

#### **IMPORTANT NOTICE**

This Planning Guide provides nominal dimensions and specifications useful for the initial planning of a project. Before beginning actual construction, make sure you have the installation (shop) drawings customized with specifications and dimensions for your specific project.

Lift configurations and dimensions are in accordance with our interpretation of the standards set forth by the codes listed on the next page. Please consult Savaria or the authorized Savaria dealer in your area for more specific information pertaining to your project, including any discrepancy between referenced standards and those of any local codes or laws.

The dimensions and specifications in this Planning Guide are subject to change (without notice) due to product enhancements and continually evolving codes and product applications.

Visit our website **www.savaria.com** for the most current drawings and dimensions.

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#### **Purpose of This Guide**

This guide assists architects, contractors, and lift professionals to incorporate the Vuelift Mini Residential Elevator into a residential design. The design and manufacture of the Vuelift Mini Elevator meets the requirements of the following codes and standards:

- EN 81-41:2010 Special lifts for the transport of persons and goods
- Directive 2006/42/CE (machinery directive)
- Directive 2014/30/CE (EMC directive)
- Directive 2014/35/CE (low voltage directive)

We recommend that you contact your local authority having jurisdiction to ensure that you adhere to all local rules and regulations pertaining to residential elevators.

**IMPORTANT:** 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 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 for the most recent drawings and dimensions.

#### **How to Use This Guide**

- 1 Determine your client's intended use of the elevator.
- 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.

#### **Revision History of This Guide**

- · September 10, 2020 Initial release
- October 7, 2020 Rephrased the vernacular throughout guide, amended applicable codes on page 3, updated table of contents on page 4, modified specifications on page 5, included additional safety features and options on page 6, removed safety notes about inapplicable codes (previously page 7), corrected voltages on pages 7 through 9, added provisions by others details on page 8, converted units of measurement on page 10, revised Figure 12 drawing on page 23, replaced Figures 14 and 15 with updated values on pages 25 and 26, and exchanged Figure 16 with updated dimensions and photos on page 27
- October 14, 2020 Updated table of contents on page 4revised specifications on page 5, removed electrical requirements about inapplicable codes (previously page 7), and combined figures 14 and 15 on page 24
- July 13, 2021 Updated load capacity in specifications page 5, and data sheet on page 24
- January 25, 2022 Added noise level to specifications on page 5
- September 29, 2022 Updated specifications on pages 5,7 and 8, updated drawings on pages 11-20, Updated measurements and images on page 25.
- November 25, 2022 updated specifications on page 9
- December 15, 2022 removed glass option for Vuelift Mini
- December 23, 2022 Updated specifications on page 24
- February 28, 2023 Revised specifications on page 5
- March 24, 2023 Revised drawings on pages 11-12, revised suspension specification on page 5
- · April 20, 2023 Revised parts number

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## **Specifications**

Specification	Specification Data
Load capacity	250 kg
Maximum travel	16.76 m
Travel speed	0.15 m/s
Noise level (for typical installation)	58 - 60 dB
Daily cycle	Normal: 40 Heavy: 80 Excessive: 150 Maximum starts in 1 hour on standard installation: 20 NOTE: Please consult your Sales Representative if there's a chance you may exceed these amounts.
Maximum levels serviced	6
Minimum overhead	2.44 m
Cab	Cab walls: Full clear acrylic Cab interior height: 1.97 m Cab weight (acrylic models): 250 kg Cab floor area: 0.76 sq m
Floor by others (in cab)	12.7 mm maximum
Footprint	1.26 m diameter
Acrylic diameter	1.08 m
Hoistway ring diameter	1.11 m
Power supply	Single-phase 220V, 50 Hz/9 A/16 A slow
Suspension	Type: White Zinc Coated Steel Rope Ø6x133  Construction: IWRC 7 x 19 RHRL  Nominal strength: 7000 lb (3175 kg)  Weight of ropes: 0.243 lb/ft (3.616 g/cm)  Travel cable weight: 0.228 lb/ft (3.393 g/cm)
Drive train	Type: Winding drum  Motor: 2.5 HP (1.85 kW) @ 50 Hz with integrated brake  Motor control: Preprogrammed variable frequency drive
Cab Lighting	10A, 220V, single-phase, 50Hz
Pit/floor load	Refer to the section "Load Calculations"
Distance between 2 landings	2.36 m minimum
Pit depth	Minimum: 76 mm; 102 mm with buffer springs (required if habitable space below) Maximum: 305 mm
Temperature operating range (environment)	- 10°C to + 40°C <b>NOTE</b> : For optimal running conditions, each landing of the unit should be in a climate-controlled environment.

