delete selection samples if colors have already been selected.

* + 1. Selection Samples: For each finished product specified, provide two complete sets of color chips representing manufacturer's full range of available colors and patterns.
    2. Verification Samples: For each finished product specified, two samples, minimum size 1-3/4 inch by 2-1/4 inches, representing actual product, color, and patterns.
  1. QUALITY ASSURANCE
     1. Manufacturer Qualifications: Firm with minimum 10 years experience in manufacturing of vertical platform lifts, with evidence of experience with similar installations of type specified.
     2. Installer Qualifications: Licensed to install equipment of this scope, with evidence of experience with specified equipment. Installer shall maintain an adequate stock of replacement parts, have qualified people available to ensure fulfillment of maintenance and callback service without unreasonable loss of time in reaching project site.
  2. REGULATORY REQUIREMENTS

\*\* NOTE TO SPECIFIER \*\* Verify local regulatory requirements. Delete one of the two following paragraphs as required to suit local requirements. First paragraph is for installations in the United States as applicable. Second paragraph is for installations in Canada as applicable.

* + 1. Provide platform lifts in compliance with:
       1. ASME A18.1 - Safety Standard for Platform Lifts and Stairway Chairlifts.
       2. ASME A17.1 - Safety Code for Elevators and Escalators.
       3. ASME A17.5 - Elevator and Escalator Electrical Equipment.
       4. NFPA 70 - National Electric Code.
    2. Provide platform lifts in compliance with:
       1. CSA B355 - Lifts for Persons with Physical Disabilities.
       2. CSA B44.1/ASME A17.5 - Elevator and Escalator Electrical Equipment.
       3. CSA - National Electric Code.
  1. DELIVERY, STORAGE, AND HANDLING
     1. Store products in manufacturer's unopened packaging until ready for installation.
     2. Store components off the ground in a dry covered area, protected from adverse weather conditions.
  2. PROJECT CONDITIONS
     1. Do not use wheelchair lift for hoisting materials or personnel during construction period.
  3. WARRANTY

\*\* NOTE TO SPECIFIER \*\* The following warranty paragraph is for all vertical lift models. Select the following paragraph(s) for the basic warranty.

* + 1. Warranty: Provide a two year limited warranty for wheelchair lift materials and workmanship.

\*\* NOTE TO SPECIFIER \*\* Add the following paragraph if an extended warranty is also required. The extended warranty requires the execution of a separate preventative maintenance program agreement for the entire warranty period. Delete if not required.

* + 1. Extended Warranty: Provide an extended manufacturer's warranty covering the wheelchair lift materials and workmanship for the following additional extended period beyond the initial two year warranty. Preventive Maintenance Agreement required.
       1. Five Years (7 years total).

1. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: Garaventa Lift; United States - P.O. Box 1769, Blaine, WA 98231-1769. Canada - 18920 - 36th Ave., Surrey, BC V3Z 0P6. ASD. Toll Free: 800-663-6556. Tel: (604) 594-0422. Fax: (604) 594-9915. Email: [productinfo@garaventalift.com](mailto:productinfo@garaventalift.com). Web: [www.garaventalift.com](http://www.garaventalift.com).

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
    2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00.

\*\* NOTE TO SPECIFIER \*\* Select one of the four following principal Wheelchair Lift paragraphs for Enclosed Self-Contained Lifts, Shaftway Lifts, Unenclosed Lifts or Enclosed Full Cab Wheelchair Lifts and delete the ones not required.   
  
\*\* NOTE TO SPECIFIER \*\* The following paragraph is for Genesis Enclosure Model enclosed, self-contained wheelchair lifts that serves two or three landings with up to 171 inches (4343 mm) maximum travel distance. Doors and gates may be located at ends and side of platform for straight through, 90 degree or on/off same side entry/exit.

* 1. ENCLOSED VERTICAL WHEELCHAIR LIFT
     1. Capacity: 750 lbs (340 kg) rated capacity.
     2. Mast Height:

\*\* NOTE TO SPECIFIER \*\* Select one of the seven following paragraphs for the lift height needed for project conditions. Delete the ones not required. Lifting height shown is the maximum vertical distance as measured from the bottom of the pit to the upper floor level, if lift is pit mounted, or the lower floor to the upper floor, if lift is floor mounted,

* + - 1. Model GVL-EN-42; 45 inches (1143 mm) maximum lifting height.
      2. Model GVL-EN-60; 63 inches (1600 mm) maximum lifting height.
      3. Model GVL-EN-72; 75 inches (1905 mm) maximum lifting height.
      4. Model GVL-EN-96; 99 inches (2515 mm) maximum lifting height.
      5. Model GVL-EN-120; 123 inches (3124 mm) maximum lifting height.
      6. Model GVL-EN-144; 147 inches (3734 mm) maximum lifting height.
      7. Model GVL-EN-168; 171 inches (4343 mm) maximum lifting height, using hydraulic drive, only.
    1. Nominal Clear Platform Dimensions:

\*\* NOTE TO SPECIFIER \*\* Select one of the three following paragraphs for the platform size. Delete the ones not required.

* + - 1. Standard: 37-1/4 inches (947 mm) by 54 inches (1370 mm).
      2. Mid Size: 37-1/4 inches (947 mm) by 60 inches (1522 mm).
      3. Large: 43-1/4 inches (1099 mm) by 60 inches (1522 mm).
    1. Platform Configuration:

\*\* NOTE TO SPECIFIER \*\* Select one of the three following paragraphs for landing configuration. Modify description to include intermediate landing when opening is not in line with one of the other landings. Delete the ones not required.

* + - 1. Straight Through Entry/Exit: Front and rear openings.
      2. 90 Degree Entry/Exit: Front and side openings.
      3. On/Off Same Side Entry/Exit: One front opening only.
    1. Landing Openings:
       1. Lower Landing: Door.

\*\* NOTE TO SPECIFIER \*\* Delete the following paragraph when lift has only two stops.

* + - 1. Intermediate Landing: Door.

\*\* NOTE TO SPECIFIER \*\* Select one of the two following paragraphs for top landing opening type. Delete the one not required.

* + - 1. Upper Landing: Door.
      2. Upper Landing: Gate.
    1. Doors and Gates: Doors and gates shall be self closing type.
       1. Door Height: Flush mount, 80 inches (2032 mm).

\*\* NOTE TO SPECIFIER \*\* Select the following paragraph if a gate is required at the upper landing. Delete if not required.

