Savaria® Luma

Through-floor lift

PLANNING GUIDE

Applicable Codes:

ASME A17.1
EN 81-41

savaria®

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.

Printed in Canada

Purpose of This Guide

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

- ASME A17.1/CSA B44 2022, Section 5.3
- EN 81-41

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 through the floor lift. 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 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.

Revision History of This Guide

May 5, 2025 - Initial release

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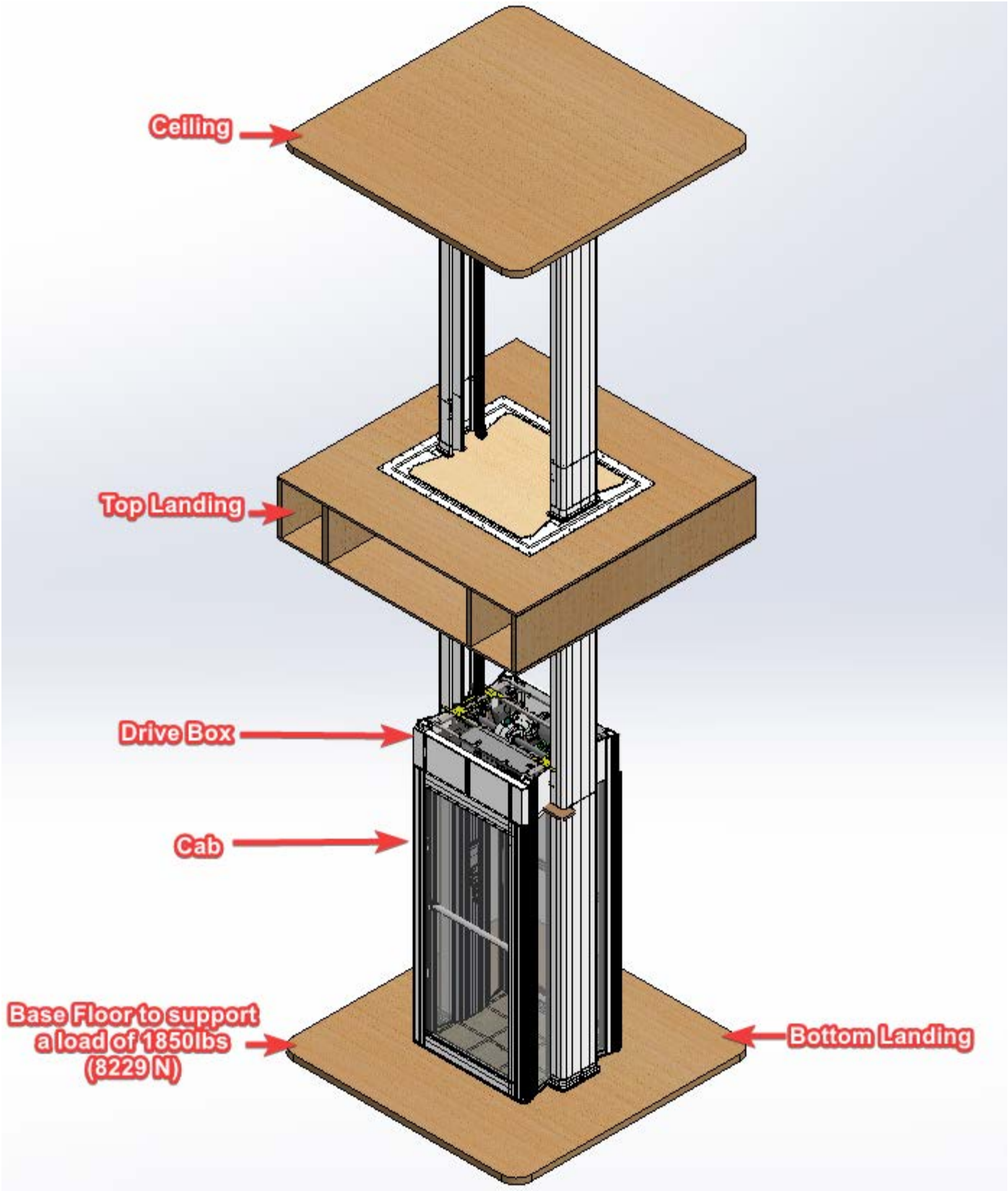
Model Specifications

Figure 1: Luma Completed Diagram



Specifications

Specification	Specification Data
Load capacity	180 kg /400 lbs
Nominal speed	0.076 m/s - 15 ft/min
Power supply	100-240 VAC, Single phase, 15A (max)
Drive system	Winding Drum
Operating temperature	10 C to +35 C
Cab sizes	Type1: 739mm x 706 mm (29.1" X 27.8") Type 2: 739mm x 655 mm (29.1" X 25.8")
Cab panel finish	Clear Acrylic
Cab interior height	2000mm (78.74 in) / 1905 mm (75 in)
Cab floor area	0.57 m^2 (890 in^2)
Maximum travel	4200 mm (165.35")
Distance between 2 landings	300 mm (11.8 in)
Noise Level (Typical Installation)	55 db
Daily Cycle	40
Levels Serviced	2
Overhead Clearance (Minimum) for 2000 mm cab	2402 mm (94.5 in)
Overhead Clearance (Minimum) for 1905 mm cab	2307 mm (90.8 in)
Minimum Lower ceiling height (2000mm cab)	2099 mm (82.64 in)
Minimum Lower ceiling height (1905mm cab)	2004 mm (78.9 in)
Max distance from lower landing to top ceiling(2000 mm Cab)	6601 mm (259.9 in)
Max distance from lower landing to top ceiling (1905 mm Cab)	6505 mm (256.14 in)
Floor Thickness	MIN- 200mm (7.8 in) MAX -360mm (14.17 in)
Control system	Universal Vertical Controller
Compliance	ASME 17.1, EN 81-41
Safety feature	Overspeed Slack rope Manual lowering E-stop Top & Bottom safety pans.
Phone System	One Touch Alert
Options	Type 1&2 Standard Height Lower height

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.

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 floor base loads imposed by the equipment. Refer to the section, Load Calculations.

Electrical

Electrical Requirements

110/220 VAC, 1 PH Power supply, provided near the floor opening.

Permanent Power

Before installation can begin, permanent power must be supplied.

Site Preparation

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

Finished Floors

- Finished floors be installed at all landing levels.

Electrical Outlet

- 220-volt, single-phase power source should be provided, as specified in the site preparation instructions.

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 Opening

- It is recommended that any floor opening be finished prior to installation.floor openings are visible after elevator installation is completed.

Check Floor to Floor Maximum and Minimum Distances

- 94.5" (2402 mm) minimum overhead distance from upper floor level to the underside of the finished ceiling for standard cab (2000mm Internal height CAB) configuration.
- 90.8" (2307 mm) minimum overhead distance from upper floor level to the underside of the finished ceiling for cab of 1905 mm Internal height configuration.

Drywall and Painting

- All drywall and painting must be complete.