Specification	Specification Data
Safety features	Pit run/stop switch and car top run/stop switch
	Emergency stop switch
	Safety brakes
	Overspeed
	Manual lowering
	Emergency battery back-up for cab lighting and lowering
	Overload load cell
	Door closer
Options	Optional configurations: Type 2 cab
	Optional colors:
	White (Texture White PX521W859)
	Silver (Texture Silver PX521S343)
	Custom powder-coat frame
	Note that Black is the standard color (Texture Black PX622N365)
	Savaria Link remote monitoring
	Pitless option with ramp
	Sabbath service
	Flood switch
	Buffer springs for habitable space below
	Buck boost transformer
	Up to 6 stops; balcony attachment or thru-floor configuration
	Cab shipped disassembled
	Landing door handle painted to match unit
	Top header ring in sheet metal painted to match unit
	440V power input (consult factory for detailed specs)
	Braille buttons

## **Provisions By Others**

#### **General**

#### **Construction Site**

The owner/agent is required to provide all masonry, carpentry, and drywall work as required. Floors shall be in a finished state prior to installation of the unit. Refer to the section, Site Preparation on the next page.

#### **Finishing**

The floor covering of the platform shall be slip resistant and contrast in colour and luminance with the landing surface.

#### **Dimensions**

The contractor/customer must verify all clearance dimensions prior to delivery of the unit.

# Structural Floor Loads

A structural engineer is required to ensure that the building will safely support all loads imposed by the lift equipment. Refer to the tables on the installation drawings (shop drawings) for pit/floor loads imposed by the equipment. Refer to the section, Load Calculations.

# **Electrical** Power Supply

Single-phase 220V, 50 HZ/9 A/16 A slow.

#### **Telephone**

If a telephone circuit is required, the jack is to be provided and installed by others. This circuit shall be brought to a location next to the controller and be available to connect and test upon elevator installation.

#### **Electrical Outlet**

Have one in close proximity.

#### **Permanent Power**

Before installation can begin, permanent power must be supplied.

#### Entrances Handrails

All balcony levels require handrails to be installed per local codes after installation is completed. The handrail and installation is to be provided by the contractor/customer. Savaria Concord Lifts Inc. and/or local installer are not responsible for handrail installation or materials.

### **Site Preparation**

The following items MUST be completed prior to installation of the elevator.

#### **Finished Floors**

• Finished floors be installed at all landing levels.

#### **Power Supply**

Single-phase 220V, 50 Hz/9 A/16 A slow.

#### **Telephone Works**

• Telephone jack must be provided next to the electrical disconnects. This can be the common house line in most jurisdictions. Please check with your local installer or building contractor for code requirements.

#### **Electrical Outlet**

Have one in close proximity.

#### Floor Built for Load

• Smooth level surface for installing the elevator, with floor load bearing capacity for the elevator plus rated load. An exact floor loading specification can be provided by contacting Savaria.

#### Floor and Pit Cutouts Complete

- If a pit is to be used, a smooth, level surface of at least 76 mm must be provided (102 mm if buffer springs are used). For pit depths greater than 305 mm, contact Savaria to ensure proper equipment will be provided.
- It is recommended that any pit floor and walls be finished prior to installation. Pit floor and walls are visible after elevator installation is completed.
- Hole in floor, or modified balcony rail as directed by drawings.

#### **Check Floor to Floor Maximum and Minimum Distances**

• 2.44 m minimum overhead distance from upper floor level to the underside of the finished ceiling for standard cab configuration.

#### **Drywall and Painting**

All drywall and painting must be complete.

### **Load Calculations**

- Primary loads are carried by the four support columns that run from top to bottom on the elevator.
- The load (represented below as Lower Floor Total Load) is supported on 102 mm x 102 mm plates at the bottom of each of the four columns.
- Vuelift Mini elevators are designed such that the dead load and impact load are transferred to the lowest level through the rail base plates and rings when installed properly in a building with structural integrity including consistent floor to floor heights.

**NOTE**: Vuelift Mini elevators are designed for applications in buildings that maintain consistent floor to floor height as the building ages.

If floor to floor height changes after installation, the elevator MUST be taken out of service pending inspection and correction by a trained installation technician.

- All mid floors including the bottom floor may be subjected to a maximum lateral load of 90.7 kg.
- Walls of bricks, terra-cotta, hollow blocks, and similar materials shall not be used for attachment of column (guide rail) brackets unless adequately reinforced.
- Where necessary, the building construction shall be reinforced to provide adequate support for the columns (guide rails).
- Shipping weight is estimated actual including crating materials, etc.
- Floor load figures include elevator structure weight when loaded with full test capacity.
- Floor load figures shown here are actual loads; your building engineer must add a proper factor of safety to the floor design.
- Many jurisdictions require floor designs to include at least a safety factor of 4, doubling the loads shown here.
- To reiterate, these figures DO NOT include your factor of safety for floor loads. Engineer your floor to include (add) an appropriate safety factor and comply with local building codes.