* + - 1. Gate Height: Flush mount, 42-1/8 inches (1070 mm).
      2. Door Construction: Aluminum frame with:

\*\* NOTE TO SPECIFIER \*\* Select one or more of the following paragraphs for the doors and gates. Delete the ones not required. May vary from landing to landing. If more than one type is required indicate the location of each type.

* + - * 1. Panels of 16 gauge (1.5 mm) painted galvanized steel.
        2. Panels of 3/16 inch (5 mm) clear Plexiglas with 16 gauge (1.5 mm) galvanized steel kick plate.
        3. Panels of 3/16 inch (5 mm) bronze Plexiglas with 16 gauge (1.5 mm) galvanized steel kick plate.
        4. Panels of 1/4 inch (6 mm) laminated safety glass with 16 gauge (1.5 mm) galvanized steel kick plate.
        5. D-Handle Pull: 12 inch (305 mm) offset D-Handle.

\*\* NOTE TO SPECIFIER \*\* Select the following paragraphs for power door operators if required. Delete if not required. This is required by many jurisdictions, especially at the lower landing if the lift entrance is via fixed ramp (no pit) or where the configuration is on/off same side.

* + - 1. Power Door/Gate Operator: Automatically opens the door/gate when platform arrives at a landing. Will also open at landing by pressing call button.
         1. ADA Compliant and obstruction sensitive.
         2. Low voltage, 24 VDC with all wiring concealed.
         3. Location:

\*\* NOTE TO SPECIFIER \*\* Select the paragraphs below for locations of doors and gates to be equipped with power door operators. Delete the ones not required.

Lower Landing: Door.

Intermediate Landing: Door.

Upper landing: Door or Gate.

* + 1. Lift Components:
       1. Machine Tower: Custom aluminum extrusion.
       2. Base Frame: Structural steel.
       3. Platform Side Wall Panels: 42-1/8 (1070 mm) inches high. 16 gauge (1.5 mm) galvanized steel sheet. Custom aluminum extrusion tubing frame.
       4. Enclosure Panels:

\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs for enclosure panels. Delete the ones not required.

* + - * 1. 16 gauge (1.5 mm) painted galvanized steel sheet.
        2. 3/16 inch (5 mm) clear Plexiglas.
        3. 3/16 inch (5 mm) bronze Plexiglas.
        4. 1/4 inch (6 mm) laminated safety glass.
    1. Enclosure Height Above Upper landing:

\*\* NOTE TO SPECIFIER \*\* Select one of the two following paragraphs for the height of the enclosure at the upper landing. Delete the one not required.

* + - 1. Enclosure shall extend 42-1/8 inches (1070 mm) above the upper landing level
      2. Enclosure shall extend 83-3/4 inches (2127 mm) above the upper landing level.

\*\* NOTE TO SPECIFIER \*\* Select one, two or three of the following paragraphs for provision of metal panels to cover the void between the side of the enclosure and the adjacent wall. See Garaventa Genesis Design and Planning Guide for further explanation. Delete if not required.

* + 1. Infill Panel Kit: Provide 16 gauge (1.5 mm) galvanized panels and mounting hardware to cover void between side of enclosure, drive mast and adjacent wall at the following locations:
       1. Lower landing.
       2. Intermediate landing.
       3. Upper landing.
    2. Base Mounting and Access to Lift at Lower Landing:

\*\* NOTE TO SPECIFIER \*\* At lower landing lift may be mounted in pit to match selected platform size or fitted with a fixed ramp if floor mounted (no pit). Select one of the two following paragraphs.

* + - 1. Floor Mount: Base of lift shall be mounted on the floor surface of the lower landing. For access onto the platform provide a ramp of 16 gauge (1.5 mm) galvanized steel sheet with a slip resistant surface.
      2. Pit Mount: Lift to be mounted in pit with dimensions to meet manufacturers requirements for the platform size specified. Pit construction shall be in accordance to Section 03 30 00 - Cast-in-Place Concrete.
    1. Options:

\*\* NOTE TO SPECIFIER \*\* Enclosure dome is optional for outdoor locations. Requires a full height enclosure fitted with a door at the upper landing; delete if not required. If lift is exposed to sunlight or in warm locations, the optional ventilation system is required. A continuous mains power for hydraulic drive will be required if an optional ventilation system is specified.

* + - 1. Enclosure Dome: Plexiglas type to cover top of lift enclosure.
      2. Ventilation System: Two exhaust fans, thermostatically controlled with a 12 VDC battery backup. Requires continuous mains power for Hydraulic Drive.

\*\* NOTE TO SPECIFIER \*\* Select the following paragraph when weather protection is required for outdoor use. Delete if not required.

* + - 1. Outdoor Protection: Lift shall include modifications recommended by manufacturer for reliable performance in outdoor climate of project site.

\*\* NOTE TO SPECIFIER \*\* Select one of the two following drive paragraphs for Leadscrew Drive or Hydraulic drive type. Use hydraulic drive when travel distance exceeds 147 inches (3734 mm) or when delivery of installation constraints require the mast in two sections. Delete the drive not required.

* + 1. Leadscrew Drive:
       1. Drive Type: Self-lubricating acme screw drive.
       2. Emergency Operation: Manual handwheel device to raise or lower platform.

\*\* NOTE TO SPECIFIER \*\* The following paragraph for battery powered emergency lowering is optional. Delete if not required.

* + - 1. Battery Powered Emergency Lowering: Battery powered platform lowering device that automatically activates in the event of power failure. Allows passenger to drive platform downward to lower landing. Does not operate lift in up direction.
      2. Safety Devices:
         1. Integral safety nut assembly with safety switch.
      3. Travel Speed: 10 fpm (3.0 m/minute).
      4. Motor: 2.0 hp (560 W).
      5. Power Supply:

\*\* NOTE TO SPECIFIER \*\* Select the power supply required and delete the one not required. 120 VAC is used in North America and 208/240 VAC is used internationally.

* + - * 1. 120 VAC single phase; 60 Hz on a dedicated 20 amp circuit.
        2. 208/240 VAC, single phase; 50 Hz on a dedicated 16 amp circuit.
    1. Hydraulic Drive:
       1. Drive Type: Chain hydraulic.
       2. Emergency Operation: Manual device to lower platform and use auxiliary battery power to raise or lower platform.
       3. Safety Devices:
          1. Slack chain safety device.
          2. Shoring device.
       4. Travel Speed: 17 fpm (5.2 m/minute).
       5. Motor: 3.0 hp (2.2 kW); 24 volts DC.
       6. Power Supply:

\*\* NOTE TO SPECIFIER \*\* Select the power supply required and delete the one not required. 120 VAC is used in North America and 208/240 VAC is used internationally.

