

Multilift (B613 & B355)

VERTICAL PLATFORM LIFT

PLANNING GUIDE

Applicable Codes: CSA B613 CSA B355-09

> 13-m03-2014 Part No. 000790

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Purpose of this guide

This guide assists architects, contractors, and lift professionals to incorporate the B613/B355 version of the Multilift Vertical Platform Lift into a residential design. The design and manufacture of the Multilift Vertical Platform Lift meets the requirements of the CSA B613 and B355-09 Safety Standards.

We recommend that you contact your local authority having jurisdiction to ensure that you adhere to all local rules and regulations pertaining to vertical platform lifts.

IMPORTANT NOTICE

This Planning Guide provides nominal dimensions and specifications useful for the initial planning of a vertical platform lift project. Dimensions and specifications are subject to change without notice due to continually evolving code and product applications.

Before beginning actual construction, please consult Savaria Corporation or the authorized Savaria dealer in your area to ensure you receive your site-specific installation drawings with the dimensions and specifications for your project.

Visit our website (www.savaria.com) for the most recent Multilift drawings and dimensions.

How to use this guide

1 Determine your client's intended use of the lift.

- **2** Determine the local code requirements.
- **3** Determine the site installation parameters.
- 4 Determine the cab type and hoistway size requirements.
- 5 Plan for electrical requirements.

History

December 20, 2010

Initial release

February 24, 2011

• Added information for automatic access ramp to "Features" in Specifications table on pg. 6

June 1, 2011

• Updated drawings for Type 3 and Type 4 with platform gate; added drawings for Type3-42 and Type 4-42 with platform gate

April 25, 2013

• Correct power supply amperage from 20A to 15A in specifications table on pg. 6

July 8, 2013

• Added Noise Level to specifications table on pg. 6

December 5, 2013

 Added B355-09 spec to title page; added 42x48, 42x54 and 42x60 cab sizes to specifications table on pg. 6; added 42x48, 42x54 and 42x60 cab sizes to list of drawings on page 12 and a NOTE that the 42" wide cab sizes are not self-supporting and need wall mounting; added new drawings on pages 14, 16, 18, 20, 22, 24, 26 and 28

December 17, 2013

• Added "must be a dedicated electrical line" to power supply specification in table on pg. 6

March 13, 2014

• Revised "Drive System" in Specifications table on pg. 6

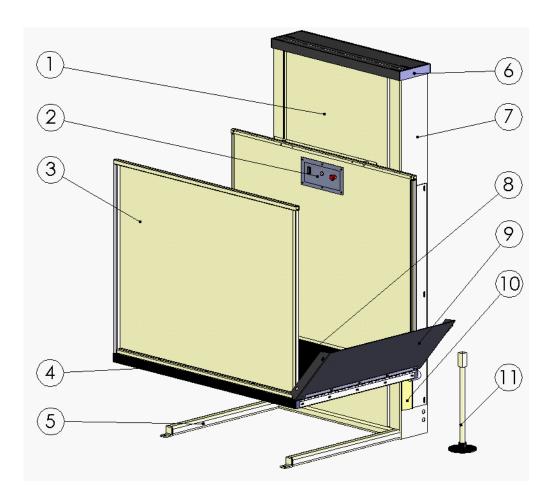
Description

The Multilift Vertical Platform Lift is designed to provide easy access from one landing to another. The versatile design of this lift can be adapted to most architectural requirements and its rugged construction allows for outdoor or indoor use. It is an ideal deck lift for home use and is also approved for certain commercial accessibility projects as well. The Multilift, with its ACME screw drive system, provides safe and reliable operation.

Lift components

The Multilift consists of a tower and a platform as shown in Figure 1.

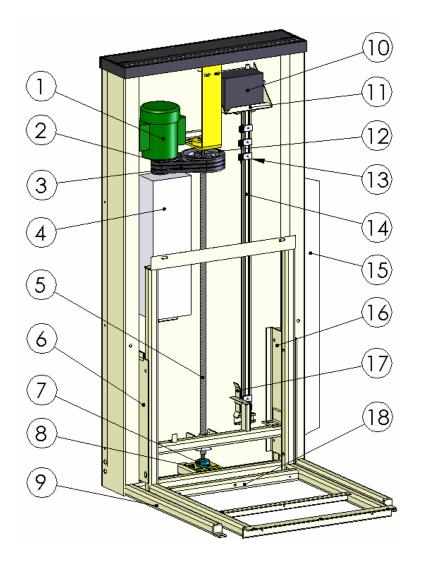
Figure 1: Typical lift



Number	Description	Number	Description
1	Front tower panel	7	Tower
2	Car operating panel (C.O.P.)	8	Non-skid platform
3	Side guard panel	9	Automatic access ramp
4	Safety underpan sensors	10	Access ramp channel
5	Self support base	11	Manual lowering device
6	Tower cover	-	-

Drive tower components The Multilift drive tower components are shown in Figure 2.

Figure 2: Drive tower



Number	Description	Number	Description
1	Motor	10	Battery (optional)
2	Main pulley	11	Battery tray
3	V strap	12	Pulley
4	Controller box	13	Limit switches (may vary)
5	Acme screw	14	Unistrut
6	Left roller guide	15	Access ramp channel
7	Lower bearing	16	Right roller guide
8	Lower bearing plate	17	Cam assembly
9	Self support base	18	Carriage assembly

Specifications

Multilift specifications

Applications	Residential (indoor/outdoor)
Load capacity	750 lb (340 kg)
Maximum travel distance	48" (1219 mm); optionally 72" (1829 mm)
Levels serviced	2
Travel speed	8 ft/min (0.04 m/s)
Noise level (for typical installation)	65.9 dBA (up direction); 65.0 dBA (down direction) Measured at a height of 1m, distance of 1m, in front of the motor with all panels on
Cab types/sizes	Type 2, 3 or 4 • 36" x 48" (914 mm x 1219 mm) • 36" x 54" (914 mm x 1371 mm) • 36" x 60" (914 mm x 1371 mm) • 42" x 48" (1067 mm x 1219 mm) • 42" x 54" (1067 mm x 1371 mm) • 42" x 60" (1067 mm x 1524 mm) NOTE that the 42" wide cab units are not self-supporting and need wall mounting.
Side guard panels	42 1/8" (1070 mm) side guard panels on platform
Cab access	Front/rear access - standard (platform Type 2) 90 degree access - optional (platform Type 3 and 4)
Power supply	120 VAC, 15 A, 60 Hz, single phase (must be a dedicated electrical line)
Drive system	Acme screw and back-up nut Standard: 1 hp (0.74 Kw) motor, 24-volt battery model Optional: 1 hp (0.74 Kw) motor, 110 VAC model
Control system	Electronic-free relay logic controller
Finish	Beige electrostatic powder coat paint on all steel surfaces and vacuum-formed plastics
Features	 Call/send stations at landings Continuous-pressure type buttons Operating control buttons on platform Emergency manual lowering/raising device Low-voltage controls Underpan sensors Non-skid platform surface Automatic access ramp (24"); field reversible to suit installation needs
]	Emergency stop button

Site construction details

The self-supporting base must be able to support at least 3000 lb (13.3 kN) per Figure 3 and must be anchored to a concrete slab (or floor) per Figure 4. Make sure the slab (floor) surface is level.

