Shaftway vertical platform lift for lifting heights up to 14 feet
Please note:

Dimensions provided in this Guide are for **REFERENCE ONLY** and should not be used for site preparation or construction.
# Genesis Shaftway Model

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What is a Vertical Platform Lift?

The Genesis Vertical Platform Lift is a cost effective way to transport a passenger in a wheelchair, or someone who has difficulty using stairs. The Genesis vertical platform lift provides a code compliant access solution for lifting heights of up to 4343mm (171”) (check the regulations for your jurisdiction). With a variety of platform configurations, the Genesis is available as a 2 or 3 stop unit that can be operated independently or by an attendant. The Genesis is suitable for indoor or outdoor use and is available in a multitude of different colors and finishes so that it blends into any setting.

Why a Vertical Platform Lift?

Cost-effective
A vertical lift is more cost-effective than an elevator and does not require a machine room to house the electrical and mechanical components. In applications where usage is limited to people who have difficulty using stairs, a vertical lift may be the most appropriate solution.

Blends with Environment
A vertical lift is an attractive space saving alternative to a lengthy or winding ramp. Adjacent to stairs or in an area complimentary to your building, these lifts can be finished to complement the aesthetics of the site.

Meets ADA Requirements (USA)
Vertical platform lifts are recognized in the ADA Accessibility Guidelines as a means to provide public building access.

Design Assistance

With over 25 years of experience, Garaventa has the expertise to overcome almost any design challenge you face. Please call our Design Hot Line with your accessibility challenge.

1-800-663-6556 or +1-604-594-0422

Finishes

The standard finish is electrostatically applied and baked powder coat finish in Satin Grey for the steel panels and champagne anodized aluminum extrusions for the framework. As an option, these components can be painted from the large selection of RAL colors (a global paint color system).

Outdoor Applications

When located in a shaftway that is not climate-controlled, the Genesis can be modified to ensure durability and reliable performance. Included in the outdoor package are: hot dipped galvanized base, primed mezzanine brackets, sealed electrical box, rubber boots on switches and stainless steel fasteners. Additional protection may be required in extreme environments.
How it Works

The Genesis vertical lift is offered in a variety of configurations and styles for different accessibility challenges. All versions of the Genesis vertical lift operate in the same manner and consists of a complete drive system, a platform with side walls, doors with an interlock system and call stations. The mast houses the electrical and mechanical components that raise and lower the cantilevered platform. The doors or gates cannot be opened unless the platform is at an appropriate landing. The platform is called to the landing by using the call stations located at each landing. Once at a landing, the door interlock is released and the door can be opened.

The Genesis vertical lift can be used to provide accessibility either indoors or outdoors and can be installed directly on the floor or in a 76mm (3”) deep pit.
Enclosure Model vs. Shaftway Model

The Genesis is available in two styles, the Enclosure Model and the Shaftway Model. This Design and Planning Guide describes the Shaftway Model.

The Enclosure Model consists of a factory supplied mast, platform, doors and factory manufactured walls that enclose the lift. Please see the Genesis Enclosure Design and Planning Guide for detailed information regarding the Genesis Enclosure Model.

The Shaftway Model consists of a mast, platform and doors. The walls enclosing the lift are built by others using dimensions provided by Garaventa Lift.

Enclosure Model

The enclosure frame is constructed of champagne color anodized aluminum extrusions. The attractive contoured corner posts allow the fasteners to be hidden and the vertical etched lines enhance the appearance of the lift. Horizontal cross members are fitted into the corner posts, securing the enclosure panels. The panels come in a choice of 16 gauge painted galvanized mild steel, 5mm (3/16”) bronze tinted or clear Plexiglas or 6mm (1/4”) laminated glass (by others). The Enclosure model is available in a number of optional finishes. Refer to the Genesis Enclosure Design and Planning Guide for more information.