* + - * 1. 120 VAC single phase; 60 Hz on a dedicated 15 amp circuit.
        2. 208/240 VAC, single phase; 50 Hz on a dedicated 16 amp circuit.

\*\* NOTE TO SPECIFIER \*\* Select one of the two following paragraphs. The first paragraph is standard for heavy, continuous use installations. Lift is connected directly to building power and batteries are used only for auxiliary emergency power.

* + - * 1. Powered by building continuous mains converted to 24 VDC and equipped with auxiliary battery backup power system capable of running lift up and down for a minimum of 5 trips with rated load. Required for high use lifts and lifts equipped with a fan and ventilation system.
        2. Powered by continuously charged battery system.
    1. Platform Controls: 24 VDC control circuit with the following features.

\*\* NOTE TO SPECIFIER \*\* Select one of the following two paragraphs for platform direction control. Standard platform control is a constant pressure rocker switch. Optional controls consist of illuminated push buttons and courtesy lights. Delete those not required.

* + - 1. Direction Control: Constant pressure rocker switch.
      2. Direction Control: Illuminated tactile and constant pressure push buttons with dual platform courtesy lights and safety light.
      3. Illuminated and audible emergency stop switch shuts off power to lift and activates audio alarm equipped with battery backup.

\*\* NOTE TO SPECIFIER \*\* Select one of the two following paragraphs for key operation. Keyless operation is standard. Keyed operation is optional. Delete the one not required.

* + - 1. Keyless operation.
      2. Keyed operation.

NOTE TO SPECIFIER: Include the following paragraphs if required, Emergency phone may be required by the local jurisdiction. Delete if not required.

* + - 1. Emergency Telephone: Platform shall be equipped with ADA compliant autodialer telephone with a stainless steel faceplate. Telephone shall operate in the event of power failure. A telephone line shall be supplied to the lift site as specified under Division 16.
      2. Arrival Gong and Digital Floor Display.
    1. Call Station Controls: 24 VDC control circuit with the following features.

\*\* NOTE TO SPECIFIER \*\* Select one of the following two paragraphs for platform direction control. Standard platform control is a constant pressure rocker switch. Optional controls consist of illuminated push buttons and courtesy lights. Delete the one not required.

* + - 1. Direction Control: Constant pressure rocker switch.
      2. Direction Control: Illuminated tactile and constant pressure push buttons with illuminated "In Use" indicator.

\*\* NOTE TO SPECIFIER \*\* Select one of the two following paragraphs for key operation. Keyless operation is standard. Keyed operation is optional Delete the one not required.

* + - 1. Keyless operation.
      2. Keyed operation.

\*\* NOTE TO SPECIFIER \*\* Select mounting required and delete those not required. Frame mounting should not be used at landing with ramp or where a power door operator is used.

* + - 1. Call Station Mounting:
         1. Lower:

Frame mounted.

Wall mounted surface.

Wall mounted recessed.

* + - * 1. Intermediate:

Frame mounted.

Wall mounted surface.

Wall mounted recessed.

* + - * 1. Upper:

Frame mounted.

Wall mounted surface.

Wall mounted recessed.

* + 1. Safety Devices and Features:
       1. Grounded electrical system with upper, lower, and final limit switches.
       2. Tamper resistant interlock to electrically monitor that the door is in the closed position and the lock is engaged before lift can move from landing.

\*\* NOTE TO SPECIFIER \*\* Pit stop switch is optional. Delete the following paragraph when not required.

* + - 1. Pit stop switch mounted on mast wall.
      2. Electrical disconnect shall shut off power to the lift.
    1. Finishes

\*\* NOTE TO SPECIFIER \*\* Edit the following paragraphs for finishes required for Wheelchair Lifts.

* + - 1. Aluminum Extrusions: Electrostatically applied baked powder finish Fine Textured Silver Moon (RAL 7047).

\*\* NOTE TO SPECIFIER \*\* Include the following paragraph for standard painted finish. Delete when custom paint finish is required.

* + - 1. Ferrous Components: Electrostatically applied baked powder finish.
         1. Color: Fine Textured Silver Moon (RAL 7047).

\*\* NOTE TO SPECIFIER \*\* Include the following paragraph when custom paint finish is required. Custom paints include finishes to simulate brass and stainless steel. Delete if not required.

* + - 1. Lift Finish: Baked powder coat finish, color as selected by the Architect from manufacturers optional RAL color chart.

\*\* NOTE TO SPECIFIER \*\* The following paragraph is for a Genesis Shaftway Model wheelchair lift installed in a shaftway and serving two or three landings with 171 inches (4343 mm) maximum travel distance. Doors and gates may be located at ends and side of platform for 90, 180, and 360 degree entry/exit.

* 1. SHAFTWAY VERTICAL WHEELCHAIR LIFT
     1. Capacity: 750 lbs (340 kg) rated capacity.
     2. Mast Height:

\*\* NOTE TO SPECIFIER \*\* Select one of the seven following paragraphs for the lift height needed for project conditions. Delete the ones not required. Lifting height shown is the maximum vertical distance as measured from the bottom of the pit to the upper floor level, if lift is pit mounted, or the lower floor to the upper floor, if lift is floor mounted,

* + - 1. Model GVL SW -42; 45 inches (1143 mm) maximum lifting height.
      2. Model GVL SW -60; 63 inches (1600 mm) maximum lifting height.
      3. Model GVL SW -72; 75 inches (1905 mm) maximum lifting height.
      4. Model GVL SW -96; 99 inches (2515 mm) maximum lifting height.
      5. Model GVL SW -120; 123 inches (3124 mm) maximum lifting height.
      6. Model GVL SW -144; 147 inches (3734 mm) maximum lifting height.
      7. Model GVL SW -168; 171 inches (4343 mm) maximum lifting height, using hydraulic drive, only.
    1. Nominal Clear Platform Dimensions:

\*\* NOTE TO SPECIFIER \*\* Select one of the four following paragraphs for the platform size or insert a custom size. Contact manufacturer for custom platform dimensions. Delete the ones not required.