Figure 3: Floor loading diagram

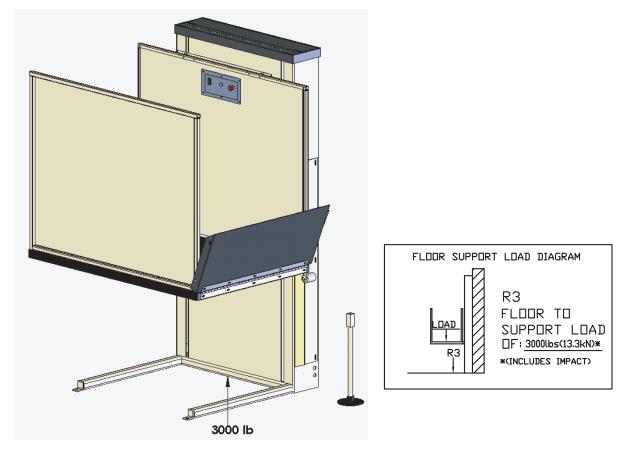


Figure 4: Anchor points

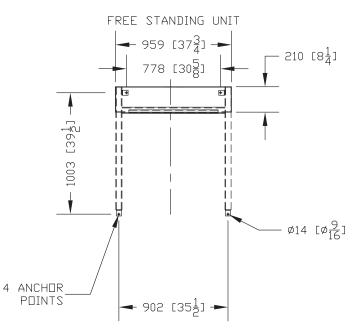
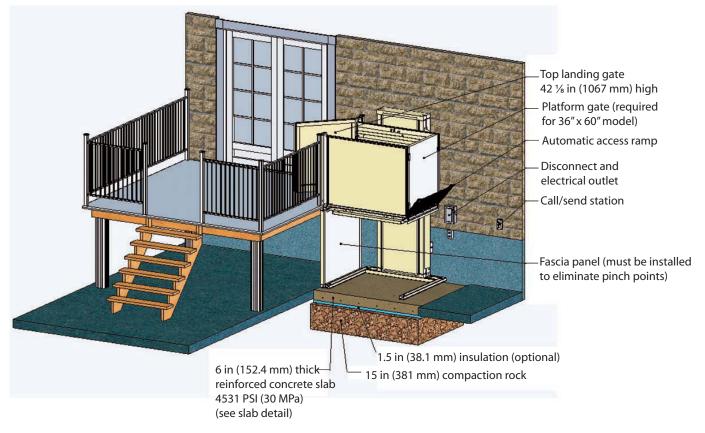


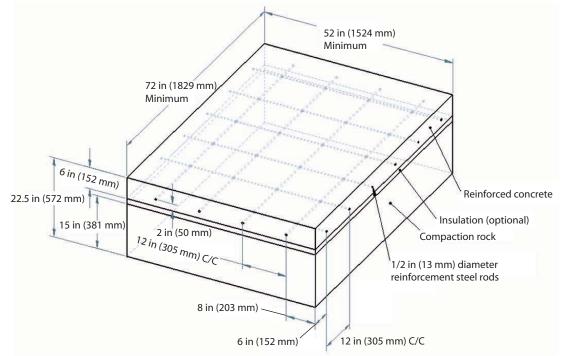
Figure 5 illustrates the site construction details for a typical outdoor application.

Figure 5: Sample unenclosed outdoor application



Outdoor applications need a strong and stable surface that will not move throughout the years. For this reason, it is essential, when the temperature can get below the freezing point, to insert an insulate sheet between the concrete slab and the compaction rock. Figure 6 illustrates the concrete slab detail for a typical outdoor application.

Figure 6: Concrete slab detail



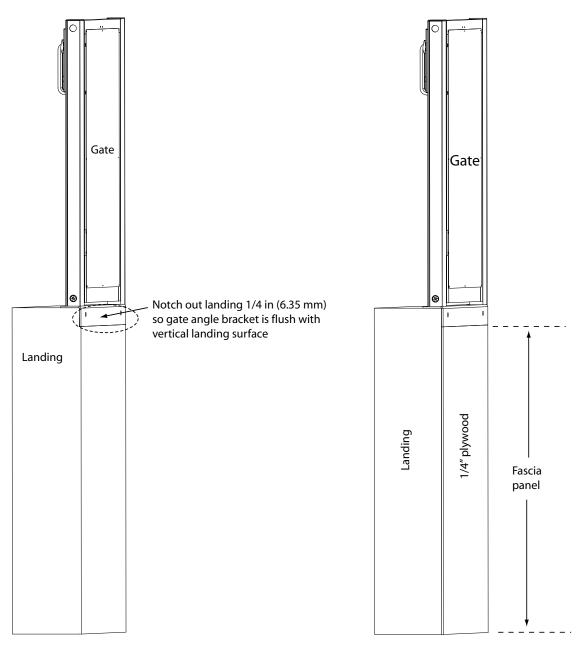
Landing gate/door details

Landing gate/door details are specific to each job site. Be sure to refer to your site-specific installation drawings.

There are two options that can be used when preparing for installation of the gate (or door with sill angle). Figure 7 illustrates the two options for a gate. Refer to the Installation Guide for details on installing the landing gate or door.

- Option 1 Notch out the landing so that the gate angle bracket (or door sill angle) is flush with the vertical landing surface.
- Option 2 Install a 1/4" fascia panel to fill in the gap in the vertical landing surface from underneath the gate angle bracket (or door sill angle) down to the floor/ground. If your site has a hoistway or pit, be sure to add 1/4" to those dimensions to account for the 1/4" fascia panel.

Figure 7: Options used when installing a gate



Notch out landing to install gate

Install fascia panel for gate

CSA requirements

The items listed below are required for CSA B613/B355:

- Grab bar (hand rail)
- Controller redundancy
- Emergency stop/alarm

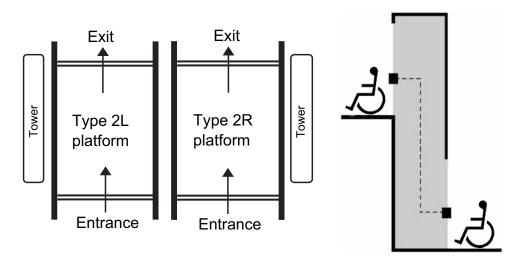
- Platform gate (for 60" platform)
 Top landing gate
 Disconnect (provided by others)
- Door locks

Cab types

Type 2 cab (standard)

For type 2 cabs, entry and exit are available from both ends of the platform.

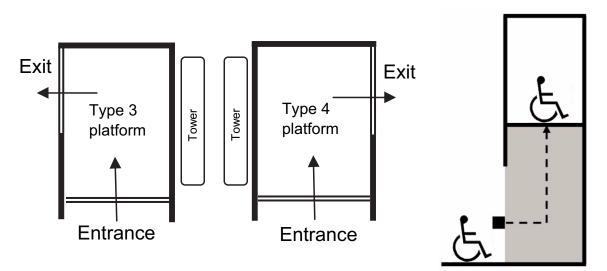
Figure 8: Type 2



Type 3 and 4 cab (optional)

For type 3 and 4 cabs, entry and exit are available from one end and one side of the platform.