Load Calculations

- Primary loads are carried by two rails that run from top to bottom on the elevator.
- The load (represented below as Lower Floor Total Load) is supported on plates at the bottom of each of the rails.
- Luma is 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: Luma is designed for applications in buildings that maintain consistent floor to floor height as the building ages.

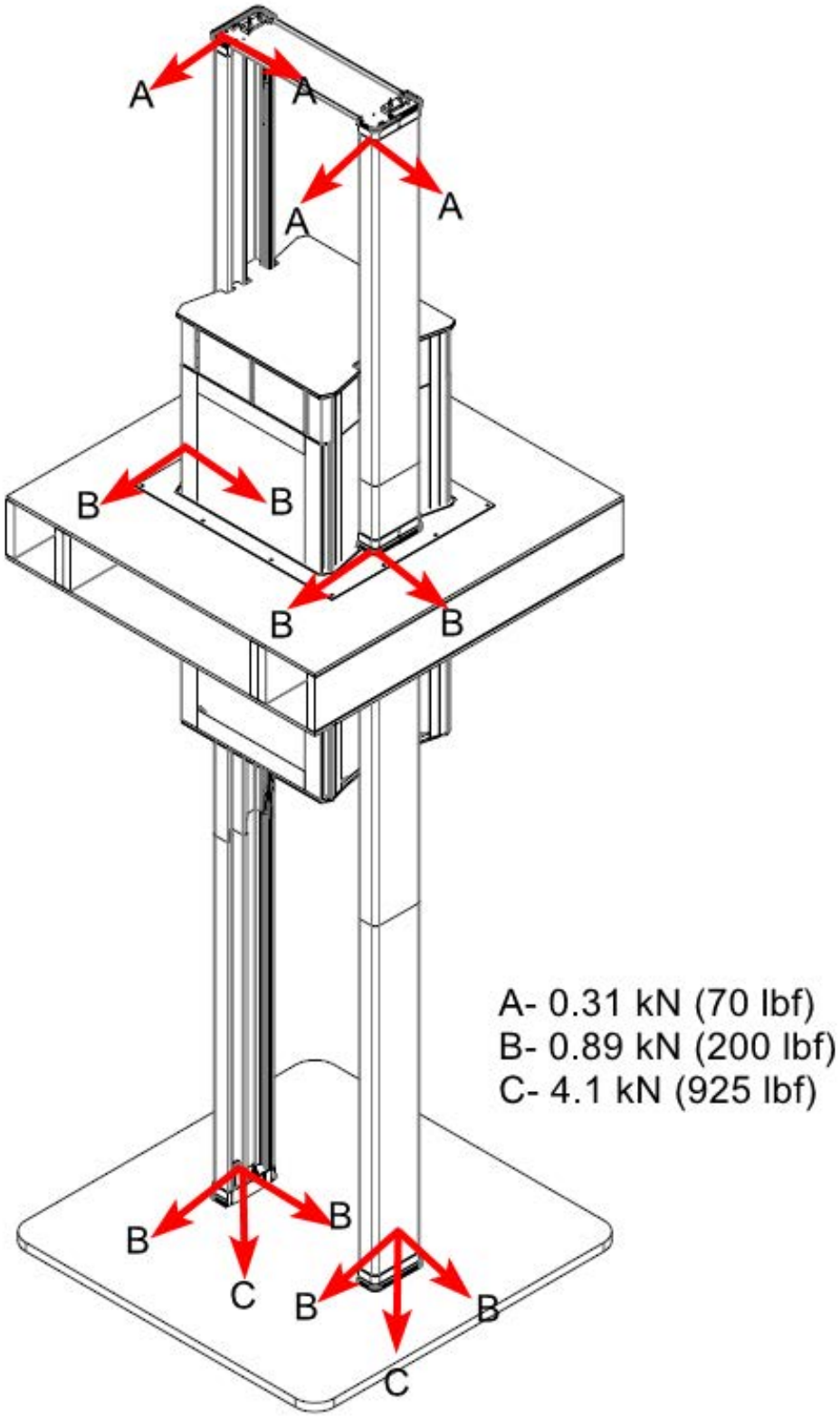
  If floor to floor height changes after installation, the elevator MUST be taken out of service pending inspection and correction by a trained installation technician.
- All mid floors including the bottom floor may be subjected to a maximum lateral load of 200 lbf.
- Where necessary, the building construction shall be reinforced to provide adequate support for the 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.

Drawings

Site construction Details

Luma requires a floor base capable of supporting a minimum load of **1850 lbs (8229 N)**. The loads mentioned in the image below are per rail.

Figure 2: Support Load Diagram



Site Preparation

Floor Opening

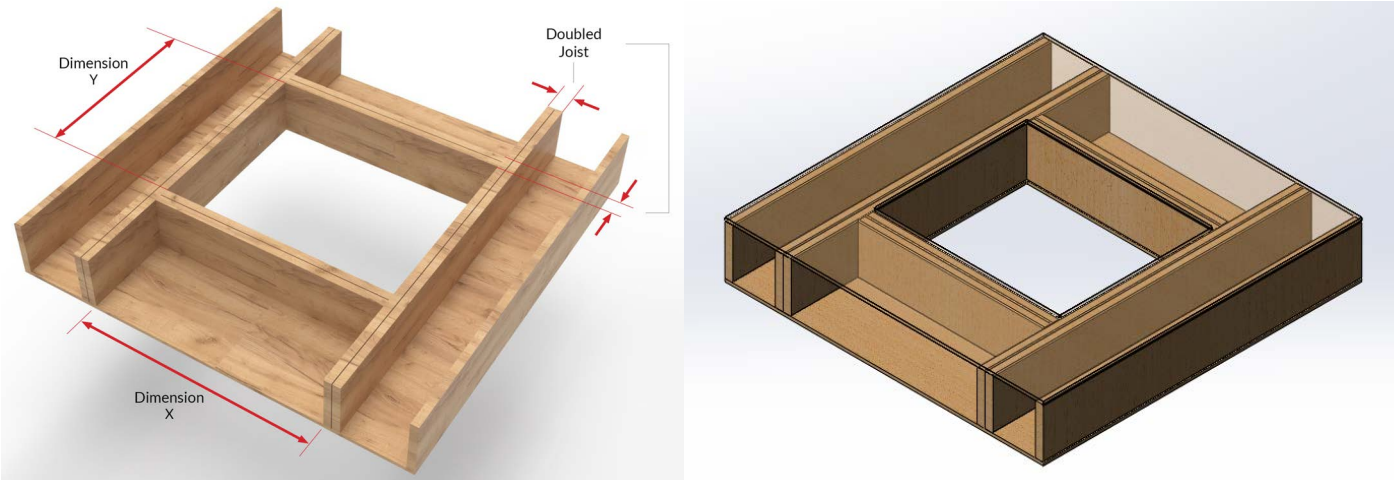
Floor Opening on first landing must be Reinforced with double joist on all four sides.

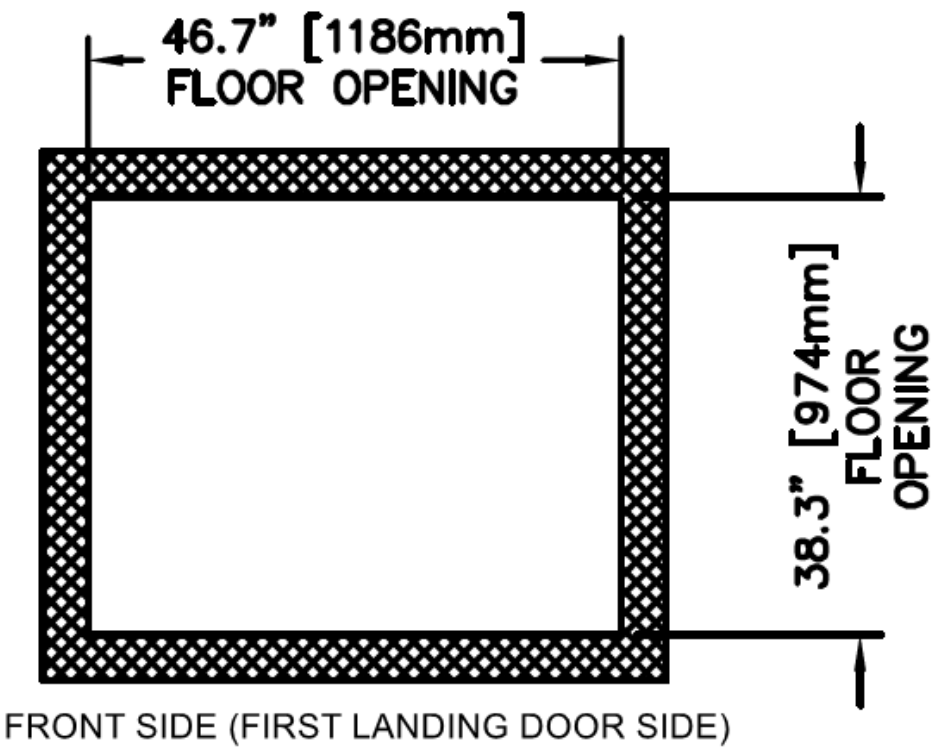
There should be hole preferably on the back side of floor opening for electrical connection as mentioned below.

Dimension X – 46.7" (1186 mm)

Dimension Y – 38.3" (974 mm)

Figure 3:

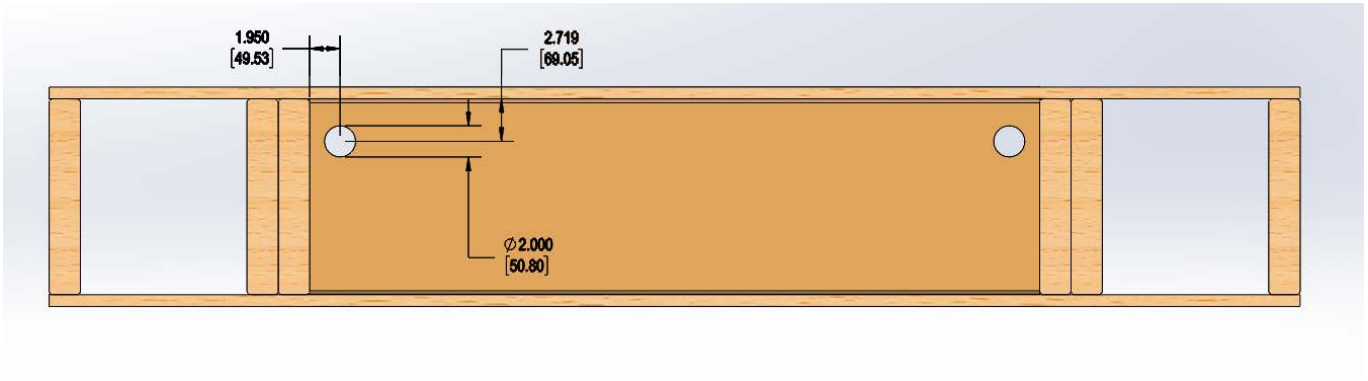


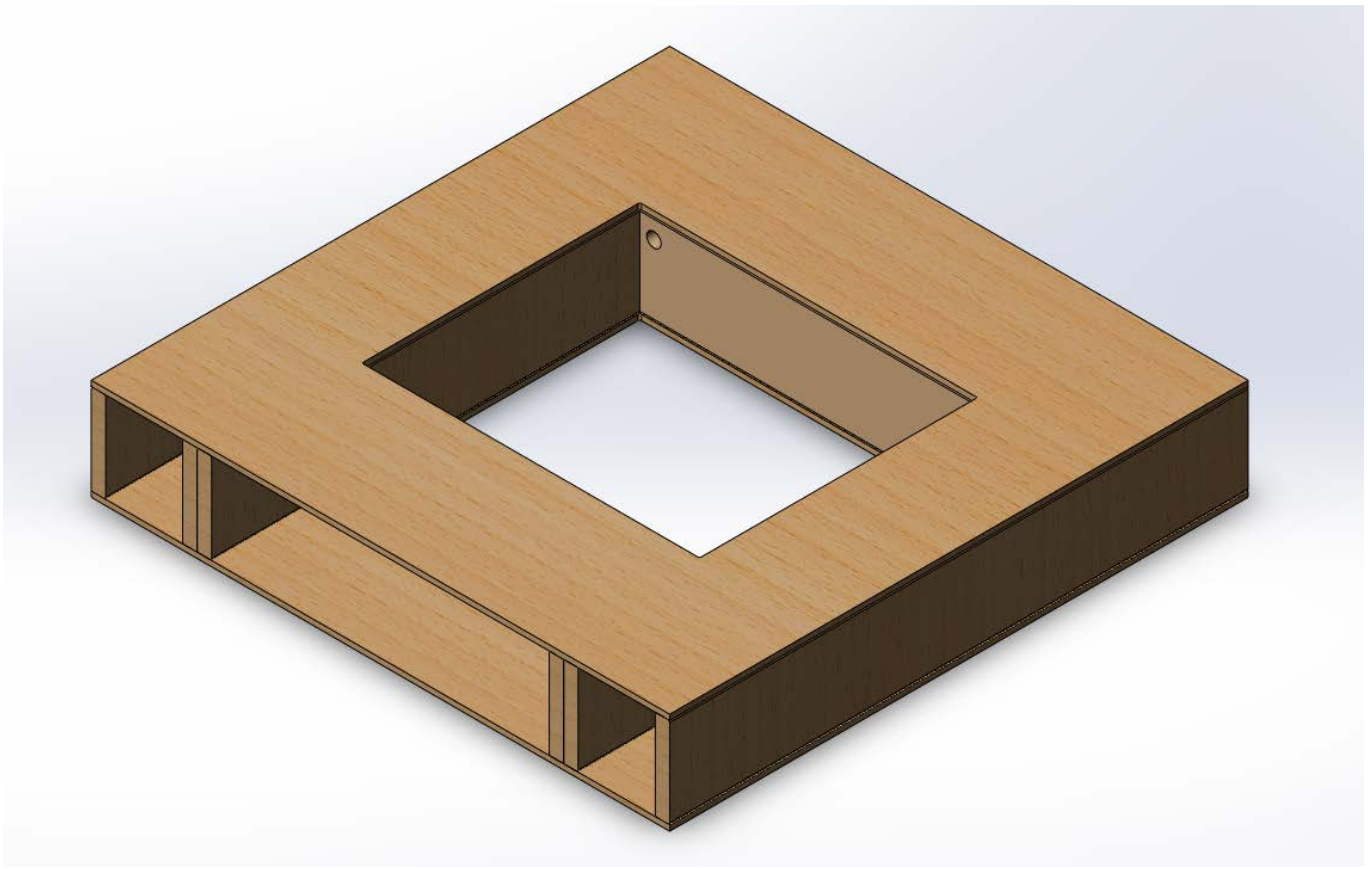


Electrical Provision:

A hole must be provided in the floor opening as previously specified, and the power source must be routed through this hole and made ready for installation. This preparation is the responsibility of qualified personnel, such as the homeowner or contractor, and must be completed prior to installation.

Figure 4:





As part of the site preparation, a 110/120 VAC, 1 PH power cable must be routed through the floor opening.

Figure 5:

Minimum Space requirement:

Figure 6: Type 1

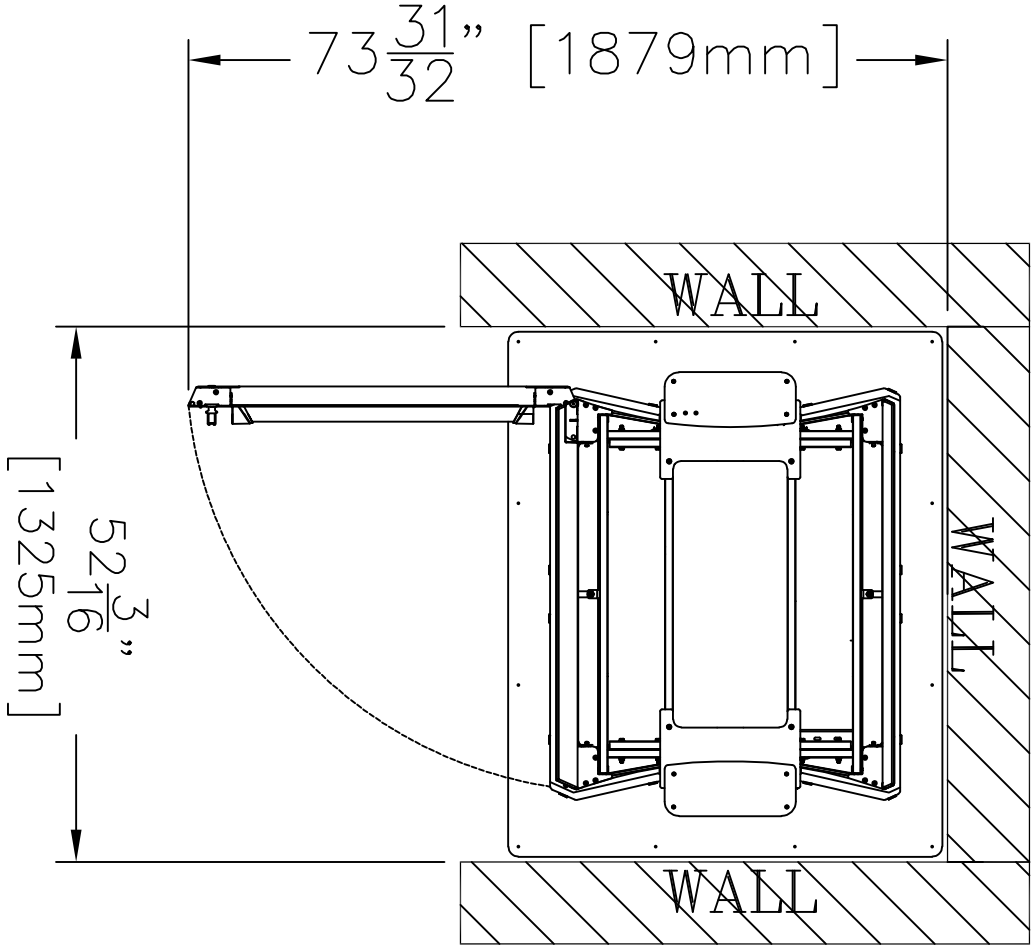
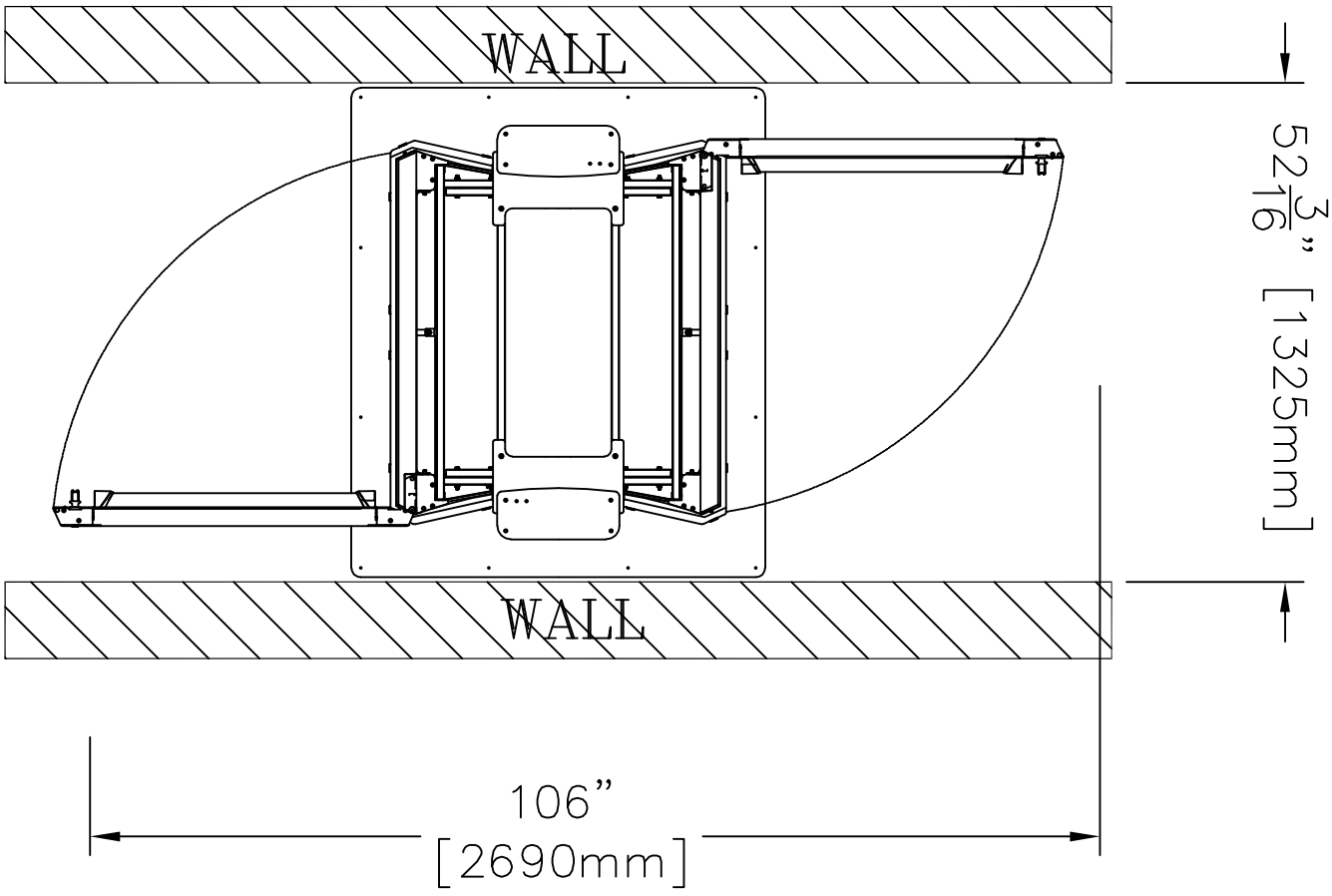


Figure 7: Type 2



Elevation View

The following illustration shows the general elevation view and dimensions of the Luma

Note that the minimum overhead clearance is **94.5" (2402 mm)** for a **2000 mm inside height cab** and **90.8" (2307 mm)** for a **1905 mm inside height cab**. Please refer to your site-specific installation drawings for details relevant to your job site.

Figure 8: Luma - 2000 mm Cab

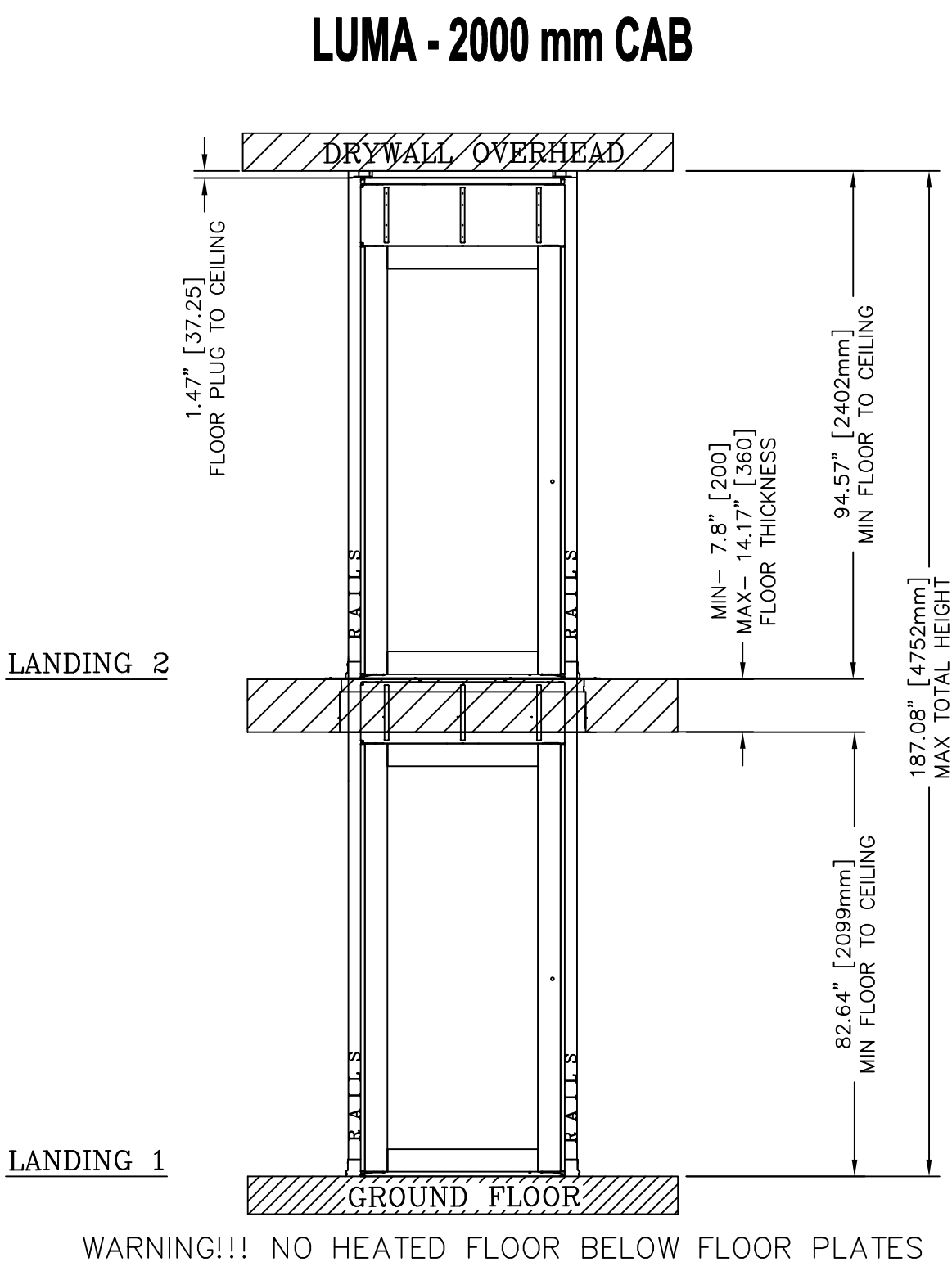


Figure 9: Luma - 1905 mm Cab

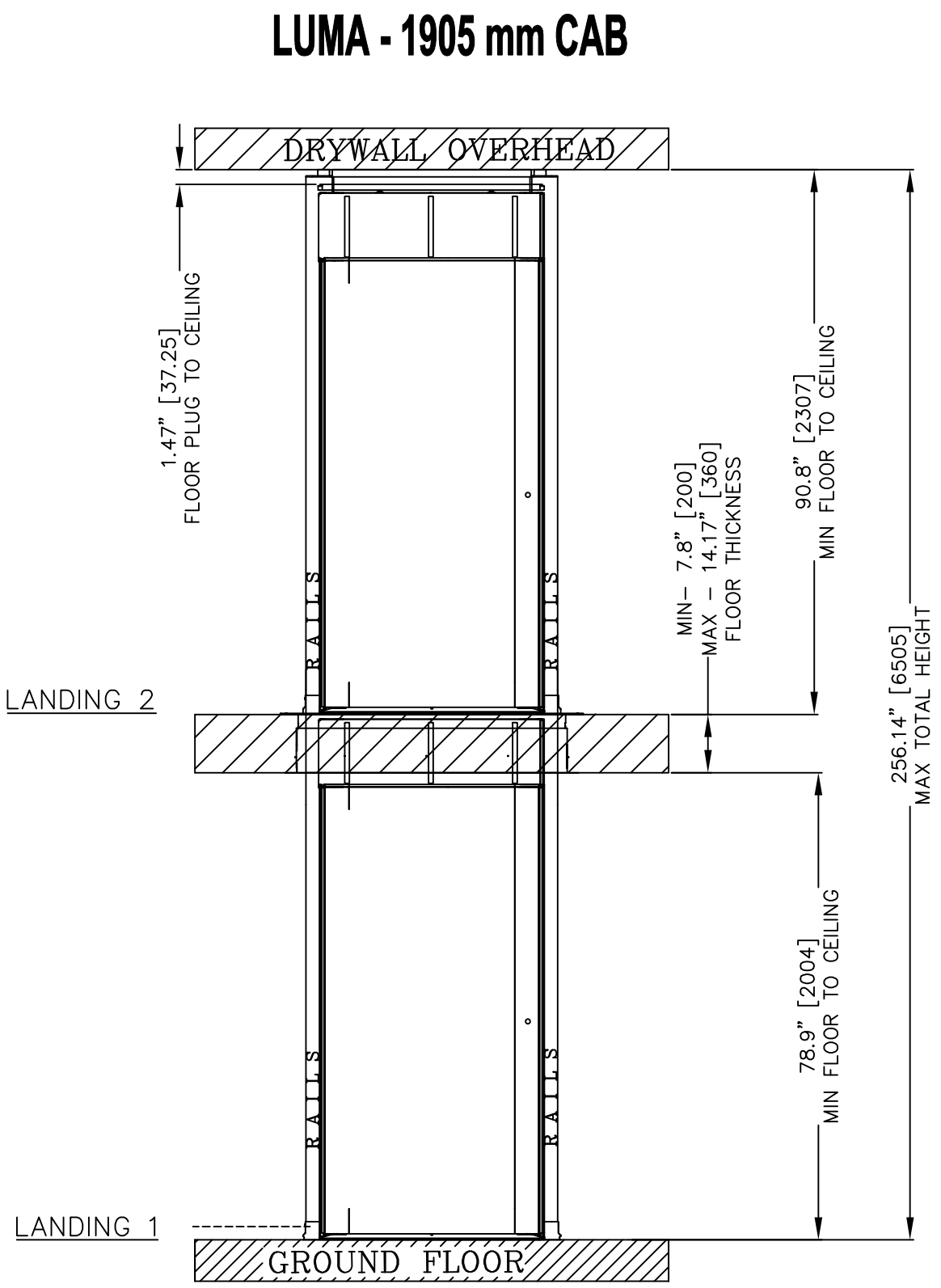


Figure 10: Luma 2000 mm - Specifications Page 1

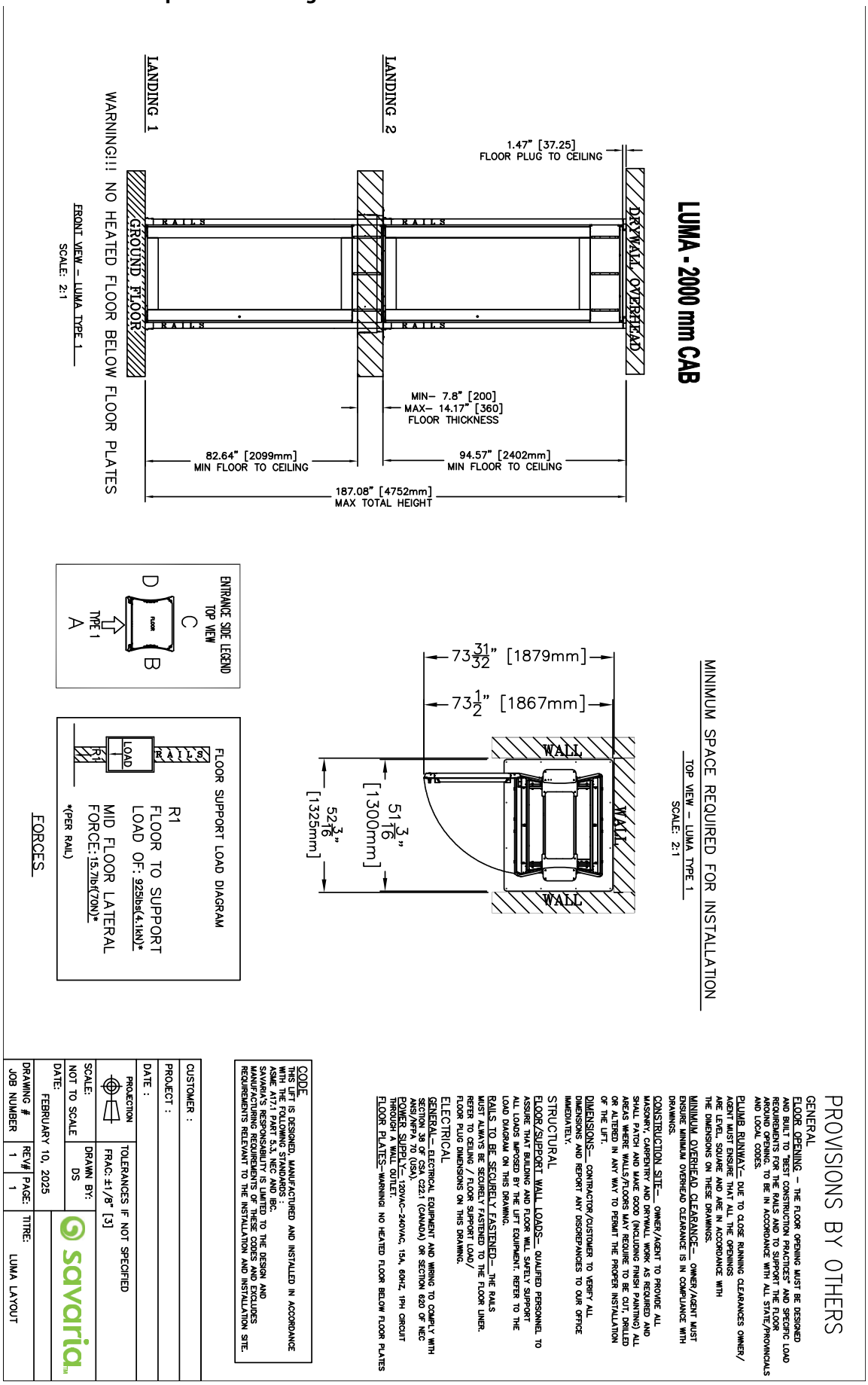
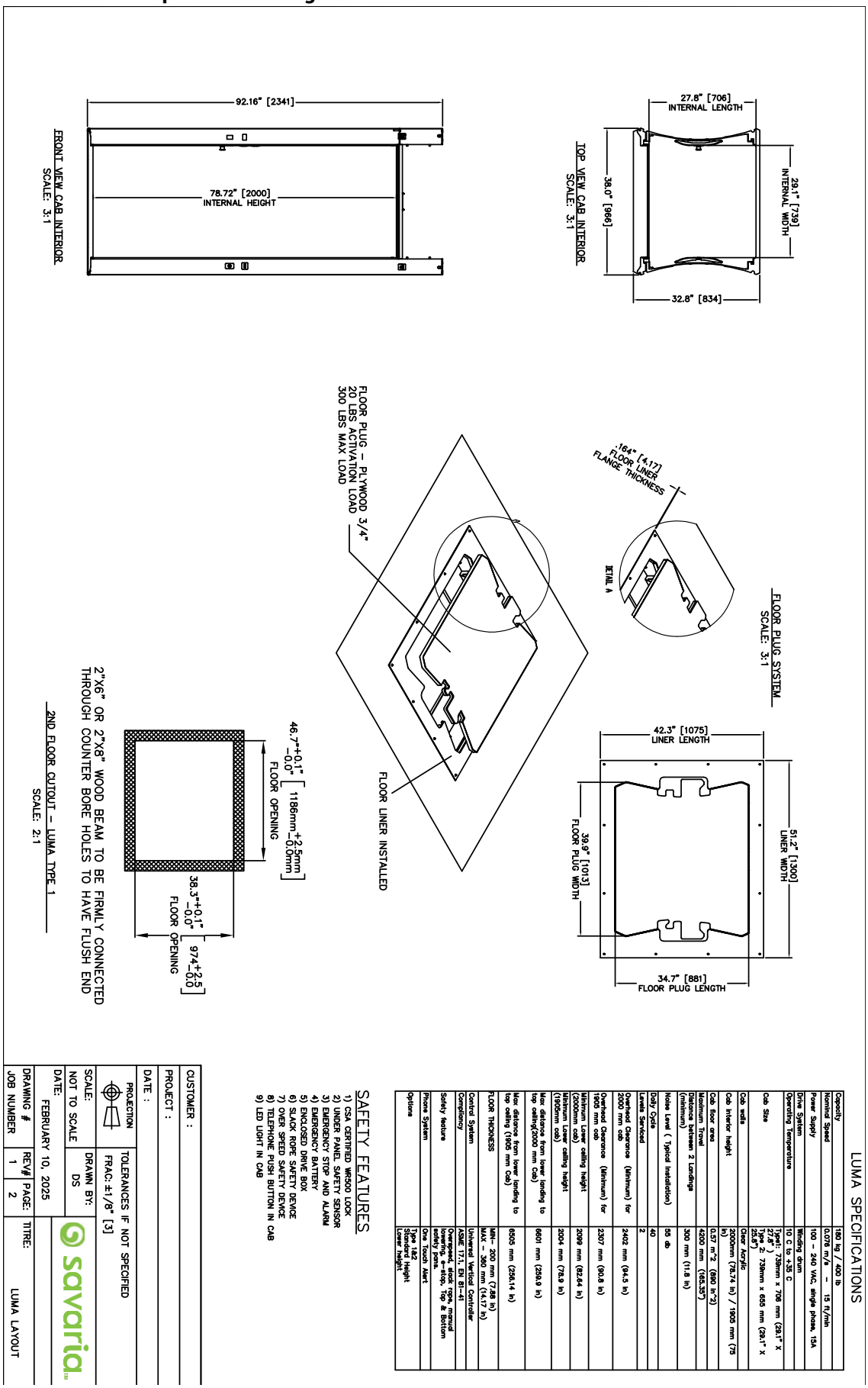


Figure 11: Luma 2000 mm - Specifications Page 2



LUMA SPECIFICATIONS

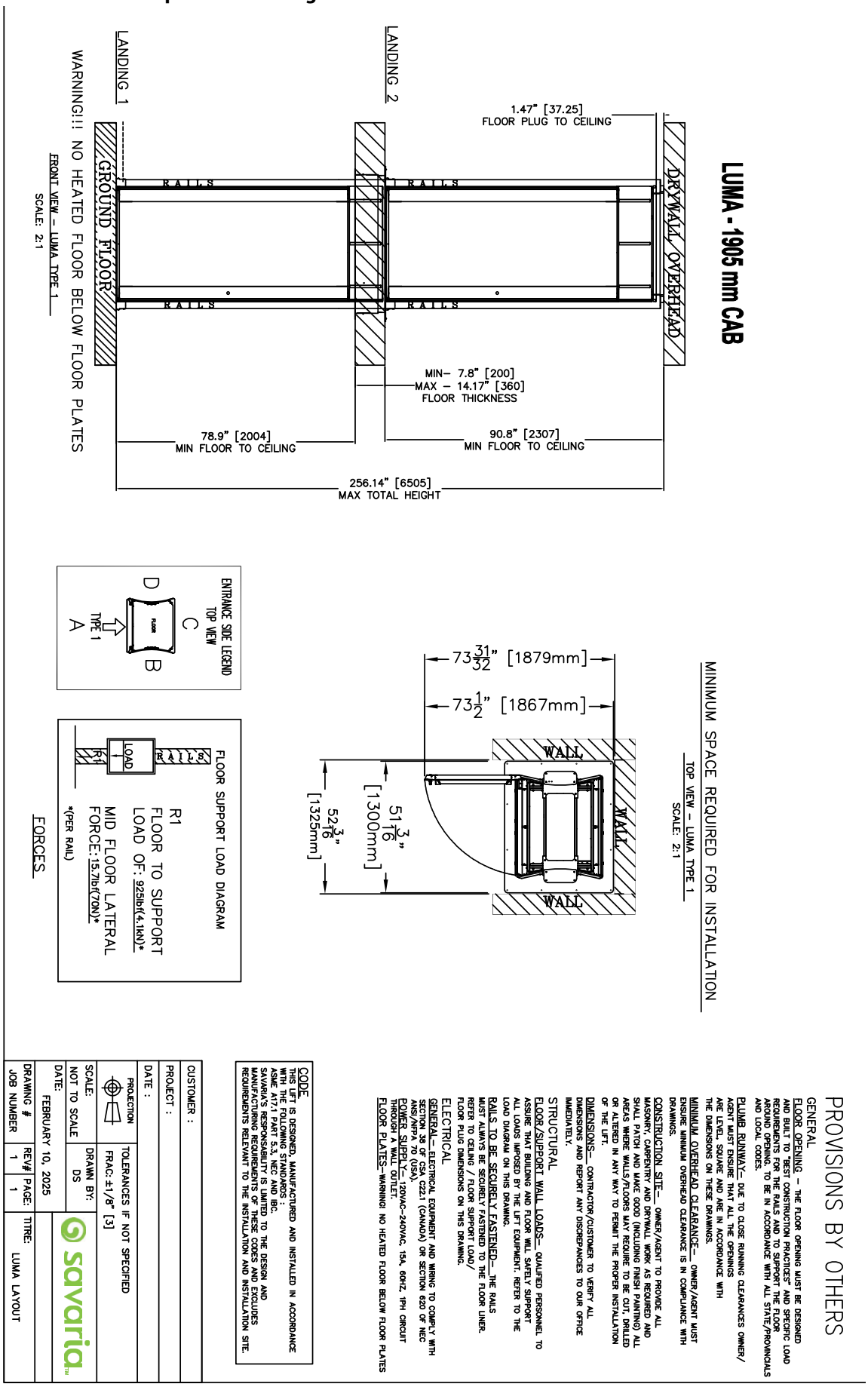
Capacity	180 kg / 400 lb
Nominal Speed	0.075 m/s – 15 ft/min
Power Supply	100 – 240 VAC, single phase, 15A
Drive System	Winding drum
Operating Temperature	10 C to +35 C
Cab Size	Type 1: 738mm x 708 mm (29.1" x 27.8") Type 2: 738mm x 655 mm (29.1" x 25.8")
Cab walls	Clear Acrylic
Cab interior height	2000mm (78.74 in) / 1905 mm (75 in)
Cab floor area	0.57 m^2 (880 in^2)
Maximum Travel	4200 mm (165.35")
Distance between 2 Landings (minimum)	300 mm (11.8 in)
Noise Level (Typical Installation)	55 db
Daily Cycle	40
Levels Serviced	2
Overhead Clearance (Minimum) for 2000 mm cab	2402 mm (94.5 in)
Overhead Clearance (Minimum) for 1905 mm cab	2307 mm (90.8 in)
Minimum Lower ceiling height (2000mm cab)	2099 mm (82.64 in)
Minimum Lower ceiling height (1905mm cab)	2004 mm (78.9 in)
Max distance from lower landing to top ceiling(2000 mm Cab)	6601 mm (259.9 in)
Max distance from lower landing to top ceiling (1905 mm Cab)	6505 mm (256.14 in)
FLOOR THICKNESS	MIN– 200 mm (7.88 in) MAX – 360 mm (14.17 in)
Control System	Universal Vertical Controller
Compliancy	ASME 17.1, EN 81–41
Safety feature	Overspeed, slack rope, manual lowering, e–stop, Top & Bottom safety parts.
Phone System	One Touch Alert
Options	Top Mounted Stop Switch Height Lower height

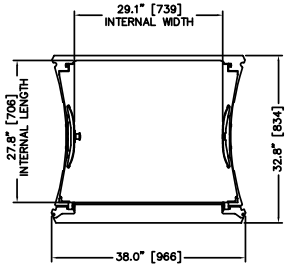
SAFETY FEATURES

1) CSA CERTIFIED WR500 LOCK
2) UNDER PANEL SAFETY SENSOR
3) EMERGENCY STOP AND ALARM
4) EMERGENCY BATTERY
5) ENCLOSED DRIVE BOX
6) SLACK ROPE SAFETY DEVICE
7) OVER SPEED SAFETY DEVICE
8) TELEPHONE PUSH BUTTON IN CAB
9) LED LIGHT IN CAB

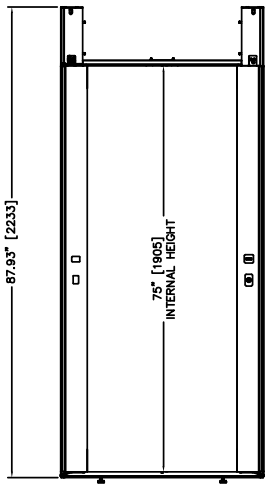
CUSTOMER :			
PROJECT :			
DATE :			
PROJECTION	TOLERANCES IF NOT SPECIFIED		
SCALE: NOT TO SCALE	DRAWN BY: DS	savaria	
DATE: FEBRUARY 10, 2025			
DRAWING # JOB NUMBER	REV# 1	PAGE: 2	TITRE: LUMA LAYOUT

Figure 12: Luma 1905 mm - Specifications Page 1



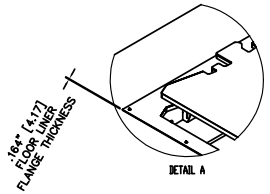


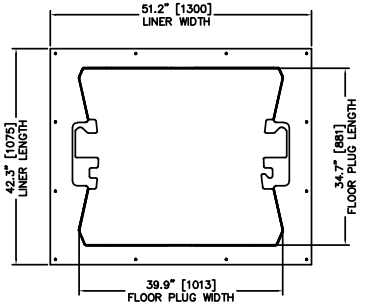
TOP VIEW CAB INTERIOR
SCALE: 3:1

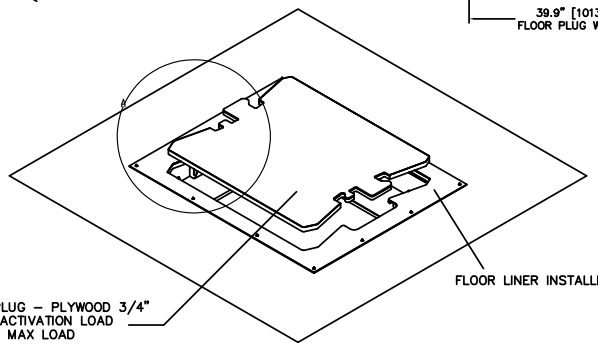


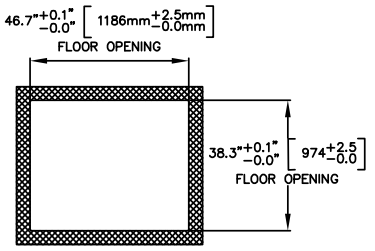
FRONT VIEW CAB INTERIOR
SCALE: 3:1

FLOOR PLUG SYSTEM
SCALE: 3:1









2"X6" OR 2"X8" WOOD BEAM TO BE FIRMLY CONNECTED THROUGH COUNTER BORE HOLES TO HAVE FLUSH END

2ND FLOOR CUTOUT – LUMA TYPE 1
SCALE: 2:1

LUMA SPECIFICATIONS

Capacity	180 kg / 400 lb
Nominal Speed	0.076 m/s – 15 ft/min
Power Supply	100 – 240 VAC, single phase, 15A
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Operating Temperature	10 C to +35 C
Cab Size	Type1: 739mm x 706 mm (29.1" X 27.8") Type 2: 739mm x 655 mm (29.1" X 25.8")
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Phone System	One Touch Alert
Options	Type 1&2 Standard Height Lower height

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4) EMERGENCY BATTERY
5) ENCLOSED DRIVE BOX
6) SLACK ROPE SAFETY DEVICE
7) OVER SPEED SAFETY DEVICE
8) TELEPHONE PUSH BUTTON IN CAB
9) LED LIGHT IN CAB

CUSTOMER :			
PROJECT :			
DATE :			
PROJECTION	TOLERANCES IF NOT SPECIFIED FRAC: ±1/8" [3]		
SCALE: NOT TO SCALE	DRAWN BY: DS	savaria	
DATE: FEBRUARY 10, 2025			
DRAWING # JOB NUMBER	REV# 1	PAGE: 2	TITRE: LUMA LAYOUT

Figure 13: Luma 1905 mm - Specifications Page 2

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Luma

Residential Elevator
PLANNING GUIDE

Part No. 001562, Rev. 000
05-m05-2025

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