* + - 1. Compact: 36 inches (914 mm) by 49-1/2 inches (1257 mm).
      2. Standard: 39 inches (992 mm) by 54 inches (1370 mm).
      3. Mid-Size: 39 inches (992 mm) by 60 inches (1522 mm).
      4. Large: 45 inches (1144 mm) by 60 inches (1522 mm).
    1. Platform Configuration:

\*\* NOTE TO SPECIFIER \*\* Select one of the three following paragraphs for landing configuration. Modify description to include intermediate landing when opening is not in line with one of the other landings. Delete the ones not required.

* + - 1. Straight Through Entry/Exit: Front and rear openings.
      2. 90 Degree Entry/Exit: Front and side openings.
      3. On/Off Same Side Entry/Exit: One front opening only.
    1. Landing Openings:
       1. Lower Landing: Door.

\*\* NOTE TO SPECIFIER \*\* Delete the following paragraph when lift has only two stops.

* + - 1. Intermediate Landing: Door.

\*\* NOTE TO SPECIFIER \*\* Select one of the two following paragraphs for top landing opening type. Delete the one not required. Fire-rated shaftways must have full height upper doors.

* + - 1. Upper Landing: Door.
      2. Upper Landing: Gate.

\*\* NOTE TO SPECIFIER \*\* Select one of the following two paragraphs for the size and materials of doors at the lower, intermediate and upper shaftway entrances. Choose between fire rated doors and non-fire rated doors and gates as required and delete the one not required.

* + 1. Door Construction:

\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs for the doors and gates. Delete the one not required.

* + - 1. Fire Rated Doors: 1-1/2 hour B label rating. Pre-hung, constructed of 16 gauge (1.5 mm) steel, with a vision panel, delayed action door closer, pull handle and integrated interlock. Doors mount flush to the inside wall of the shaftway.
      2. Non-Rated Doors: Pre-hung, on an anodized aluminum frame, with a door closer, pull handle, integrated interlock and constructed with a 16 gauge (1.5 mm) galvanized steel kick plate and upper panel as follows:

\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs for non-fire rated doors. Delete the ones not required. May vary from landing to landing. If more than one type is required indicate the location of each type.

* + - * 1. Panels of 16 gauge (1.5 mm) galvanized steel.
        2. Panels of clear Plexiglas.
        3. Panels of smoke gray Plexiglas.
        4. Panels of 1/4 inch (6 mm) laminated safety glass.

\*\* NOTE TO SPECIFIER \*\* Select the following optional paragraph for non-fire rated doors. Delete if not required. May vary from landing to landing. If more than one type is required, indicate the location of each type on the Drawings.

* + - * 1. D-Handle Pull: 12 inch (305 mm) offset D-Handle.
      1. Door Width:

\*\* NOTE TO SPECIFIER \*\* Select the appropriate door width for each landing. Delete the ones not required.

* + - * 1. Lower Landing:

35-5/8 inches (905 mm).

41-1/8 inches (1046 mm).

* + - * 1. Intermediate Landing:

35-5/8 inches (905 mm).

41-1/8 inches (1046 mm.

* + - * 1. Upper landing:

35-5/8 inches (905 mm).

41-1/8 inches (1046 mm).

\*\* NOTE TO SPECIFIER \*\* Select the paragraph below if the upper landing will be fitted with a gate instead of a door. Select only if the shaftway is open at the upper landing and is not fire rated. Delete if not required.

* + 1. Upper Gate Construction
       1. 42 inches (1067 mm) high, pre-hung on an anodized aluminum frame, fitted with a door closer, pull handle, integrated interlock and constructed with a 16 gauge (1.5 mm) galvanized steel kick plate and upper panel as follows:

\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs for upper gates. Delete the ones not required.

* + - * 1. Panels of 16 gauge (1.5 mm) galvanized steel.
        2. Panels of clear Plexiglas.
        3. Panels of smoke gray Plexiglas.
        4. Panels of 1/4 inch (6 mm) laminated safety glass.

\*\* NOTE TO SPECIFIER \*\* Edit the following paragraph as required for power operators for doors and gates. Note that power door operators are required in many jurisdictions. May be required if ramp is used for entry at lower landing and for certain platform configurations.

* + 1. Power Door Operator: Automatically opens the door/gate when platform arrives at a landing. Will also open at landing by pressing call button.
       1. ADA Compliant and obstruction sensitive.
       2. Low voltage, 24 VDC with all wiring concealed.
       3. Provide power operators at the following locations:

\*\* NOTE TO SPECIFIER \*\* Select the paragraphs for doors and gates to be equipped with power door operators. Delete the ones not required.

* + - * 1. Lower Landing: Door.
        2. Intermediate Landing: Door.
        3. Upper landing: Door or Gate.
    1. Lift Components:
       1. Machine Tower: Custom aluminum extrusion.
       2. Base Frame: Structural steel tubing.
       3. Platform Side Wall Panels: 16 gauge (1.5 mm) galvanized steel sheet. Custom aluminum extrusion tubing frame.
    2. Base Mounting and Access to Lift at Lower Landing:

\*\* NOTE TO SPECIFIER \*\* At lower landing lift may be mounted in pit to match selected platform size or fitted with a fixed ramp if floor mounted (no pit). Select one of the two following paragraphs.

* + - 1. Floor Mount: Base of lift shall be mounted on the floor surface of the lower landing. For access onto the platform provide a ramp of 16 gauge (1.5 mm) galvanized steel sheet with a slip resistant surface.
      2. Pit Mount: Lift to be mounted in pit with dimensions to meet manufacturers requirements for the platform size specified. Pit construction shall be in accordance to Section 03 30 00 - Cast-in-Place Concrete.

\*\* NOTE TO SPECIFIER \*\* Select the flowing paragraph if local jurisdiction requires the void spaces on either side of the mast be covered on the front and top surfaces. Consult the Genesis Design and Planning Guide for more details. Delete if not required.

* + 1. Drive Mast Side Wall Panels: Provide 16 gauge (1.5 mm) galvanized panels and mounting hardware to cover the void between both sides of the mast and the side of the shaftway. Panels to cover the front and top of the void area to the height of the top surface of the drive mast.

\*\* NOTE TO SPECIFIER \*\* Select one of the two following drive paragraphs for Leadscrew Drive or Hydraulic drive type. Use hydraulic drive when travel distance exceeds 147 inches (3734 mm) or when delivery of installation constraints require the mast in two sections. Delete the drive not required.