Figure 9: Type 3 and 4



Drawings

The next several pages provide various Multilift drawings. Always refer to your installation drawings for details specific to your site.

Elevation and plan view drawings (for the different cab types and sizes):

- Type 2 without platform gate 36" x 54"
- Type 2 without platform gate 42" x 48", 42" x 54", 42" x 60"
- Type 3 without platform gate 36" x 54"
- Type 3 without platform gate 42" x 48", 42" x 54", 42" x 60"
- Type 4 without platform gate 36" x 54"
- Type 4 without platform gate 42" x 48", 42" x 54", 42" x 60"
- Type 2 with platform gate 36" x 54", 36" x 60"
- Type 2 with platform gate 42" x 54", 42" x 60"
- Type 3 with platform gate 36" x 54", 36" x 60"
- Type 3 (42" B side opening) with platform gate 36" x 60"
- Type 3 (42" B side opening) with platform gate 42" x 60"
- Type 4 with platform gate 36" x 54", 36" x 60"
- Type 4 with platform gate 42" x 54", 42" x 60"
- Type 4 (42" B side opening) with platform gate 36" x 60"
- Type 2, enclosure, 36" x 48", 36" x 54", 36" x 60"
- Type 2, enclosure, 42" x 48", 42" x 54", 42" x 60"
- Type 3, enclosure, 36" x 48", 36" x 54", 36" x 60"
- Type 3, enclosure, 42" x 48", 42" x 54", 42" x 60"
- Type 4, enclosure, 36" x 48", 36" x 54", 36" x 60"
- Type 4, enclosure, 42" x 48", 42" x 54", 42" x 60"

NOTE that the 42" wide cab units and B355 units are not self-supporting and need wall mounting.

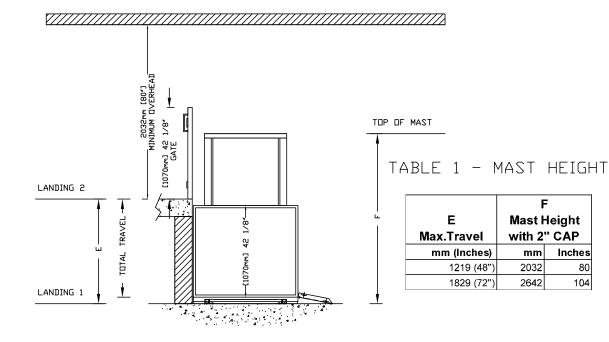
Two sample landing gate layout drawings are provided:

- 42" x 36" auto left-hand gate
- 42" x 36" manual left-hand gate

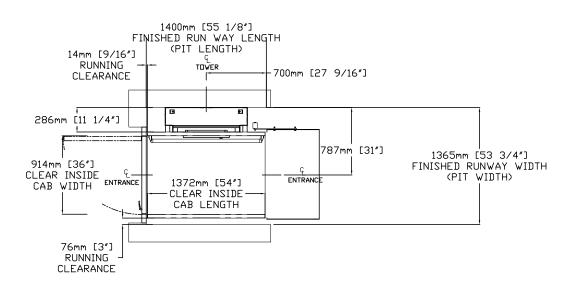
Note: For specifications on other landing gates and doors, go to our website www.savaria.com, select the "architects and builders" tab at the top of the page and then select "Doors and Gates" from the menu on the left-hand side of the page.

The link is as follows: http://www.savaria.com/architects/drawings/doors-gates/index.php.

<u>ELEVATION VIEW TYPE-2</u>



TOP VIEW TYPE-2



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Figure 11: Elevation and plan view – type 2 without platform gate – 42" x 48", 42" x 54", 42" x 60"

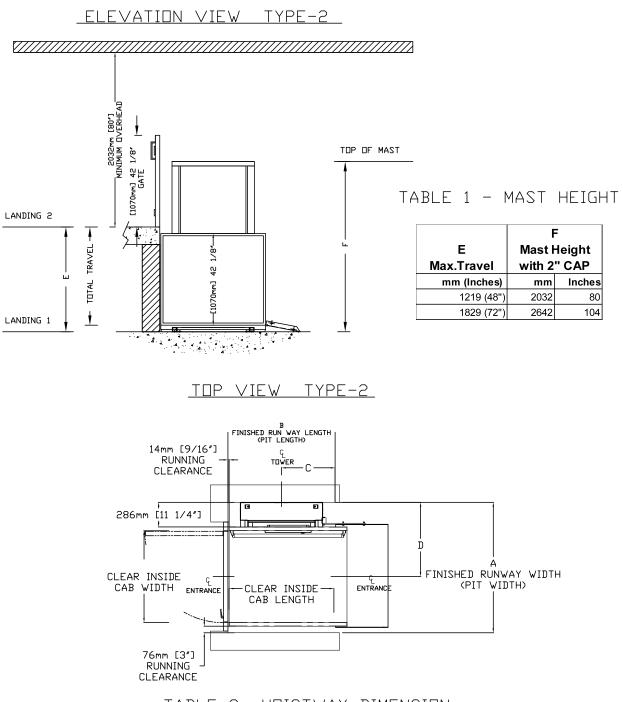


TABLE 2- HOISTWAY DIMENSION

	SIDE CAB		SIDE CAB GTH		A NWAY WIDTH		B	(TOWER CE	C NTER LINE	DOOR CE (IN CASE OF) NTER LINE = 42" DOOR)
mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches
1067	42	1219	48	1511	59 1/2	1248	49 1/8	624	24 9/16	864	34
1067	42	1372	54	1511	59 1/2	1400	55 1/8	700	27 9/16	864	34
1067	42	1524	60	1511	59 1/2	1553	61 1/8	776	30 9/16	864	34



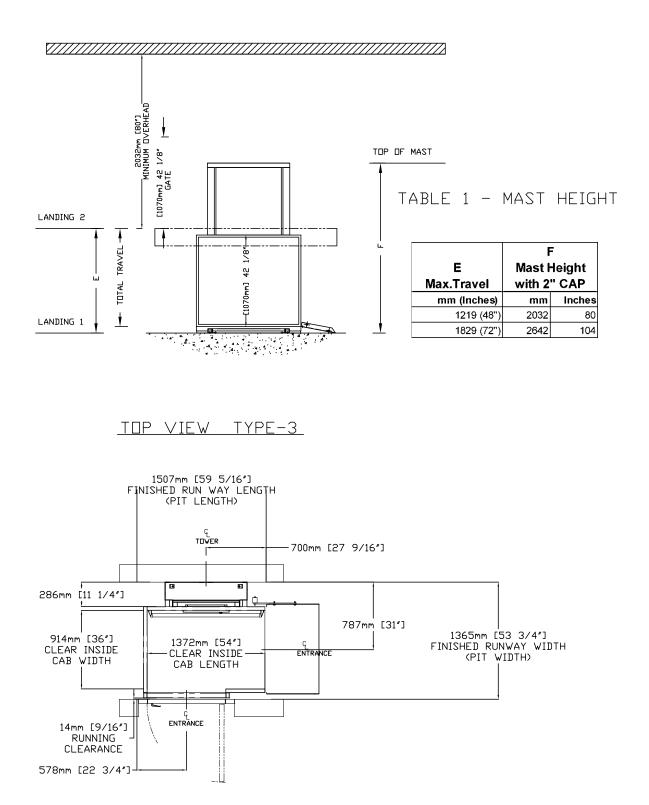


Figure 13: Elevation and plan view – type 3 without platform gate – 42" x 48", 42" x 54", 42" x 60"