Pit Floor to Support Load of:

#### **ACRYLIC:**

Kg = (m of hoistway \* 55) + (# of floors \* 81) + 730 dead load

## **Drawings**

- Plan view (acrylic), type 1
- Plan view (acrylic), type 2
- Pit view (acrylic), type 1 or 2
- Base ring details (acrylic), type 1 or 2
- Thru floor view (acrylic), type 1 or 2
- Balcony view (acrylic), type 1 or 2
- Thru floor details (acrylic), type 1 or 2
- Balcony details (acrylic), type 1 or 2
- Pit cutout details (acrylic), type 1 or 2
- Elevation view (acrylic), type 1 or 2
- Machine room layout and wire routing (acrylic), type 1 or 2
- Wire routing from pit (acrylic), type 1 or 2
- · Corner installation view (acrylic), type
- Datasheet (acrylic), type 1 or 2
- Controller box dimensions (acrylic)

Figure 1: Plan view (acrylic) - type 1

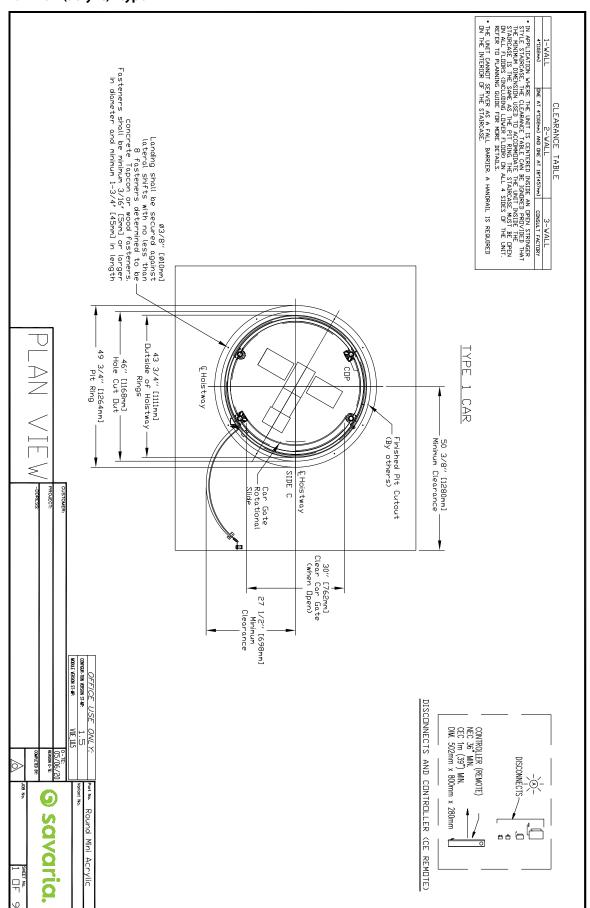


Figure 2: Plan view (acrylic) - type 2

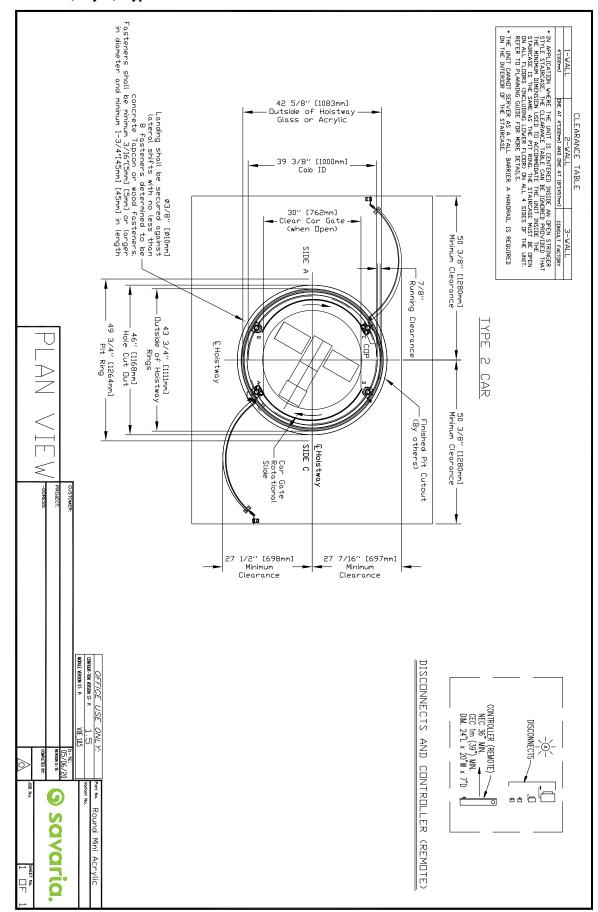


Figure 3: Pit view (acrylic) - type 1 or 2

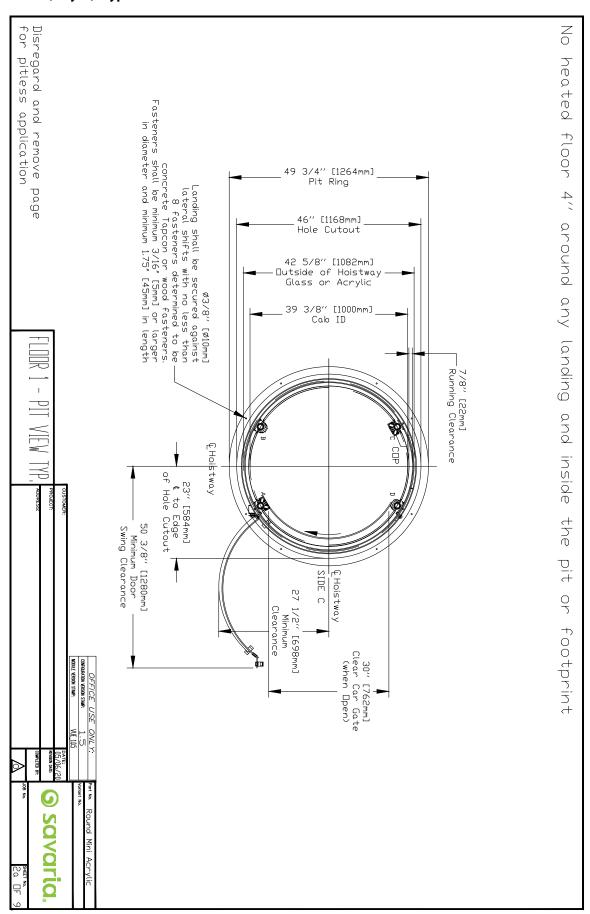


Figure 4: Base ring details (acrylic) - type 1 or 2

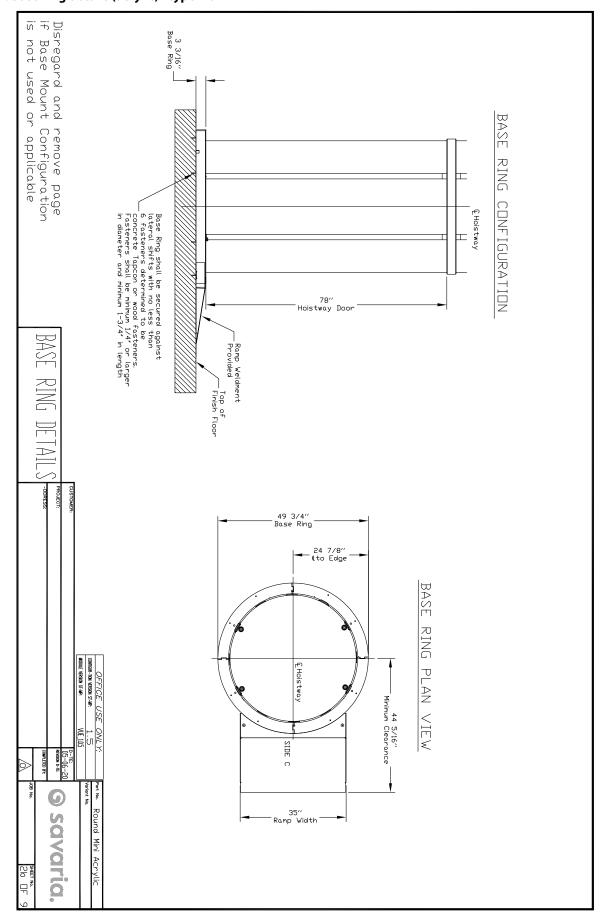


Figure 5: Thru floor view (acrylic) - type 1 or 2

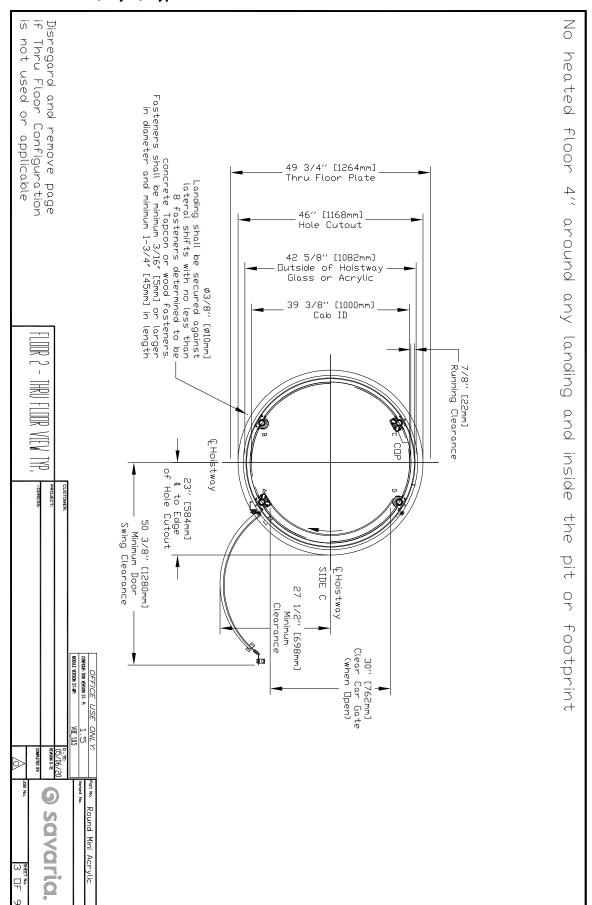


Figure 6: Balcony view (acrylic) - type 1 or 2

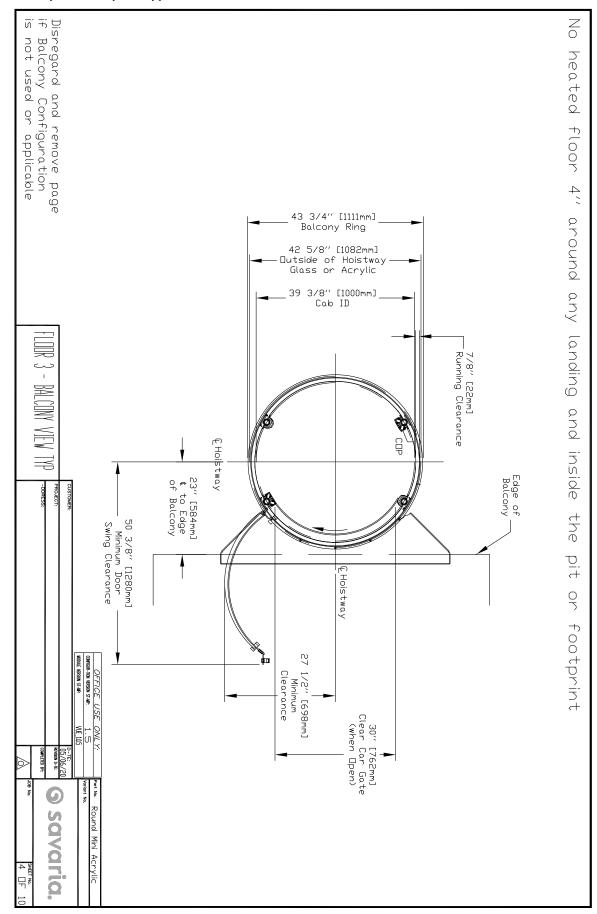


Figure 7: Thru floor details (acrylic) - type 1 or 2

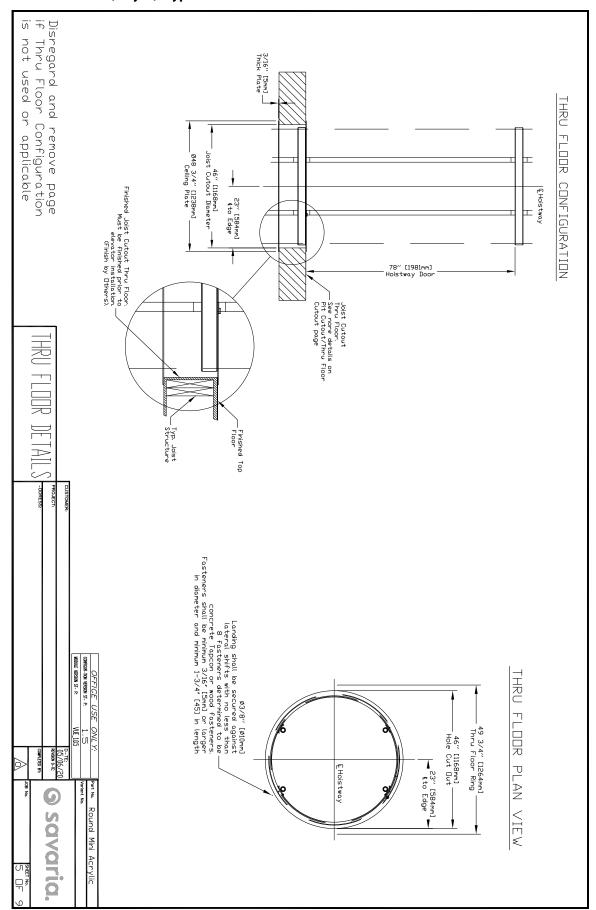


Figure 8: Balcony details (acrylic) - type 1 or 2

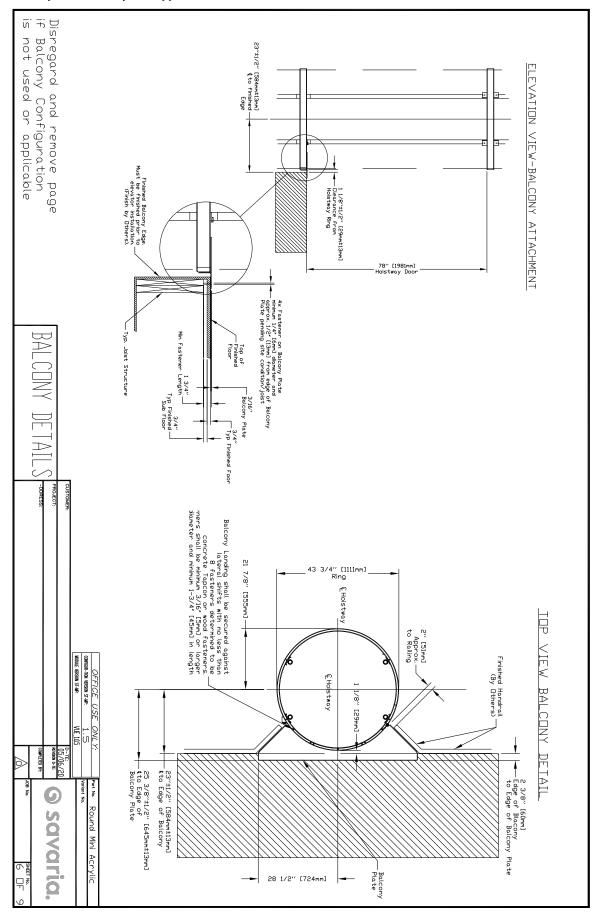


Figure 9: Pit cutout details (acrylic) - type 1 or 2

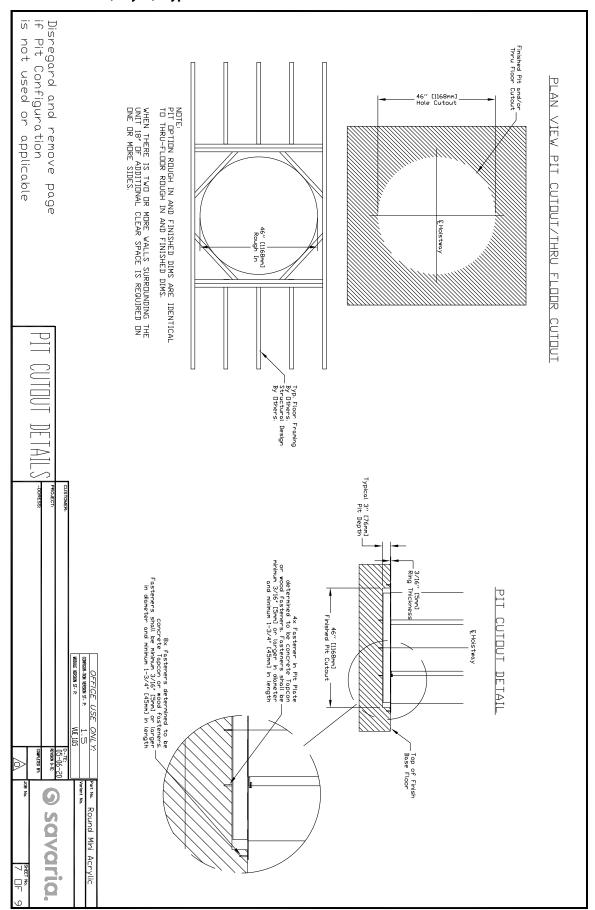


Figure 10: Elevation view (acrylic) - type 1 or 2

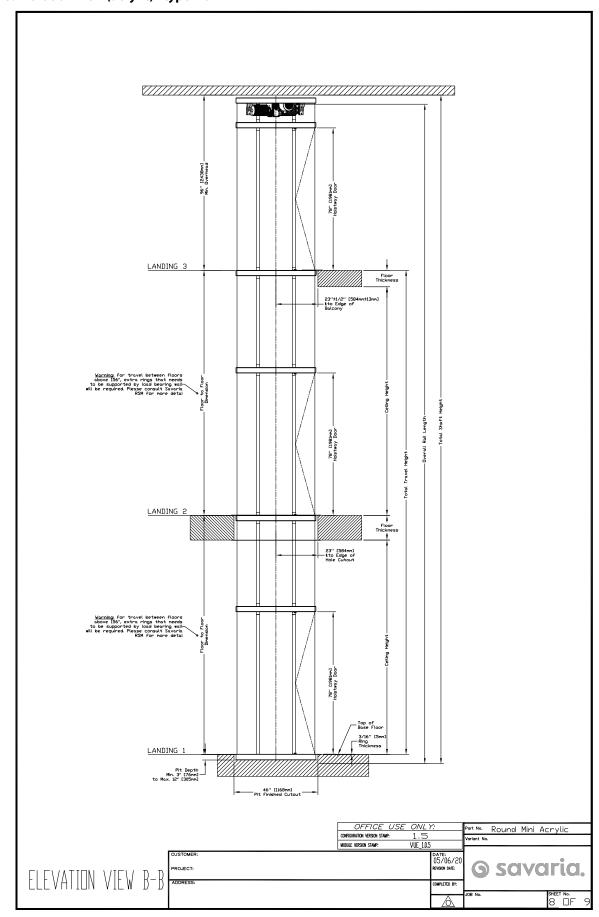


Figure 11: Corner installation view (acrylic) - type 1

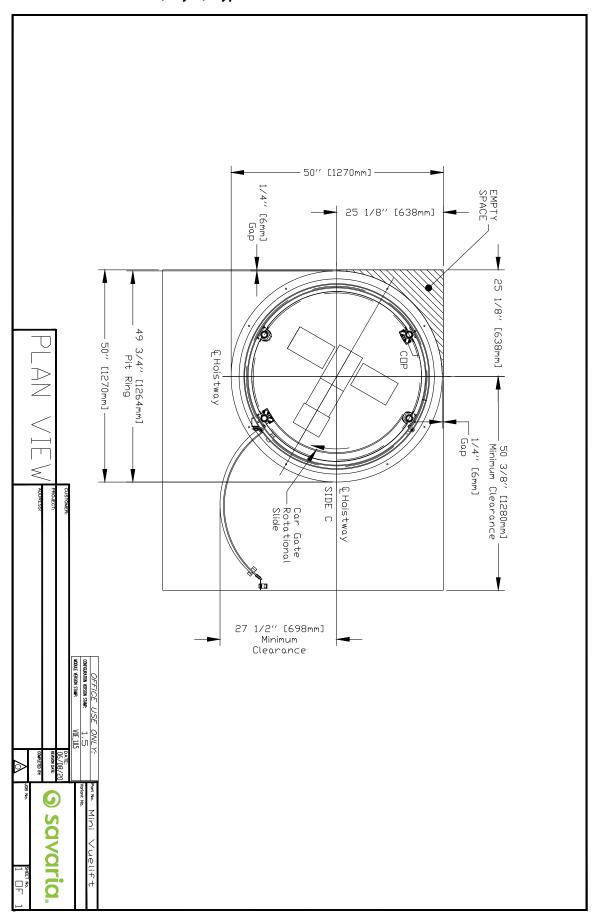


Figure 12: Machine room layout and wire routing (acrylic) - type 1 or 2

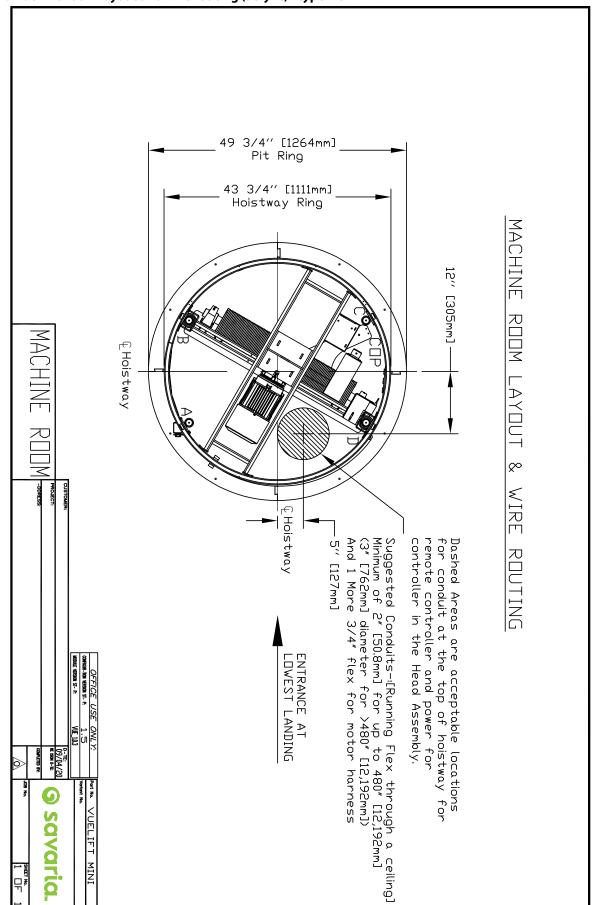


Figure 13: Wire routing from pit (acrylic) - type 1 or 2

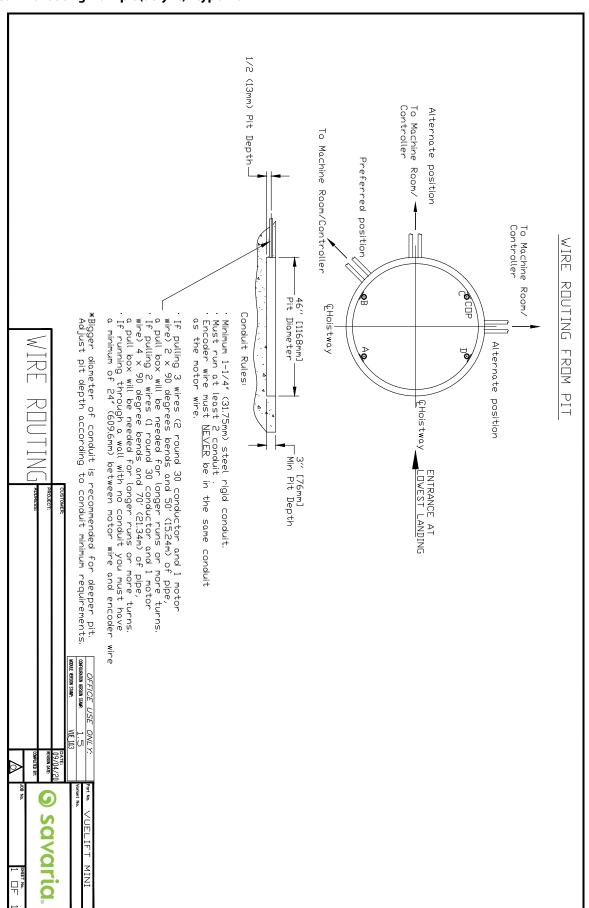


Figure 14: Datasheet (acrylic) - type 1 or 2

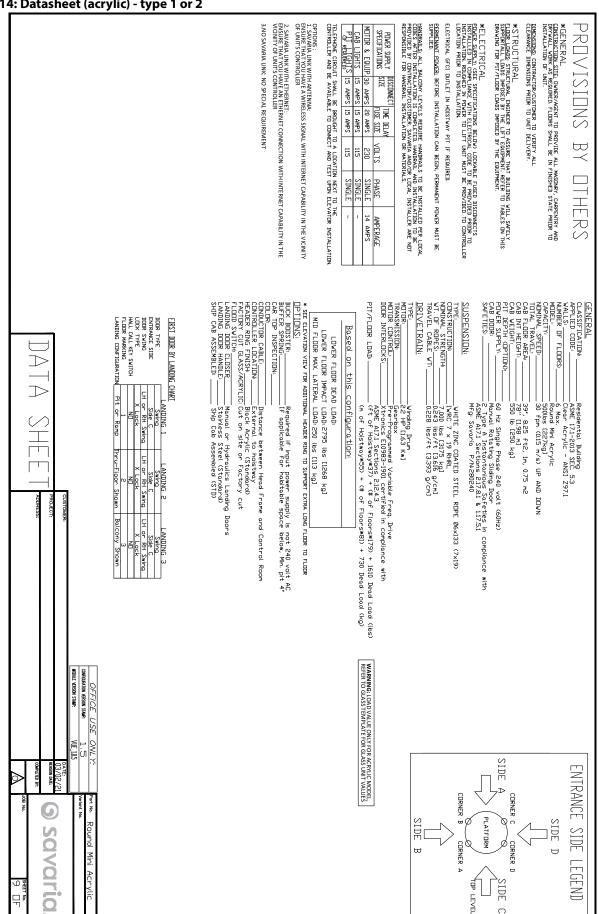
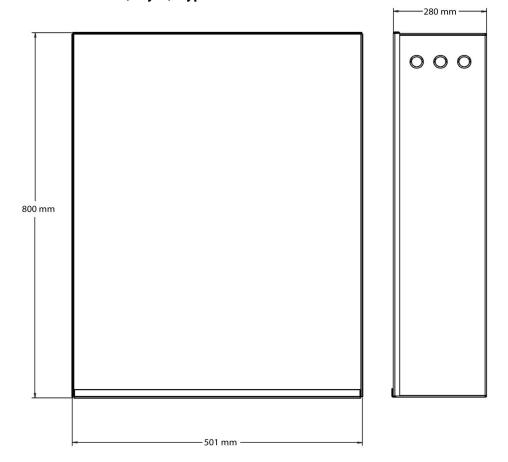


Figure 15: Controller box dimensions (acrylic) - type 1 or 2





**NOTE:** A remote controller cannot be more than 100 ft (30.48 m) from the top of the unit for the cable to reach.

## Vuelift Mini Residential Elevator PLANNING GUIDE (Europe)

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