* + 1. Leadscrew Drive:
       1. Drive Type: Self-lubricating acme screw drive.
       2. Emergency Operation: Manual handwheel device to raise or lower platform.

\*\* NOTE TO SPECIFIER \*\* The following paragraph for battery powered emergency operation is optional. Delete if not required. This option is strongly recommended for lifts over 60 inches (1524 mm).

* + - 1. Battery Powered Emergency Lowering: Battery powered platform lowering device that automatically activates in the event of power failure. Allows passenger to drive platform downward to lower landing. Does not operate lift in up direction.
      2. Safety Devices:
         1. Integral safety nut assembly with safety switch.

\*\* NOTE TO SPECIFIER \*\* Shoring device is optional. Delete the following paragraph when not required.

* + - * 1. Shoring device.
      1. Travel Speed: 10 fpm (3.0 m/minute).
      2. Motor: 2.0 hp (560 W).
      3. Power Supply:

\*\* NOTE TO SPECIFIER \*\* Select the power supply required and delete the one not required. 120 VAC is used in North America and 208/240 VAC is used internationally.

* + - * 1. 120 VAC single phase; 60 Hz on a dedicated 20 amp circuit.
        2. 208/240 VAC, single phase; 50 Hz on a dedicated 16 amp circuit.
    1. Hydraulic Drive:
       1. Drive Type: Chain hydraulic.
       2. Emergency Operation: Manual device to lower platform and auxiliary battery power to raise or lower platform.
       3. Safety Devices:
          1. Slack chain safety device.
          2. Shoring device.
       4. Travel Speed: 17 fpm (5.2 m/minute).
       5. Motor: 3.0 hp (2.2 kW); 24 volts DC.
       6. Power Supply:

\*\* NOTE TO SPECIFIER \*\* Select the power supply required and delete the one not required. 120 VAC is used in North America and 208/240 VAC is used internationally.

* + - * 1. 120 VAC single phase; 60 Hz on a dedicated 15 amp circuit.
        2. 208/240 VAC, single phase; 50 Hz on a dedicated 16 amp circuit.

\*\* NOTE TO SPECIFIER \*\* Select one of the two following paragraphs. The first paragraph is standard for heavy, continuous use installations. Lift is connected directly to building power and batteries are used only for auxiliary emergency power.

* + - * 1. Powered by continuous building mains converted to 24 VDC equipped with auxiliary battery power system capable of running lift up and down for a minimum of 5 trips with rated load. Required for high usage lifts.
        2. Powered by continuously charged battery system.
    1. Platform Controls: 24 VDC control circuit with the following features.

\*\* NOTE TO SPECIFIER \*\* Select one of the following two paragraphs for platform direction control. Standard platform control is a constant pressure rocker switch. Optional controls consist of illuminated push buttons and courtesy lights. Delete the one not required.

* + - 1. Direction Control: Constant pressure rocker switch.
      2. Direction Control: Illuminated tactile and constant pressure buttons with dual platform courtesy lights and safety light.
      3. Illuminated and audible emergency stop switch shuts off power to lift and activates audio alarm equipped with battery backup.

\*\* NOTE TO SPECIFIER \*\* Select one of the two following paragraphs for key operation. Keyless operation is standard. Keyed operation is optional. Delete the one not required.

* + - 1. Keyless operation.
      2. Keyed operation.

\*\* NOTE TO SPECIFIER \*\* Include the following paragraph if required, Emergency phone may be required by the local jurisdiction. Delete if not required.

* + - 1. Emergency Telephone: Platform shall be equipped with ADA compliant autodialer telephone with a stainless steel faceplate. Telephone shall operate in the event of power failure. A telephone line shall be supplied to the lift site as specified under Division 16.
      2. Arrival Gong and Digital Floor Display.
    1. Call Station Controls: 24 VDC control circuit with the following features.

\*\* NOTE TO SPECIFIER \*\* Select one of the following two paragraphs for platform direction control. Standard platform control is a constant pressure switch. Optional controls consist of illuminated push buttons and courtesy lights. Delete the one not required.

* + - 1. Direction Control: Constant pressure switches.
      2. Direction Control: Illuminated and tactile constant pressure buttons with illuminated "in-use" indicator.
      3. Safety indicator lamp.

\*\* NOTE TO SPECIFIER \*\* Select one of the two following paragraphs for key operation. Keyless operation is standard. Keyed operation is optional. Delete the one not required.

* + - 1. Keyless operation.
      2. Keyed operation.
      3. Call Station Mounting:

\*\* NOTE TO SPECIFIER \*\* Select mounting required and delete those not required. Frame mounted call stations are standard for fire rated doors. Frame mounting should not be used at landing with ramp or where a power door operator is used.

* + - * 1. Lower:

Frame mounted.

Wall mounted surface.

Wall mounted recessed.

* + - * 1. Intermediate:

Frame mounted.

Wall mounted surface.

Wall mounted recessed.

* + - * 1. Upper:

Frame mounted.

Wall mounted surface.

Wall mounted recessed.

* + 1. Safety Devices and Features:
       1. Grounded electrical system with upper, lower, and final limit switches.
       2. At all landings a solenoid activated interlock shall electrically monitor that the door is in the closed position and the lock is engaged before lift can move from landing.

\*\* NOTE TO SPECIFIER \*\* Pit stop switch is optional. Delete the following paragraph when not required.

* + - 1. Pit stop switch mounted on mast wall.
      2. Electrical disconnect shall shut off power to the lift.
    1. Finishes

\*\* NOTE TO SPECIFIER \*\* Edit the following paragraphs for finishes required for Wheelchair Lifts.

* + - 1. Aluminum Extrusions: Electrostatically applied baked powder finish Fine Textured Silver Moon (RAL 7047).

\*\* NOTE TO SPECIFIER \*\* Include the following paragraph for standard painted finish. Delete when custom paint finish is required.

* + - 1. Ferrous Components: Electrostatically applied baked powder finish, fine textured.
         1. Color: Silver Moon.

\*\* NOTE TO SPECIFIER \*\* Include the following paragraph when custom paint finish is required. Custom paints include finishes to simulate brass and stainless steel. Delete if not required.

* + - 1. Lift Finish: Baked powder coat finish as selected by the Architect from manufacturer's optional RAL color chart.

\*\* NOTE TO SPECIFIER \*\* The following paragraph is for a Genesis OPAL Model unenclosed, self-contained wheelchair lift serving two landings with up to 63 inches (1600 mm) maximum travel distance. Gates may be located at ends and side of platform for straight through and 90 and 180 degree entry/exit, subject to local jurisdiction.

