

Bruno VPL-3300B Series

Shaftway Application - Design and Planning Guide



Bruno VPL-3300B Series Shaftway Application

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Planning Guide Purpose

Use this planning guide to gain details on incorporating a Bruno Shaftway, also known as a Hoistway, Vertical Platform Lift into a public building design. All Bruno commercial vertical platform lifts meet the following applicable codes and performance standards:

- ASME A18.1-2011 Section 2 (Public) Safety Standards for Platform Lifts and Stairway Chairlifts
- ASME A18.1-2014 Section 2 (Public) Safety Standards for Platform Lifts and Stairway Chairlifts
- ASME A18.1-2017 Section 2 (Public) Safety Standards for Platform Lifts and Stairway Chairlifts
- CAN/CSA B355-09 (Public) Lifts for Persons with Physical Disabilities
- CAN/CSA B355-15 (Public) Lifts for Persons with Physical Disabilities
- CSA B44.1-11/ASME A17.5-2011 - Elevator and Escalator Electrical Equipment
- CSA B44.1-14/ASME A17.5-2014 - Elevator and Escalator Electrical Equipment
- CSA - National Electric Code
- NFPA 70 - National Electric Code

Vertical Platform Lift Definition

Vertical platform lifts (VPLs) are a cost-effective solution to make a church, school, office or other public building accessible for people using mobility devices. Sometimes called a wheelchair lift, a VPL provides code-compliant access up to 14' in a variety of configurations (check with local jurisdiction) and are suitable for indoor or outdoor use.



Shaftway Vertical Platform Lift, access up to 14'

Benefits of Vertical Platform Lifts

Cost-Effective

Gain cost efficiencies by installing a vertical platform lift instead of an elevator or long ramp system.

Compact

Ramps require 12" horizontal travel for every 1" vertical travel. For example, a 36" rise would require a 36' ramp. In addition to taking up significant space, ramps can be fatiguing. A vertical platform lift saves space and is automatically powered.

Meets USA ADA Requirements

Vertical platform lifts are acknowledged in the Americans with Disabilities Act (ADA) Accessibility Guidelines as a means to provide public building access. Bruno VPLs are designed in accordance with ASME A18.1 section 2.

Design Assistance

Need help on specifying the right VPL configuration? Bruno's commercial VPL architect support professionals can help design the right solution for your project.

Email: commercialvpl@bruno.com. Phone: 800.848.3056

General Information

Finishes

Bruno's commercial VPL standard finish is electrostatically applied with a baked powder coat finish in champagne color. Platform and landing gate parts are E-coated for an extra level of protection from the outdoor elements.

Indoor / Outdoor

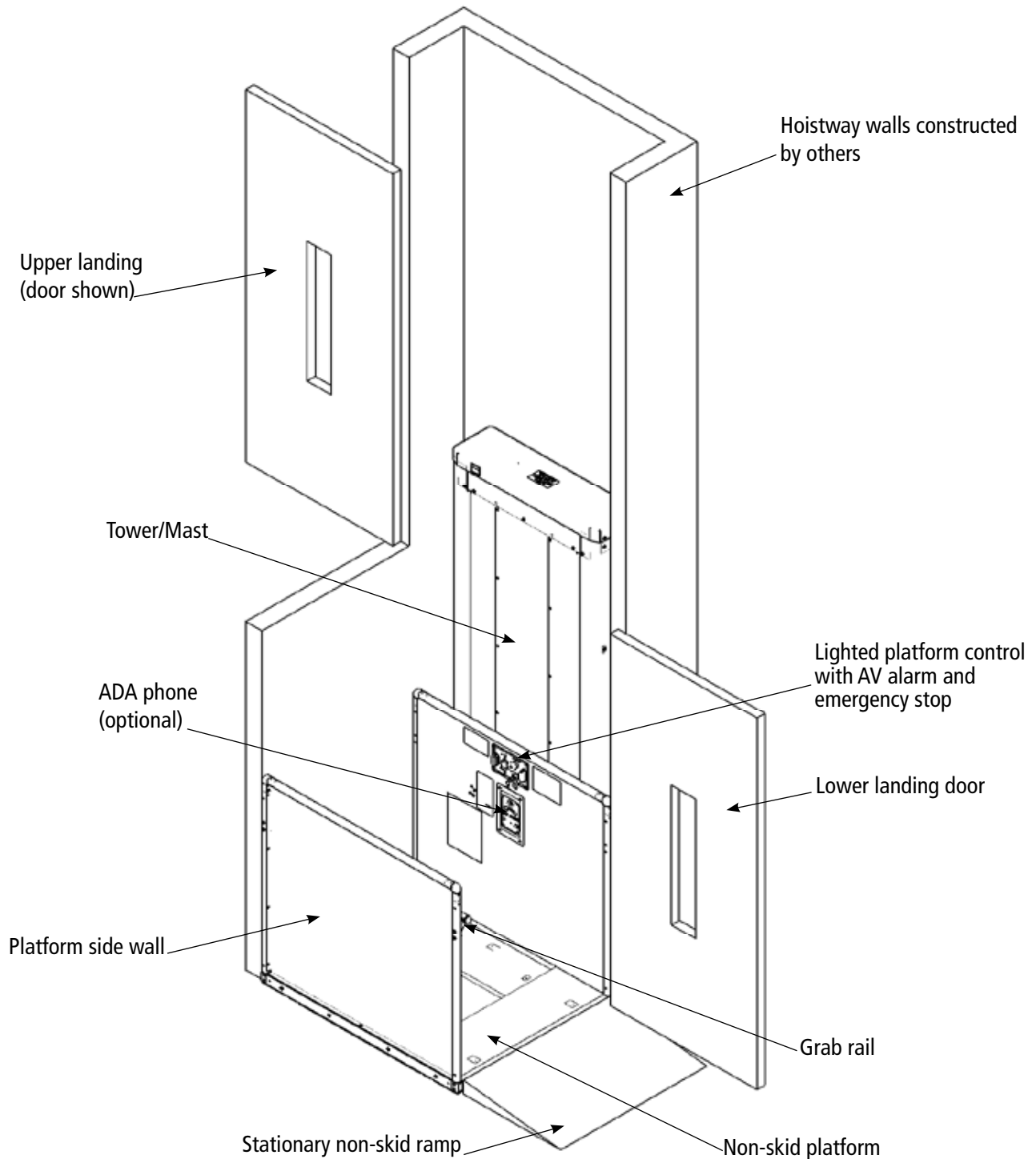
All Bruno VPLs are suitable for indoor and outdoor applications. Optional cold-weather package recommended if operating temperature is below 20° F/-7°C.

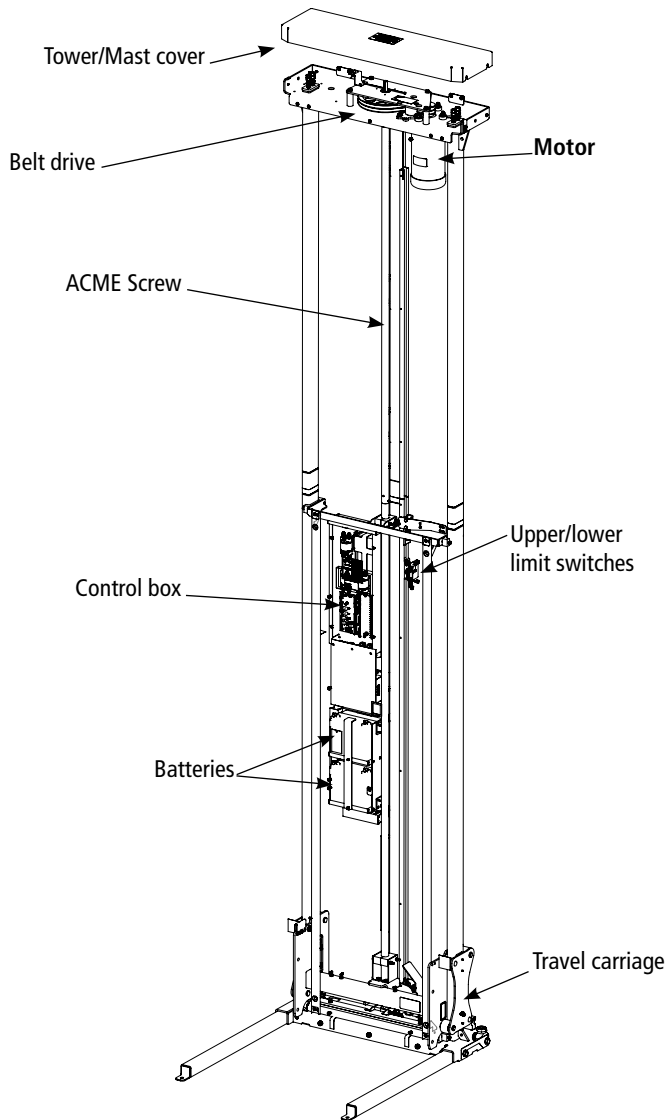
How It Works – Shaftway

Bruno's Shaftway vertical platform lift is placed inside a shaftway (also known as a hoistway) built by others. Providing access up to 14 ft., the shaftway wheelchair lift includes a drive mast, passenger platform, doors and gates. All Bruno shaftway

configurations include an ACME screw-driven system with full-time battery operation. Bruno's Shaftway wheelchair lift is a great choice for ADA compliance and features Bruno Made-in-America quality.

Shaftway key components



ACME Screw Drive System (image shown is a “tall” model)

Power requirements: 120VAC, 3A, single phase, 60 Hz

Manual lowering tool: An optional manual hand crank is offered to lower the device. The manual lowering hand-wheel has a black plastic handle and slotted shape that engages a square key on the main screw drive.

Emergency Battery Lowering System: Standard on VPL models VPL-3310B, VPL-3312B, & VPL-3314B. In the event of a power failure, models VPL-3310B, VPL-3312B, and VPL-3314B have an external lockable keyed switch for lowering the platform by means of a separate battery located inside the electrical enclosure (control box).

Emergency Lowering Battery Backup Access Box: Standard on tall VPLs only (Models VPL-3310B, VPL-3312B, and VPL-3314B)



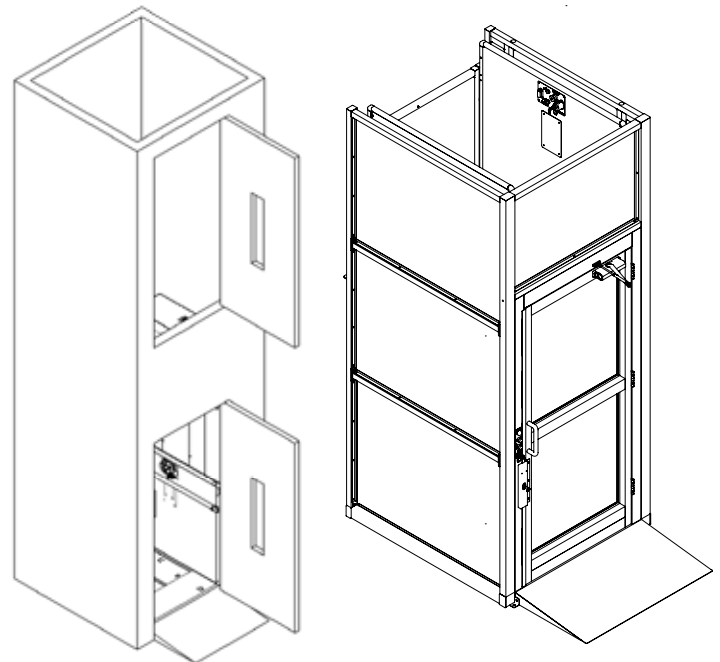
Difference between Shaftway / Hoistway and Enclosure

Shaftway / Hoistway

The vertical platform lift is placed inside a shaftway/hoistway built by others. The lift is hidden from sight behind two doors and equipment is placed inside the shaftway which is built to site drawings and meets running clearances of the lift.

Enclosure

All equipment is self-contained in an Enclosure VPL. All running clearances are built in, and it is constructed with an aluminum frame and side walls with a full-size Plexiglas door.



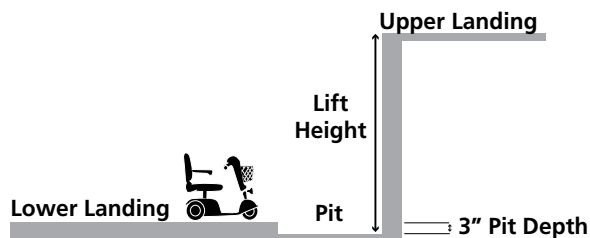
Shaftway model

Enclosure model

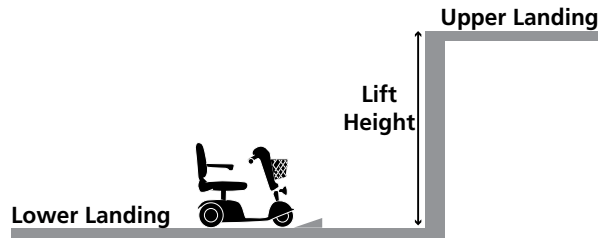
Lift Heights and Floor-to-Floor Measuring

Lift height is defined as the distance from the lower landing where the lift will be placed to the upper landing. The lift can be installed with or without a pit. In a pit installation, the measurement is from the bottom of the pit to the upper landing. For a floor installation, the measurement is from the floor to the upper landing.

Pit installation = Pit to floor distance



Floor installation = Floor to floor distance



Model selection is determined by floor-to-floor lift height, a critical measurement in designing a vertical platform lift. See below for a table to select the appropriate model based on lift height.

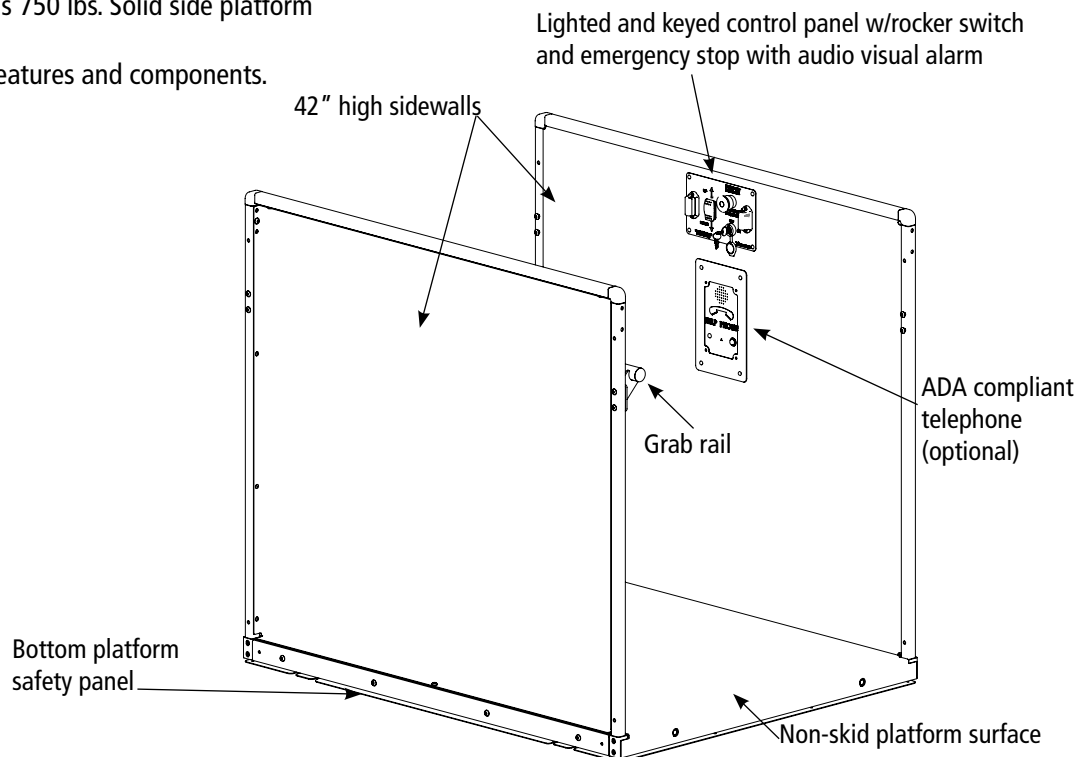
Shaftway VPL Measures				
Model	Max Floor-to-Floor	Min Floor-to-Floor	Mast Height	Unit Weight
VPL-3353B	53"	11"	75-9/16"	897 lb
VPL-3375B	75"	53"	97-9/16"	970 lb
VPL-3310B	123"	75"	148-1/16"	1210 lb
VPL-3312B	147"	75"	172-1/16"	1304 lb
VPL-3314B	171"	75"	196-1/16"	1400 lb

Platforms

The rated load for the platform is 750 lbs. Solid side platform walls measure 42" high. See below for typical platform features and components.

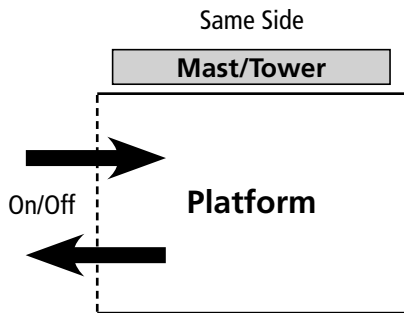
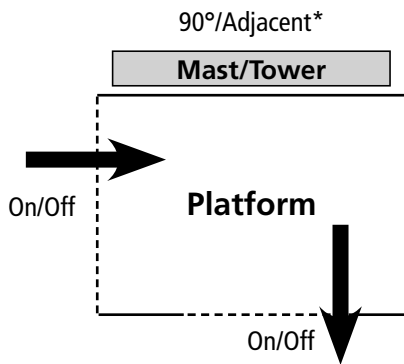
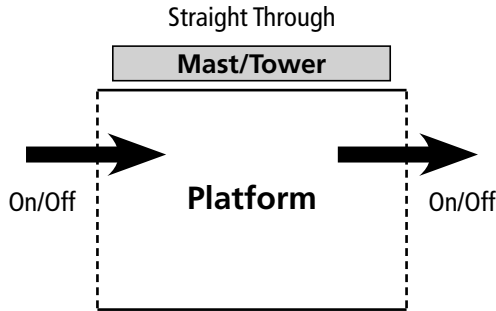
Platform Size Options:

- 36" x 54" – standard
- 36" x 48"
- 36" x 60"
- 42" x 60"



Platform Configurations

Platforms can be designed in multiple on/off configurations including Straight Through (most common), 90°/Adjacent and Same Side. See images below.



*See notes on page 11 if designing a 90° / Adjacent Platform.

Number of Landings: 2-3 stops (upper, middle, and lower) are available.

Operating Controls

Platform Controls: All Bruno VPL-3300B Series lifts come standard with a weather-protected, continuous pressure up and down rocker switch platform control. Optional paddle style control is available.



Rocker Switch Platform Control (Standard)



Paddle Platform Control (Optional)



3-stop Push Button Platform Control:
(Standard for 3-stop units)

Call/Sends: Optional remote call/send controls come in rocker or paddle style and either flush or surface mount installation. Used on upper and lower landings.



Rocker / Surface mount



Paddle / Flush Mount

Operating Controls cont.

Middle landing call control (3-stop only): available in surface or flush mount.



Call surface mount



Call flush mount

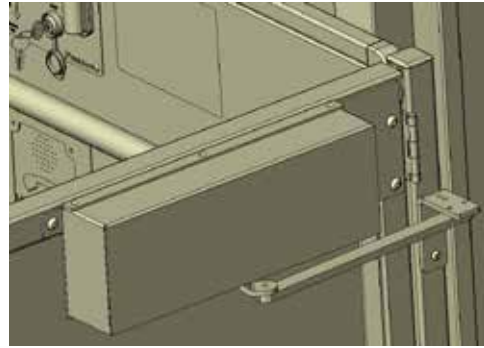
Upper Landing Controls: Optional upper landing gate controls are also available in rocker or paddle style control.