ELEVATION VIEW TYPE-3

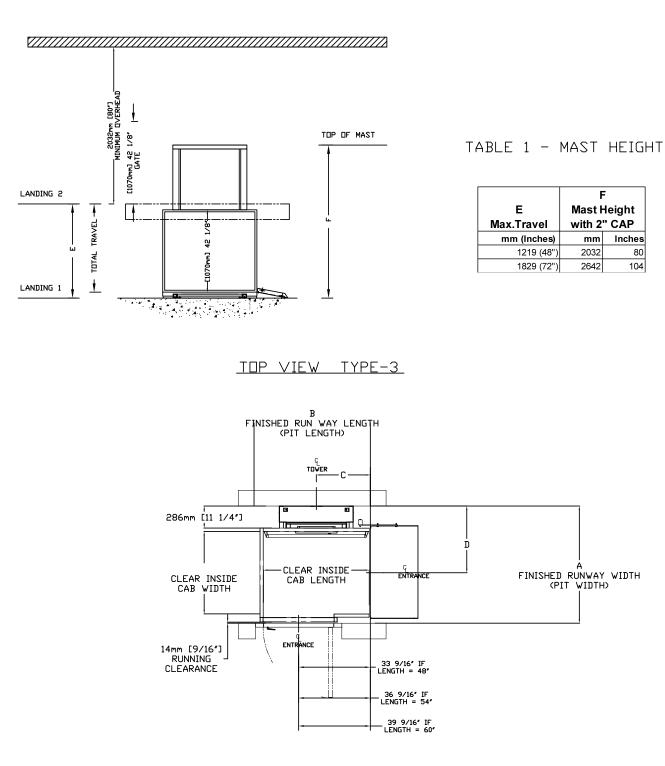


TABLE 2- HDISTWAY DIMENSION

CLEAR IN		CLEAR IN	SIDE CAB GTH	FINISHED RU	A NWAY WIDTH	E FINISHED RUN	B IWAY LENGTH	(TOWER CE	C NTER LINE	DOOR CE (IN CASE OF) NTER LINE 42" DOOR)
mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches
1067	42	1219	48	1518	59 3/4	1354	53 5/16	624	24 9/16	864	34
1067	42	1372	54	1518	59 3/4	1507	59 5/16	700	27 9/16	864	34
1067	42	1524	60	1518	59 3/4	1659	65 5/16	776	30 9/16	864	34

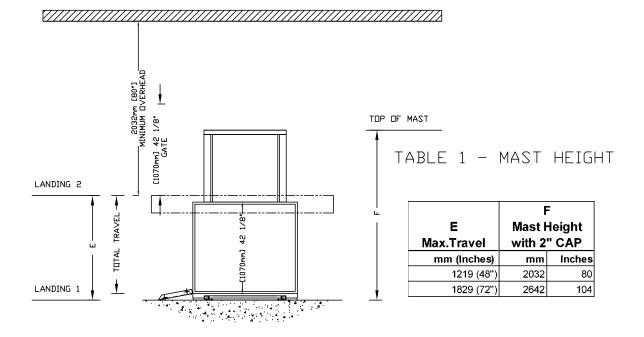
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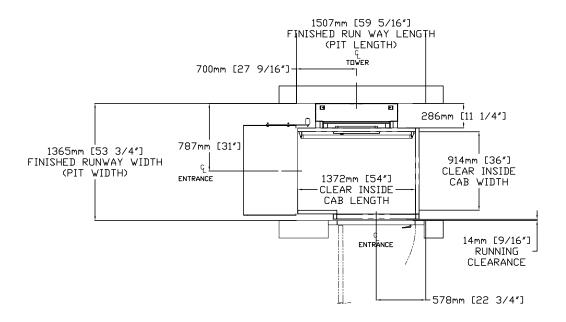
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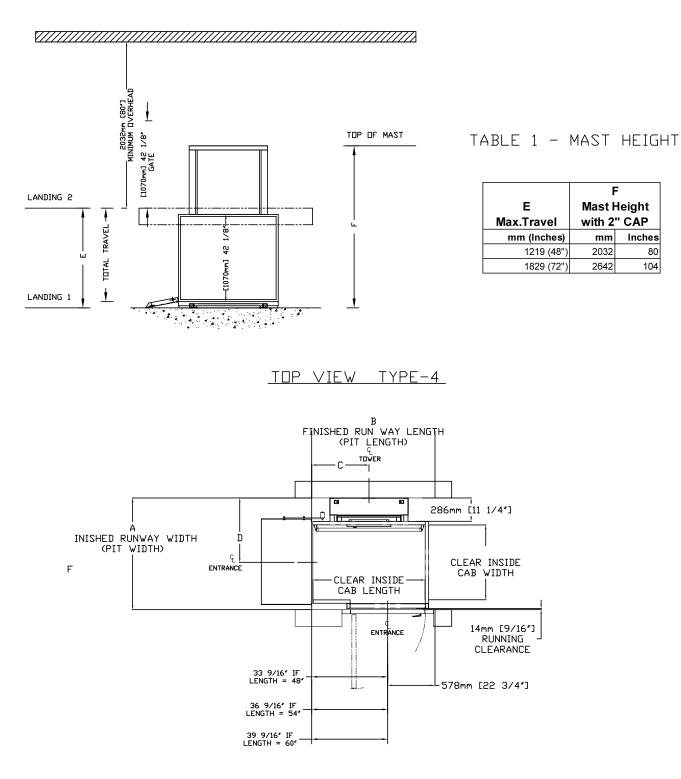
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TOP VIEW TYPE-4





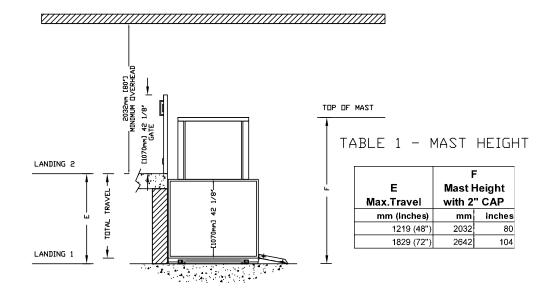
CLE	EAR IN: WID	SIDE CAB	CLEAR IN	SIDE CAB GTH	FINISHED RU	A NWAY WIDTH	FINISHED RUN	B WAY LENGTH	(TOWER CE	C NTER LINE	DOOR CE (IN CASE OF) NTER LINE 42" DOOR)
m	m	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches
106	67	42	1219	48	1518	59 3/4	1354	53 5/16	624	24 9/16	864	34
106	67	42	1372	54	1518	59 3/4	1507	59 5/16	700	27 9/16	864	34
106	67	42	1524	60	1518	59 3/4	1659	65 5/16	776	30 9/16	864	34

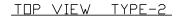
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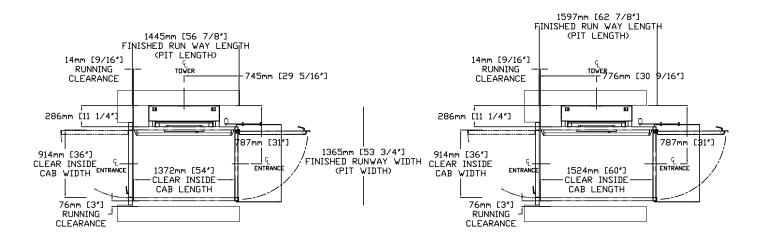
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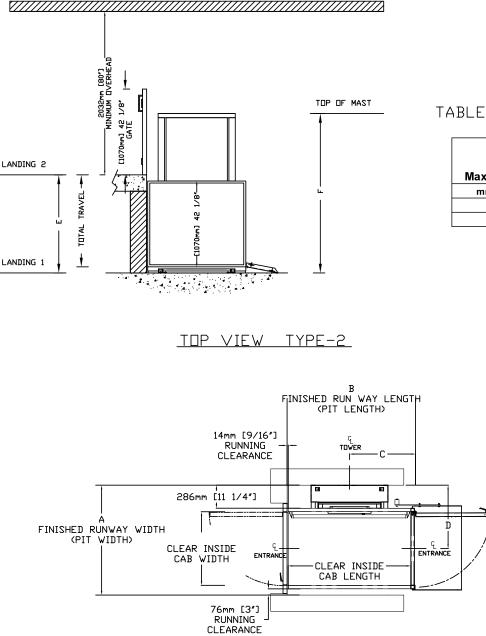
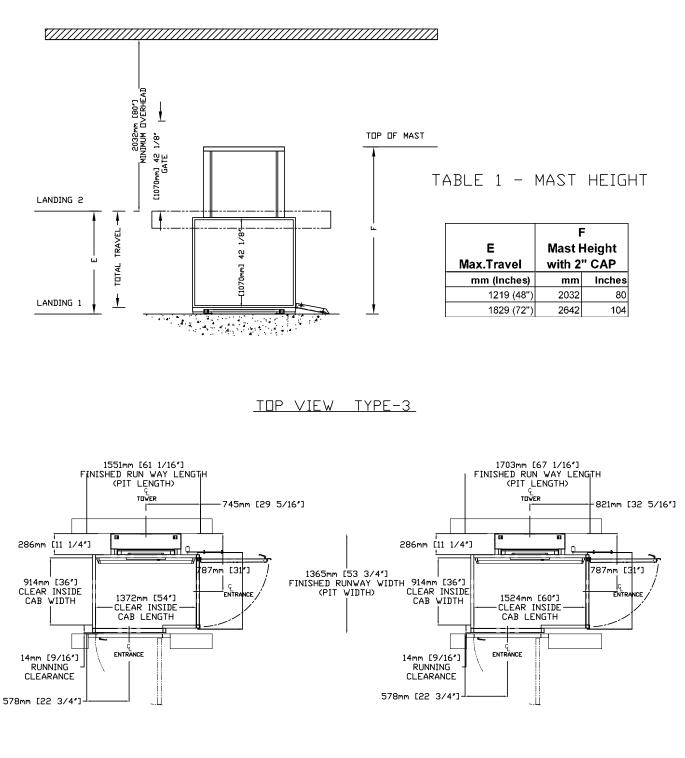


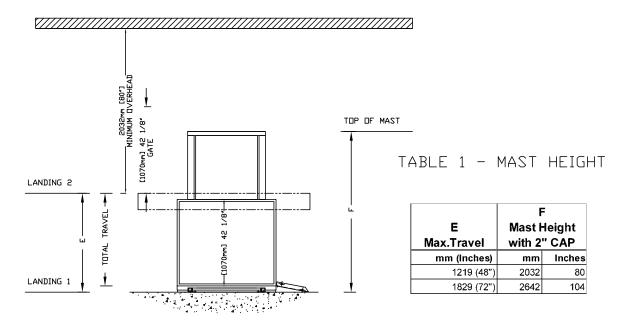
TABLE 1 - MAST HEIGHT

E Max.Travel	•	= Height " CAP
mm (Inches)	mm	Inches
1219 (48")	2032	80
1829 (72")	2642	104

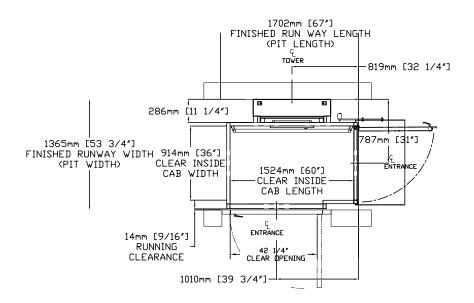
TABLE 2- HDISTWAY DIMENSION

CLEAR IN	SIDE CAB	CLEAR IN	SIDE CAB	B A B				(;	D DOOR CENTER LINE	
WIDTH LENGTH		FINISHED RUNWAY WIDTH		FINISHED RUNWAY LENGTH		TOWER CENTER LINE		(IN CASE OF 42" DOOR)			
mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches
1067	42	1219	48	1518	59 3/4	1292	50 7/8	624	26 5/16	864	34
1067	42	1372	54	1518	59 3/4	1445	56 7/8	700	29 5/16	864	34
1067	42	1524	60	1518	59 3/4	1597	62 7/8	776	32 5/16	864	34





TOP VIEW TYPE-3



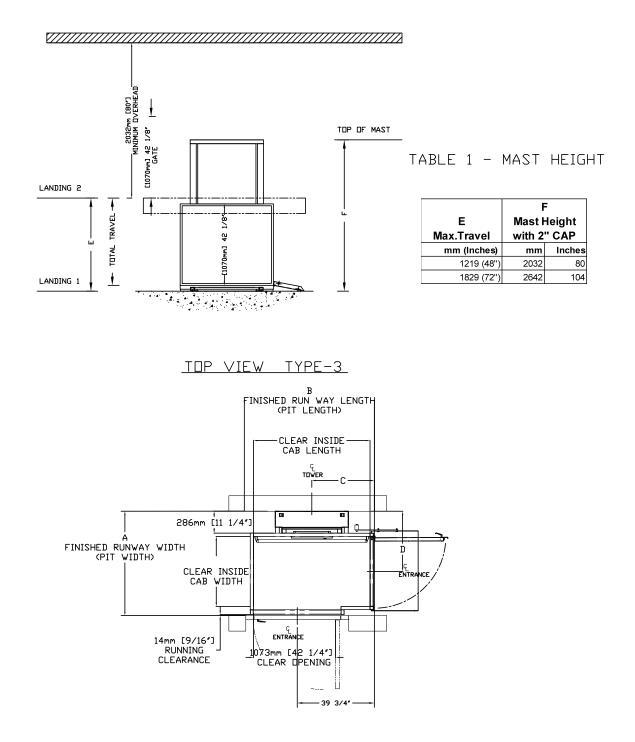
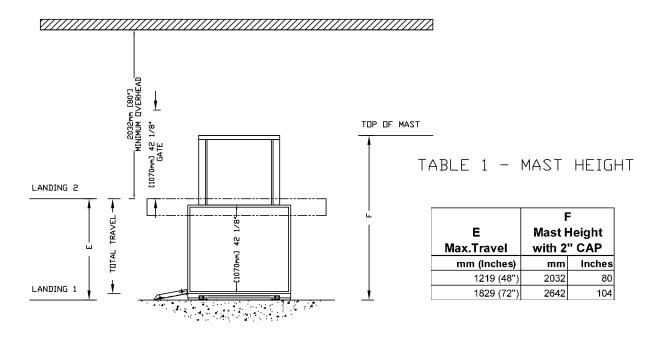
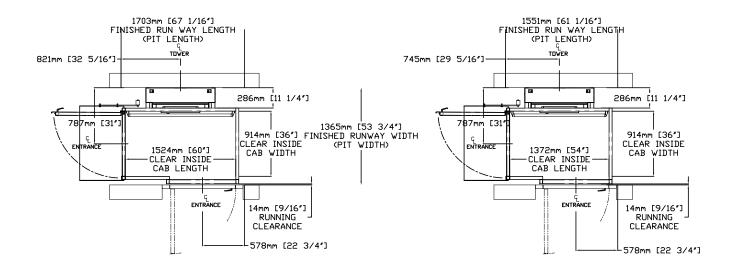


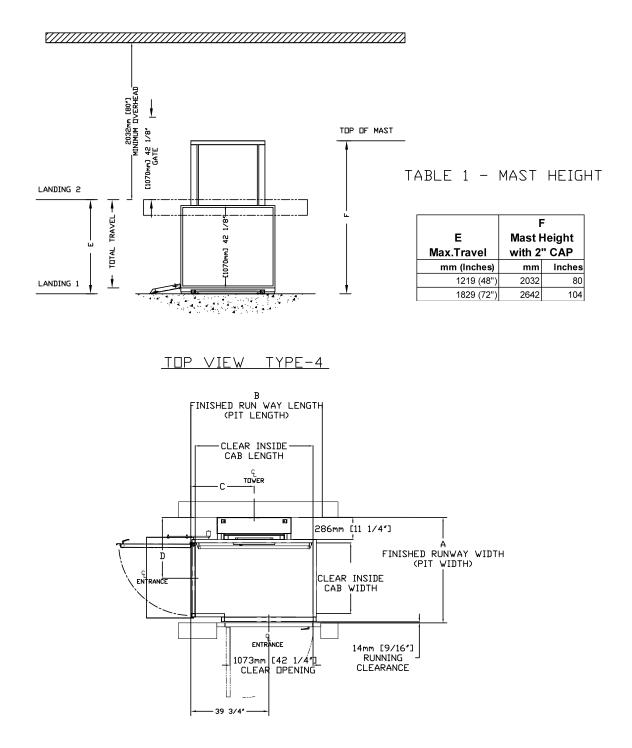
TABLE 2- HOISTWAY DIMENSION

CLEAR IN	INSIDE CAB CLEAR INSIDE CAB		NSIDE CAB CLEAR INSIDE CAB A B				3	(D DOOR CENTER LINE	
WE	WDTH LENGTH		FINISHED RUNWAY WIDTH		FINISHED RUNWAY LENGTH		TOWER CENTER LINE		(IN CASE OF 42" DOOR)		
mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches
1067	42	1219	48	1518	59 3/4	1397	55	624	26 1/4	864	34
1067	42	1372	54	1518	59 3/4	1549	61	700	29 1/4	864	34
1067	42	1524	60	1518	59 3/4	1702	67	776	32 1/4	864	34

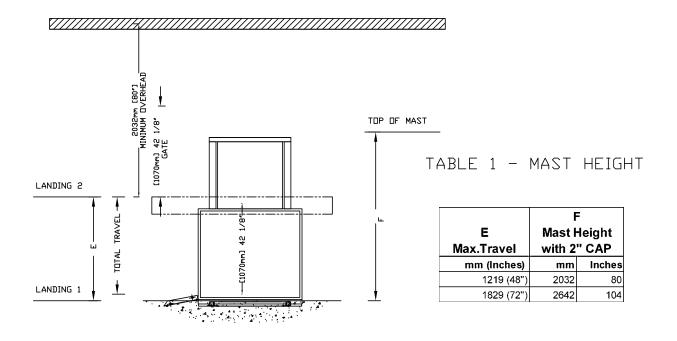


<u>TOP VIEW TYPE-4</u>

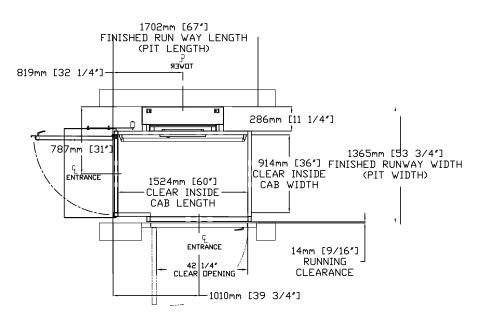


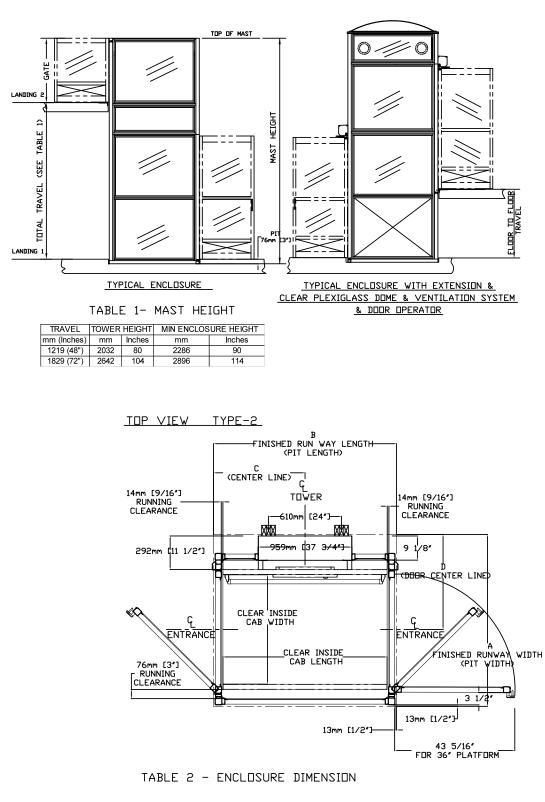


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	CLEAR INSIDE CAB		CAB CLEAR INSIDE CAB		A		в				DOOR CENTER LINE	
	WIDTH LENGTH		FINISHED RUNWAY WIDTH		FINISHED RUNWAY LENGTH		I TOWER CENTER LINE		(IN CASE OF 42" DOOR)			
	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches
	1067	42	1219	48	1518	59 3/4	1397	55	624	26 1/4	864	34
	1067	42	1372	54	1518	59 3/4	1549	61	700	29 1/4	864	34
	1067	42	1524	60	1518	59 3/4	1702	67	776	32 1/4	864	34



TOP VIEW TYPE-4





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CLEAR INSIDE CAB		CLEAR INSIDE CAB		A			3	(>	DOOR CENTER LINE	
WIE	WIDTH LENGTH		GTH	FINISHED RUNWAY WIDTH		FINISHED RUNWAY LENGTH		TOWER CENTER LINE		(IN CASE OF 36" DOOR)	
mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches
914	36	1219	48	1449	57 1/16	1376	54 3/16	687	27 1/16	806	31 3/4
914	36	1372	54	1449	57 1/16	1529	60 3/16	764	30 1/16	806	31 3/4
914	36	1524	60	1449	57 1/16	1681	66 3/16	840	33 1/16	806	31 3/4

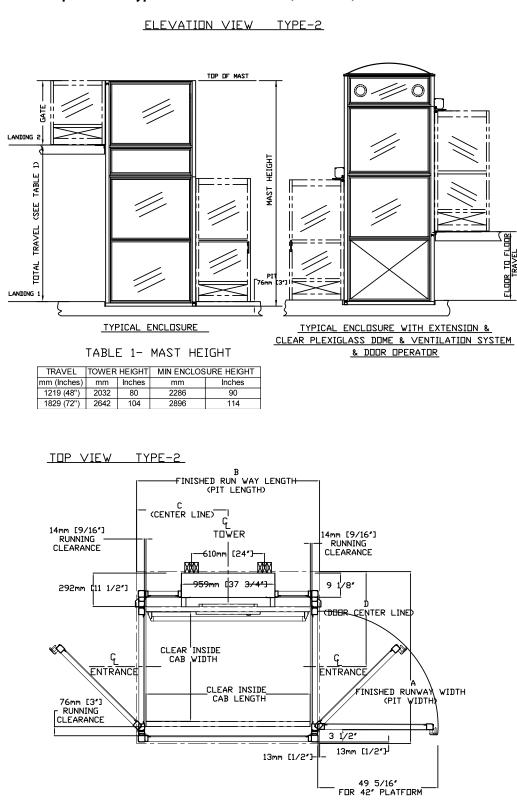
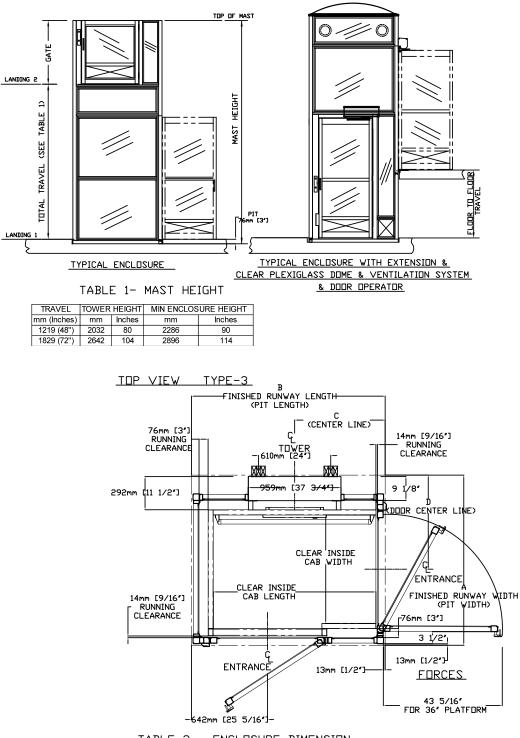


TABLE 2 - ENCLOSURE DIMENSION

CLEAR INSIDE CAB WIDTH		CLEAR IN	SIDE CAB GTH	FINISHED RU	A NWAY WIDTH	[FINISHED RU	B WAY LENGTH	(TOWER CE	C INTER LINE	DOOR CE (IN CASE OI) NTER LINE 5 36" DOOR)
mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches
1067	42	1219	48	1589	62 9/16	1376	54 3/16	687	27 1/16	883	34 3/4
1067	42	1372	54	1589	62 9/16	1529	60 3/16	764	30 1/16	883	34 3/4
1067	42	1524	60	1589	62 9/16	1681	66 3/16	840	33 1/16	883	34 3/4

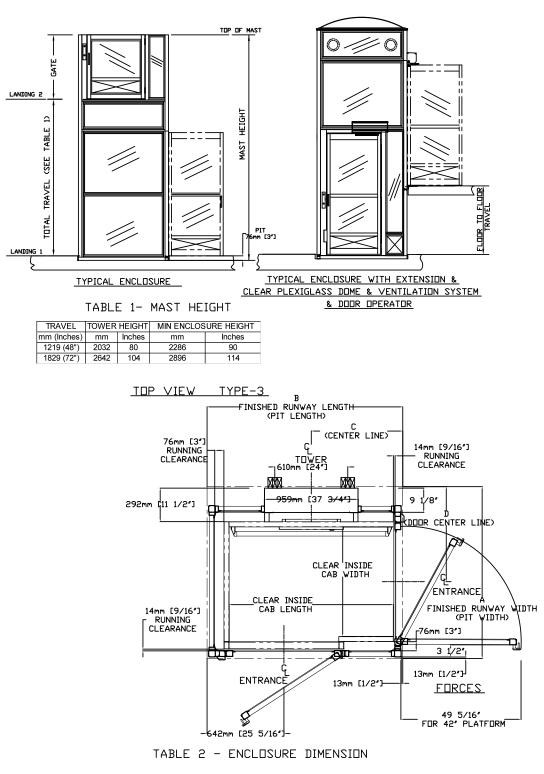
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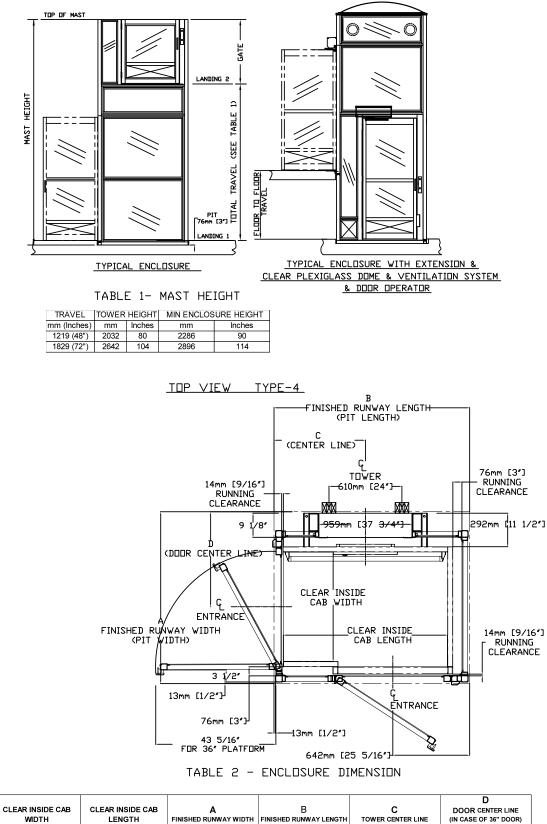




CLEAR INSIDE CAB WIDTH		CLEAR IN LEN	SIDE CAB GTH	FINISHED RU	A NWAY WIDTH	FINISHED RUN	3 IWAY LENGTH	(TOWER CE	C INTER LINE	DOOR CE (IN CASE OI) INTER LINE F 36'' DOOR)
mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches
914	36	1219	48	1449	57 1/16	1483	58 3/8	687	27 1/16	806	31 3/4
914	36	1372	54	1449	57 1/16	1635	64 3/8	764	30 1/16	806	31 3/4
914	36	1524	60	1449	57 1/16	1788	70 3/8	840	33 1/16	806	31 3/4

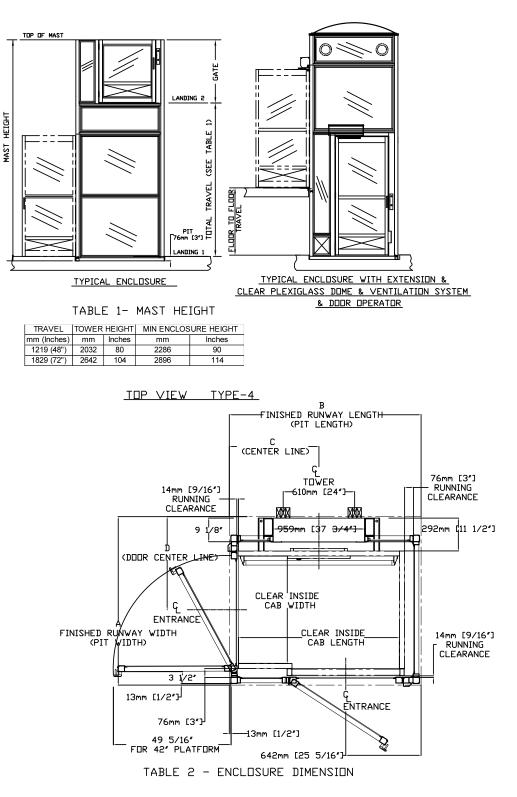


CLEAR INSIDE CAB WIDTH			ISIDE CAB IGTH	FINISHED RU	A NWAY WIDTH	FINISHED RUN	3 WAY LENGTH	(TOWER CE	C INTER LINE		D DOOR CENTER LINE N CASE OF 36" DOOR)	
mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	
1067	42	1219	48	1602	63 1/16	1483	58 3/8	687	27 1/16	883	34 3/4	
1067	42	1372	54	1602	63 1/16	1635	64 3/8	764	30 1/16	883	34 3/4	
1067	42	1524	60	1602	63 1/16	1788	70 3/8	840	33 1/16	883	34 3/4	



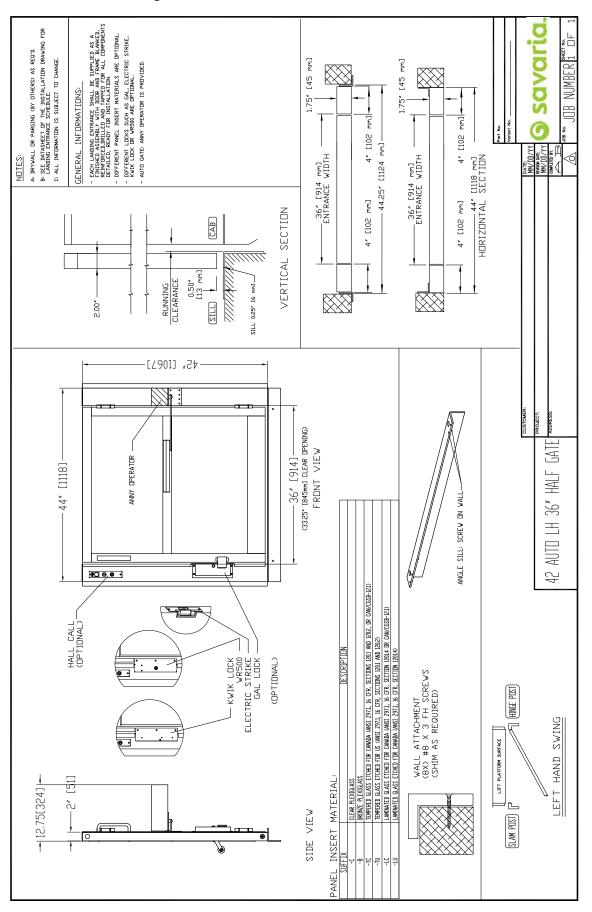
WIE	WIDTH		LENGTH		FINISHED RUNWAY WIDTH		FINISHED RUNWAY LENGTH		TOWER CENTER LINE	
mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
914	36	1219	48	1449	57 1/16	1483	58 3/8	687	27 1/16	806
914	36	1372	54	1449	57 1/16	1635	64 3/8	764	30 1/16	806
914	36	1524	60	1449	57 1/16	1788	70 3/8	840	33 1/16	806
					•					

Inches 31 3/4 31 3/4 31 3/4



CLEAR INSIDE CAB										[)
		CLEAR IN	SIDE CAB		A	6	3	()	DOOR CE	NTER LINE
WIE	DTH	LEN	GTH	FINISHED RU	NWAY WIDTH	FINISHED RUN	WAY LENGTH	TOWER CE	NTER LINE	(IN CASE OF 36" DOOR)	
mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches
1067	42	1219	48	1602	63 1/16	1483	58 3/8	687	27 1/16	883	34 3/4
1067	42	1372	54	1602	63 1/16	1635	64 3/8	764	30 1/16	883	34 3/4
1067	42	1524	60	1602	63 1/16	1788	70 3/8	840	33 1/16	883	34 3/4

Figure 30: 42" x 36" Auto left-hand gate



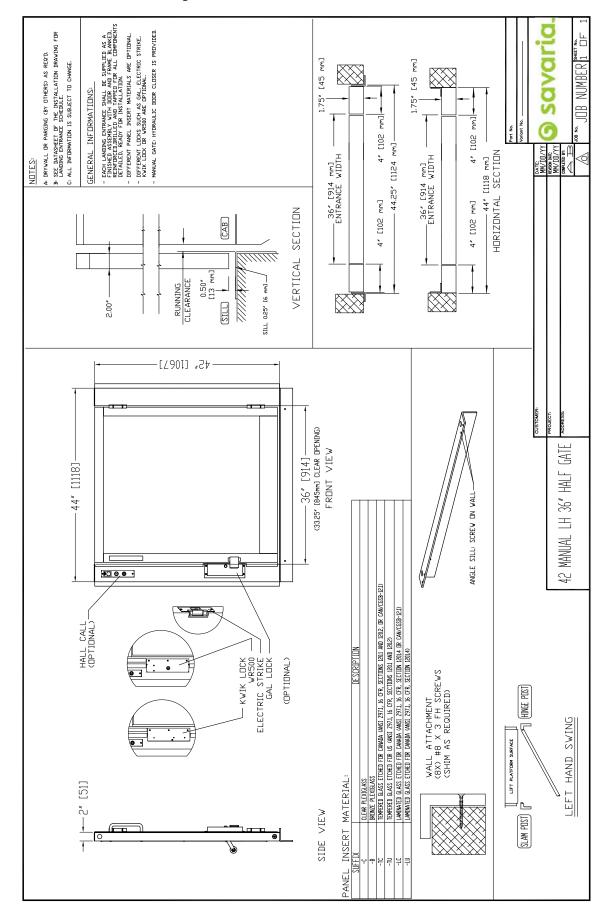


Figure 31: 42" x 36" Manual left-hand gate

Provisions by others



Multilift (B613 & B355) Vertical Platform Lift PLANNING GUIDE

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