* 1. UNENCLOSED VERTICAL WHEELCHAIR LIFT
     1. Capacity: 750 lbs (340 kg) rated capacity.
     2. Mast Height:

\*\* NOTE TO SPECIFIER \*\* Select one of the two following paragraphs for the lift height needed for project conditions. Delete the ones not required. Lifting height shown is the maximum vertical distance as measured from the bottom of the pit to the upper floor level, if lift is pit mounted, or the lower floor to the upper floor, if lift is floor mounted,

* + - 1. Model GVL-OP-42; 45 inches (1143 mm) maximum lifting height.
      2. Model GVL-OP-60; 63 inches (1600 mm) maximum lifting height.
    1. Platform Size and Nominal Clear Platform Dimensions:

\*\* NOTE TO SPECIFIER \*\* Select one of the four following paragraphs for the platform size. For 90 degree entry/exit select only the large platform. Delete the ones not required.

* + - 1. Standard: 36 inches (914 mm) by 48-7/8 inches (1242 mm) clear platform dimensions.
      2. Mid-Size: 36 inches (914 mm) by 54-7/8 inches (1394 mm) clear platform dimensions.
      3. Large: 43-1/4 inches (1100 mm) by 60-7/8 inches (1546 mm) clear platform dimensions.
      4. Large 90 degree: 42 inches (1067 mm) by 60 inches (1524 mm) with 90 degree entry/exit configuration.
    1. Platform Configuration:

\*\* NOTE TO SPECIFIER \*\* Select one of the two following paragraphs for landing configuration. Delete the one not required.

* + - 1. Straight Through: Front and rear openings.
      2. 90 Degree: Front and side openings.
    1. Landing Openings: Gates shall be self closing type.
       1. Gate Height: 42-1/8 inches (1070 mm).
       2. Platform Gate: Travels with platform and opens at lower landing.
       3. Upper Landing Gate: Detached, freestanding type.

\*\* NOTE TO SPECIFIER \*\* Select the following paragraphs for power door operator if required. Delete if not required. Can go on upper, lower or both gates. This is required by many jurisdictions, especially at the lower landing if the lift entrance is via fixed ramp (no pit).

* + 1. Power Gate Operators:
       1. Location:

\*\* NOTE TO SPECIFIER \*\* Select the paragraphs below for doors and gates to be equipped with power door operators. Delete the ones not required.

* + - * 1. Platform Gate: Travels with platform and opens lower landing.
        2. Upper Landing Gate.
      1. Automatically opens the gate when platform arrives at a landing. Will also open at landing by pressing call button or gently pulling the gate.
      2. ADA Compliant and obstruction sensitive.
      3. Low voltage, 24 VDC with all wiring concealed.
    1. Lift Components:
       1. Machine Tower: Custom aluminum extrusion.
       2. Base Frame: Structural steel.
       3. Platform Side Wall Panels: 16 gauge (1.5 mm) galvanized steel sheet.
       4. Platform Access Ramp: 12 gauge (2.5 mm) galvanized steel plates; slip resistant surfaces.

\*\* NOTE TO SPECIFIER \*\* Select one of the two following paragraphs for ramp type. Delete the one not required. Ramps are not required if lift mounts in a pit.

* + - * 1. Ramp: Stationary type.
        2. Ramp: Automatic folding type.
      1. Side Guard Panels: 42-1/8 inches (1070 mm) high mounted on platform.

\*\* NOTE TO SPECIFIER \*\* Select the two following paragraph when weather protection is required for outdoor use. Delete the one not required.

* + - 1. Outdoor Protection: Lift shall include modifications recommended by manufacturer for reliable performance in outdoor climate of project site.
    1. Base Mounting at Lower Landing:

\*\* NOTE TO SPECIFIER \*\* At lower landing lift may be mounted in pit to match selected platform size or fitted with a fixed ramp if floor mounted (no pit). Select one of the two following paragraphs.

* + - 1. Floor Mount: Base of lift shall be mounted on the floor surface of the lower landing. For access onto the platform provide a ramp of 16 gauge (1.5 mm) galvanized steel sheet with a slip resistant surface.
      2. Pit Mount: Lift to be mounted in pit with dimensions to meet manufacturers requirements for the platform size specified. Pit construction shall be in accordance to Section 03 30 00 - Cast-in-Place Concrete.

\*\* NOTE TO SPECIFIER \*\* Select one of the two following drive paragraphs for Leadscrew Drive or Hydraulic drive type. Use hydraulic drive when travel distance exceeds 144 inches (3658 mm). Delete the drive not required.

* + 1. Leadscrew Drive:
       1. Drive Type: Self-lubricating acme screw drive.
       2. Emergency Operation: Manual handwheel device to raise or lower platform.

\*\* NOTE TO SPECIFIER \*\* The following paragraph for battery powered emergency operation is optional. Delete if not required.

* + - 1. Battery Powered Emergency Lowering: Battery powered platform lowering device that automatically activates in the event of power failure. Allows passenger to drive platform downward to lower landing. Does not operate lift in up direction.
      2. Safety Devices:
         1. Integral safety nut assembly with safety switch.
      3. Travel Speed: 10 fpm (3.0 m/minute).
      4. Motor: 2.0 hp (560 W).
      5. Power Supply:

\*\* NOTE TO SPECIFIER \*\* Select the power supply required and delete the one not required. 120 VAC is used in North America and 208/240 VAC is used internationally.

* + - * 1. 120 VAC single phase; 60 Hz on a dedicated 20 amp circuit.
        2. 208/240 VAC, single phase; 50 Hz on a dedicated 16 amp circuit.
    1. Hydraulic Drive:
       1. Drive Type: Chain hydraulic.
       2. Emergency Operation: Manual device to lower platform and battery auxiliary power to raise or lower platform.
       3. Safety Devices:
          1. Slack chain safety device.
          2. Shoring device.
       4. Travel Speed: 17 fpm (5.2 m/minute).
       5. Motor: 3.0 hp (2.2 kW); 24 volts DC.
       6. Power Supply:

\*\* NOTE TO SPECIFIER \*\* Select the power supply required and delete the one not required. 120 VAC is used in North America and 208/240 VAC is used internationally.

* + - * 1. 120 VAC single phase; 60 Hz on a dedicated 15 amp circuit.
        2. 208/240 VAC, single phase; 50 Hz on a dedicated 16 amp circuit.