Shaftway Model (Hoistway Style)

The Genesis Shaftway unit is designed to fit the essential lift components within your shaftway walls. The Genesis Shaftway Model can have either aluminum frame doors/gates, fire rated steel doors, or the doors can be supplied by others. All styles of doors/gates have interlocks integrated with our control system.
**Lifting Heights and Mast Sizes**

The mast size required for a particular site is determined by the vertical travel required between the upper and lower landings. When the site is measured, **the lift height “H” is always defined as the distance from the lower landing (pit or floor) where the lift will sit to the upper landing floor** as shown in the diagram below. If the lift is to be mounted directly on the surface of the lower landing and an entry ramp is used, then “H” equals the elevation change between the upper and lower landings. If the lift is pit mounted, then the measurement “H” is 76mm (3”) greater than the elevation change between landings. This measurement is crucial for your custom designed lift. Be certain the height you provide is accurate. We recommend using the “as built” dimension. **The width of the mast is 998mm (39 1/4”) for all mast heights.**

**Based on the measured value of “H” the drive mast is selected as follows:**

<table>
<thead>
<tr>
<th>Mast Size</th>
<th>Max. “H” Value</th>
<th>Mast Structure Height</th>
<th>Mast Tieback Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>GVL - 42</td>
<td>1143mm (45”)</td>
<td>1737mm (68 3/8”)</td>
<td>1572mm (61 7/8”)</td>
</tr>
<tr>
<td>GVL - 60</td>
<td>1600mm (63”)</td>
<td>2194mm (86 3/8”)</td>
<td>2029mm (79 7/8”)</td>
</tr>
<tr>
<td>GVL - 72</td>
<td>1905mm (75”)</td>
<td>2498mm (98 3/8”)</td>
<td>2333mm (91 7/8”)</td>
</tr>
<tr>
<td>GVL - 96</td>
<td>2515mm (99”)</td>
<td>3108mm (122 3/8”)</td>
<td>2943mm (115 7/8”)</td>
</tr>
<tr>
<td>GVL - 120</td>
<td>3124mm (123”)</td>
<td>3718mm (146 3/8”)</td>
<td>3553mm (139 7/8”)</td>
</tr>
<tr>
<td>GVL - 144</td>
<td>3734mm (147”)</td>
<td>4327mm (170 3/8”)</td>
<td>4162mm (163 7/8”)</td>
</tr>
<tr>
<td>GVL - 168*</td>
<td>4343mm (171”)*</td>
<td>4937mm (194 3/8”)*</td>
<td>4772mm (187 7/8”)</td>
</tr>
</tbody>
</table>

For Shaftway units, a second Tie Back is required on both sides of the mast. Consult Garaventa Lift. *Hydraulic drive only and Split Mast standard with this height.

Two stop lift in a pit and floor mount application. An optional three stop unit is also available.
Leadscrew Drive System

Single-phase 2 HP motor attached to a 1” ACME screw, the platform travels at 3 meters (10 ft.) per minute.

Mains Power Requirement:

North America
120 VAC single phase on a dedicated 20 amp circuit.

International
208 - 240 VAC single phase on a dedicated 16 amp circuit.

Electrical Disconnect (optional)
An electrical disconnect is supplied with the lift for both safety reasons and customer convenience. This disconnect shuts off the mains power and the 24V battery lowering system to the lift. For the Enclosure Model, the disconnect is located on the side of the mast closest to the lower landing door. For the Shaftway Model, the disconnect is located on the outside of the shaftway walls in a location determined by local code requirements.

Manual Lowering Handwheel (Lead Screw Model Only - standard)
The manual lowering handwheel has a black plastic handle and slotted shaft that engages a crosspin on the main drive screw.

Battery Powered Emergency Lowering (Lead Screw Model Only - optional)
The Genesis Leadscrew Model can be supplied with an optional battery-powered emergency lowering system which is automatically activated in the event of a power failure. Using the down directional control, the battery powered emergency lowering system lowers the platform at a speed of approximately 0.3m/min. (1 ft/min.).
Hydraulic Drive System

Single-phase (2.2 KW), 24VDC hydraulic motor. Continuous mains power and auxiliary power system. The lift connects directly to the building power. The power is reduced to 24 VC to operate the control system and drive the motor. The lift is equipped with an auxiliary power system that enables the lift to operate if mains power is lost. The platform travels between landings at 5.2 meters (17ft.) per minute. *Required for heavy use lifts or lifts equipped with a Fan and Ventilation System.

Mains Power Requirement:
- **North America** - 120 VAC single phase on a dedicated 15 amp circuit.
- **International** - 208 - 240 VAC single phase on a dedicated 16 amp circuit.

**Full Time Battery Operation** (optional)
For very low use applications and basic units, full time battery operation is appropriate.

**Electrical Disconnect** (optional)
An electrical disconnect is supplied with the lift for both safety reasons and customer convenience. This disconnect shuts off the mains power and the 24V battery back-up system to the lift.

The Enclosure Model disconnect is on the side of the mast closest to the lower landing door. The Shaftway Model disconnect is located on the outside of the shaftway wall in a location determined by local code requirements.

**Manual Lowering** (Hydraulic Model Only - standard)
The manual emergency lowering device consists of a pull knob mounted in a box on the side of the mast. When used, the platform is gently lowered to the landing.

**Split Mast** (Hydraulic Drive Only - optional)
For installation sites where it would be difficult to place the drive mast into position as a single piece, the split mast option is available for GVL-120 and GVL-144. GVL-168 Hydraulic Models are supplied standard with a split mast.

Remote Drive Cabinet
(Hydraulic Drive Only - optional)
For the ultimate in quiet operation, the drive system can be located up to 3 meters (10 feet) away in a remote drive cabinet.

**Mast Heater** (Hydraulic Drive Only - optional)
For outside installations where cold temperatures are a concern, a mast heater can be installed to protect hydraulic fluid from freezing.
Platforms

The platform is rated for a load of 340 kg. (750 lbs.) and has 1100 mm (43”) high side walls. The side wall in front of the mast includes a grab rail and platform controls.

Standard sizes are typically code-compliant for straight through commercial applications. Larger sizes may be required for other on/off configurations or to facilitate ease of use.

The Genesis Shaftway Model has 4 standard platform sizes to meet your requirements:

- Compact
- Standard
- Mid-Size
- Large

Custom sizes are also available.

Exact platform dimensions will vary depending upon the configuration. For platform dimensions, see pages 25-28.
Platform Configurations

**Entry/Exit Configurations**
The Genesis is available in various entry/exit configurations. The lift can be supplied as a straight through (180°), a 90° (left or right exit) or an on/off same side (360°) lift configuration.

- **90° Configuration**
- **Straight Through (180°) Configuration**
- **On/Off Same Side (360°) Configuration** (must have a lift height of 2253mm (88 3/4") or greater)
Operating Controls

Rocker Style Switches (standard)
The Genesis vertical lift comes equipped standard with rugged indoor/outdoor constant pressure switches, rated to IP 6.7. The platform control panel comes standard with an Illuminated Audible Emergency Stop Switch. All controls can be fitted with an optional AEMA key switch.

Push Button Control Package
The Push Button Control Package includes illuminated constant pressure directional control switches and platform courtesy lighting. The illuminated push button directional controls also feature tactile directional arrows and braille symbols. Platform courtesy lighting remains illuminated for the duration of platform travel and for 10 seconds after the platform arrives at the landing.

Keyed Call Station and Platform Controls (optional)
To prevent the use of the lift by unauthorized personnel, the call stations and platform controls can be set up for keyed operation.

Shaftway Frame Mounted Call Stations: Fire Rated Doors
When a fire rated door is used the call stations are usually mounted in the steel frame of the door, similar to the Garaventa style door call stations. Can be ordered with optional wall mount call stations.
Operating Controls (Continued)

**Push Button Type Frame Mounted Call Station (Optional)**

- Call/Send Push Buttons
- "In Use" Lamp
- Key Switch (optional)

**Push Button Style Platform Controls (Optional)**

- Audible & Illuminated Emergency Stop / Alarm
- Key Switch (optional)
- Safety Indicator Light
- Directional Controls
- Auxillary Lights

**Call Station Face Plate Installed on Wall Mount Conduit Box (Optional)**

*Surface Mount Call Station Dimension 250mm (9 3/4") x 100mm(3 7/8") x 23mm (7/8")
For dimensional purposes. Not exactly as shown.

**Frame Mounted Fire Door Call Station (Optional Wall Mount Available)**

- Call / Send Buttons
- In Use Lamp
- Key Switch
Optional Features

**Autodial Telephone**
In locations where the lift cannot be easily monitored or as required by code in certain jurisdictions, an autodial telephone can be installed on the platform. The Autodial telephone allows the lift user to make contact with pre-programmed help numbers with the push of a button.

**Garaventa PDO - Power Door Operator**
The Garaventa Power Door Operator (PDO) allows for automatic door opening and closing. The PDO is obstruction sensing and is clutched which provides a high level of safety and enhances the usability of the lift. The Garaventa PDO is suitable for use on Garaventa aluminum framed 36", 42", and 44" doors and gates.

**Arrival Gong and Digital Floor Display**
Required by code in some parts of Europe, the platform mounted arrival Gong and Digital Floor Display enhance lift usability by providing audio and visual lift location information.

**Ramps (optional)**
A ramp is used when a 76mm (3") deep pit cannot be provided. Six ramps are available for the Genesis, depending on the available space at landings. The ramps are available in slopes of 1:10 and 1:12. Both slopes are available in widths of 1069mm (42"), 1225mm (48 1/4") or 1375mm (54 1/8"). It is recommended that you use a Power Door Operator and a wall mount call station at landings where a ramp is used.

**Mast Side Wall Panel Kits (optional)**
Custom mast side wall panel kits are available to fill the open space on either side of the mast. The panel kit will enhance the overall appearance of the Genesis and seal off this open space.
**Garaventa Style Doors & Gates**

The standard Genesis doors and gates are referred to as “Garaventa style doors and/or gates”. These non-fire rated doors and gates are prehung in a Champagne colored anodized aluminum extrusion frame. The doors and gates are constructed of matching aluminum extrusions with a powder coated 16 gauge galvanized steel kickplate and an upper panel (powder coated 16 gauge galvanized steel, bronze or clear Plexiglas, or laminated glass).

Garaventa doors are equipped with an offset “D” handle. Custom finishes are also available as an option, please refer to page 4. This non-fire rated door and gate are an attractive alternative to the industrial looking fire rated door.

The door height is 2032mm (80”) and the gate height is 1070mm (42 1/8”) and are both available in 3 widths:

- 905mm (35 5/8”)
- 1046mm (41 1/8”)
- 1109mm (43 5/8”) (for wide side 90° configurations)

Refer to pages 17-20 for further door and door swing dimensions.

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**Fire Rated Doors & Frames**

The fire rated door and frame is completely prehung and is constructed of 16 gauge steel. The door is supplied with a vision panel and a delayed action door closer. The door has a 1 1/2 hour ‘B’ label fire rating with an integrated interlock system. This door comes standard with a frame mounted 2-button keyed call station.

The fire rated door and frame is available in both 906mm (35 5/8”) and 1059mm (41 5/8”) clear door widths. See the Door Layouts and Clearances section on pages 21-24 for further door and door swing dimensions.
**Door Locks**

**Powerlock 2000 (CSA Certified)**

The Powerlock 2000 is standard for Genesis Shaftway model lifts that are equipped with Garaventa style doors and/or gates. The Powerlock 2000 is a 24 VDC interlock that is monitored by the safety circuit to ensure that the Garaventa style door/gate is properly secured when the platform is away from the landing.

**Locks by Others**

Garaventa lifts can be configured to accept interlocks or strikes by others, typically found in fire doors. Consult your local Garaventa Lift representative for more information.

**Door Swings**

![Gate Positions & Swing Options](image-url)
Garaventa Style Door Dimensions - Straight Through (180°) Entry/Exit

<table>
<thead>
<tr>
<th>Door</th>
<th>Door Width</th>
<th>R/O* Width</th>
<th>R/O* Height</th>
<th>Door Swing</th>
<th>Door Projection</th>
</tr>
</thead>
<tbody>
<tr>
<td>36&quot;</td>
<td>905mm (35 5/8&quot;)</td>
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</tr>
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<td>1109mm (43 5/8&quot;)</td>
<td>1302mm (51 1/4&quot;)</td>
<td>2140mm (84 1/4&quot;)</td>
<td>1104mm (43 1/2&quot;)</td>
<td>1162mm (45 3/4&quot;)</td>
</tr>
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<table>
<thead>
<tr>
<th>Platform Size</th>
<th>Platform C Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compact</td>
<td>771mm (30 3/8&quot;)</td>
</tr>
<tr>
<td>Standard</td>
<td>809mm (31 7/8&quot;)</td>
</tr>
<tr>
<td>Mid-Size</td>
<td>809mm (31 7/8&quot;)</td>
</tr>
<tr>
<td>Large</td>
<td>885mm (34 7/8&quot;)</td>
</tr>
</tbody>
</table>

R/O* is Rough Opening

Dimensions are provided for reference only. Submittal drawing dimensions should be used for site preparation and construction.
### Garaventa Style Door Dimensions - 90° Entry/Exit

<table>
<thead>
<tr>
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<tr>
<td>Compact</td>
<td>783mm (30 7/8&quot;)</td>
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<tr>
<td>Standard</td>
<td>822mm (32 3/8&quot;)</td>
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<tr>
<td>Mid-Size</td>
<td>822mm (32 3/8&quot;)</td>
</tr>
<tr>
<td>Large</td>
<td>898mm (35 3/8&quot;)</td>
</tr>
</tbody>
</table>

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Garaventa Style Door Dimensions - On/Off Same Side
(Entry/Exit Adjacent to Mast)

<table>
<thead>
<tr>
<th>Door</th>
<th>Door Width</th>
<th>R/O* Width</th>
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<td>885mm (34 7/8&quot;)</td>
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# Garaventa Style Door Dimensions - On/Off Same Side (Entry/Exit Opposite to Mast)

<table>
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<tr>
<th>Door</th>
<th>Door Width</th>
<th>R/O* Width</th>
<th>R/O* Height</th>
<th>Door Swing</th>
<th>Door Projection</th>
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R/O* is Rough Opening

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Fire Rated Door Dimensions - Straight Through Entry/Exit

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</tr>
</tbody>
</table>

Add 102mm (4") to R/O height when using a Falcon Power Door Operator

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## Fire Rated Door Dimensions - 90° Entry/Exit

<table>
<thead>
<tr>
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</tr>
</tbody>
</table>

Add 102mm (4”) to R/O height when using a Falcon Power Door Operator.

### Platform Size

<table>
<thead>
<tr>
<th>Platform Size</th>
<th>Platform C Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compact</td>
<td>783mm (30 7/8”)</td>
</tr>
<tr>
<td>Standard</td>
<td>822mm (32 3/8”)</td>
</tr>
<tr>
<td>Mid-Size</td>
<td>822mm (32 3/8”)</td>
</tr>
<tr>
<td>Large</td>
<td>898mm (35 7/8”)</td>
</tr>
</tbody>
</table>

**Dimensions are provided for reference only.** Submittal drawing dimensions should be used for site preparation and construction.
Fire Rated Door Dimensions - On/Off Same Side
(Entry/Exit Adjacent to Mast)

<table>
<thead>
<tr>
<th>Door</th>
<th>Door Width</th>
<th>R/O* Width</th>
<th>R/O* Height</th>
<th>Door Swing</th>
<th>Door Projection</th>
</tr>
</thead>
<tbody>
<tr>
<td>36&quot;</td>
<td>908mm (35 3/4&quot;)</td>
<td>1131mm (44 1/2&quot;)</td>
<td>2140mm (84 1/4&quot;)</td>
<td>933mm (36 3/4&quot;)</td>
<td>985mm (38 7/8&quot;)</td>
</tr>
<tr>
<td>42&quot;</td>
<td>1060mm (41 3/4&quot;)</td>
<td>1283mm (50 1/2&quot;)</td>
<td>2140mm (84 1/4&quot;)</td>
<td>1085mm (42 3/4&quot;)</td>
<td>1138mm (44 7/8&quot;)</td>
</tr>
</tbody>
</table>

Add 102mm (4") to R/O height when using a Falcon Power Door Operator

<table>
<thead>
<tr>
<th>Platform Size</th>
<th>Platform C Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compact</td>
<td>771mm (30 3/8&quot;)</td>
</tr>
<tr>
<td>Standard</td>
<td>809mm (31 7/8&quot;)</td>
</tr>
<tr>
<td>Mid-Size</td>
<td>809mm (31 7/8&quot;)</td>
</tr>
<tr>
<td>Large</td>
<td>885mm (34 7/8&quot;)</td>
</tr>
</tbody>
</table>

Dimensions are provided for reference only. Submittal drawing dimensions should be used for site preparation and construction.
### Fire Rated Door Dimensions - On/Off Same Side (Entry/Exit Opposite to Mast)

<table>
<thead>
<tr>
<th>Door</th>
<th>Door Width</th>
<th>R/O* Width</th>
<th>R/O* Height</th>
<th>Door Swing</th>
<th>Door Projection</th>
</tr>
</thead>
<tbody>
<tr>
<td>36”</td>
<td>908mm (35 3/4&quot;)</td>
<td>1131mm (44 1/2&quot;)</td>
<td>2140mm (84 1/4&quot;)</td>
<td>933mm (36 3/4&quot;)</td>
<td>985mm (38 7/8&quot;)</td>
</tr>
<tr>
<td>42”</td>
<td>1060mm (41 3/4&quot;)</td>
<td>1283mm (50 1/2&quot;)</td>
<td>2140mm (84 1/4&quot;)</td>
<td>1085mm (42 3/4&quot;)</td>
<td>1138mm (44 7/8&quot;)</td>
</tr>
</tbody>
</table>

Add 102mm (4") to R/O height when using a Falcon Power Door Operator.

---

*Dimensions are provided for reference only. Submittal drawing dimensions should be used for site preparation and construction.*
Shaftway/Pit and Platform Clear Dimensions - Straight Through (180°) Entry/Exit

<table>
<thead>
<tr>
<th>Platform Size</th>
<th>Shaftway/Pit Width</th>
<th>Shaftway/Pit Length</th>
<th>Clear Width</th>
<th>Clear Length</th>
<th>Net Usable Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compact</td>
<td>1317mm (51 7/8&quot;)</td>
<td>1295mm (51&quot;)</td>
<td>914mm (36&quot;)</td>
<td>1257mm (49 1/2&quot;)</td>
<td>1.15sq.m. (12.4 sq. ft.)</td>
</tr>
<tr>
<td>Standard</td>
<td>1394mm (54 7/8&quot;)</td>
<td>1407mm (55 3/8&quot;)</td>
<td>992mm (39&quot;)</td>
<td>1370mm (53 7/8&quot;)</td>
<td>1.36sq.m. (14.61 sq. ft.)</td>
</tr>
<tr>
<td>Mid-Size</td>
<td>1394mm (54 7/8&quot;)</td>
<td>1558mm (61 3/8&quot;)</td>
<td>992mm (39&quot;)</td>
<td>1520mm (59 7/8&quot;)</td>
<td>1.57sq.m. (16.23 sq. ft.)</td>
</tr>
<tr>
<td>Large</td>
<td>1546mm (60 7/8&quot;)</td>
<td>1558mm (61 3/8&quot;)</td>
<td>1146mm (45&quot;)</td>
<td>1520mm (59 7/8&quot;)</td>
<td>1.74sq.m. (18.0 sq. ft.)</td>
</tr>
</tbody>
</table>

- Add 38mm (1 1/2") to pit width if a mast tie-back rail is used.
- 63 1/2mm (2 1/2") running clearance dimension is included on non entry exit sides
- 19mm (3/4") running clearance dimension is included on entry / exit sides
- Shaftway units require (4) mast tie back locations (2 per side).

Dimensions are provided for reference only. Submittal drawing dimensions should be used for site preparation and construction.
Shaftway/Pit and Platform Clear Dimensions - 90° Entry/Exit

<table>
<thead>
<tr>
<th>Platform Size</th>
<th>Shaftway/Pit Width</th>
<th>Shaftway/Pit Length</th>
<th>Clear Width</th>
<th>Clear Length</th>
<th>Net Usable Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compact</td>
<td>1272mm (50 1/8&quot;)</td>
<td>1316mm (51 7/8&quot;)</td>
<td>940mm (37&quot;)</td>
<td>1208mm (47 1/2&quot;)</td>
<td>1.14sq.m. (12.2 sq. ft.)</td>
</tr>
<tr>
<td>Standard</td>
<td>1350mm (53 1/8&quot;)</td>
<td>1428mm (56 1/4&quot;)</td>
<td>1017mm (40&quot;)</td>
<td>1320mm (52&quot;)</td>
<td>1.34sq.m. (14.45 sq. ft.)</td>
</tr>
<tr>
<td>Mid-Size</td>
<td>1350mm (53 1/8&quot;)</td>
<td>1579mm (62 1/8&quot;)</td>
<td>1017mm (40&quot;)</td>
<td>1471mm (57 7/8&quot;)</td>
<td>1.50sq.m. (16.11 sq. ft.)</td>
</tr>
<tr>
<td>Large</td>
<td>1502mm (59 1/8&quot;)</td>
<td>1579mm (62 1/8&quot;)</td>
<td>1169mm (46&quot;)</td>
<td>1471mm (57 7/8&quot;)</td>
<td>1.72sq.m. (18.0 sq. ft.)</td>
</tr>
</tbody>
</table>

- Add 38mm (1 1/2") to pit width if a mast tie-back rail is used.
- 63 1/2mm (2 1/2") running clearance dimension is included on non entry exit sides
- 19mm (3/4") running clearance dimension is included on entry / exit sides
- Shaftway units require (4) mast tie back locations (2 per side).

90° Entry/Exit Shaftway/Pit and Platform Clear Dimensions

Dimensions are provided for reference only. Submittal drawing dimensions should be used for site preparation and construction.
## Shaftway/Pit and Platform Clear Dimensions - On/Off Same Side (360°) Entry/Exit Adjacent to Mast

<table>
<thead>
<tr>
<th>Platform Size</th>
<th>Shaftway/Pit Width</th>
<th>Shaftway/Pit Length</th>
<th>Clear Width</th>
<th>Clear Length</th>
<th>Net Usable Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compact</td>
<td>1317mm (51 7/8&quot;)</td>
<td>1316mm (51 7/8&quot;)</td>
<td>914mm (36&quot;)</td>
<td>1209mm (47 1/2&quot;)</td>
<td>1.10sq.m. (11.89 sq. ft.)</td>
</tr>
<tr>
<td>Standard</td>
<td>1394mm (54 7/8&quot;)</td>
<td>1428mm (56 1/4&quot;)</td>
<td>992mm (39&quot;)</td>
<td>1320mm (52&quot;)</td>
<td>1.31sq.m. (14.09 sq. ft.)</td>
</tr>
<tr>
<td>Mid-Size</td>
<td>1394mm (54 7/8&quot;)</td>
<td>1579mm (62 1/8&quot;)</td>
<td>992mm (39&quot;)</td>
<td>1471mm (57 7/8&quot;)</td>
<td>1.46sq.m. (15.71 sq. ft.)</td>
</tr>
<tr>
<td>Large</td>
<td>1546mm (60 7/8&quot;)</td>
<td>1579mm (62 1/8&quot;)</td>
<td>1144mm (45&quot;)</td>
<td>1471mm (57 7/8&quot;)</td>
<td>1.68sq.m. (18.0 sq. ft.)</td>
</tr>
</tbody>
</table>

- Add 38mm (1 1/2") to pit width if a mast tie-back rail is used.
- 63 1/2mm (2 1/2") running clearance dimension is included on non entry exit sides
- 19mm (3/4") running clearance dimension is included on entry / exit sides
- Shaftway units require (4) mast tie back locations (2 per side)

---

**On/Off Same Side (360°) Entry/Exit Adjacent to Mast Shaftway/Pit & Platform Dimensions**

Dimensions are provided for reference only. Submittal drawing dimensions should be used for site preparation and construction.
Shaftway/Pit and Platform Clear Dimensions -
On/Off Same Side (360°) Entry/Exit Opposite Mast

<table>
<thead>
<tr>
<th>Platform Size</th>
<th>Shaftway/Pit Width</th>
<th>Shaftway/Pit Length</th>
<th>Clear Width</th>
<th>Clear Length</th>
<th>Net Usable Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compact</td>
<td>1272mm (50 1/8&quot;)</td>
<td>1337mm (52 7/8&quot;)</td>
<td>940mm (37&quot;)</td>
<td>1159mm (45 5/8&quot;)</td>
<td>1.09sq.m. (11.72 sq. ft.)</td>
</tr>
<tr>
<td>Standard</td>
<td>1350mm (53 1/8&quot;)</td>
<td>1448mm (57&quot;)</td>
<td>1017mm (40&quot;)</td>
<td>1271mm (50&quot;)</td>
<td>1.29sq.m. (13.91 sq. ft.)</td>
</tr>
<tr>
<td>Mid-Size</td>
<td>1350mm (53 1/8&quot;)</td>
<td>1600mm (63&quot;)</td>
<td>1017mm (40&quot;)</td>
<td>1422mm (56&quot;)</td>
<td>1.45sq.m. (15.57 sq. ft.)</td>
</tr>
<tr>
<td>Large</td>
<td>1502mm (59 1/8&quot;)</td>
<td>1600mm (63&quot;)</td>
<td>1169mm (46&quot;)</td>
<td>1422mm (56&quot;)</td>
<td>1.66sq.m. (17.90 sq. ft.)</td>
</tr>
</tbody>
</table>

- Add 38mm (1 1/2") to pit width if a mast tie-back rail is used.
- 63 1/2mm (2 1/2") running clearance dimension is included on non entry exit sides
- 19mm (3/4") running clearance dimension is included on entry / exit sides
- Shaftway units require (4) mast tie back locations (2 per side).

Shaftway / Pit Width

313mm (12 3/8") Clear Width 19mm (3/4")

Mast

Min. 51mm (2")

Entry / Exit Clear Length

Shaftway / Pit Length

Shaftway / Pit Depth

76mm (3")

On / Off Same Side (360°) Entry/Exit Opposite Mast Shaftway/Pit and Platform Dimensions

Dimensions are provided for reference only. Submittal drawing dimensions should be used for site preparation and construction.
**Base Attachment**

The Genesis Shaftway mast is fastened to the floor/pit at the lower landing. It is recommended that the floor is a level concrete surface rated for 3500 PSI with a minimum thickness of 102mm (4”). If the floor surface does not meet these specifications, it must be able to withstand the loads shown on the loading diagram.

**Mast Attachment**

The Genesis is supplied with adjustable tie back brackets. These brackets are fastened to the mast and installed into a load bearing support wall. This helps to stabilize the mast. Refer to the loading diagram for the loads that must be supported by the wall.

An optional Tie Back Rail Kit can be used to spread the load when attaching to a timber stud wall.

CAUTION: Using a Tie Back Rail Kit will increase the required shaftway width by 38 mm (1.5”).

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**Attachment Details**
Lead Screw Drive System:
Technical Reference

Shaftway Platform Sizes:
- Compact
- Standard
- Mid-size
- Large

Exact clear platform dimensions are listed on pages 25-28.

Rated Load:
340 kg (750 lbs), with a safety factor of 5

Drive System:
Mains Power:
120 VAC single phase on a dedicated 20 amp circuit. Outside N.A. 208-240 VAC single phase on a dedicated 16 amp circuit.

Drive Type: ACME screw (1” diameter)

Motor: 2 HP, AC Motor. Variable frequency control for smooth start and stop.

Speed:
3 meters (10 ft) per minute at full load

Operating Controls:
Keyed Controls: Keyswitch on call stations and platform controls (optional)

Directional Controls: Continuous pressure switches

Control Voltage: 24 VDC

Safety Features:
Safety Nut:
Safety nut automatically engages if drive nut fails. Platform falls less than 13mm (1/2”) when safety nut engages. Engaging safety nut trips the safety circuit.

Door Interlocks:
Solenoid powered deadbolt with monitoring circuit. Deadbolt stays in the locked position in the event of power failure. Battery backup provided.

Emergency Stop:
Stops platform travel and sounds audible alarm.

Emergency Operation:
Equipped standard with a manual lowering wheel. Optional battery powered lowering system available.

Finish:
Enclosure Frame & Mast Sides: Anodized aluminum

Sidewalls & Mast Cover: Baked powder finish on 16 gauge galvanized steel panels – Satin Grey

Doors: Baked powder finish on 16 gauge galvanized steel panels – Satin Grey or optional 5mm (3/16”) thick clear or bronze tinted Plexiglas.

Optional Finishes: Extrusions and panels can be painted any color in the RAL chart.

Design Hot Line: 1-800-663-6556 or +1-604-594-0422
Genesis Shaftway Design & Planning Guide 23376-C-DP
Hydraulic Drive System: Technical Reference

Shaftway Platform Sizes:
- Compact
- Standard
- Mid-size
- Large

Exact clear platform dimensions are listed on pages 25-28.

Rated Load:
340 kg (750 lbs), with a safety factor of 5

Drive System:
Mains Power:
120 VAC single phase on a dedicated 15 amp circuit. Outside N.A. - 208-240 VAC single phase on a dedicated 16 amp circuit.

Drive Type: Chained Hydraulic (Dual 5/8” ANSI 50 chains)

Standard Motor: 2.2 kW - 24V DC Motor: Continuous mains power and auxiliary battery power

Optional Power Supply: 2.2 kW - 24V DC from battery system, continuously charged by buildings mains power (suitable for low usage lifts only).

Speed:
5.2 meters (17 ft) per minute at full load

Operating Controls:
Keyed Controls: Keyswitch on call station and platform controls (optional)

Directional Controls: Continuous pressure switches

Control Voltage: 24 VDC

Safety Features:
Safety: Monitored slack chain device. Automatically engages if the drive chain fails. Platform falls less than 13mm (1/2”) when the slack chain safety device engages.

Door Interlocks:
Solenoid powered deadbolt with monitoring circuit. Deadbolt stays in the locked position in the event of power failure. Battery backup provided.

Emergency Stop: Stops platform travel and sounds audible alarm.

Emergency Operation: Auxiliary Power System operates the lift in up and down direction.

Finish:
Enclosure Frame & Mast Sides: Anodized aluminum

Sidewalls & Mast Cover: Baked powder finish on 16 gauge galvanized steel panels – Satin Grey

Doors: Baked powder finish on 16 gauge galvanized steel panels – Satin Grey or optional 5mm (3/16”) thick clear or bronze tinted Plexiglas.

Optional Finishes: Extrusions and panels can be painted any color in the RAL chart.