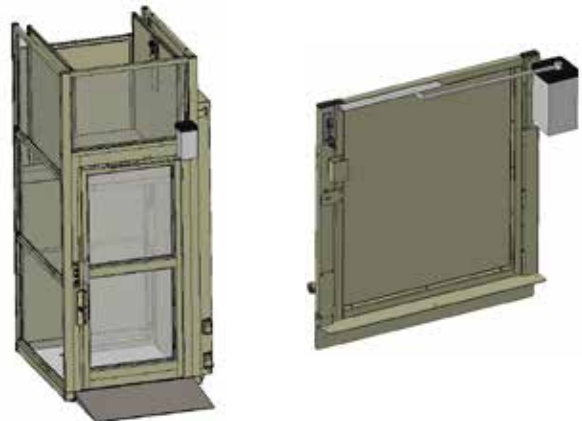
Rocker



Paddle



Platform Gate Operator



Doors and Upper Landing Gate Operator

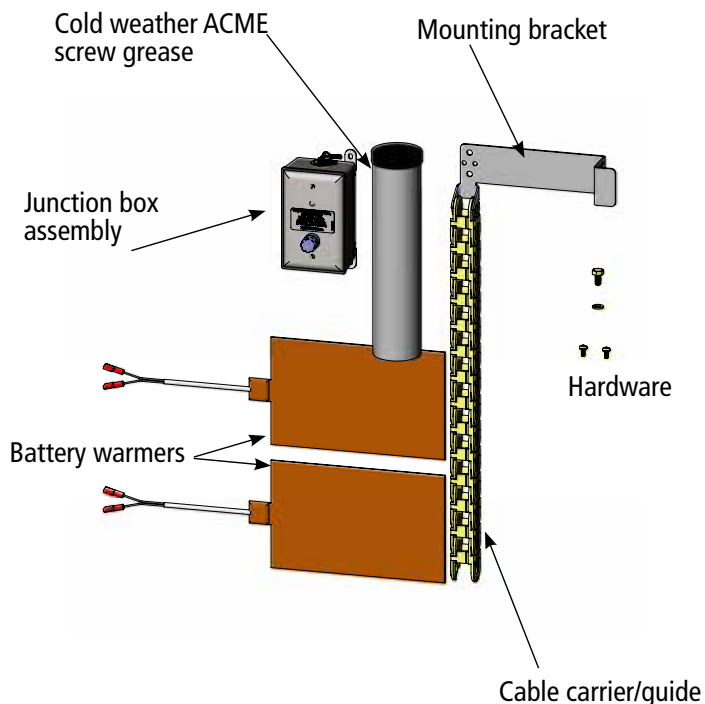
Additional Options



ADA Phone with Battery Backup

Additional Options cont.

Cold weather package: recommended if operating temperature is below 20°F (-7°C)



Pit Switch

Mounts inside the hoistway and ensures safety of someone working beneath the platform.



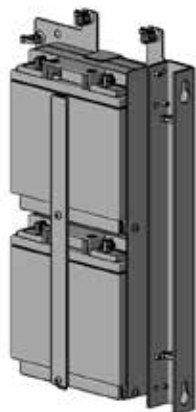
Flood Sensor

The flood sensor is used to detect water near the bottom of the VPL. The sensor can be mounted anywhere below the lower limit switches. When water is detected, the platform will stop moving in either up or down direction.



Battery Package Upgrade

34AH (upgrade package for VPL-3353B & VPL-3375B only)



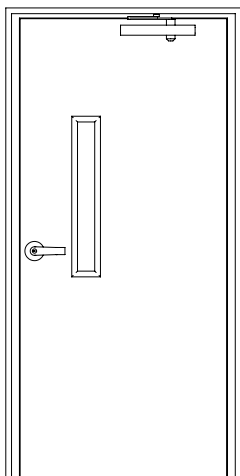
34AH Batteries

Bruno Doors and Gates

Bruno offers multiple flush-mount door and gate options for Shaftway VPLs.

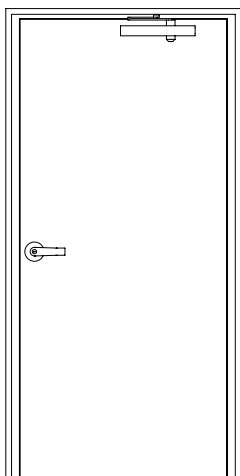
The steel door is fire-rated and features a window opening and steel frame. It is available in two sizes and comes equipped with an electric strike interlock system (ESI). Door has gray primer finish.

- 36" door (33" inside opening), 42" frame
- 46" door (43" inside opening), 52" frame



The oak door is non-fire rated, ships with a steel frame, and is available in two sizes. It comes equipped with an electric strike interlock system (ESI). Door is not finished.

- 36" door (33" inside opening), 42" frame
- 46" door (43" inside opening), 52" frame



The aluminum door is non-fire rated and features a framed door with Plexiglas panels. It is equipped with an electric strike interlock system (ESI) and comes pre-hung in an aluminum frame. Door is painted champagne color. The height of the door is 80" and is available in two widths:

- 36" door (33-3/8" inside opening), 42" frame
- 45" door (42-3/8" inside opening), 51" frame



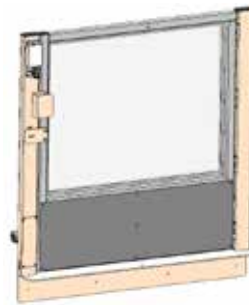
Optional upper landing gate includes Bruno electrical mechanical interlock (EMI) or optional electric strike interlock (ESI) which releases the gate when platform is at the upper landing.

Electronic sensors stop the platform from operating unless the gate is closed. Rocker switch upper landing control comes mounted to the gate. Paddle switch and/or remote mount are optional. Available with steel or Plexiglas panels in two sizes:

- 36" W x 42" H
- 42" W x 42" H



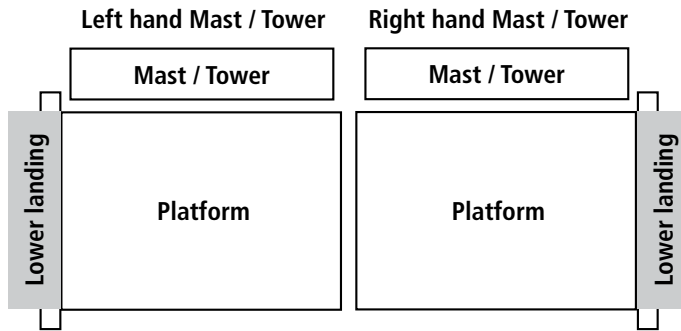
Steel panel, rocker switch



Plexiglas panel, paddle control

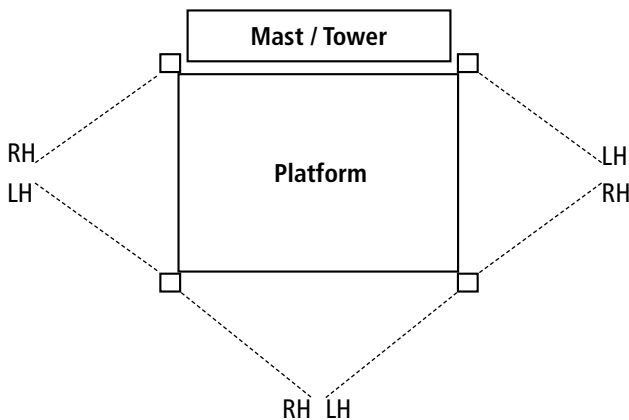
Hand of Mast / Tower

Hand of mast / tower is determined by the side the mast / tower is on when entering the lift at the lower landing. See below.



Gate and Door Swing Direction

Identify gate or door swing based on the direction the gate or door opens from the platform (see drawing below). For example, if a user's back is to the hinge and the right arm would be used to open the door or gate, it would require a right-hand swing.



Please note the following for most 90° / Adjacent Platforms:

- Left hand mast / tower requires right hand upper landing gate with EMI interlock.
- Right hand mast / tower requires left hand upper landing gate with EMI interlock.
- If this configuration cannot be achieved due to any design or structure requirements, an upper landing gate with an ESI lock can be used and this requirement will not apply.

Site Construction Details

Electrical Requirements:

Check applicable local codes for all electrical and wiring requirements. If it is determined that a GFI (Ground Fault Interrupter) outlet is required, use a GFI 120V, 15A, 60 Hz single phase circuit to operate the internal battery charger (charger draws 3A max.). National Electrical Code requires a GFI is used in all outdoor or wet environment applications.

Platform Pathway Requirements:

Make sure the platform pathway is clear of any electrical conduit and wire ways; liquids, and steam or gas piping discharge into the pathway. Ensure there is sufficient headroom clearance (minimum of 80" – 2032 mm) throughout floor-to-floor travel, and the area should be sufficiently lit.

Floor Recommendations:

A 4" (102 mm) thick, 3500 PSI minimum compressive strength, reinforced concrete slab is recommended. Refer to technical drawings for minimum slab dimensions. If the temperature can fall below freezing, it is advised that you insert an insulation sheet between the concrete slab and the compacted rock.

Floor Attachment:

VPL must be fastened to concrete slab using four (4) 1/2" (3/8" bolt) x minimum 2-1/2" long concrete anchors suitable for the environment. Refer to technical drawings for mounting hole locations. Follow selected concrete anchor manufacturer's guidelines and applicable codes.

Housing Attachment:

Use 5/16-18 tapped holes on tower frame work to fasten the tower housing to a vertical wall near or above the upper landing (200 lb/91 kg wall loading). Mounting brackets are supplied with unit.

Top Landing Gate Attachment:

Refer to landing gate detail on pages 30-33.

Space Requirements:

Refer to application specific drawings starting on page 12.

Platform-to-Top Landing Sill Clearance:

ASME code indicates the platform floor-to-sill clearance at the upper landing shall not be less than 3/8" (9.5 mm) nor exceed 3/4" (19 mm). Follow applicable local codes.

Fascia Wall Requirements:

ASME code indicates that fascia should be smooth and/or non-perforated that guards the full length and width of the platform. The fascia shall be securely fastened from the upper landing sill down to the lower landing sill. It should also be able to withstand a 125-pound side load over any 4-inch square area. Follow applicable local codes.

Application Specific Drawings

Shaftway same side platform (VPL-3300B), no pit

Technical Data/Specifications

Rated load

- 750 lbs max

Input power source

- DC battery powered unit: 110-120 volt - 3 Amp 60 Hz battery charger

Drive

- DC battery powered unit: VPL-3310B/VPL-3312B/VPL-3314B: 1 hp motor, 1750 rpm, 24 VDC, continuous duty

Intermediate reduction: Dual 4L style Poly-V belts and pulleys, 3.94:1 pulley reduction

Final drive: VPL-3310B/VPL-3312B/VPL-3314B: 1.25" dia. ACME screw w/bronze nut and bronze safety back up nut

Motor controller

- DC battery powered unit: 24VDC relay control

Speed

- DC battery powered unit: 10 ft per minute maximum

For complete technical specifications, please see ILS-01100 "VPL-3300B Series Commercial Vertical Platform Lift Technical Specification."

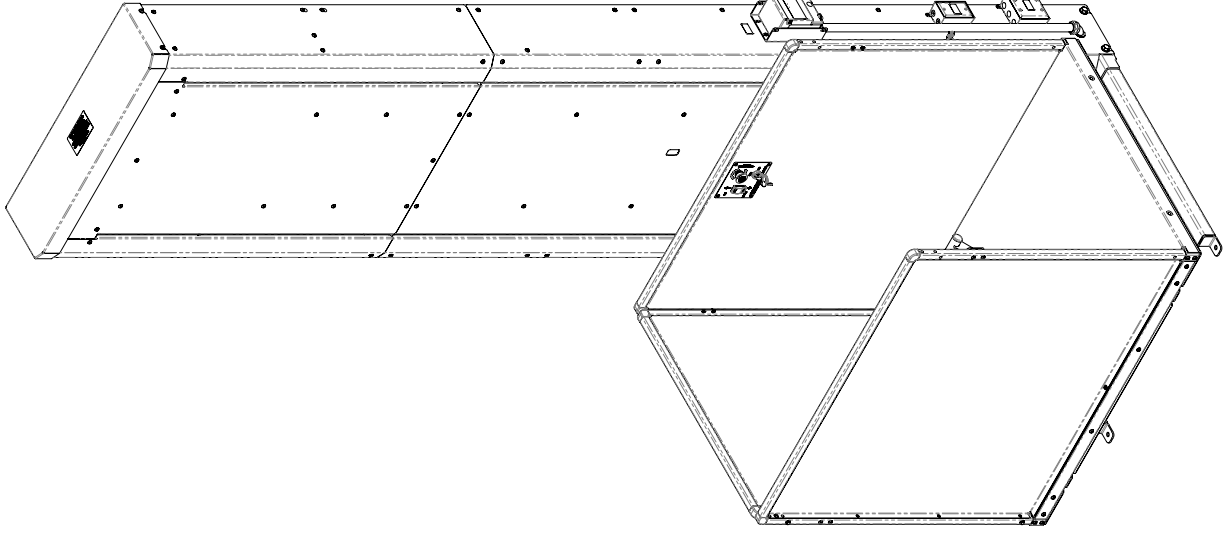
Performance Standards

USA Food & Drug Administration: Class II, 510(K) Exempt, File No. 890.3930 Product Code: PCE

ASME A18.1 (Section 2) Safety Standards for Platform Lifts and Stairway Chairlifts

CSA B355 Lifts for Persons with Physical Disabilities

CSA B44.1/ASME A17.5 Elevator and Escalator Equipment



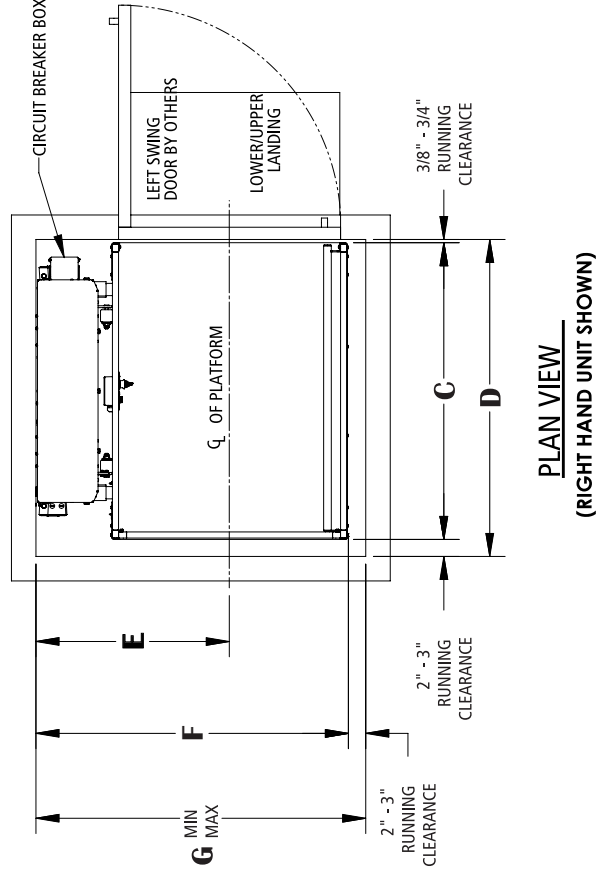
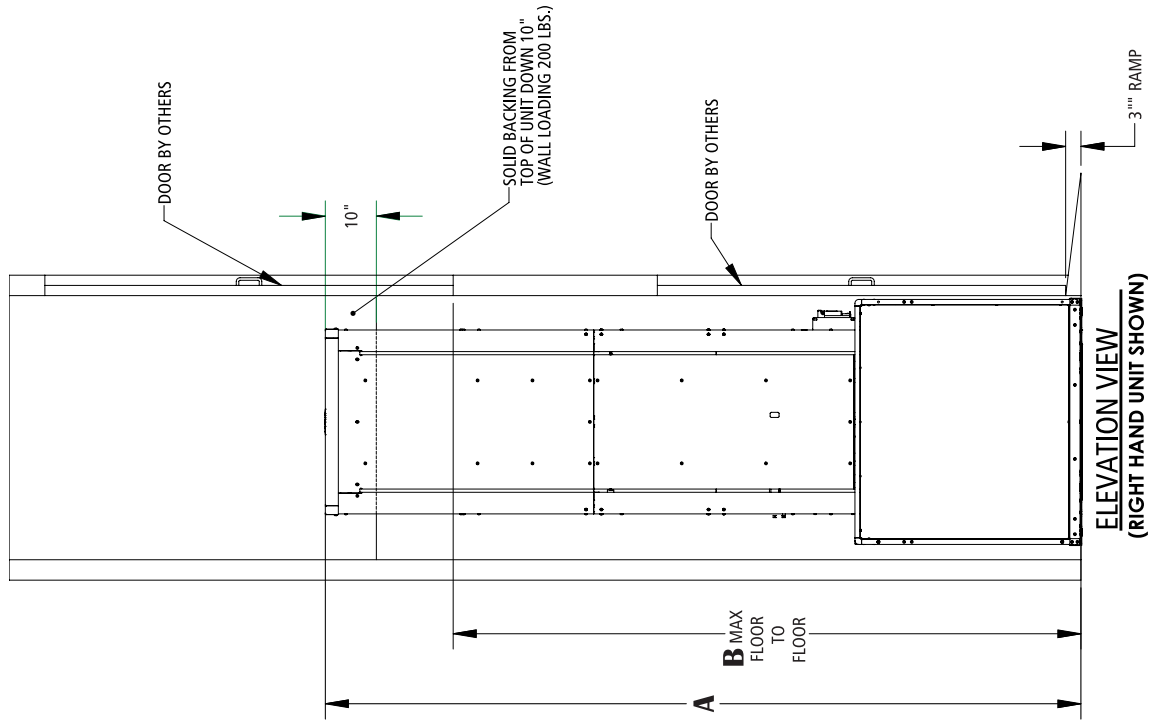
Shaftway same side platform (VPL-3300B), no pit

Notes:

1. Hoistway in accordance with safety codes (ASME-A18.1) and local codes and regulations. Hoistway to be fire rated in accordance with applicable building codes if required by such codes.
2. Plumb hoistway due to close running clearances. Must be constructed plumb ($\pm 1/8"$) and square and to size shown.
3. No conduit, wiring or piping other than that pertaining to the unit is permitted in the hoistway.

	A	B
VPL-3310B	148-1/16"	123"
VPL-3312B	172-1/16"	147"
VPL-3314B	196-1/16"	171"

	C	D	E	F	G MIN	G MAX
36" x 48" Platform	48-7/16"	50-13/16" - 52-3/16"	31-9/16"	50-13/16"	52-13/16"	53-13/16"
36" x 54" Platform	54-7/16"	56-13/16" - 58-3/16"	31-9/16"	50-13/16"	52-13/16"	53-13/16"
36" x 60" Platform	60-7/16"	62-13/16" - 64-3/16"	31-9/16"	50-13/16"	52-13/16"	53-13/16"
42" x 60" Platform	60-7/16"	62-13/16" - 64-3/16"	34-9/16"	56-13/16"	58-13/16"	59-13/16"



Anchor point locations/slab detail Shaftway same side platform (VPL-3300B), no pit

Technical Data/Specifications

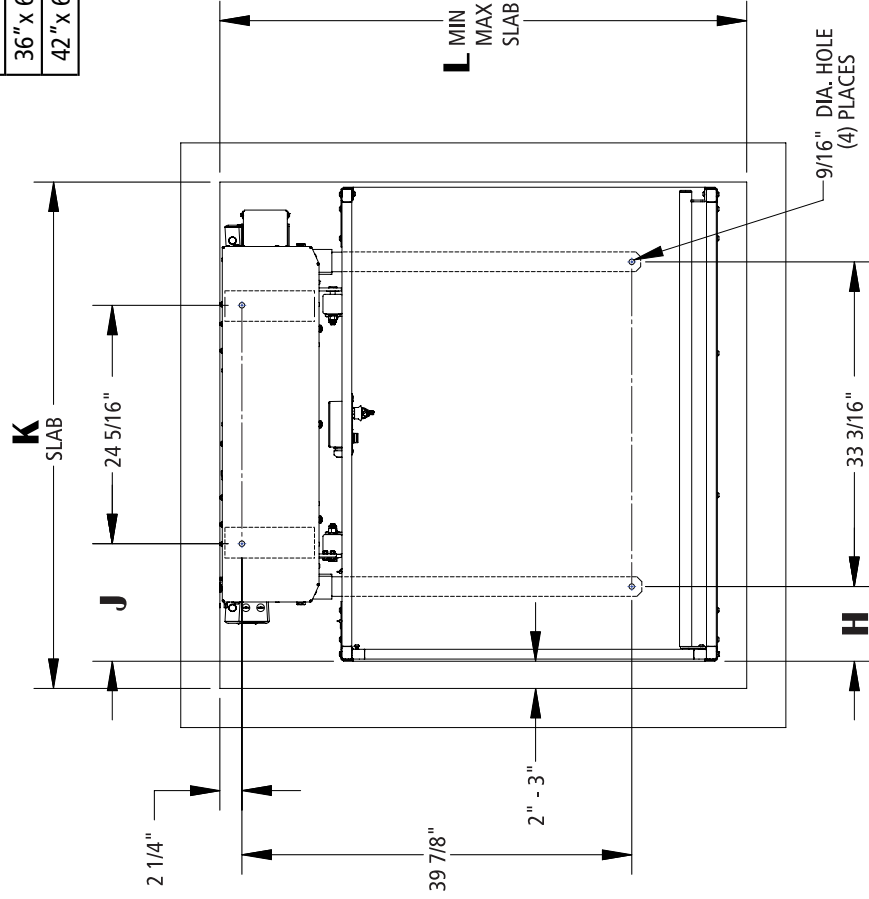
Floor Attachment

VPL must be fastened to concrete slab using four (4) 1/2" (3/8" bolt) x minimum 2-1/2" long concrete anchors suitable for the environment. Follow selected concrete anchor manufacturers guidelines and applicable codes.

Floor Requirements

4" thick 3500 PSI minimum compressive strength, reinforced concrete slab

	H	J	K	L MIN	L MAX
36" x 48" Platform	7-5/8"	12-1/16"	50-13/16" - 52-3/16"	52-13/16"	53-13/16"
36" x 54" Platform	10-5/8"	15-1/16"	56-13/16" - 58-3/16"	52-13/16"	53-13/16"
36" x 60" Platform	13-5/8"	18-1/16"	62-13/16" - 64-3/16"	52-13/16"	53-13/16"
42" x 60" Platform	13-5/8"	18-1/16"	62-13/16" - 64-3/16"	58-13/16"	59-13/16"



UNITS WITH SAME SIDE PLATFORM

Application Specific Drawings

bruno.com/cvpl | 1-800-848-3056
ILS-01254 - Rev. 2 • Sheet 1 of 3

Shaftway same side platform (VPL-3300B), with pit

Technical Data/Specifications

Rated load

- 750 lbs max

Input power source

- DC battery powered unit: 110-120 volt - 3 Amp 60 Hz battery charger

Drive

- DC battery powered unit: VPL-3310B/VPL-3312B/VPL-3314B: 1 hp motor, 1750 rpm, 24 VDC, continuous duty

Intermediate reduction: Dual 4L style Poly-V belts and pulleys, 3.94:1 pulley reduction

Final drive: VPL-3310B/VPL-3312B/VPL-3314B: 1.25" dia. ACME screw w/bronze nut and bronze safety back up nut

Motor controller

- DC battery powered unit: 24 VDC relay control

Speed

- DC battery powered unit: 10 ft per minute maximum

For complete technical specifications, please see ILS-01100 "VPL-3300B Series Commercial Vertical Platform Lift Technical Specification."

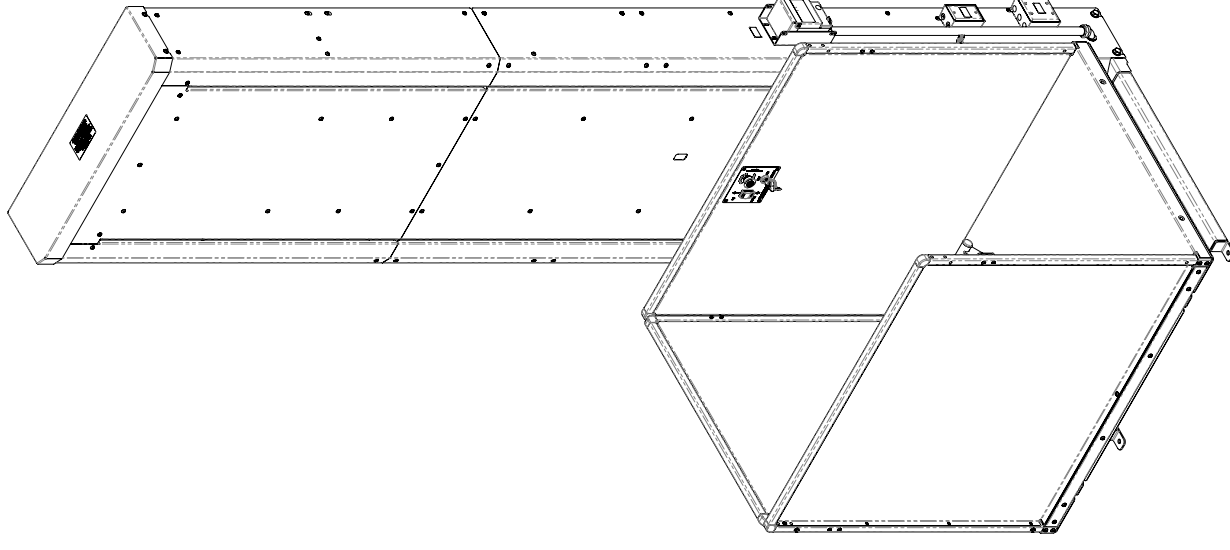
Performance Standards

USA Food & Drug Administration: Class II, 510(K) Exempt, File No. 890.3930 Product Code: PCE

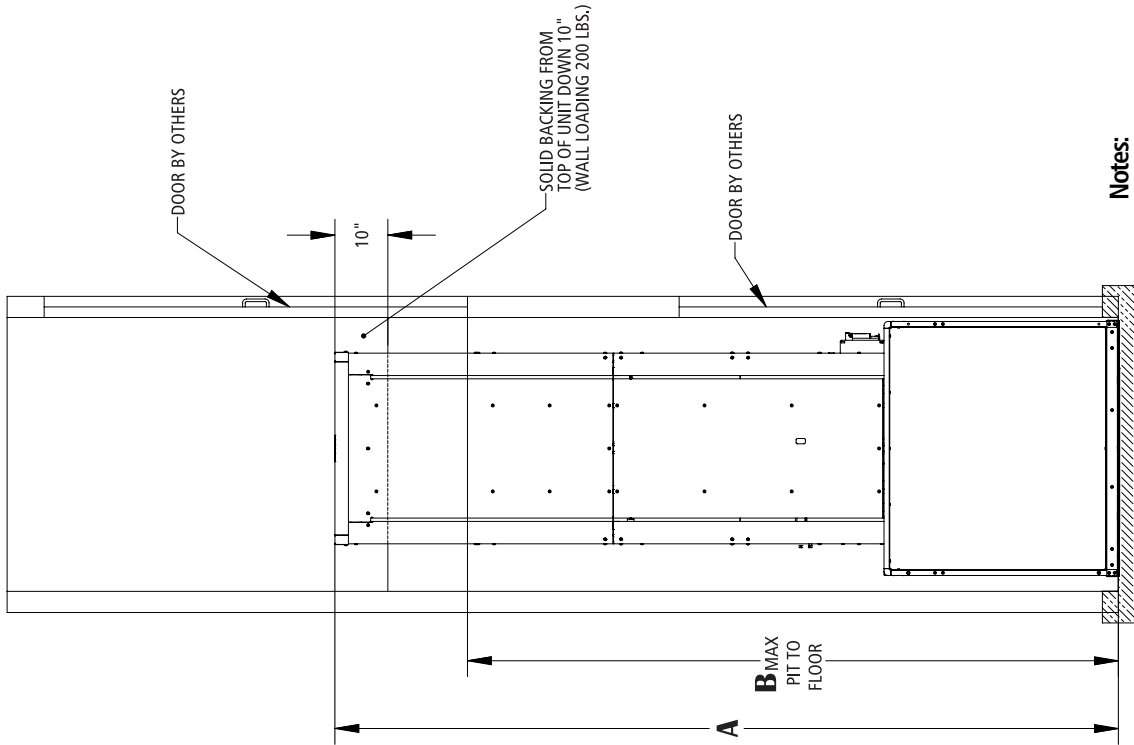
ASME A18.1 (Section 2) Safety Standards for Platform Lifts and Stairway Chairlifts

CSA B355 Lifts for Persons with Physical Disabilities

CSA B44.1/ASME A17.5 Elevator and Escalator Equipment



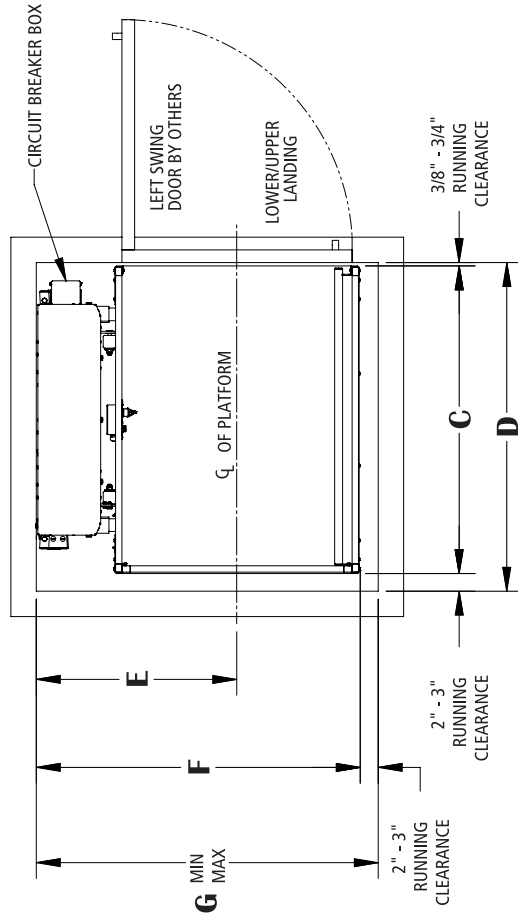
Shaftway same side platform (VPL-3300B), with pit



ELEVATION VIEW
 (RIGHT HAND UNIT SHOWN)

	A	B
VPL-3310B	148-1/16"	123"
VPL-3312B	172-1/16"	147"
VPL-3314B	196-1/16"	171"

	C	D	E	F	G^{MIN}	G^{MAX}
36" x 48" Platform	48-7/16"	50-13/16" - 52-3/16"	31-9/16"	50-13/16"	52-13/16"	53-13/16"
36" x 54" Platform	54-7/16"	56-13/16" - 58-3/16"	31-9/16"	50-13/16"	52-13/16"	53-13/16"
36" x 60" Platform	60-7/16"	62-13/16" - 64-3/16"	31-9/16"	50-13/16"	52-13/16"	53-13/16"
42" x 60" Platform	60-7/16"	62-13/16" - 64-3/16"	34-9/16"	56-13/16"	58-13/16"	59-13/16"



PLAN VIEW
 (RIGHT HAND UNIT SHOWN)

Notes:

1. Hoistway in accordance with safety codes (ASME-A18.1) and local codes and regulations. Hoistway to be fire rated in accordance with applicable building codes if required by such codes.
2. Plumb hoistway due to close running clearances. Must be constructed plumb ($\pm 1/8"$) and square and to size shown.
3. No conduit, wiring or piping other than that pertaining to the unit is permitted in the hoistway.

Anchor point locations/pit detail Shaftway same side platform (VPL-3300B), with pit

Technical Data/Specifications

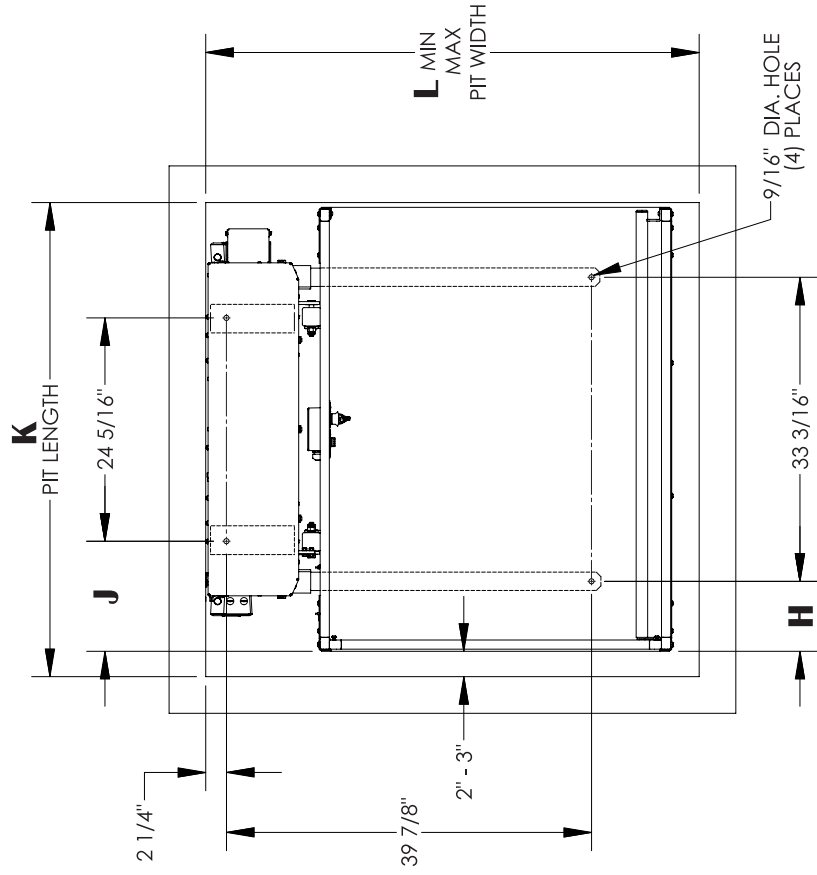
Floor Attachment

VPL must be fastened to concrete slab using four (4) 1/2" (3/8" bolt) x minimum 2-1/2" long concrete anchors suitable for the environment. Follow selected concrete anchor manufactures guidelines and applicable codes.

Floor Requirements

4" thick 3500 PSI minimum compressive strength, reinforced concrete slab

	H	J	K	L MIN	L MAX
36" x 48" Platform	7-5/8"	12-1/16"	50-13/16" - 52-3/16"	52-13/16"	53-13/16"
36" x 54" Platform	10-5/8"	15-1/16"	56-13/16" - 58-3/16"	52-13/16"	53-13/16"
36" x 60" Platform	13-5/8"	18-1/16"	62-13/16" - 64-3/16"	52-13/16"	53-13/16"
42" x 60" Platform	13-5/8"	18-1/16"	62-13/16" - 64-3/16"	58-13/16"	59-13/16"



UNITS WITH SAME SIDE PLATFORM

PIT DETAIL

Application Specific Drawings

Shaftway straight through platform (VPL-3300B), no pit

Technical Data/Specifications

Rated load

- 750 lbs max

Input power source

- DC battery powered unit: 110-120 volt - 3 Amp 60 Hz battery charger

Drive

- DC battery powered unit: VPL-3353B/VPL-3375B: 1/2 hp motor, 1750 rpm, 24 VDC, continuous duty
 VPL-3310B/VPL-3312B/VPL-3314B: 1hp motor, 1750 rpm, 24 VDC, continuous duty

Intermediate reduction: Dual 4L style Poly-V belts and pulleys, 3.94:1 pulley reduction

Final drive: VPL-3353B/VPL-3375B: 1" dia. ACME screw w/bronze nut and bronze safety back up nut
 VPL-3310B/VPL-3312B/VPL-3314B: 1.25" dia. ACME screw w/bronze nut and bronze safety back up nut

Motor controller

- DC battery powered unit: 24 VDC relay control

Speed

- DC battery powered unit: 10 ft per minute maximum

For complete technical specifications, please see ILS-01100 "VPL-3300B Series Commercial Vertical Platform Lift Technical Specification."

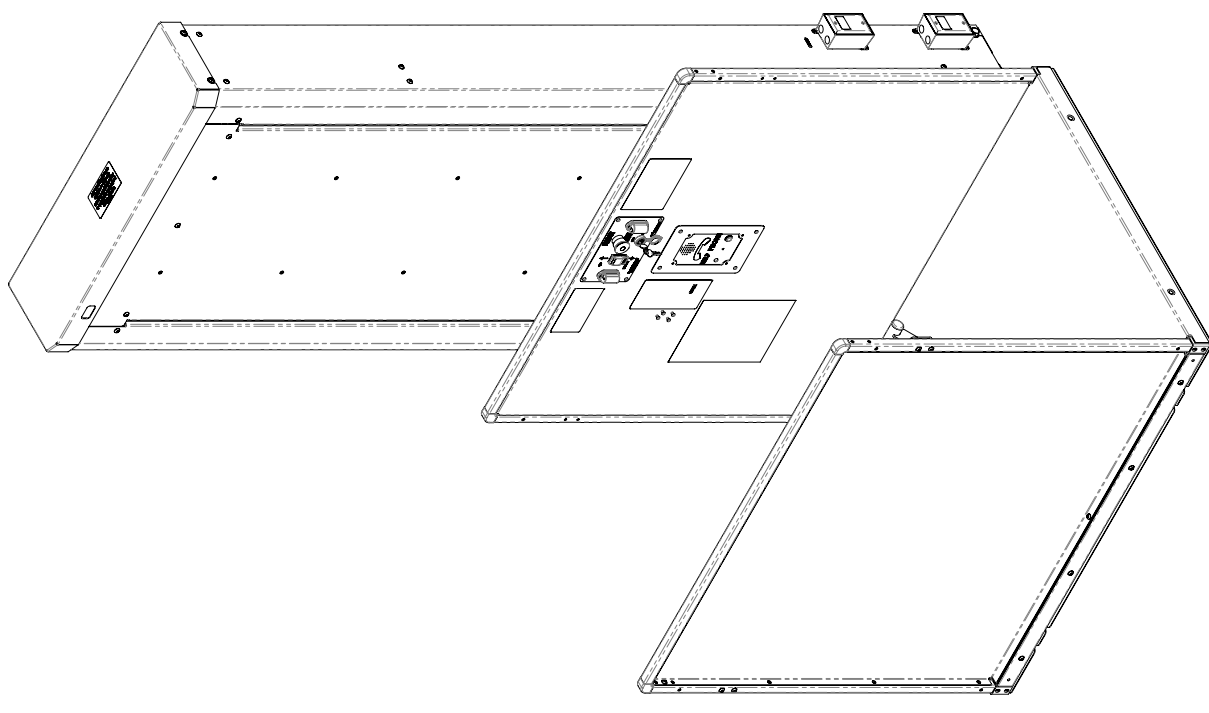
Performance Standards

USA Food & Drug Administration: Class II, 510(K) Exempt, File No. 890.3930 Product Code: PCE

ASME A18.1 (Section 2) Safety Standards for Platform Lifts and Stairway Chairlifts

CSA B355 Lifts for Persons with Physical Disabilities

CSA B44.1/ASME A17.5 Elevator and Escalator Equipment



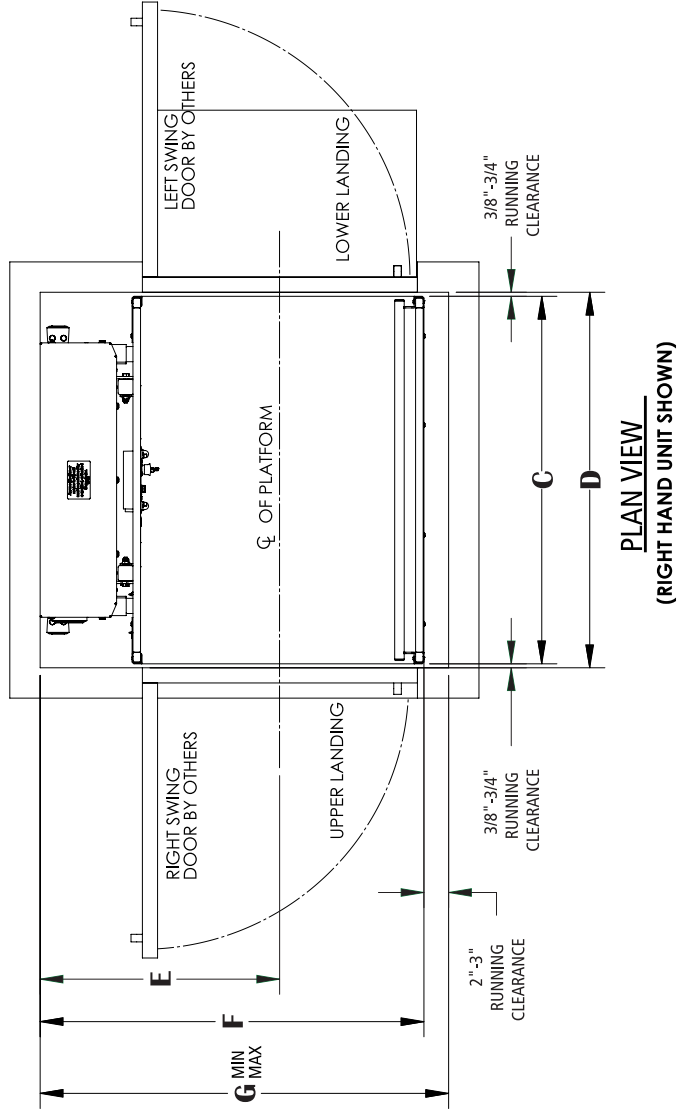
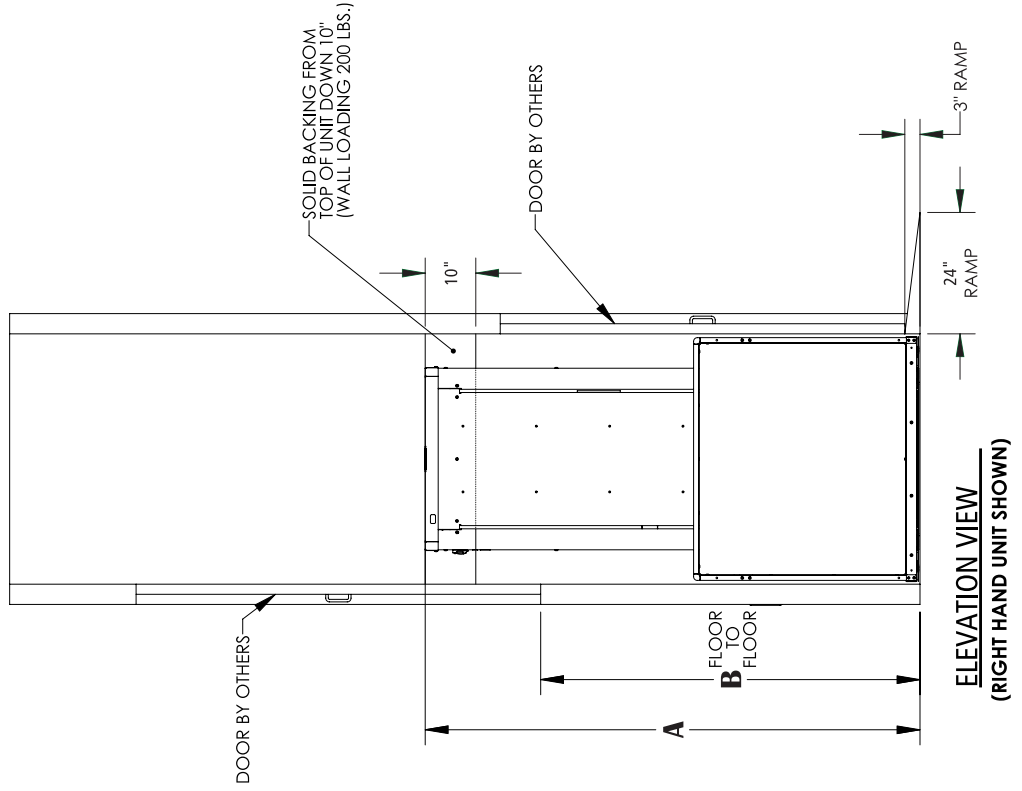
Shaftway straight through platform (VPL-3300B), no pit

Notes:

1. Hoistway in accordance with safety codes (ASME-A18.1) and local codes and regulations. Hoistway to be fire rated in accordance with applicable building codes if required by such codes.
2. Plumb hoistway due to close running clearances. Must be constructed plumb ($\pm 1/8"$) and square and to size shown.
3. No conduit, wiring or piping other than that pertaining to the unit is permitted in the hoistway.

	A	B MIN	B MAX
VPL-3353B	75-9/16"	11"	53"
VPL-3375B	97-9/16"	32"	75"
VPL-3310B	148-1/16"	75"	123"
VPL-3312B	172-1/16"	75"	147"
VPL-3314B	196-1/16"	75"	171"

	C	D	E	F	G MIN	G MAX
36" x 48" Platform	48-7/16"	49-3/16" - 49-15/16"	31-9/16"	50-13/16"	52-13/16"	53-13/16"
36" x 54" Platform	54-7/16"	55-3/16" - 55-15/16"	31-9/16"	50-13/16"	52-13/16"	53-13/16"
36" x 60" Platform	60-7/16"	61-3/16" - 61-15/16"	31-9/16"	50-13/16"	52-13/16"	53-13/16"
42" x 60" Platform	60-7/16"	61-3/16" - 61-15/16"	34-9/16"	56-13/16"	58-13/16"	59-13/16"



Anchor point locations/slab detail Shaftway straight through platform (VPL-3300B), no pit

Technical Data/Specifications

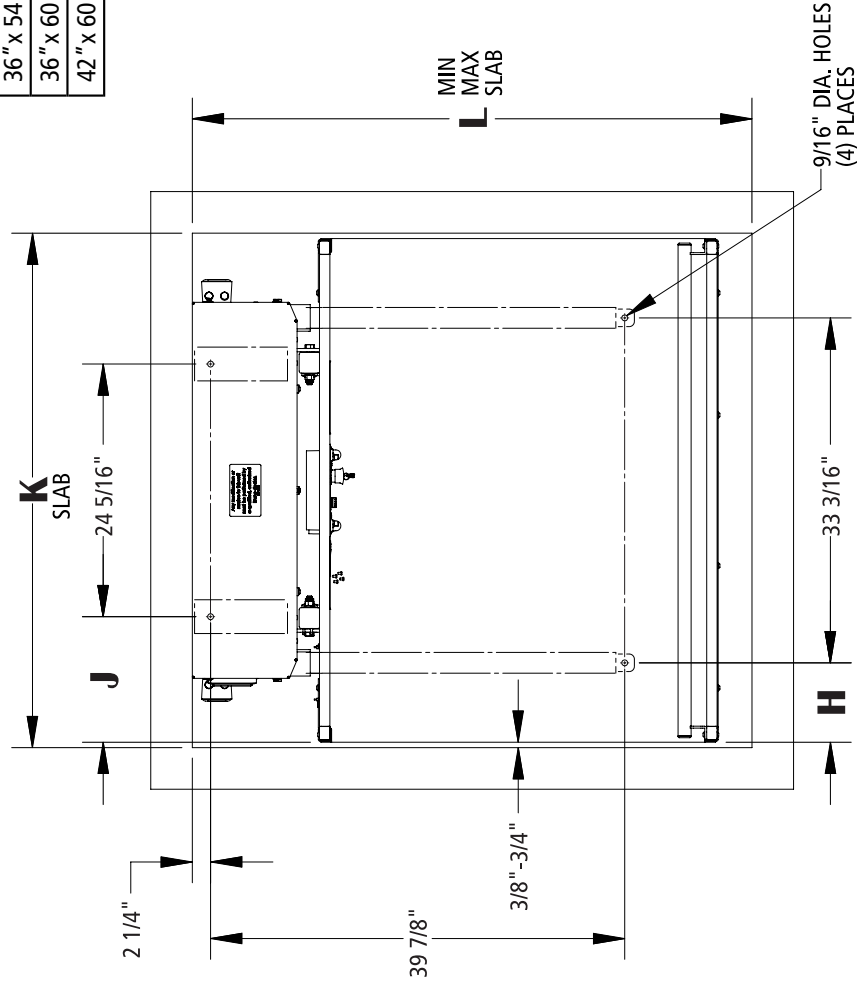
Floor Attachment

VPL must be fastened to concrete slab using four (4) 1/2" (3/8" bolt) x minimum 2-1/2" long concrete anchors suitable for the environment. Follow selected concrete anchor manufactures guidelines and applicable codes.

Floor Requirements

4" thick 3500 PSI minimum compressive strength, reinforced concrete slab

	H	J	K	L MIN	L MAX
36" x 48" Platform	7-5/8"	12-1/16"	49-3/16" - 49-15/16"	52-13/16"	53-13/16"
36" x 54" Platform	10-5/8"	15-1/16"	55-3/16" - 55-15/16"	52-13/16"	53-13/16"
36" x 60" Platform	13-5/8"	18-1/16"	61-3/16" - 61-15/16"	52-13/16"	53-13/16"
42" x 60" Platform	13-5/8"	18-1/16"	61-3/16" - 61-15/16"	58-13/16"	59-13/16"



UNITS WITH STRAIGHT THROUGH PLATFORM

Application Specific Drawings

Shaftway straight through platform (VPL-3300B), with pit

Technical Data/Specifications

Rated load

- 750 lbs max

Input power source

- DC battery powered unit: 110-120 volt - 3 Amp 60 Hz battery charger

Drive

- DC battery powered unit: VPL-3353B/VPL-3375B: 1/2 hp motor, 1750 rpm, 24 VDC, continuous duty
VPL-3310B/VPL-3312B/VPL-3314B: 1 hp motor, 1750 rpm, 24 VDC, continuous duty

Intermediate reduction: Dual 4L style Poly-V belts and pulleys, 3.94:1 pulley reduction

Final drive: VPL-3353B/VPL-3375B: 1" dia. ACME screw w/bronze nut and bronze safety back up nut
VPL-3310B/VPL-3312B/VPL-3314B: 1.25" dia. ACME screw w/bronze nut and bronze safety back up nut

Motor controller

- DC battery powered unit: 24 VDC relay control

Speed

- DC battery powered unit: 10 ft per minute maximum

For complete technical specifications, please see ILS-01100 "VPL-3300B Series Commercial Vertical Platform Lift Technical Specification."

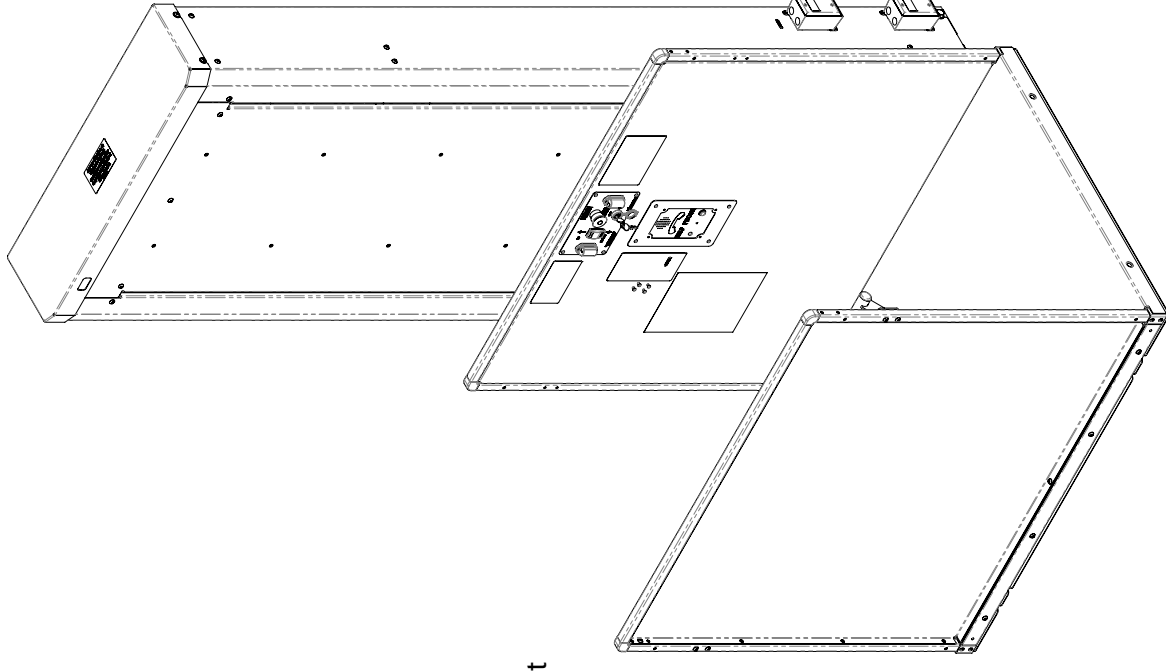
Performance Standards

USA Food & Drug Administration: Class II, 510(K) Exempt, File No. 890.3930 Product Code: PCE

ASME A18.1 (Section 2) Safety Standards for Platform Lifts and Stairway Chairlifts

CSA B355 Lifts for Persons with Physical Disabilities

CSA B44.1/ASME A17.5 Elevator and Escalator Equipment



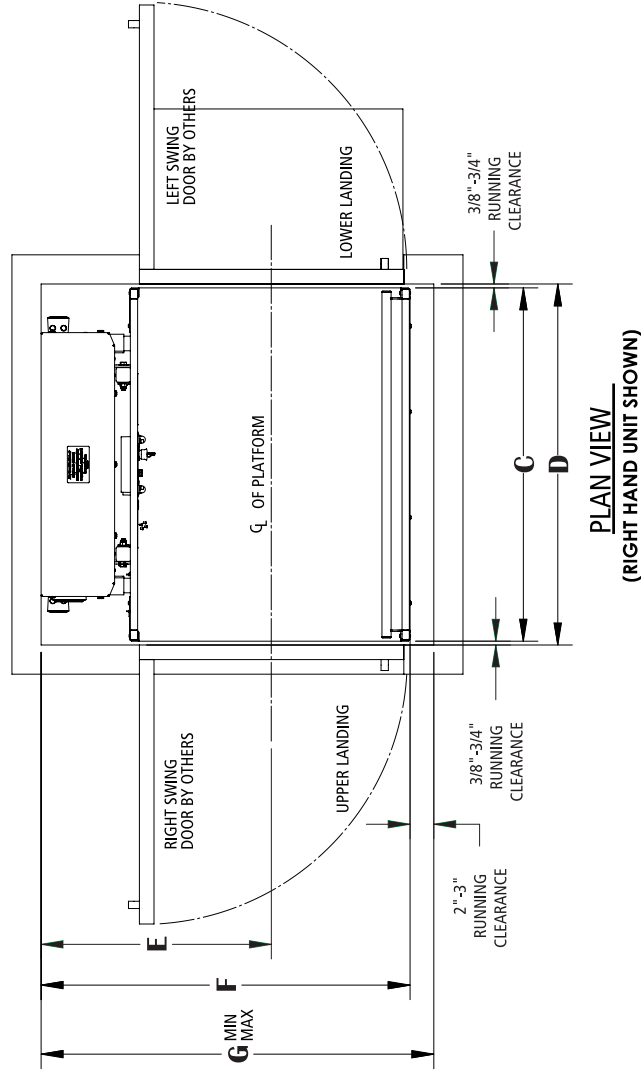
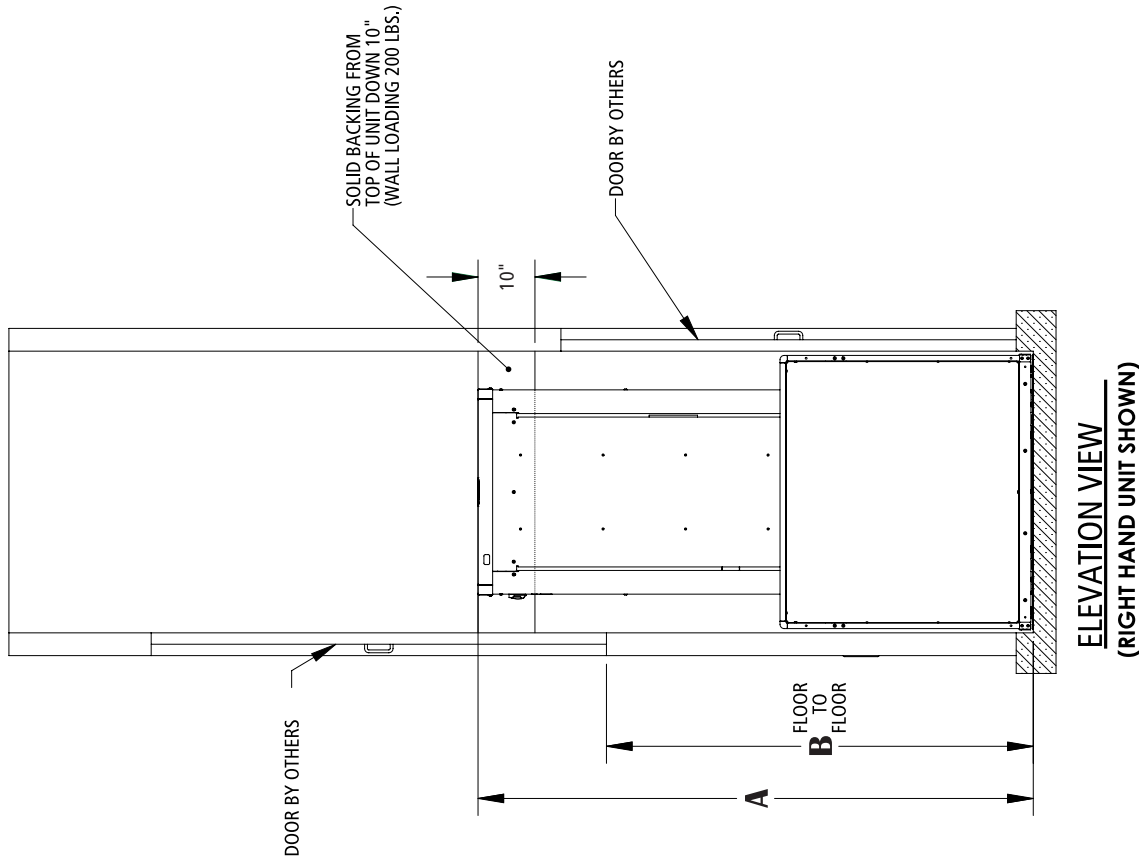
Shaftway straight through platform (VPL-3300B), with pit

Notes:

1. Hoistway in accordance with safety codes (ASME-A18.1) and local codes and regulations. Hoistway to be fire rated in accordance with applicable building codes if required by such codes.
2. Plumb hoistway due to close running clearances. Must be constructed plumb ($\pm 1/8"$) and square and to size shown.
3. No conduit, wiring or piping other than that pertaining to the unit is permitted in the hoistway.

	A	B MIN	B MAX
VPL-3353B	75-9/16"	11"	53"
VPL-3375B	97-9/16"	32"	75"
VPL-3310B	148-1/16"	75"	123"
VPL-3312B	172-1/16"	75"	147"
VPL-3314B	196-1/16"	75"	171"

	C	D	E	F	G MIN	G MAX
36" x 48" Platform	48-7/16"	49-3/16" - 49-15/16"	31-9/16"	50-13/16"	52-13/16"	53-13/16"
36" x 54" Platform	54-7/16"	55-3/16" - 55-15/16"	31-9/16"	50-13/16"	52-13/16"	53-13/16"
36" x 60" Platform	60-7/16"	61-3/16" - 61-15/16"	31-9/16"	50-13/16"	52-13/16"	53-13/16"
42" x 60" Platform	60-7/16"	61-3/16" - 61-15/16"	34-9/16"	56-13/16"	58-13/16"	59-13/16"



ELEVATION VIEW
(RIGHT HAND UNIT SHOWN)

PLAN VIEW
(RIGHT HAND UNIT SHOWN)

Anchor point locations/pit detail Shaftway straight through platform (VPL-3300B), with pit

Technical Data/Specifications

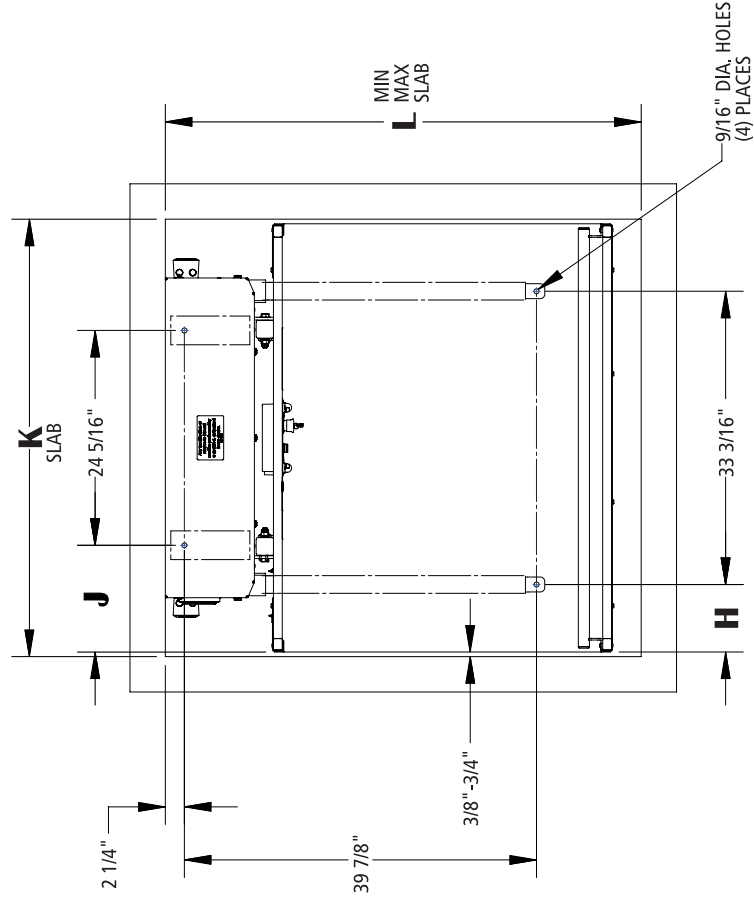
Floor Attachment

VPL must be fastened to concrete slab using four (4) 1/2" (3/8" bolt) x minimum 2-1/2" long concrete anchors suitable for the environment. Follow selected concrete anchor manufactures guidelines and applicable codes.

Floor Requirements

4" thick 3500 PSI minimum compressive strength, reinforced concrete slab

	H	J	K	L MIN	L MAX
36" x 48" Platform	7-5/8"	12-1/16"	49-3/16" - 49-15/16"	52-13/16"	53-13/16"
36" x 54" Platform	10-5/8"	15-1/16"	55-3/16" - 55-15/16"	52-13/16"	53-13/16"
36" x 60" Platform	13-5/8"	18-1/16"	61-3/16" - 61-15/16"	52-13/16"	53-13/16"
42" x 60" Platform	13-5/8"	18-1/16"	61-3/16" - 61-15/16"	58-13/16"	59-13/16"



UNITS WITH STRAIGHT THROUGH PLATFORM

Application Specific Drawings

Shaftway 90/adjacent exit platform (VPL-3300B), no pit

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 ILS-01178 - Rev. 5 • Sheet 1 of 3

Technical Data/Specifications

Rated load

- 750 lbs max

Input power source

- DC battery powered unit: 110-120 volt - 3 Amp 60 Hz battery charger

Drive

- DC battery powered unit: VPL-3353B/VPL-3375B: 1/2 hp motor, 1750 rpm, 24 VDC, continuous duty
 VPL-3310B/VPL-3312B/VPL-3314B: 1hp motor, 1750 rpm, 24 VDC, continuous duty

Intermediate reduction: Dual 4L style Poly-V belts and pulleys, 3.94:1 pulley reduction

Final drive: VPL-3353B/VPL-3375B: 1" dia. ACME screw w/bronze nut and bronze safety back up nut
 VPL-3310B/VPL-3312B/VPL-3314B: 1.25" dia. ACME screw w/bronze nut and bronze safety back up nut

Motor controller

- DC battery powered unit: 24 VDC relay control

Speed

- DC battery powered unit: 10 ft per minute maximum

For complete technical specifications, please see ILS-01100 "VPL-3300B Series Commercial Vertical Platform Lift Technical Specification."

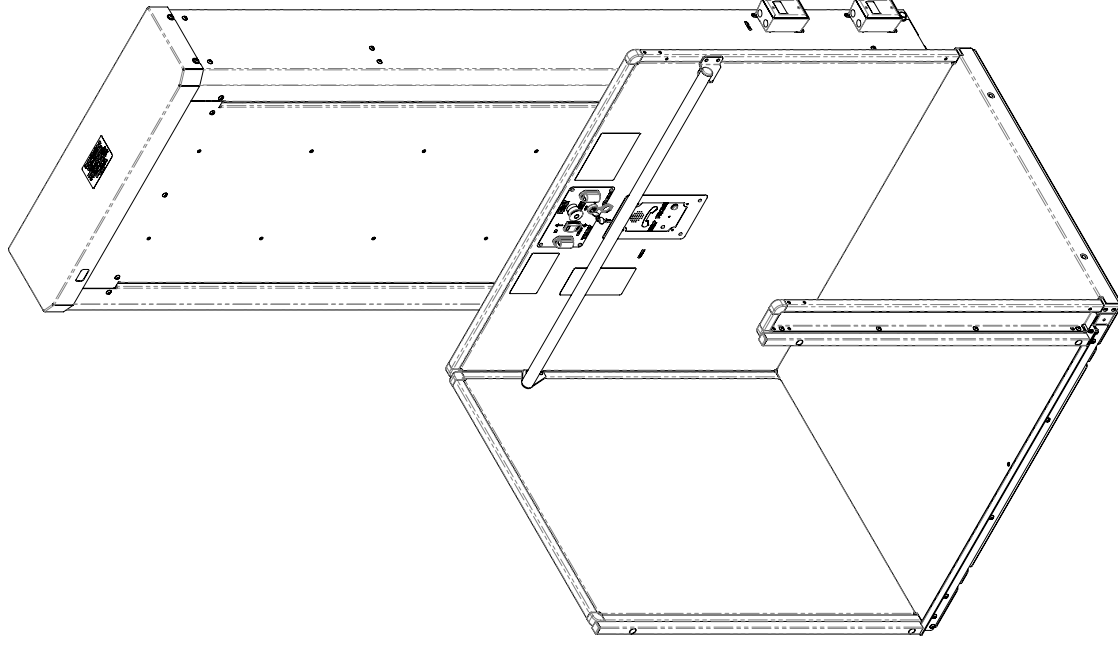
Performance Standards

USA Food & Drug Administration: Class II, 510(K) Exempt, File No. 890.3930 Product Code: PCE

ASME A18.1 (Section 2) Safety Standards for Platform Lifts and Stairway Chairlifts

CSA B355 Lifts for Persons with Physical Disabilities

CSA B44.1/ASME A17.5 Elevator and Escalator Equipment



Shaftway 90/adjacent exit platform (VPL-3300B), no pit

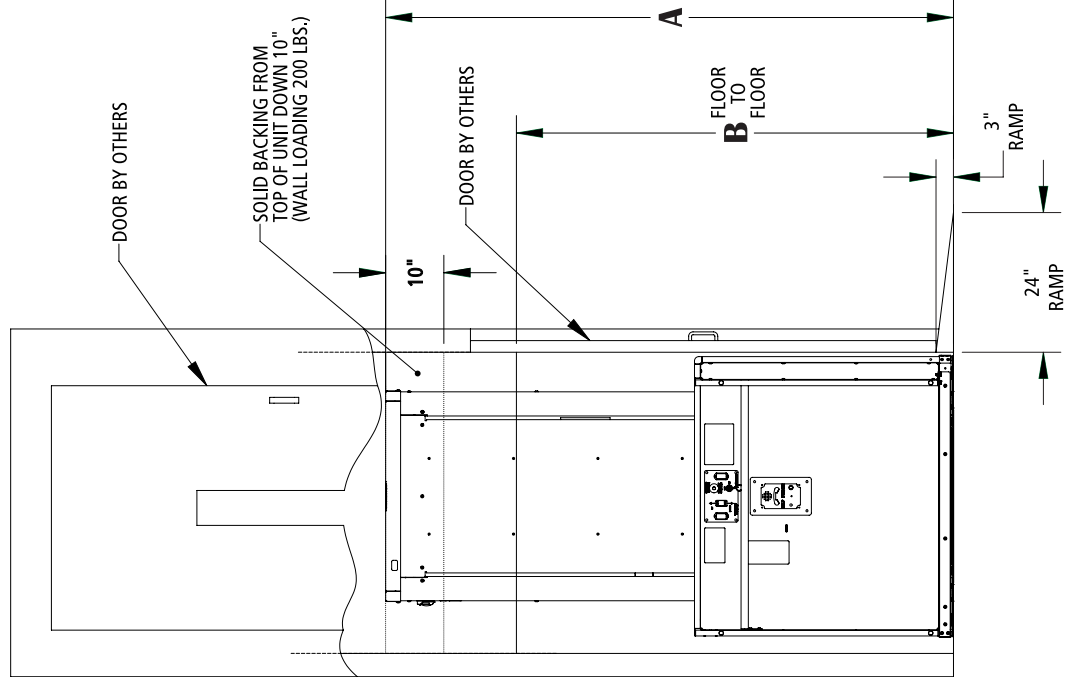
bruno.com/cvp | 1-800-848-3056
 ILS-01178 - Rev. 5 • Sheet 2 of 3

Notes:

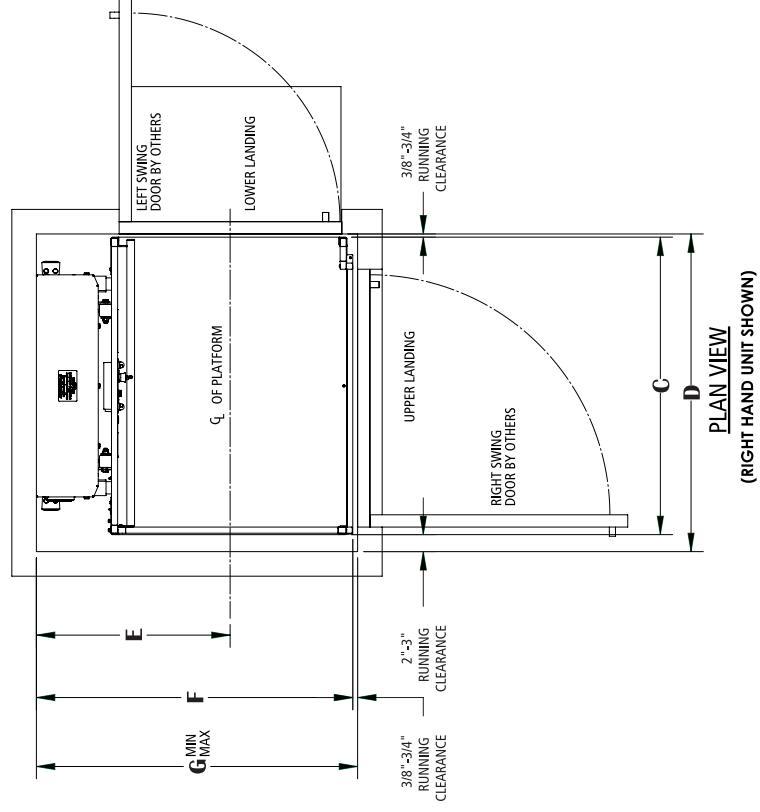
1. Hoistway in accordance with safety codes (ASME-A18.1) and local codes and regulations. Hoistway to be fire rated in accordance with applicable building codes if required by such codes.
2. Plumb hoistway due to close running clearances. Must be constructed plumb ($\pm 1/8"$) and square and to size shown.
3. No conduit, wiring or piping other than that pertaining to the unit is permitted in the hoistway.

	A	B MIN	B MAX
VPL-3353B	75-9/16"	11"	53"
VPL-3375B	97-9/16"	32"	75"
VPL-3310B	148-1/16"	75"	123"
VPL-3312B	172-1/16"	75"	147"
VPL-3314B	196-1/16"	75"	171"

	C	D	E	F	G MIN	G MAX
36" x 48" Platform	48-7/16"	50-13/16" - 52-3/16"	31-9/16"	51-11/16"	52-1/16"	52-7/16"
36" x 54" Platform	54-7/16"	56-13/16" - 58-3/16"	31-9/16"	51-11/16"	52-1/16"	52-7/16"
36" x 60" Platform	60-7/16"	62-13/16" - 64-3/16"	31-9/16"	51-11/16"	52-1/16"	52-7/16"
42" x 60" Platform	60-7/16"	62-13/16" - 64-3/16"	34-9/16"	57-11/16"	58-1/16"	58-7/16"



ELEVATION VIEW
 (RIGHT HAND UNIT SHOWN)



PLAN VIEW
 (RIGHT HAND UNIT SHOWN)

Anchor point locations/slab detail Shaftway 90°/adjacent exit platform (VPL-3300B), no pit

Technical Data/Specifications

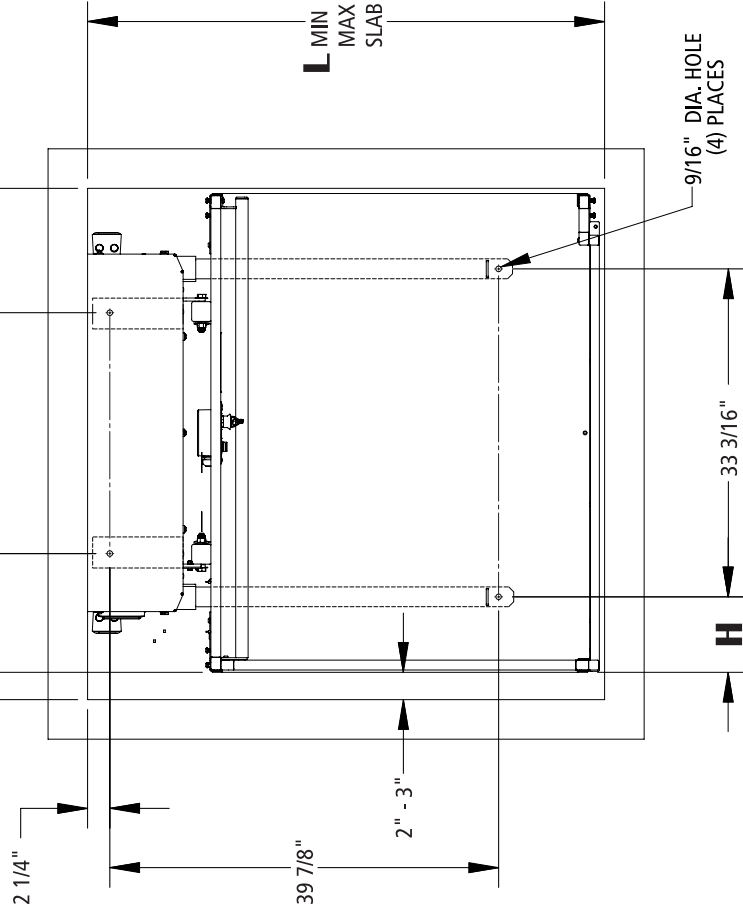
Floor Attachment

VPL must be fastened to concrete slab using four (4) 1/2" (3/8" bolt) x minimum 2-1/2" long concrete anchors suitable for the environment. Follow selected concrete anchor manufacturers guidelines and applicable codes.

Floor Requirements

4" thick 3500 PSI minimum compressive strength, reinforced concrete slab

	H	J	K	L MIN	L MAX
36" x 48" Platform	7-5/8"	12-1/16"	50-13/16" - 52-3/16"	52-1/16"	52-7/16"
36" x 54" Platform	10-5/8"	15-1/16"	56-13/16" - 58-3/16"	52-1/16"	52-7/16"
36" x 60" Platform	13-5/8"	18-1/16"	62-13/16" - 64-3/16"	52-1/16"	52-7/16"
42" x 60" Platform	13-5/8"	18-1/16"	62-13/16" - 64-3/16"	58-1/16"	58-7/16"



UNITS WITH 90° / ADJACENT EXIT PLATFORM

Application Specific Drawings

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ILS-01179 - Rev. 6 • Sheet 1 of 3

Shaftway 90/adjacent exit platform (VPL-3300B), with pit

Technical Data/Specifications

Rated load

- 750 lbs max

Input power source

- DC battery powered unit: 110-120 volt - 3 Amp 60 Hz battery charger

Drive

- DC battery powered unit: VPL-3353B/VPL-3375B: 1/2 hp motor, 1750 rpm, 24 VDC, continuous duty
VPL-3310B/VPL-3312B/VPL-3314B: 1hp motor, 1750 rpm, 24 VDC, continuous duty

Intermediate reduction: Dual 4L style Poly-V belts and pulleys, 3.94:1 pulley reduction

Final drive: VPL-3353B/VPL-3375B: 1" dia. ACME screw w/bronze nut and bronze safety back up nut
VPL-3310B/VPL-3312B/VPL-3314B: 1.25" dia. ACME screw w/bronze nut and bronze safety back up nut

Motor controller

- DC battery powered unit: 24 VDC relay control

Speed

- DC battery powered unit: 10 ft per minute maximum

For complete technical specifications, please see ILS-01100 "VPL-3300B Series Commercial Vertical Platform Lift Technical Specification."

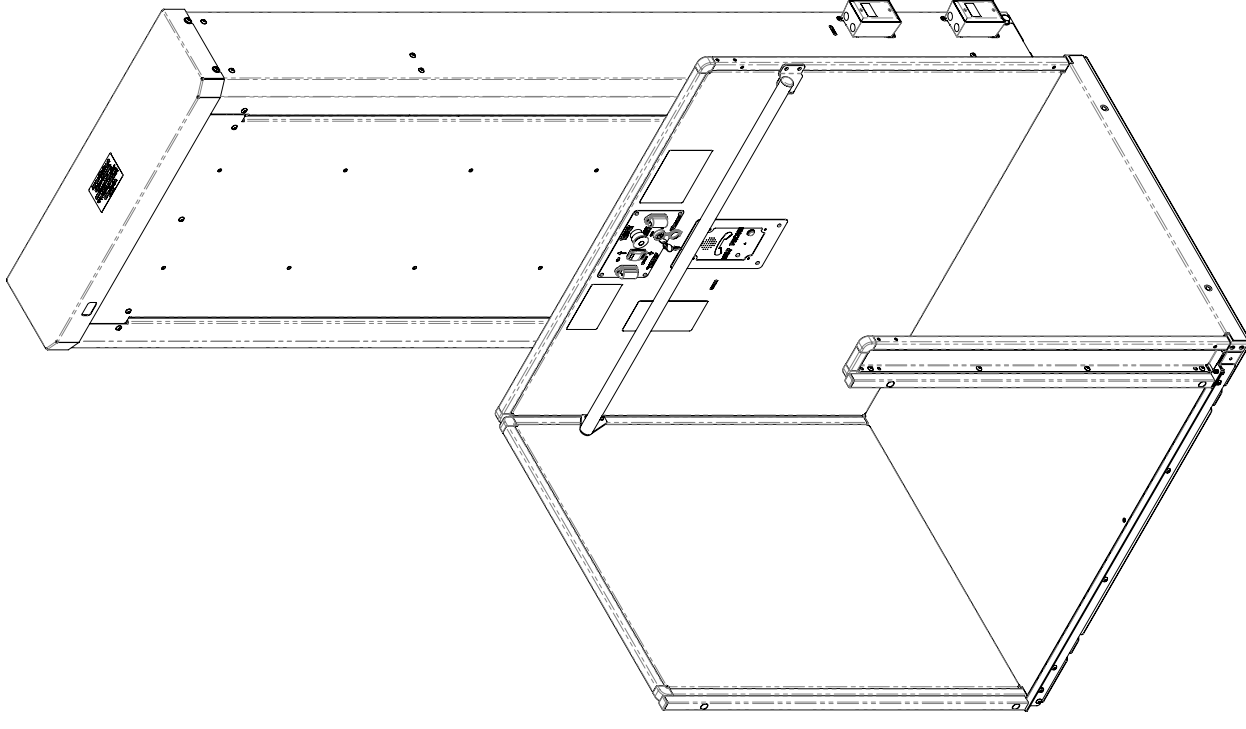
Performance Standards

USA Food & Drug Administration: Class II, 510(K) Exempt, File No. 890.3930 Product Code: PCE

ASME A18.1 (Section 2) Safety Standards for Platform Lifts and Stairway Chairlifts

CSA B355 Lifts for Persons with Physical Disabilities

CSA B44.1/ASME A17.5 Elevator and Escalator Equipment

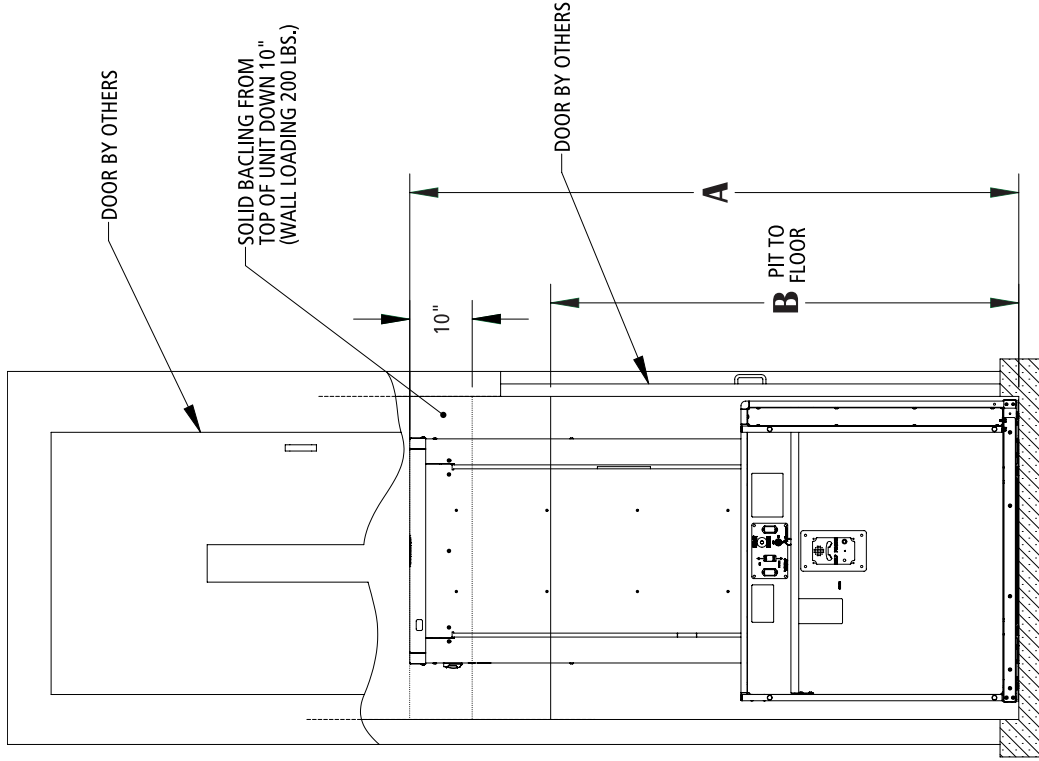


Shaftway 90/adjacent exit platform (VPL-3300B), with pit

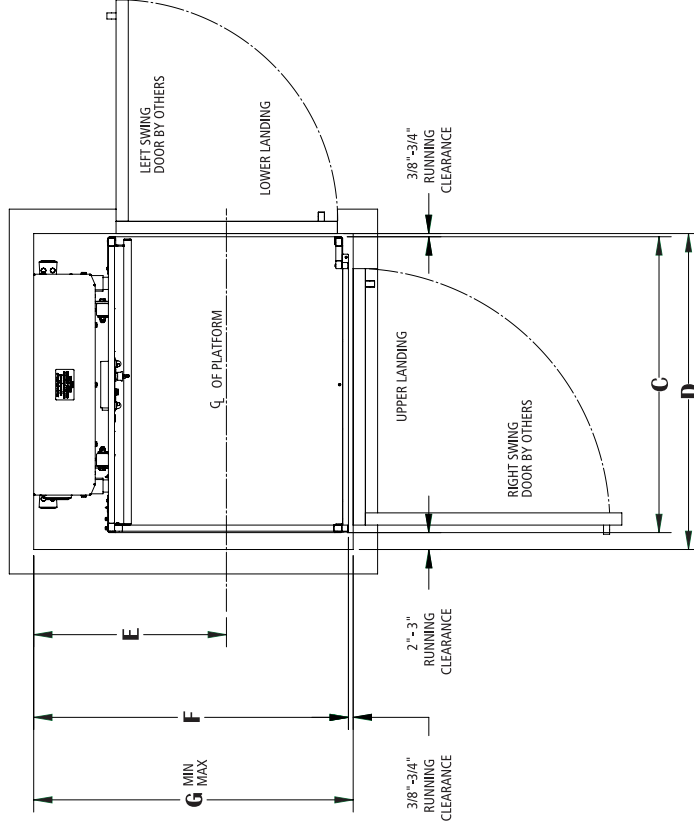
- Notes:**
1. Hoistway in accordance with safety codes (ASME-A18.1) and local codes and regulations. Hoistway to be fire rated in accordance with applicable building codes if required by such codes.
 2. Plumb hoistway due to close running clearances. Must be constructed plumb ($\pm 1/8"$) and square and to size shown.
 3. No conduit, wiring or piping other than that pertaining to the unit is permitted in the hoistway.

	A	B MIN	B MAX
VPL-3353B	75-9/16"	11"	53"
VPL-3375B	97-9/16"	32"	75"
VPL-3310B	148-1/16"	75"	123"
VPL-3312B	172-1/16"	75"	147"
VPL-3314B	196-1/16"	75"	171"

	C	D	E	F	G MIN	G MAX
36" x 48" Platform	48-7/16"	50-13/16" - 52-3/16"	31-9/16"	51-11/16"	52-1/16"	52-7/16"
36" x 54" Platform	54-7/16"	56-13/16" - 58-3/16"	31-9/16"	51-11/16"	52-1/16"	52-7/16"
36" x 60" Platform	60-7/16"	62-13/16" - 64-3/16"	31-9/16"	51-11/16"	52-1/16"	52-7/16"
42" x 60" Platform	60-7/16"	62-13/16" - 64-3/16"	34-9/16"	57-11/16"	58-1/16"	58-7/16"



ELEVATION VIEW
(RIGHT HAND UNIT SHOWN)



PLAN VIEW
(RIGHT HAND UNIT SHOWN)

Anchor point locations/pit detail Shaftway 90°/adjacent exit platform (VPL-3300B), no pit

Technical Data/Specifications

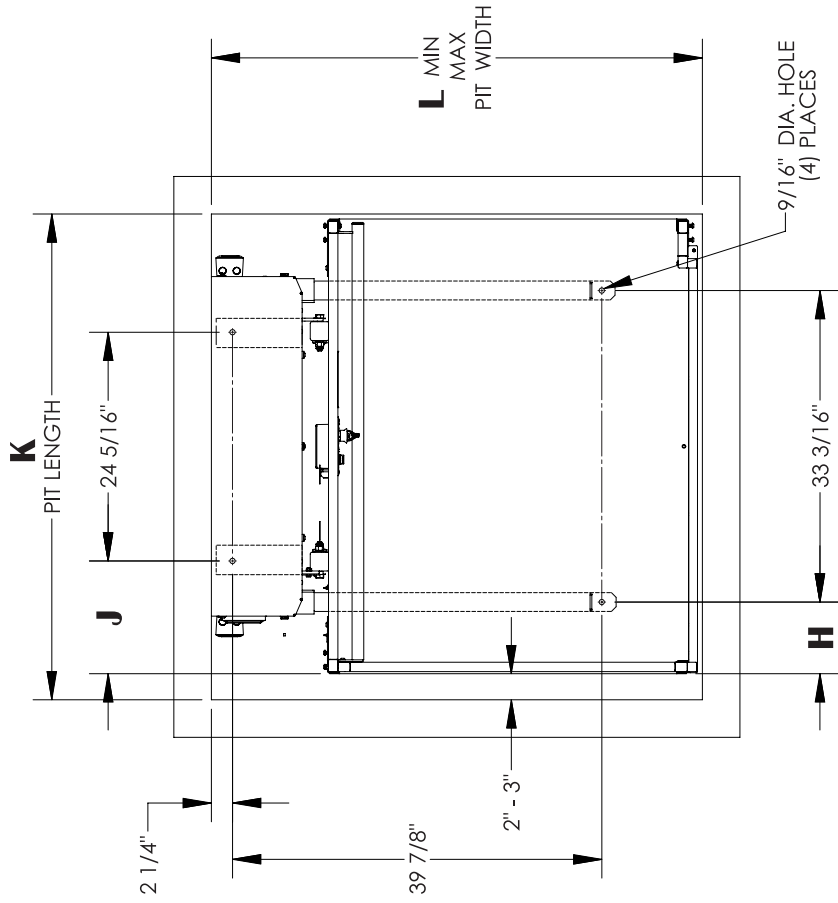
Floor Attachment

VPL must be fastened to concrete slab using four (4) 1/2" (3/8" bolt) x minimum 2-1/2" long concrete anchors suitable for the environment. Follow selected concrete anchor manufactures guidelines and applicable codes.

Floor Requirements

4" thick 3500 PSI minimum compressive strength, reinforced concrete slab

	H	J	K	L MIN	L MAX
36" x 48" Platform	7-5/8"	12-1/16"	50-13/16" - 52-3/16"	52-1/16"	52-7/16"
36" x 54" Platform	10-5/8"	15-1/16"	56-13/16" - 58-3/16"	52-1/16"	52-7/16"
36" x 60" Platform	13-5/8"	18-1/16"	62-13/16" - 64-3/16"	52-1/16"	52-7/16"
42" x 60" Platform	13-5/8"	18-1/16"	62-13/16" - 64-3/16"	58-1/16"	58-7/16"



3" MIN
PIT DEPTH

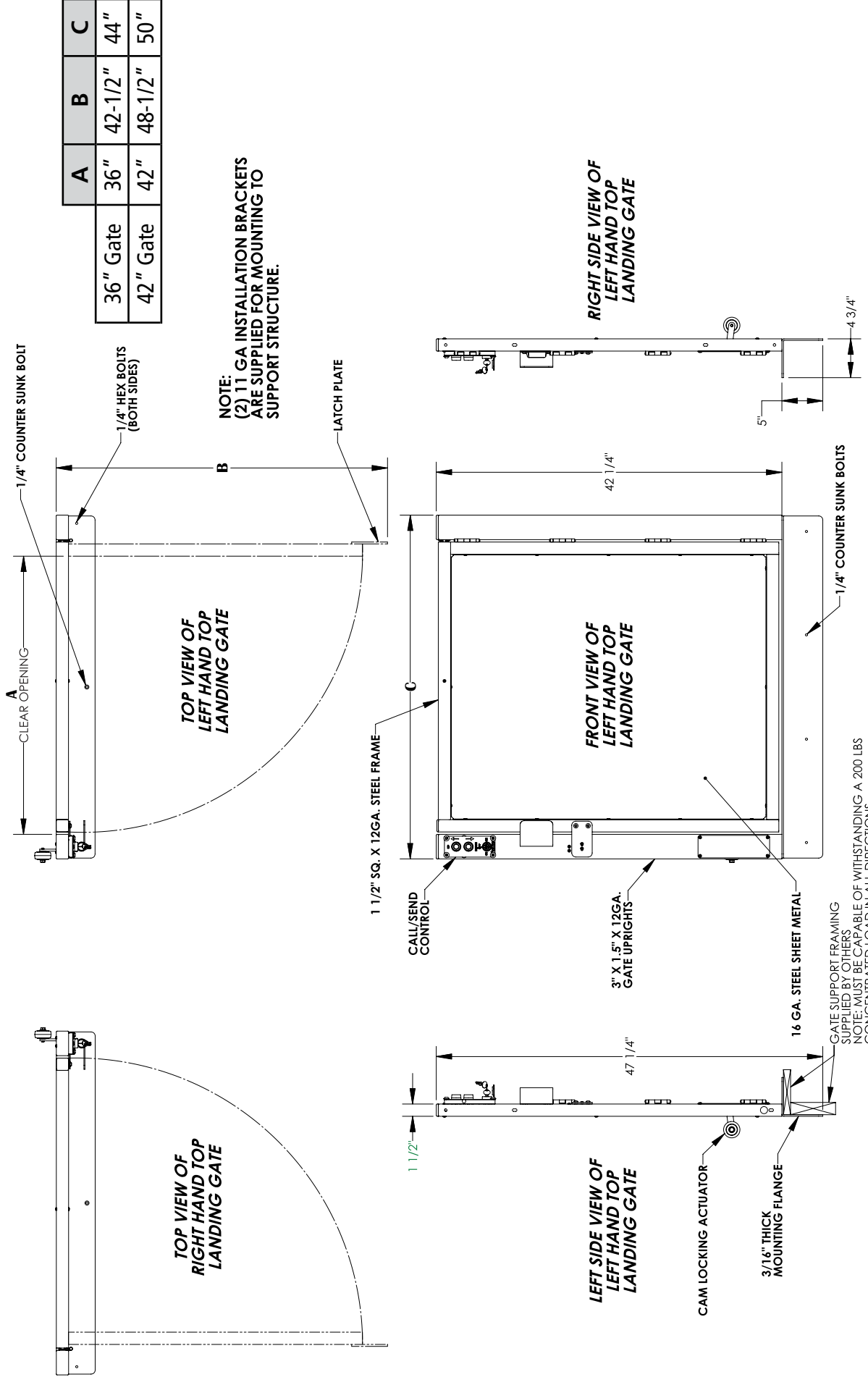
PIT DETAIL

UNITS WITH 90°/ADJACENT EXIT PLATFORM

Landing Gate Detail

VPL-3300B Series (Viewed at top landing)

Note: All dimensions applicable for LH or RH landing gate



	A	B	C
36" Gate	36"	42-1/2"	44"
42" Gate	42"	48-1/2"	50"

GATE SUPPORT FRAMING SUPPLIED BY OTHERS
 NOTE: MUST BE CAPABLE OF WITHSTANDING A 200 LBS CONCENTRATED LOAD IN ALL DIRECTIONS.

Landing Gate Detail

VPL-3300B Series Straight through Platform (Viewed at top landing)

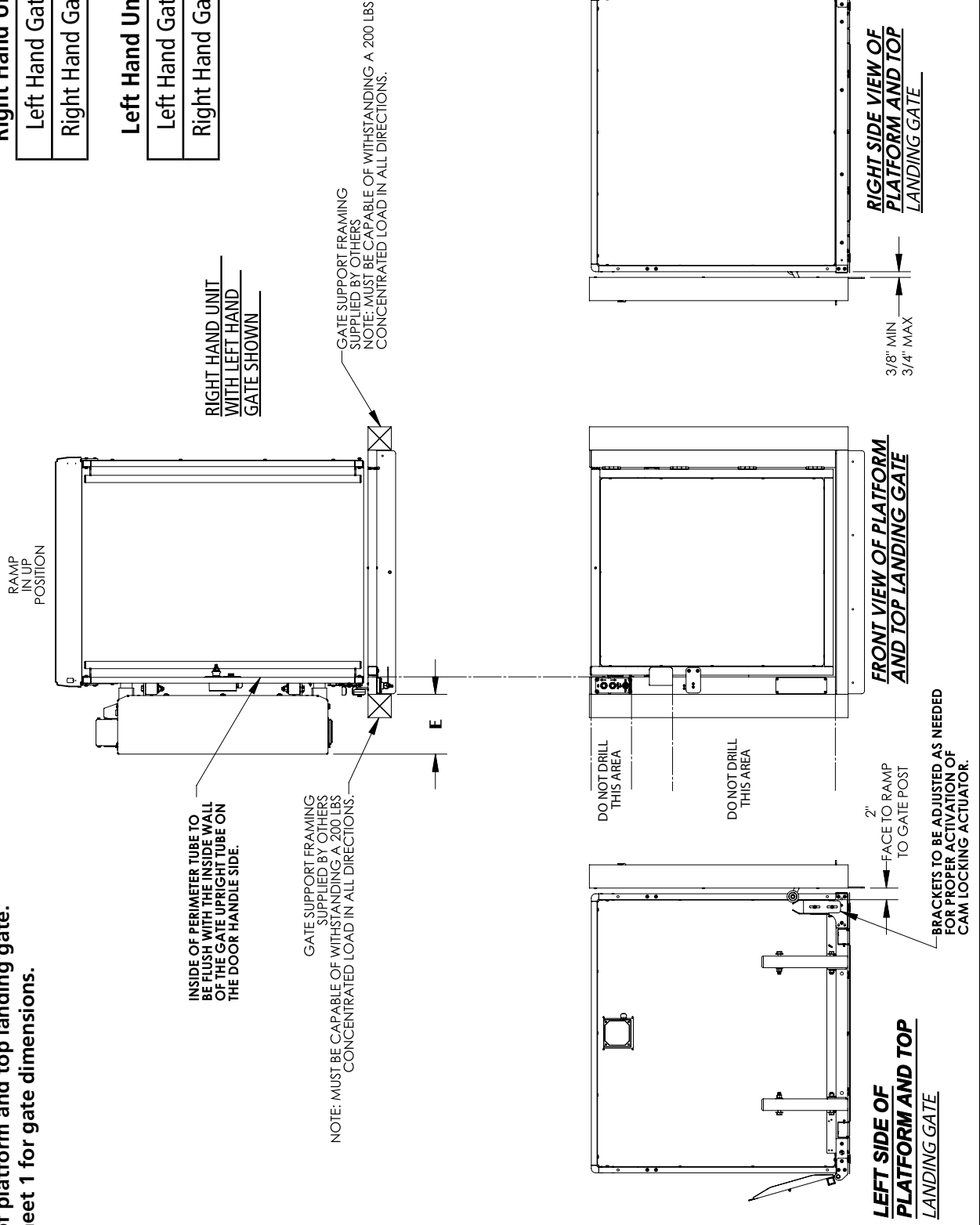
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Note: All dimensions applicable for LH or RH landing gate

Top view of platform and top landing gate.
 Refer to sheet 1 for gate dimensions.

Right Hand Unit		E
Left Hand Gate		10-1/4"
Right Hand Gate		8-1/2"

Left Hand Unit		E
Left Hand Gate		8-1/2"
Right Hand Gate		10-1/4"



Landing Gate Detail

VPL-3300B Series 90° / Adjacent Exit Platform (Viewed at top landing)

Top view of platform and top landing gate.
Refer to sheet 1 for gate dimensions.

RIGHT HAND UNIT
WITH LEFT HAND
GATE SHOWN

INSIDE OF PERIMETER TUBE TO
BE FLUSH WITH THE INSIDE WALL
OF THE GATE UPRIGHT TUBE ON
THE DOOR HANDLE SIDE.

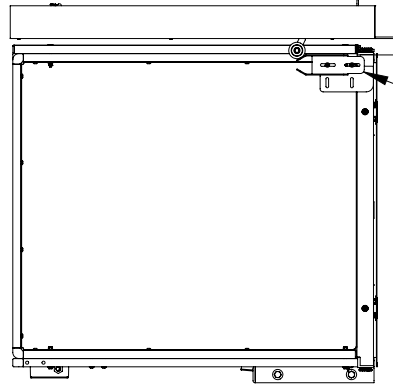
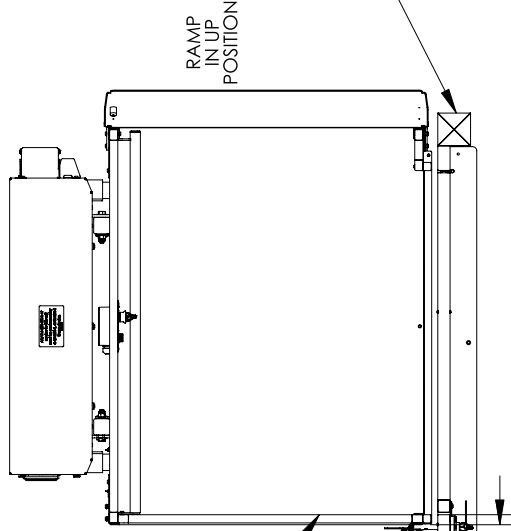
GATE SUPPORT FRAMING
SUPPLIED BY OTHERS
NOTE: MUST BE CAPABLE OF WITHSTANDING A 200 LBS
CONCENTRATED LOAD IN ALL DIRECTIONS.

1 3/4"
OUTSIDE OF PLATFORM
TO GATE SUPPORT FRAMING
SUPPLIED BY OTHERS

NOTE:
LEFT HAND GATE MUST BE USED
WITH RIGHT HAND UNIT.
RIGHT HAND GATE MUST BE USED
WITH LEFT HAND UNIT.

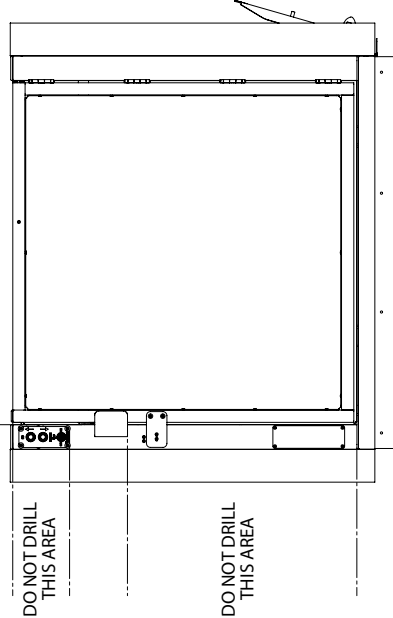
GATE SUPPORT FRAMING
SUPPLIED BY OTHERS
NOTE: MUST BE CAPABLE OF WITHSTANDING A 200 LBS
CONCENTRATED LOAD IN ALL DIRECTIONS.

RAMP
IN UP
POSITION

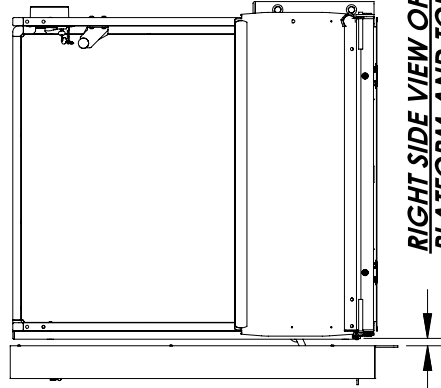


**LEFT SIDE VIEW OF
PLATFORM AND TOP
LANDING GATE**

BRACKETS TO BE ADJUSTED AS NEEDED
FOR PROPER ACTIVATION OF
CAM LOCKING ACTUATOR.



**FRONT VIEW OF PLATFORM
AND TOP LANDING GATE**



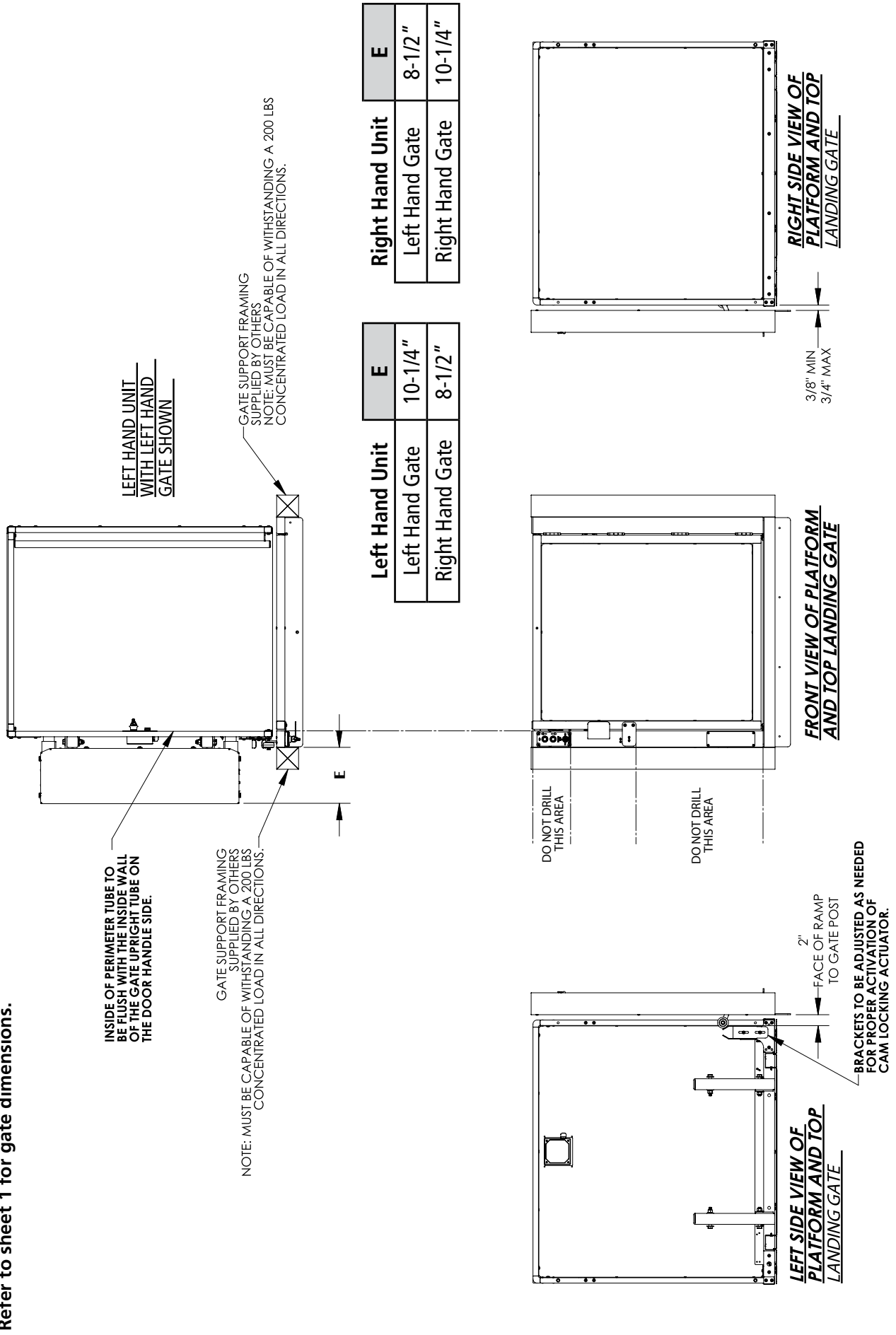
**RIGHT SIDE VIEW OF
PLATFORM AND TOP
LANDING GATE**

3/8" MIN
3/4" MAX

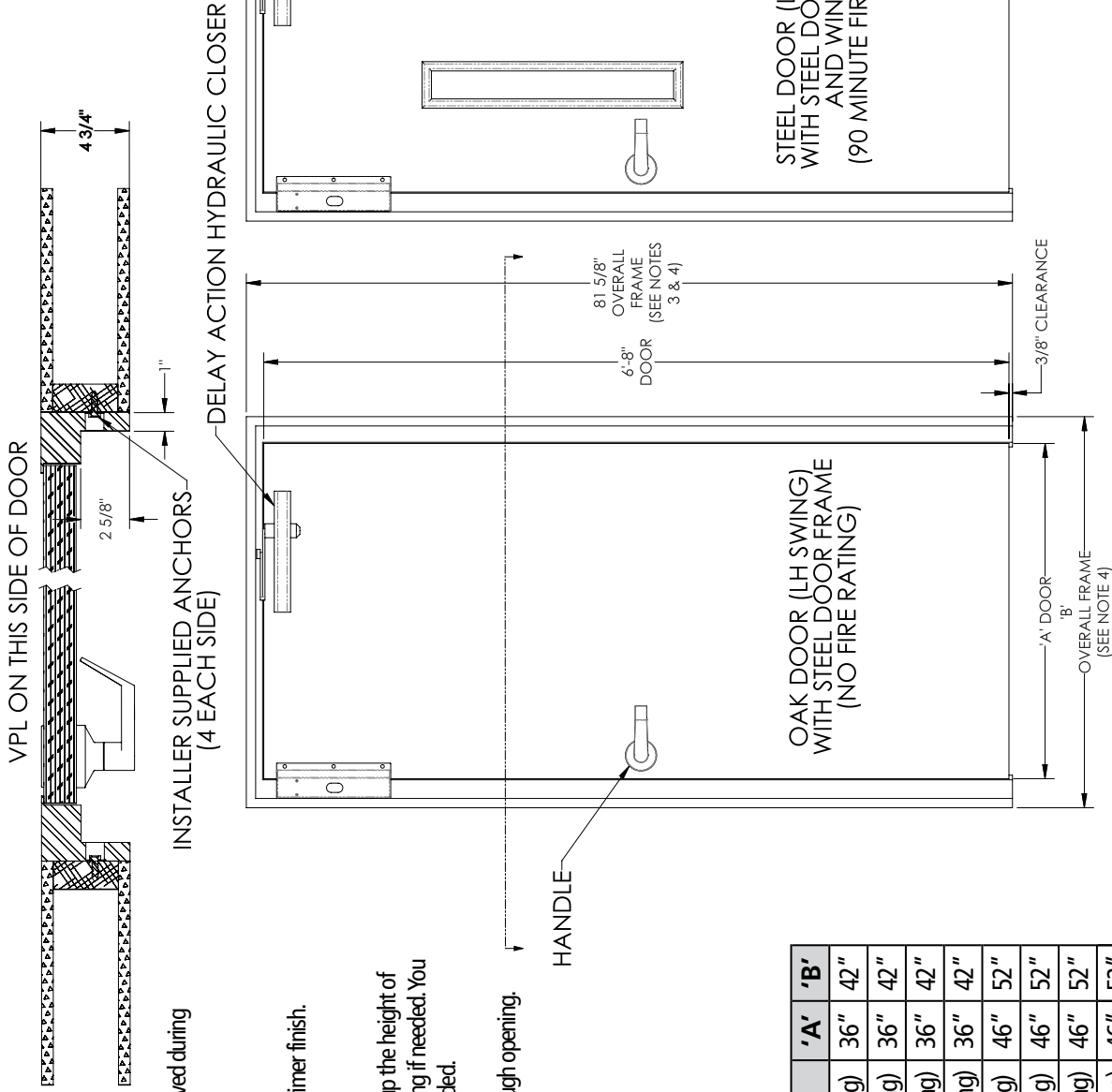
Landing Gate Detail

VPL-3300B Series Same Side Platform (Viewed at top landing)

Top view of platform and top landing gate.
 Refer to sheet 1 for gate dimensions.



Flush mount door detail

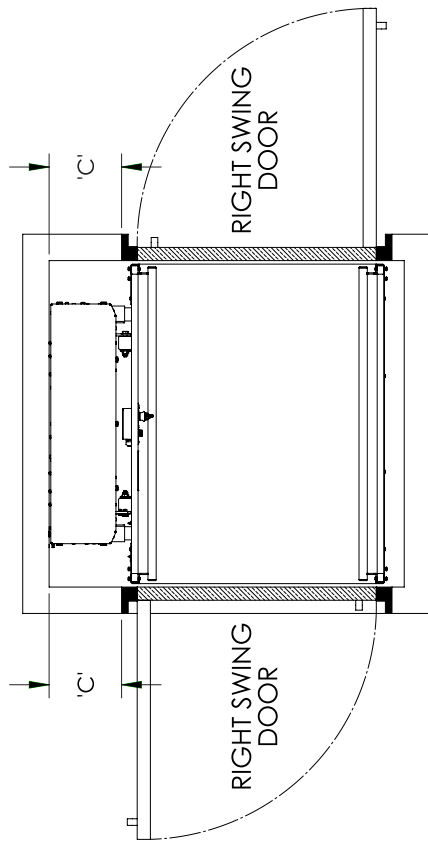
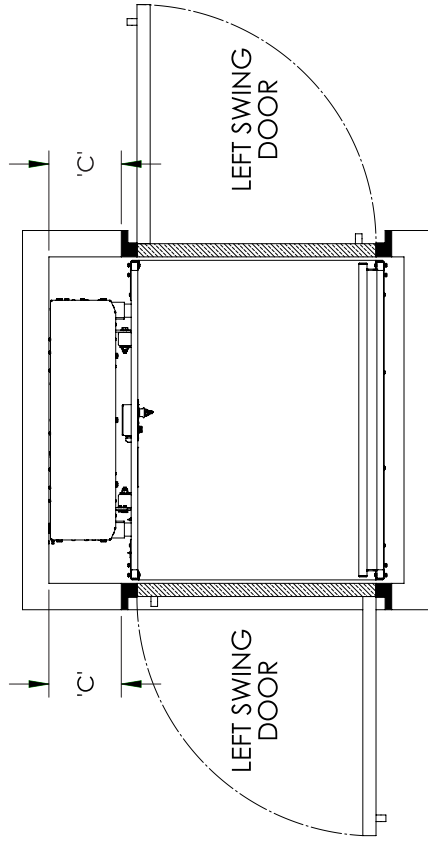


- Notes:**
1. Door frame is shipped with tackplate sill which is removed during installation (use a hammer to remove).
 2. Finish:
 - A) Oak door is plain (not finished) and frame is gray primer finish.
 - B) Steel door and frame has a gray primer finish.
 3. If door is used with a fixed ramp, raise the door frame up the height of the fixed ramp. Please allow for this in the rough opening if needed. You will have to finish the bottom of the door frame as needed.
 4. Add 1/2" to overall frame dimensions to determine rough opening.

Part No.	Description	'A'	'B'
VPL-32236	Flush mount 36" Oak door (LH swing)	36"	42"
VPL-32237	Flush mount 36" Oak door (RH swing)	36"	42"
VPL-32238	Flush mount 36" Steel door (LH swing)	36"	42"
VPL-32239	Flush mount 36" Steel door (RH swing)	36"	42"
VPL-32272	Flush mount 46" Oak door (LH swing)	46"	52"
VPL-32273	Flush mount 46" Oak door (RH swing)	46"	52"
VPL-32274	Flush mount 46" Steel door (LH swing)	46"	52"
VPL-32275	Flush mount 46" Steel door (RH swing)	46"	52"



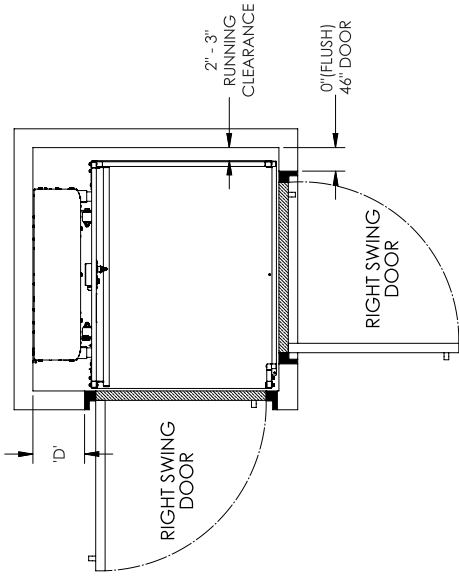
Flush mount door detail - Straight Through Platform



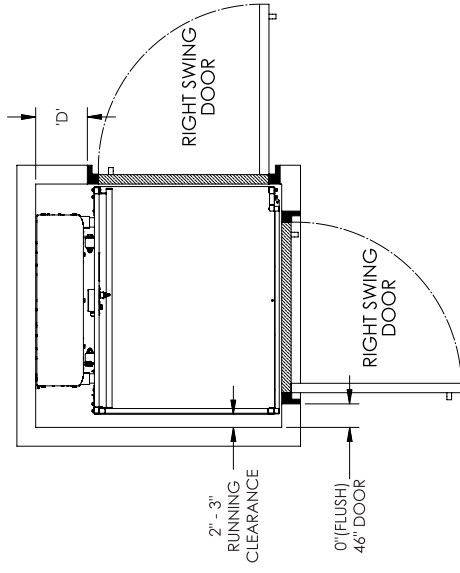
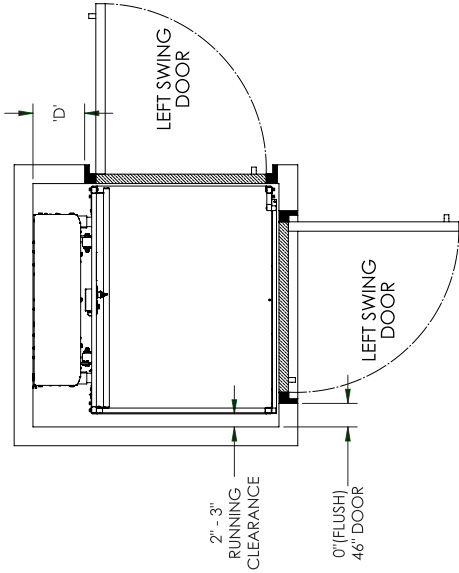
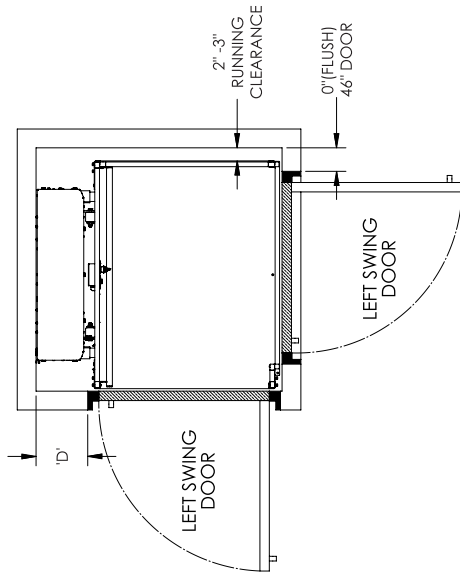
PLAN VIEWS

Door Size	Door Location	Door Swing	Left Hand Unit 'C'	Right Hand Unit 'C'
36"	Lower landing	Left swing door	11"	9-3/4"
36"	Lower landing	Right swing door	9-3/4"	11"
36"	Upper landing	Left swing door	9-3/4"	11"
36"	Upper landing	Right swing door	11"	9-3/4"
46"	Lower landing	Left swing door	9"	7-3/4"
46"	Lower landing	Right swing door	7-3/4"	9"
46"	Upper landing	Left swing door	7-3/4"	9"
46"	Upper landing	Right swing door	9"	7-3/4"

Flush mount door detail - 90° Adjacent Exit Platform

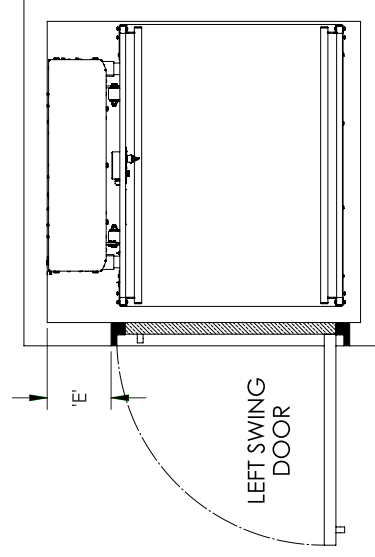
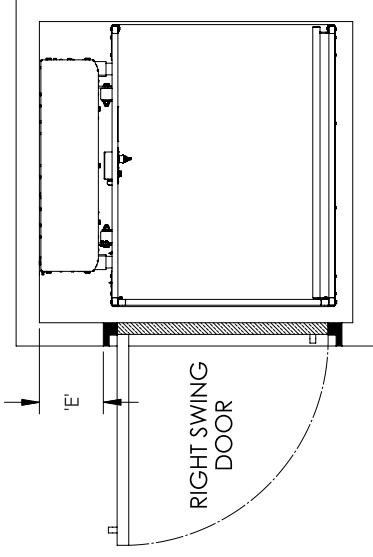
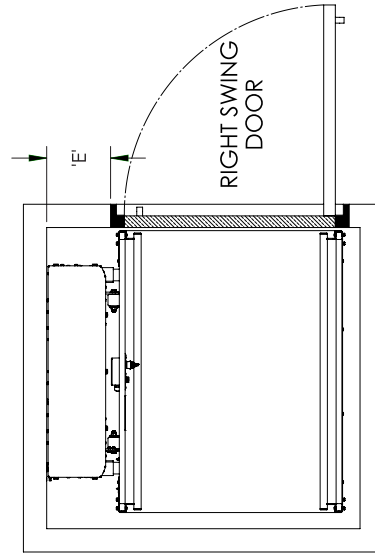
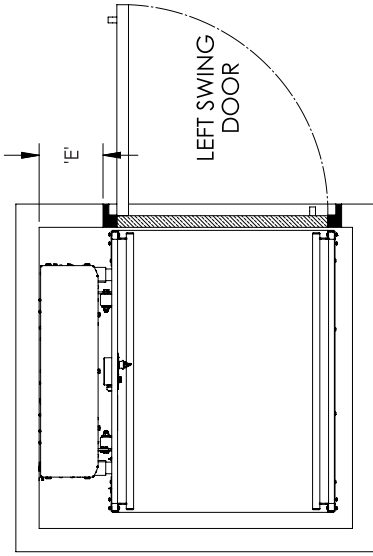


PLAN VIEWS



Platform Size	Door Size	Door Location	Door Swing	Left Hand Unit 'D'	Right Hand Unit 'D'
36"	36"	Lower landing	Left swing door	11"	9-3/4"
36"	36"	Lower landing	Right swing door	9-3/4"	11"
36"	46"	Upper landing	Left swing door	Flush	Flush
36"	36"	Upper landing	Right swing door	Flush	Flush
42"	46"	Lower landing	Left swing door	9"	7-3/4"
42"	46"	Lower landing	Right swing door	7-3/4"	9"
42"	46"	Upper landing	Left swing door	Flush	Flush
42"	46"	Upper landing	Right swing door	Flush	Flush

Flush mount door detail - Same Side Platform



PLAN VIEWS

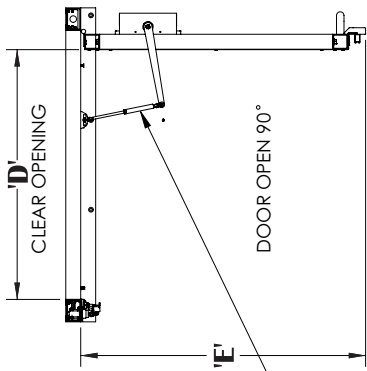
Door Size	Door Location	Door Swing	Left Hand Unit 'E'	Right Hand Unit 'E'
36"	Lower landing	Left swing door	11"	9-3/4"
36"	Lower landing	Right swing door	9-3/4"	11"
36"	Upper landing	Left swing door	11"	9-3/4"
36"	Upper landing	Right swing door	9-3/4"	11"
46"	Lower landing	Left swing door	9"	7-3/4"
46"	Lower landing	Right swing door	7-3/4"	9"
46"	Upper landing	Left swing door	9"	7-3/4"
46"	Upper landing	Right swing door	7-3/4"	9"

Flush mount aluminum door detail - LH Swing

Description	'A'	'B'	'C'	'D'	'E'
Flush mount 36" aluminum door	36"	42"	42-1/2"	33-3/8"	38-1/8"
Flush mount 45" aluminum door	45"	51"	51-1/2"	42-3/8"	47-1/8"

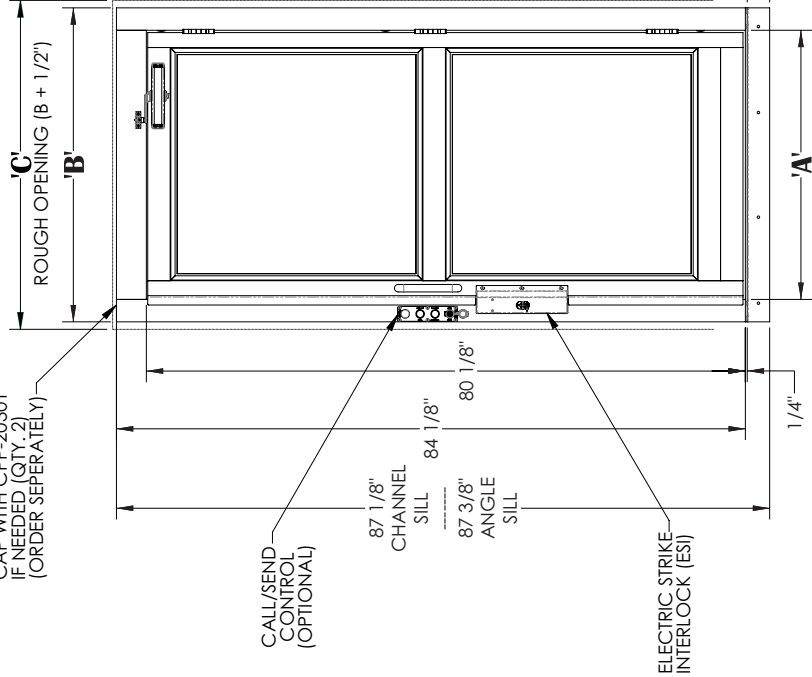
Notes:

- Two pieces of vertical frame trim is included. Trim can be used as needed when installing the door.
- Dealer to supply mounting hardware (i.e. screws, anchors).
- Panel insert material is either clear acrylic or bronze acrylic. Panels are shipped with a protective paper to be removed by installer
- When angle sill is used in a pit, pit depth should be at least 3"
- When channel sill is used in a pit, pit depth should be 3" (door will not open if pit is over 3")

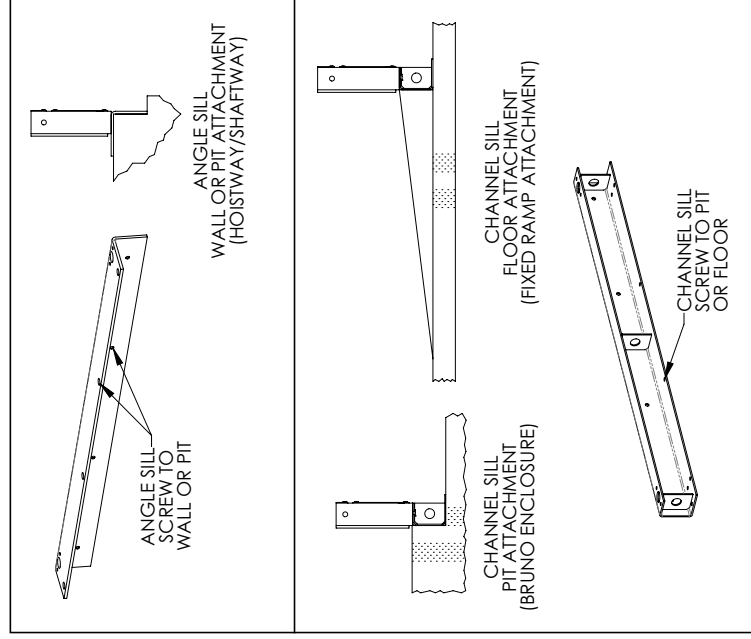


DOOR CLOSER PROVIDED (REMOVED BY INSTALLER IF INSTALLING A DOOR OPENER)

CAP WITH CPP-20301 IF NEEDED (QTY. 2) (ORDER SEPARATELY)



THERE ARE 3 MOUNTING HOLES (7/16" DIA.) ON EACH SIDE OF THE DOOR FRAME TO SECURE THE DOOR TO THE WALLS.

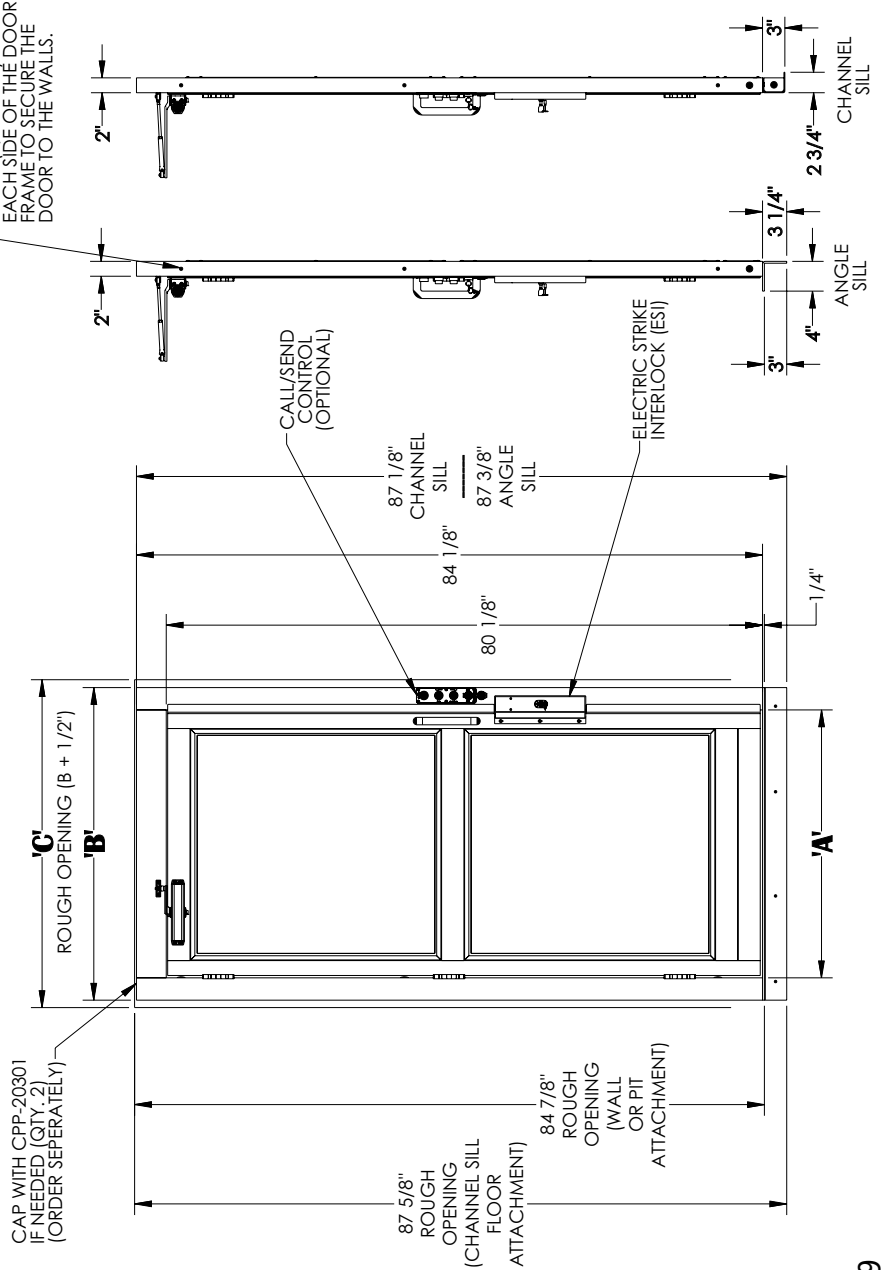
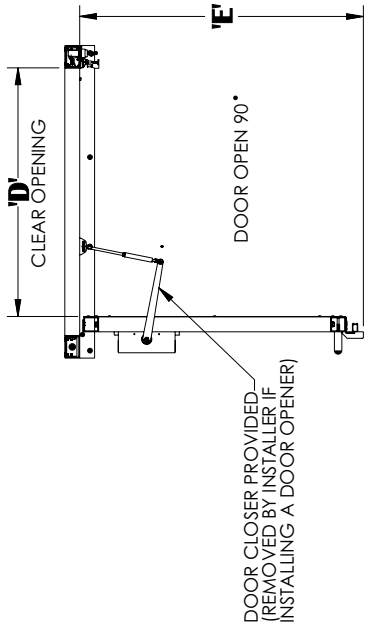


Flush mount aluminum door detail - RH Swing

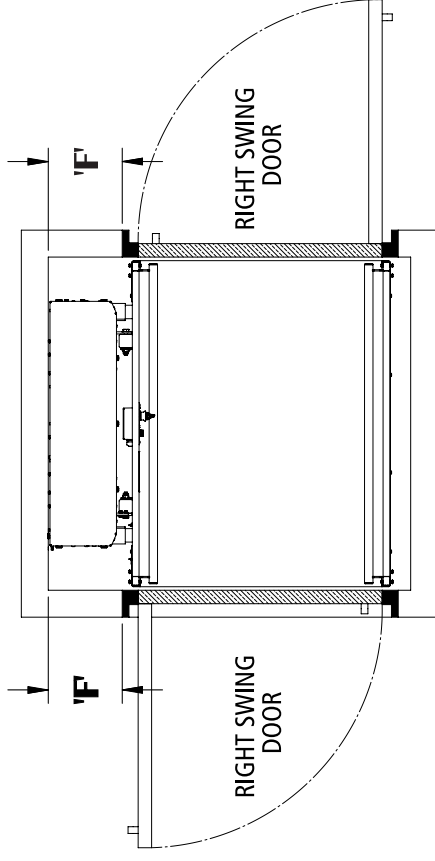
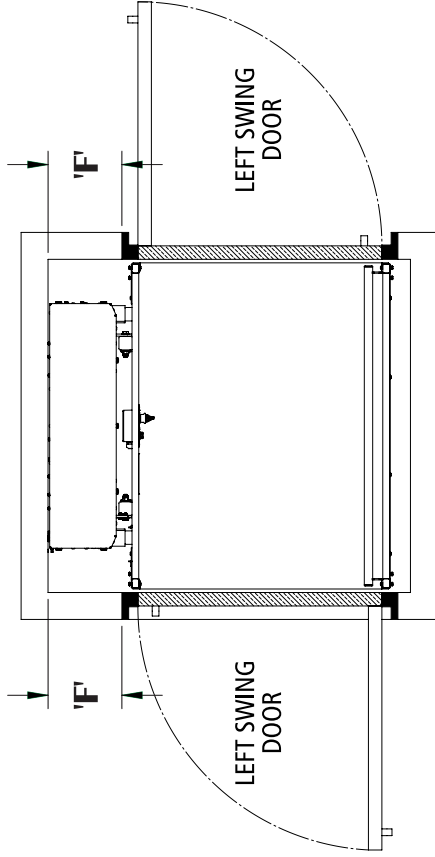
Description	'A'	'B'	'C'	'D'	'E'
Flush mount 36" aluminum door	36"	42"	42-1/2"	33-3/8"	38-1/8"
Flush mount 45" aluminum door	45"	51"	51-1/2"	42-3/8"	47-1/8"

Notes:

- Two pieces of vertical frame trim is included. Trim can be used as needed when installing the door.
- Dealer to supply mounting hardware (i.e. screws, anchors).
- Panel insert material is either clear acrylic or bronze acrylic. Panels are shipped with a protective paper to be removed by installer
- When angle sill is used in a pit, pit depth should be at least 3"
- When channel sill is used in a pit, pit depth should be 3" (door will not open if pit is over 3")



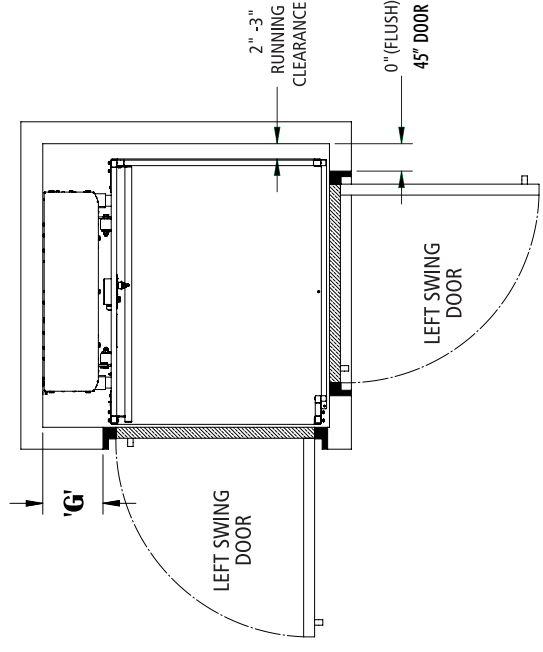
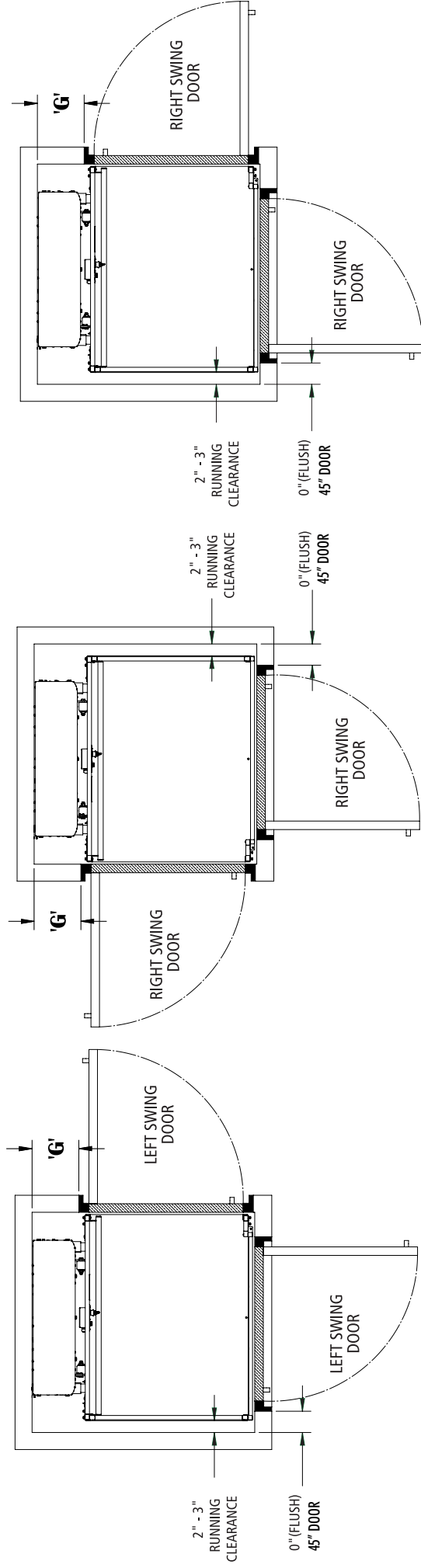
Flush mount aluminum door alignment Straight through platform - plan views



Door Size	Door Location	Door Swing	LH Unit 'F'	RH Unit 'F'
36"	Lower landing	Left swing door	11-5/8"	9-1/8"
36"	Lower landing	Right swing door	9-1/8"	11-5/8"
36"	Upper landing	Left swing door	9-1/8"	11-5/8"
36"	Upper landing	Right swing door	11-5/8"	9-1/8"
45"	Lower landing	Left swing door	10-1/8"	7-5/8"
45"	Lower landing	Right swing door	7-5/8"	10-1/8"
45"	Upper landing	Left swing door	7-5/8"	10-1/8"
45"	Upper landing	Right swing door	10-1/8"	7-5/8"

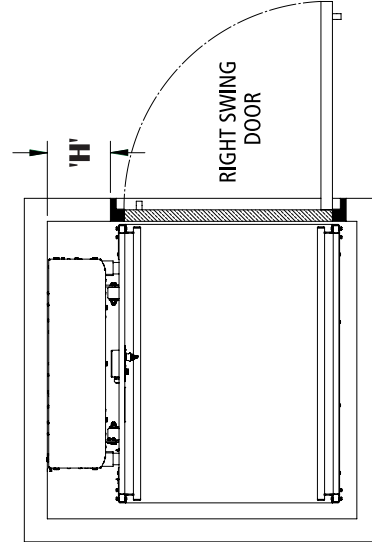
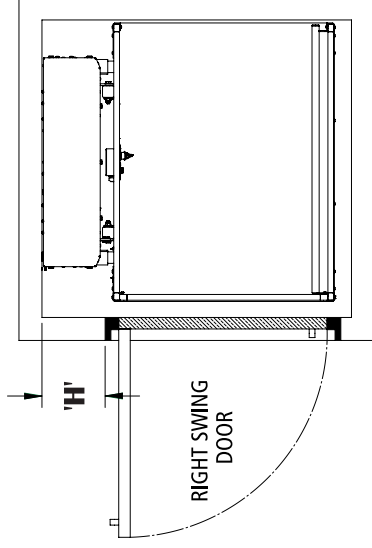
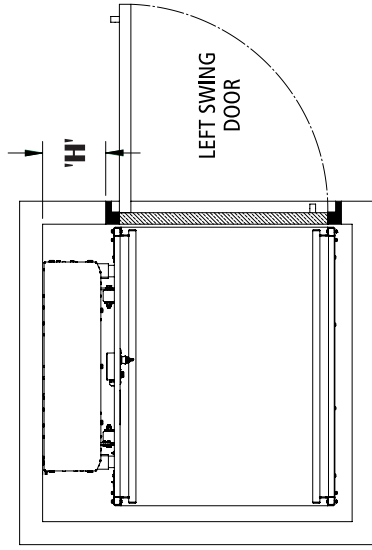
Flush mount aluminum door alignment 90°/Adjacent exit platform- plan views

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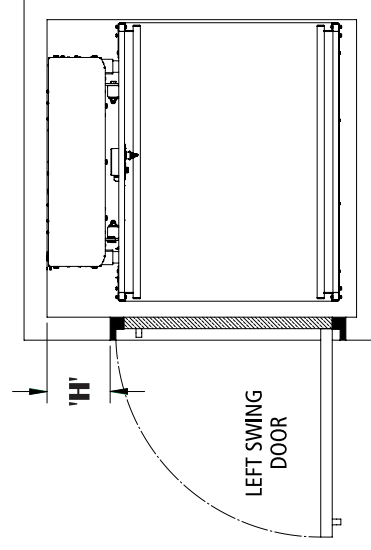


Platform Size	Door Size	Door Location	Door Swing	LH Unit 'G'	RH Unit 'G'
36"	36"	Lower landing	Left swing door	11-5/8"	9-1/8"
36"	36"	Lower landing	Right swing door	9-1/8"	11-5/8"
36"	45"	Upper landing	Left swing door	Flush	1"
36"	45"	Upper landing	Right swing door	1"	Flush
42"	45"	Lower landing	Left swing door	10-1/8"	7-5/8"
42"	45"	Lower landing	Right swing door	7-5/8"	10-5/8"
42"	45"	Upper landing	Left swing door	Flush	1"
42"	45"	Upper landing	Right swing door	1"	Flush

Flush mount aluminum door alignment Same side platform - Plan views



Door Size	Door Location	Door Swing	LH Unit 'H'	RH Unit 'H'
36"	Lower landing	Left swing door	11-5/8"	9-1/8"
36"	Lower landing	Right swing door	9-1/8"	11-5/8"
36"	Upper landing	Left swing door	11-5/8"	9-1/8"
36"	Upper landing	Right swing door	9-1/8"	11-5/8"
45"	Lower landing	Left swing door	10-1/8"	7-5/8"
45"	Lower landing	Right swing door	7-5/8"	10-5/8"
45"	Upper landing	Left swing door	10-1/8"	7-5/8"
45"	Upper landing	Right swing door	7-5/8"	10-1/8"





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