\*\* NOTE TO SPECIFIER \*\* Select one of the two following paragraphs. The first is standard for heavy, continuous use installations. Lift is connected directly to building power and batteries are used only for auxiliary emergency power.

* + - * 1. Powered by continuous building mains converted to 24 VDC, equipped with auxiliary power system capable of running lift up and down for a minimum of 5 trips with rated load.
        2. Powered by continuously charged battery system.
    1. Platform Controls: 24 VDC control circuit with the following features.

\*\* NOTE TO SPECIFIER \*\* Select one of the two following paragraphs for directional controls. Rocker switches are standard. Tactile controls are optional. Delete the one not required.

* + - 1. Direction Control: Constant pressure rocker switch.
      2. Direction Control: Illuminated tactile and constant pressure elevator-style buttons with dual platform courtesy lights and safety light.
      3. Illuminated and audible emergency stop switch shuts off power to lift and activates audio alarm with battery backup.

\*\* NOTE TO SPECIFIER \*\* Select one of the two following paragraphs for key operation. Keyless operation is standard. Keyed operation is optional. Delete the one not required.

* + - 1. Keyless operation.
      2. Keyed operation.

\*\* NOTE TO SPECIFIER \*\* Include the following paragraph if required, Emergency phone may be required by the local jurisdiction. Delete if not required.

* + - 1. Emergency Telephone: Platform shall be equipped with ADA compliant integrated telephone with a stainless steel faceplate. Telephone shall operate in the event of power failure. A telephone line shall be supplied to the lift site as specified under Division 16.
    1. Call Station Controls: 24 VDC control circuit with the following features.
       1. Direction Control:

\*\* NOTE TO SPECIFIER \*\* Select one of the two following paragraphs for call station controls. Directional control rocker switch is standard. Elevator style with illuminated and tactile buttons is optional. Delete the one not required.

* + - * 1. Constant pressure rocker switch.
        2. Illuminated tactile and continuous pressure elevator-style buttons with dual platform courtesy lights and safety light.

\*\* NOTE TO SPECIFIER \*\* Select one of the two following paragraphs for key operation. Keyless operation is standard. Keyed operation is optional Delete the one not required.

* + - 1. Keyless operation.
      2. Keyed operation.

\*\* NOTE TO SPECIFIER \*\* Select mounting required and delete those not required.

* + - 1. Call Station Mounting:
         1. Lower:

Wall mounted surface.

* + - * 1. Upper:

Frame mounted.

Wall mounted surface.

* + 1. Safety Devices and Features:
       1. Grounded electrical system with upper, lower, and final limit switches.
       2. Tamper resistant interlock to electrically monitor that the gate is in the closed position and the lock is engaged before lift can move from landing.

\*\* NOTE TO SPECIFIER \*\* Pit stop switch is optional. Delete the following paragraph when not required.

* + - 1. Pit stop switch mounted on mast wall.
      2. Electrical disconnect shall shut off power to the lift.
      3. Under platform safety pan with five waterproof safety switches to detect obstruction under platform.
    1. Finishes

\*\* NOTE TO SPECIFIER \*\* Edit the following paragraphs for finishes required for Wheelchair Lifts.

* + - 1. Aluminum Extrusions: Electrostatically applied baked powder finish, Fine Textured Silver Moon (RAL 7047).

\*\* NOTE TO SPECIFIER \*\* Include the following paragraph for standard painted finish. Delete when custom paint finish is required.

* + - 1. Ferrous Components: Electrostatically applied baked powder finish, fine textured.
         1. Color: Silver Moon.

\*\* NOTE TO SPECIFIER \*\* Include the following paragraph when custom paint finish is required. Custom paints include finishes to simulate brass and stainless steel. Delete if not required.

* + - 1. Lift Finish: Baked powder coat finish as selected by the Architect from manufacturer's optional RAL color chart.

\*\* NOTE TO SPECIFIER \*\* The following paragraph is for a Genesis Elvoron CPL Model Commercial Platform Lift with cab installed in a shaftway and serving up to six stops and up to 50 feet (15.2 m) subject to local jurisdiction.

* 1. FULL CAB VERTICAL WHEELCHAIR LIFT
     1. General Description: Elvoron CPL vertical platform lift equipped with a full height cab and a non-load bearing ceiling.
     2. Capacity:

\*\* NOTE TO SPECIFIER \*\* Select one of the three following paragraphs for the platform size. Delete the ones not required.

* + - 1. 750 lbs (340 kg) rated capacity.
      2. 1000 lbs (454 kg) rated capacity.
      3. 1400 lbs (635 kg) rated capacity.
    1. Floor to Floor Lifting Height:

\*\* NOTE TO SPECIFIER \*\* Insert the height required in the following paragraph. Check with local code authorities for travel limits on vertical platform lifts.

* + - 1. \_\_\_\_\_\_\_\_ Feet.
    1. Nominal Clear Platform Dimensions:

\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs for the platform size. Delete the ones not required. Contact manufacturer for limits on custom car dimensions.

* + - 1. 36 inches (914 mm) by 60 inches (1524 mm).
      2. 42 inches (1067 mm) by 60 inches (1524 mm).
      3. 48 inches (1220 mm) by 60 inches (1524 mm).
      4. Custom size to fit existing shaftway as indicated..
    1. Car Configuration:

\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs for car configuration. Modify description to include intermediate landing when opening is not in line with one of the other landings. Delete the ones not required.

* + - 1. Style 1R: On/Off Same Side, Rails on Right.
      2. Style 1L: On/Off Same Side, Rails on Left.
      3. Style 2: Straight through entry/exit.
      4. Style 3: 90 degree entry/exit, Rails on Right of one entrance.
      5. Style 4: 90 degree entry/exit, Rails on Left of one entrance.
      6. Style 5: On/Off same side Rails opposite entrances
    1. Landing Openings:
       1. All Landings: Fire Doors interlocked with Lift controls.
    2. Doors Construction:
       1. Fire Rated Doors: 1-1/2 hour B label rating. Pre-hung, constructed of 16 gauge (1.5 mm) steel, with a vision panel, delayed action door closer, pull handle and integrated interlock. Doors mount flush to the inside wall of the shaftway.
       2. Nominal Door Width: 36 inches.

\*\* NOTE TO SPECIFIER \*\* Select the following paragraphs for power door operators if required. Delete if not required. Note that power operators are required by many jurisdictions. May be required if ramp is used for entry at lower landing and for certain platform configurations.

* + 1. Power Door/Gate Operator: Automatically opens the door/gate when platform arrives at a landing. Will also open at landing by pressing call button or gently the pulling door.
       1. ADA Compliant and obstruction sensitive.
       2. Location:

\*\* NOTE TO SPECIFIER \*\* Select the paragraphs below for locations of doors and gates to be equipped with power door operators. Delete the ones not required.

* + - * 1. Lowest Landing: Door.
        2. Second Landing: Door.
        3. Third Landing: Door.
        4. Fourth Landing: Door.
        5. Fifth Landing: Door.
        6. Upper landing: Door.
    1. Shaftway Pit at Lower Landing:
       1. Pit Mount: Lift to be mounted in pit with dimensions to meet manufacturers requirements for the car size specified.
       2. Pit construction shall be in accordance to Section 03 30 00 - Cast-in-Place Concrete.
    2. Hydraulic Drive:
       1. Drive Type: 1:2 Cable hydraulic.
       2. Emergency Operation: Manual device to lower platform.
       3. Safety Devices:
          1. Slack chain safety device.
          2. Shoring device.
       4. Travel Speed: 30 fpm (.15 m/second).
       5. Motor: 3 HP.
       6. Power Supply: 208/240 VAC, single phase; 50 Hz on a dedicated 16 amp circuit.
    3. Car Controls: 24 VDC control circuit with the following features.
       1. Direction Control: Constant pressure rocker switch.
       2. Illuminated and audible emergency stop switch shuts off power to lift and activates audio alarm equipped with battery backup.

\*\* NOTE TO SPECIFIER \*\* Select one of the two following paragraphs for key operation. Keyless operation is standard. Keyed operation is optional. Delete the one not required.

* + - 1. Keyless operation.
      2. Keyed operation.

NOTE TO SPECIFIER: Include the following paragraphs if required, Emergency phone may be required by the local jurisdiction. Delete if not required.

* + - 1. Emergency Telephone: Platform shall be equipped with ADA compliant integrated telephone with a stainless steel faceplate. Telephone shall operate in the event of power failure. A telephone line shall be supplied to the lift site as specified under Division 16.
      2. Digital Floor Display.
    1. Call Station Controls: 24 VDC control circuit with the following features.
       1. Direction Control: Illuminated constant pressure push buttons.

\*\* NOTE TO SPECIFIER \*\* Select one of the two following paragraphs for key operation. Keyless operation is standard. Keyed operation is optional Delete the one not required.

* + - 1. Keyless operation.
      2. Keyed operation.
      3. Call Station Mounting:

\*\* NOTE TO SPECIFIER \*\* Select mounting required and delete those not required. Frame mounted call stations are standard for fire rated doors. Frame mounting should not be used at landing with ramp or where a power door operator is used.

* + - * 1. Lowest:

Wall mounted recessed.

Mounted within the door frame.

* + - * 1. Second Floor:

Wall mounted recessed.

Mounted within the door frame.

* + - * 1. Third Floor:

Wall mounted recessed.

Mounted within the door frame.

* + - * 1. Fourth Floor:

Wall mounted recessed.

Mounted within the door frame.

* + - * 1. Fifth Floor:

Wall mounted recessed.

Mounted within the door frame.

* + - * 1. Top Floor:

Wall mounted recessed.

Mounted within the door frame.

* + 1. Safety Devices and Features:
       1. Grounded electrical system with upper, lower, and final limit switches.
       2. At all landings a solenoid activated interlock shall electrically monitor that the door is in the closed position and the lock is engaged before lift can move from landing.

\*\* NOTE TO SPECIFIER \*\* Pit stop switch is optional. Delete the following paragraph when not required.

* + - 1. Pit stop switch mounted on mast wall.
      2. Electrical disconnect shall shut off power to the lift.
    1. Finishes

\*\* NOTE TO SPECIFIER \*\* Edit the following paragraphs for finishes required for Car Walls, Operating Panel, Handrail and Hall Call Stations.

* + - 1. Car Walls:
         1. 1/2 inch (12 mm) Melamine:

Super White

Antique White

Sweet Beige

Willow Gray

Sunrise Maple

Finnish Oak

Calamare

Authentic

Custom Melamine:

* + - * 1. 1/2 inch (12 mm) Plastic Laminate:

Designer White

Dove Grey

Cloud Nebula

Kensington Maple

New Age Oak

Empire Mahogany

Custom Plastic Laminate:

* + - 1. Car Operating Panel:
         1. Brushed Stainless Steel
         2. Custom metal finish.
      2. Car Handrail:
         1. Brushed Stainless Steel
         2. Custom metal finish.
      3. Hall Call Stations:
         1. Brushed Stainless Steel
         2. Custom metal finish.

1. EXECUTION
   1. EXAMINATION
      1. Do not begin installation until substrates have been properly prepared.
      2. Verify shaft and machine space are of correct size and within tolerances.
      3. Verify required landings and openings are of correct size and within tolerances.
      4. Verify electrical rough-in is at correct location.
      5. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
   2. PREPARATION
      1. Clean surfaces thoroughly prior to installation.
      2. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
   3. INSTALLATION

\*\* NOTE TO SPECIFIER \*\* Include one of the two following paragraphs to suit local requirements. First paragraph is for installations in the United States. Second paragraph is for installations in Canada. Delete the paragraph not required.

* + 1. Install lifts in accordance with applicable regulatory requirements including ASME A 17.1, ASME A 18.1 and the manufacturer's instructions.
    2. Install lifts in accordance with applicable regulatory requirements including CSA B355, and manufacturer's instructions.
    3. Install system components and connect to building utilities.
    4. Accommodate equipment in space indicated.
    5. Startup equipment in accordance with manufacturer's instructions.
    6. Adjust for smooth operation.
  1. FIELD QUALITY CONTROL

\*\* NOTE TO SPECIFIER \*\* Include one of the two following paragraphs to suit local requirements. First paragraph is for installations in the United States. Second paragraph is for installations in Canada. Delete the paragraph not required.

* + 1. Perform tests in compliance with ASME A 17.1 or A18.1 and as required by authorities having jurisdiction.
    2. Perform tests in compliance with CSA B355 and required by authorities having jurisdiction.
    3. Schedule tests with agencies and Architect, Owner, and Contractor present.
  1. PROTECTION
     1. Protect installed products until completion of project.
     2. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION