

Savaria® Luma

Through-floor lift

PLANNING GUIDE



Applicable Codes:

ASME A17.1/CSA B44 2022, Section 5.3
EN81-41-2024

 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 below. 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.

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, 2024

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.

Revision History of This Guide

July 31, 2025 - Initial release

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Product Elements Diagram

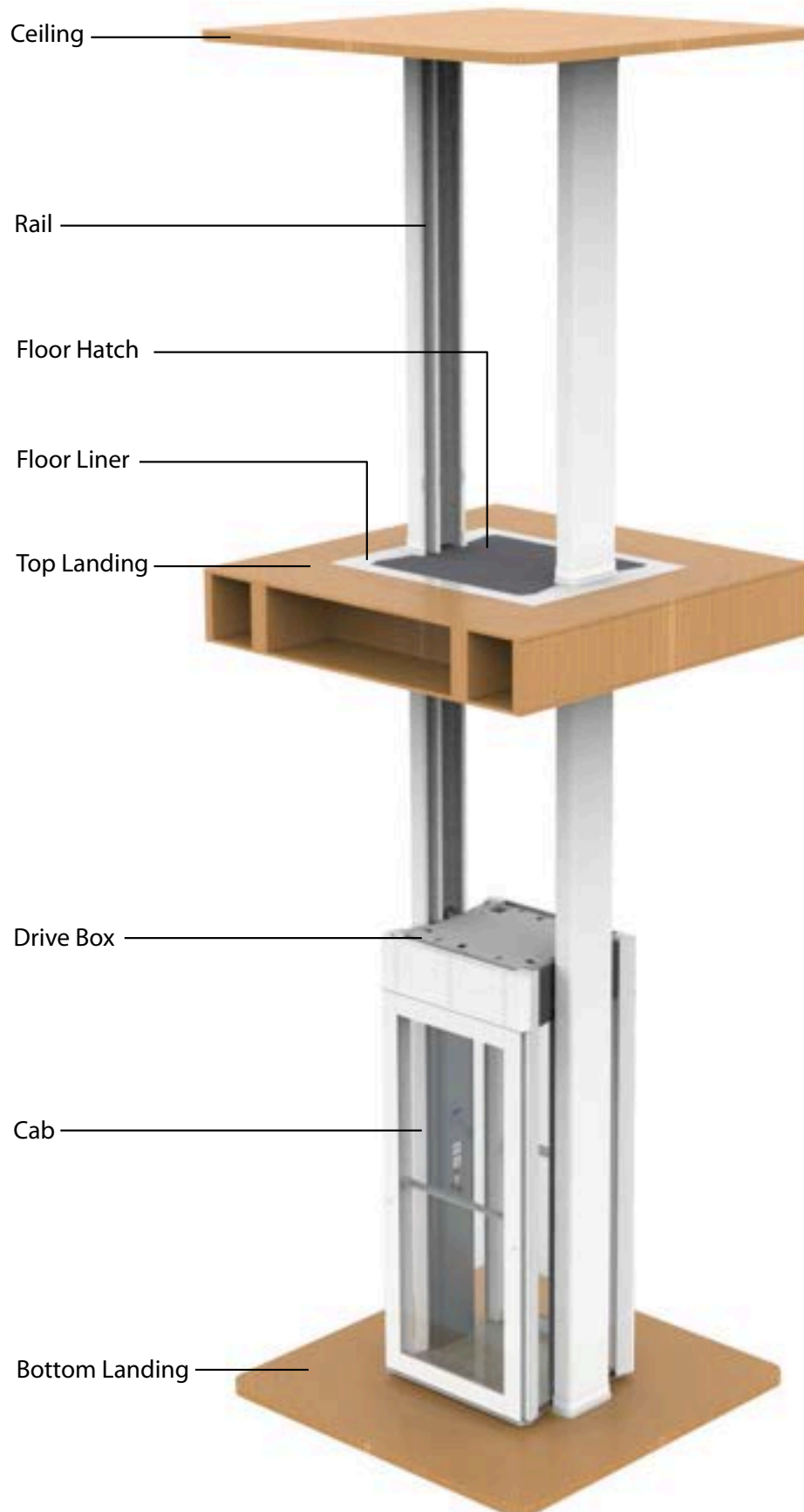




Figure 1: Luma lift diagram

Technical Specifications

NOTE: Imperial values rounded to 1/4"

Specification	Specification Data
Load capacity	180 kg (400 lbs)
Nominal speed	0.066 m/s (13 ft/min)
Power supply	110 - 240 VAC, Single phase, 5A
Drive system	Winding drum. 24 VDC Motor (Battery operated)
Operating temperature	+10 C to +35 C
Batteries	2x, 12 VDC, 18 Ah
Charging	Charge stations positioned at the top and bottom landing
Cab sizes	Type 1: 739 mm x 706 mm (29" X 27 3/4") Type 2: 739 mm x 655 mm (29" X 25 3/4")
Cab panel finish	Clear Acrylic
Cab interior height	2000 mm (78 3/4") / 1905 mm (75")
Cab floor area	Type 1: 0.52 m ² (809 in ²) Type 2: 0.48 m ² (751 in ²)
Maximum travel	4200 mm (165 1/4")
Noise level (Typical installation)	60 db (average inside cab)
Daily cycle	10 starts per hour (5 round trips) 30 starts per day (15 round trips)
Levels serviced	2
Minimum distance between 2 landings	2000 mm (78 3/4") Cab - 2380 mm (93 3/4") 1905 mm (75") Cab - 2285mm (90")
Minimum ceiling height from top floor to ceiling (2000 mm cab)	2400 mm (94 1/2")
Minimum ceiling height from top floor to ceiling (1905 mm cab)	2310 mm (91")
Minimum lower ceiling height (2000mm cab)	2100 mm (82 3/4")
Minimum lower ceiling height (1905mm cab)	2005 mm (79")
Max distance from lower landing to top ceiling (2000 mm cab)	6600 mm (25 3/4")
Max distance from lower landing to top ceiling (1905 mm cab)	6505 mm (256")
Site floor thickness	Standard: Min - 200 mm (8") Max - 360 mm (14") Custom: (Additional charges will apply) Min- 100 mm (4") Max -915 mm (36")
Floor cut-out dimensions	956 mm x 1186 mm (37 3/4" x 46 3/4")

Specification	Specification Data
Control system	Savaria Universal Vertical Controller
Compliance	ASME A17.1/CSA B44 2022, Section 5.3, EN 81-41, 2024
Safety feature	Overspeed protection Slack rope Manual lowering E-stop Top & Bottom safety pans Emergency power Cab floor interlocks
Phone system	One Touch Alert GSM Based (SIM card by others) -Supported: 4G LTE / Volte nano sim -Not supported: 5G, E-sim
Ventilation mode	Fan
Color of unit	Cab- White Powder coating PS111W2 Rails- White Powder coating PS111W2 COP and Opposite panel- Silver Velvacoat PK612s3
Interior cab floor finish	Altro- Bleached Oak (WSA2001)
Floor hatch finish	Altro- Symphonia Hibiscus (SY20005)
Cop panel	Can be mounted on either side
Call station	Handheld, Wall mounted 2 Button Remote- 868MHz for EU 2 Button Remote- 915MHz for NA
Remote diagnostic tool	Savaria Link (Wi-Fi Connection required)
Emergency operation	Full up and down travel on power interruption up to 10 starts, 5 round trips (full battery backup).
Options	<p>Type 1</p>  <p>Type 2</p>  <p>Standard height (2000 mm (78 3/4")) Lower height (1905 mm (75")) Door - Left hand/Right hand</p>

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 site dimensions prior to delivery of the unit.

Heated Floor

No heated floor below floor plates.

STRUCTURAL

Floor Loads

A structural engineer or qualified professional as required by your authority having jurisdiction is required to ensure the building will safely support all loads imposed by the lift equipment inclusive of additional safety factors required locally. Refer to the tables on the installation drawing or load pages of this guide.

ELECTRICAL

Electrical Requirements

110/240 VAC, Single Phase, capable of supplying 5 amps. Electrical connection must follow the guidelines outlined on site preparation section. Alternatively, a dedicated outlet located near the floor cut-out may be used to plug in the charger and route the necessary wiring to the elevator.

Permanent Power

Before installation can begin, permanent power must be supplied.

RF Wireless Call Station

Handheld, Wall mounted. 2 Button remote (Figure 2)

- 868MHz for EU

- 915 MHz for NA



Figure 2: Radio-frequency remote control

Site Preparation

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

Fire Rated Area

Luma is not suitable for installation in areas or rooms that require fire-rated protection or are part of a designated smoke barrier (i.e. garage).

Finished Floors

Finished floors be installed at both landings.

Floor Built for Load

Smooth level surface for installing the elevator, with floor load bearing capacity for the elevator plus rated load.

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 is supported on plates at the bottom of each of the rails.
- Luma is designed to transfer the fully loaded elevator weight and impact forces to the lowest level through the rail base plates, provided it is properly installed in a structurally sound building with consistent floor-to-floor heights. (Figure 3)
- Top floor and 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.
- Floor load figures include elevator structure weight when loaded with full capacity

Drawings

Site construction details

Luma requires a floor base capable of supporting a minimum load of **1850 lbs (8229 N)**.

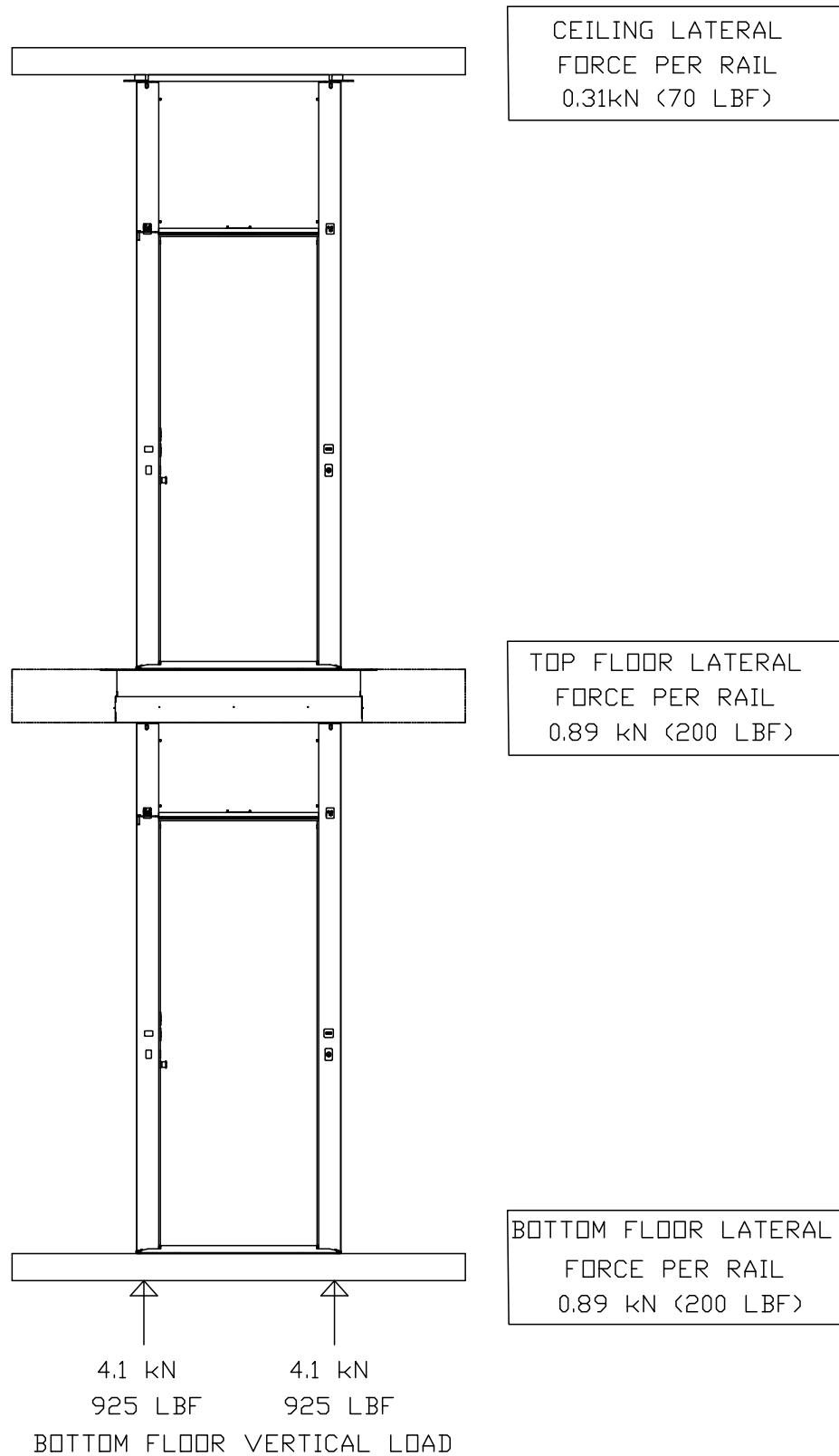


Figure 3: Support Load Diagram

NOTE: The house floor may need to be reinforced prior to elevator installation if there is a habitable space below, to ensure structural integrity and meet safety requirements.

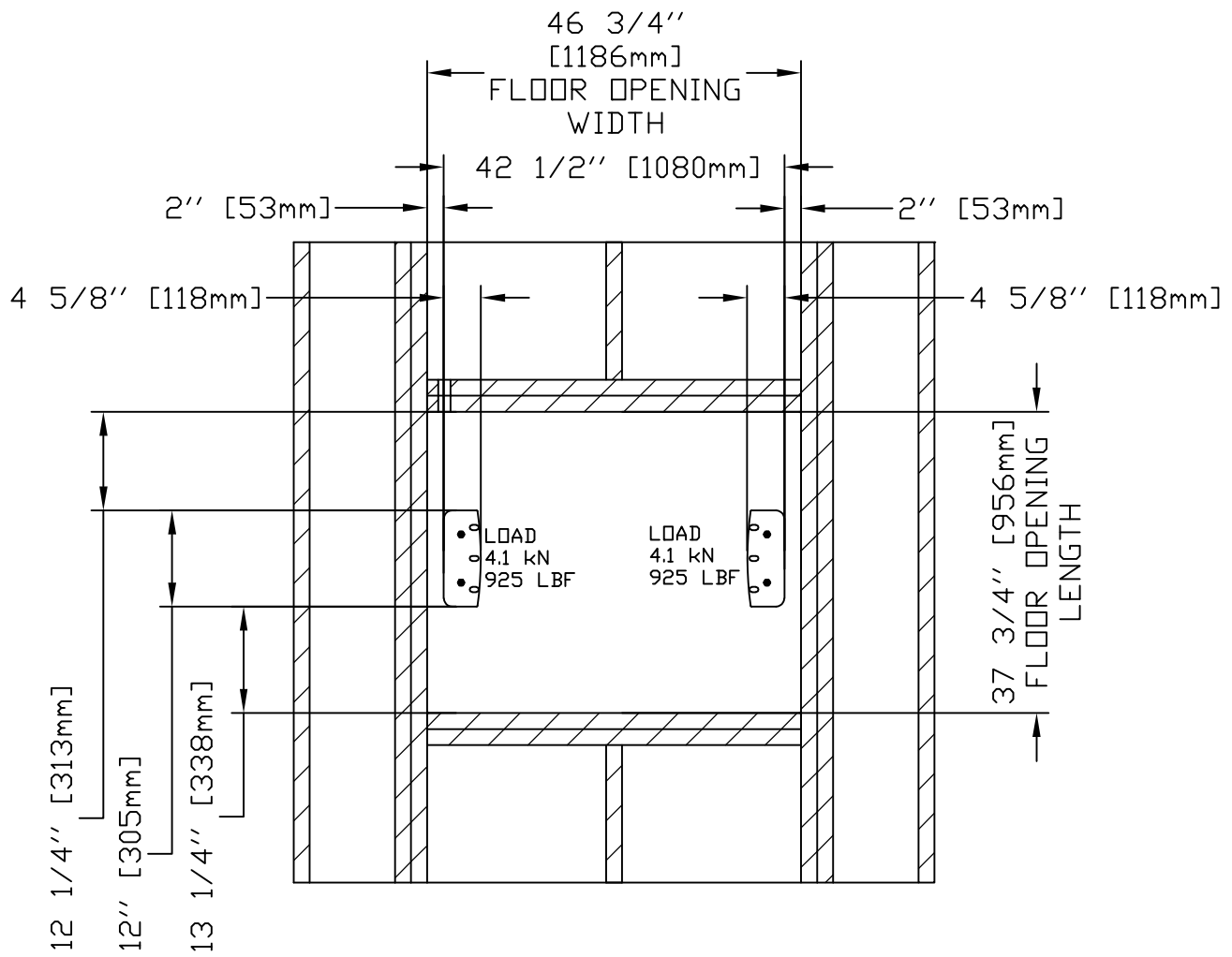


Figure 4: Bottom floor vertical load details

Ground Floor Attachment

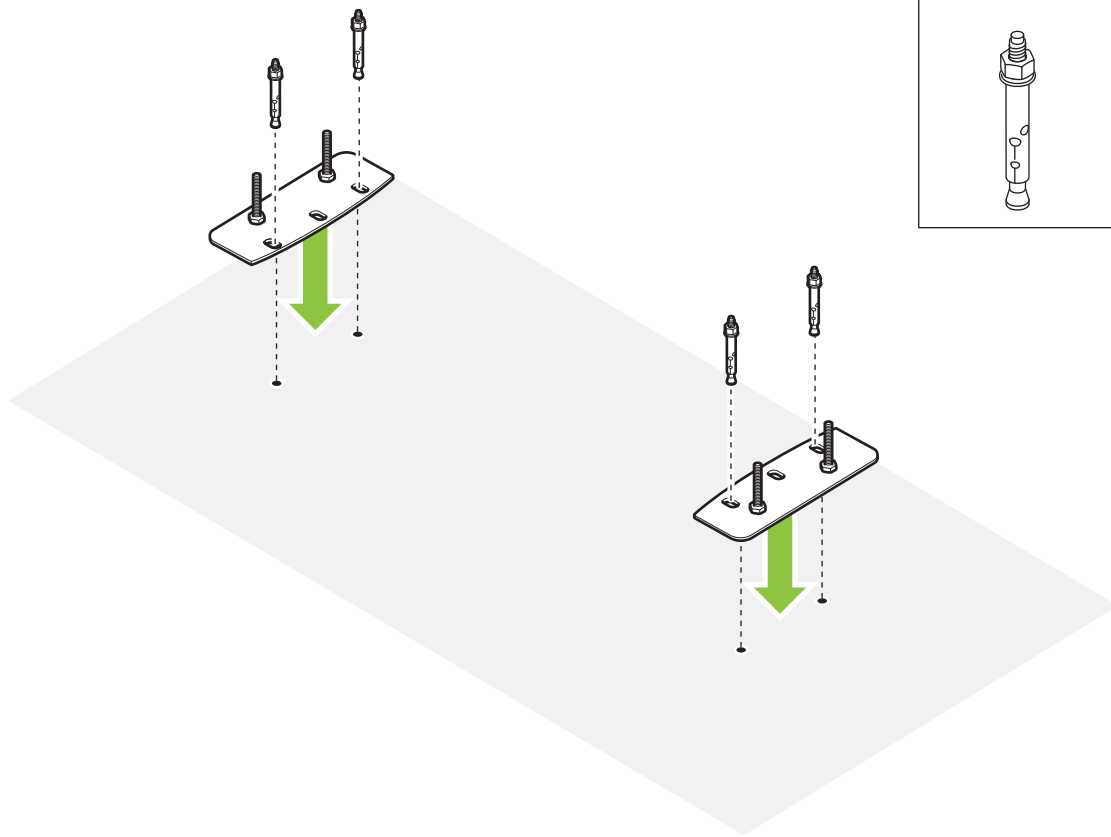


Figure 5: Floor anchor for concrete floor on bottom landing

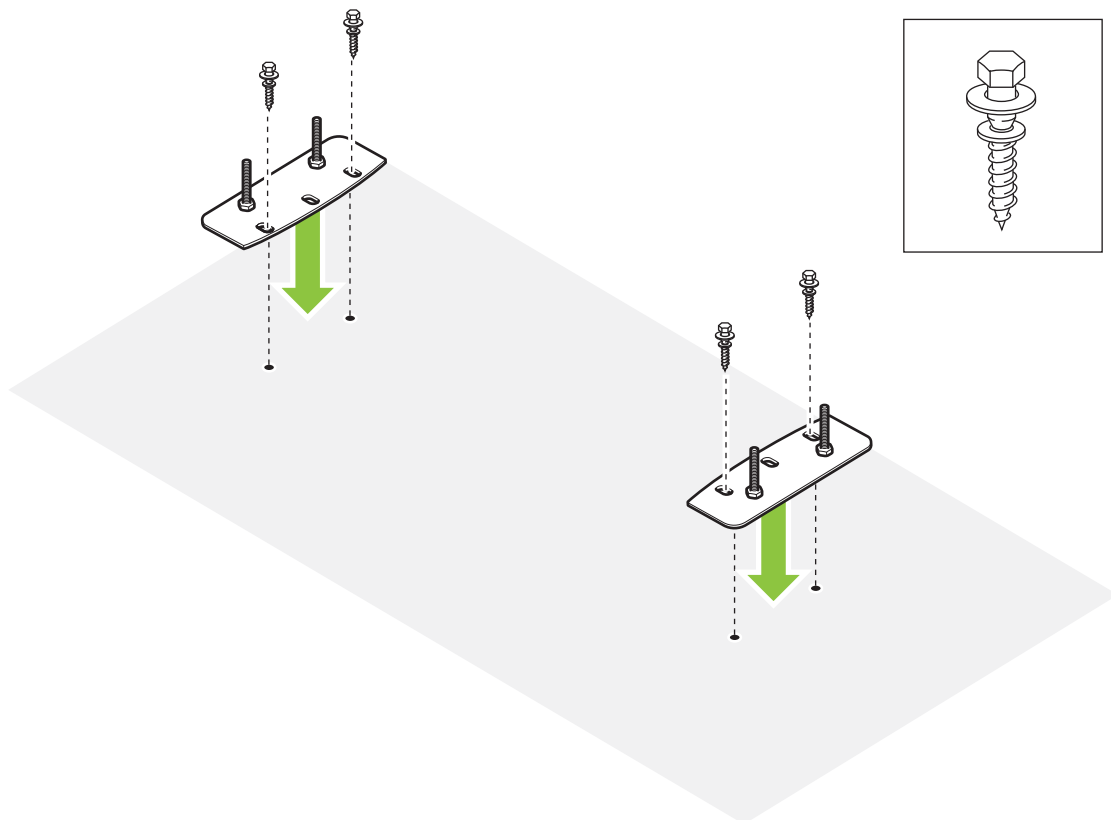


Figure 6: Floor anchor for wooded floors on bottom landing

Ceiling Attachement

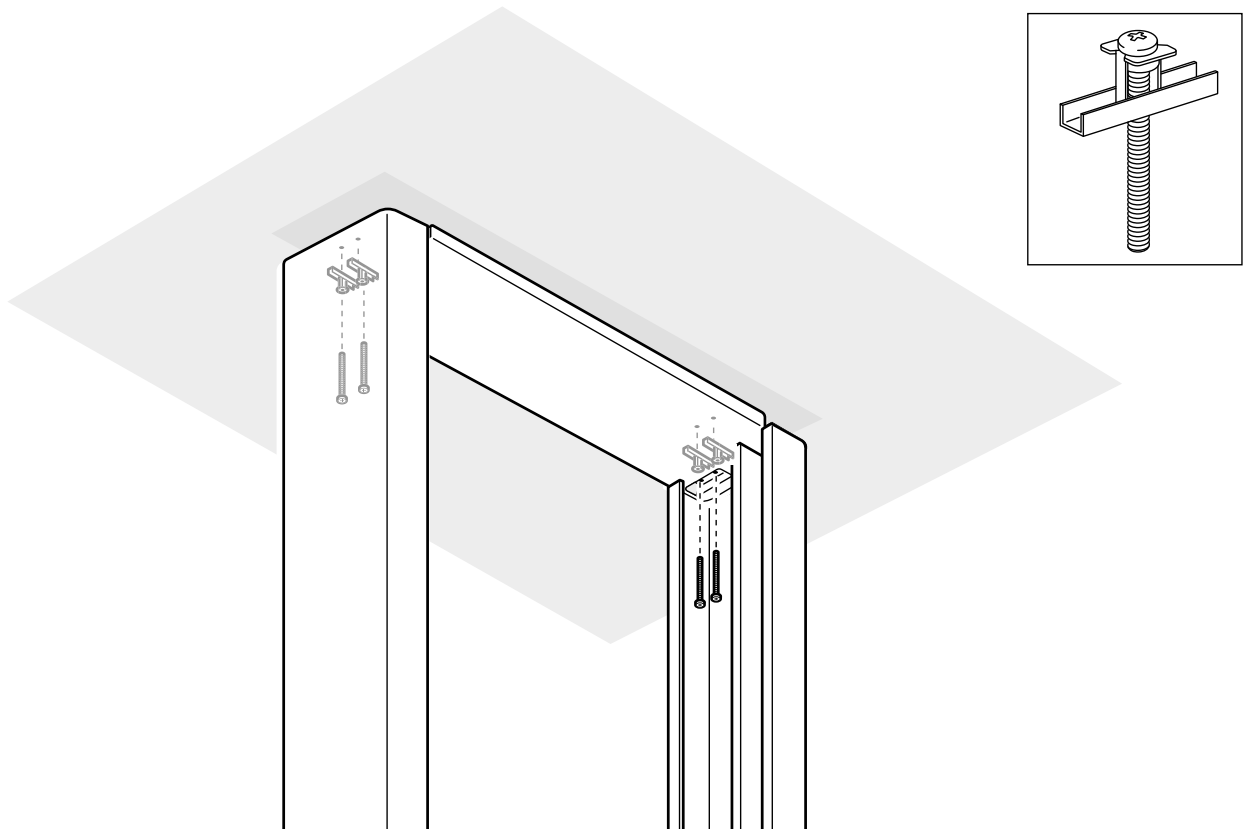


Figure 7: Top ceiling anchor system

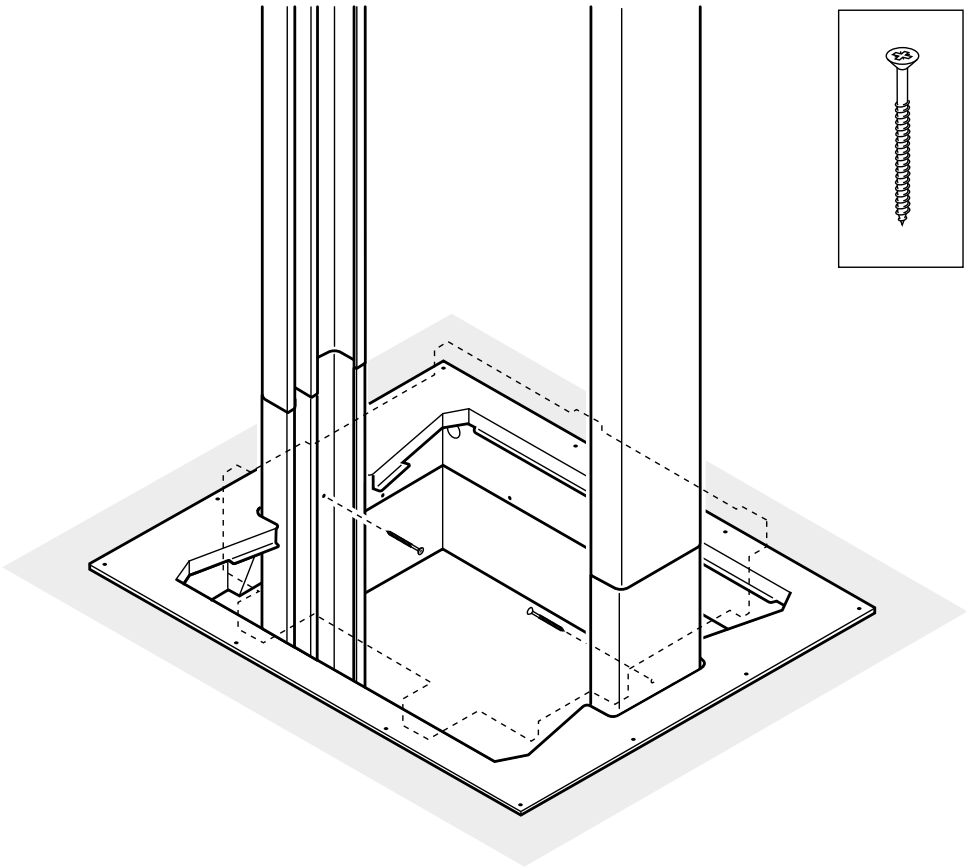


Figure 8: Floor liner anchor system

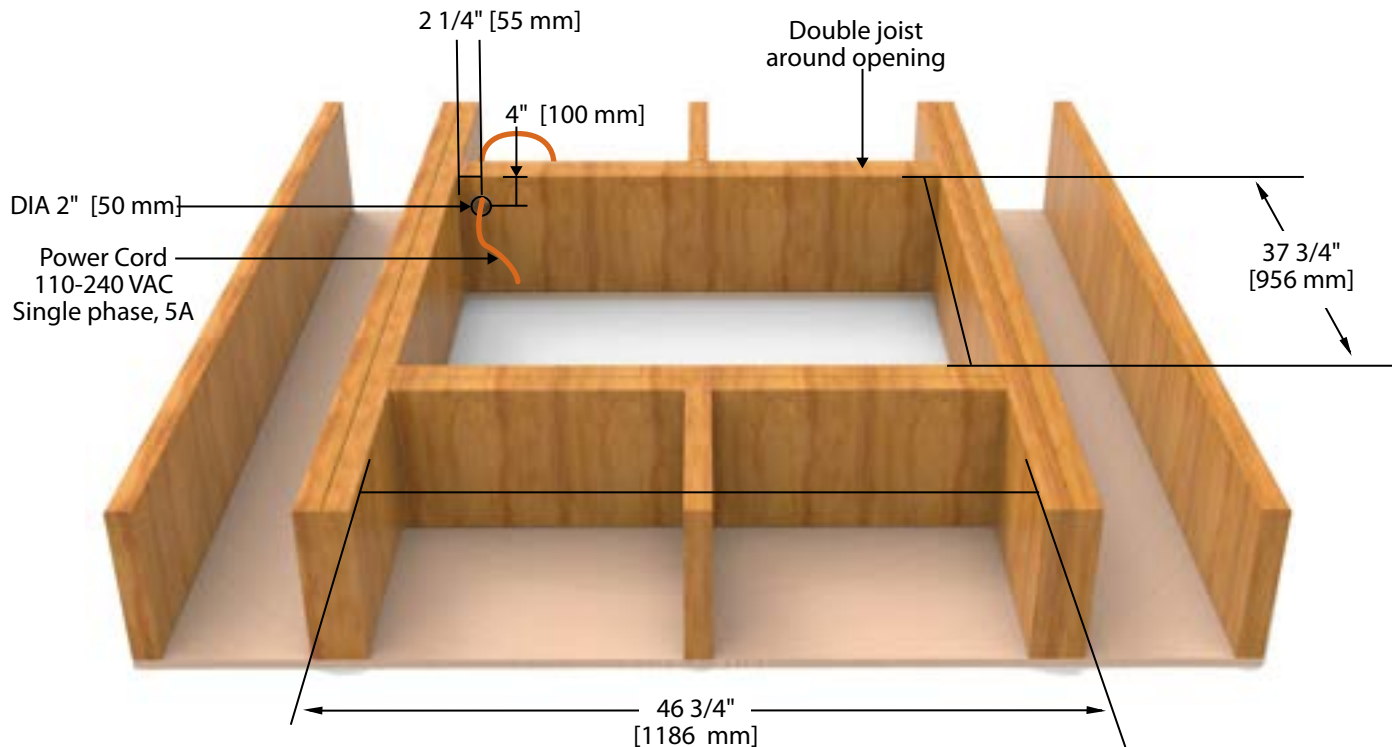
Site Preparation

Floor Opening (Type 1 and 2)

Floor Opening must be Reinforced with double joist on all four sides (Figure 8).

There should be hole on the back side of floor opening for electrical connection (Figure 9).

NOTE: Floor cutout vertical faces don't need to be finished, as they will be covered by the floor liner



Front of the Unit

Figure 9: Top landing floor opening

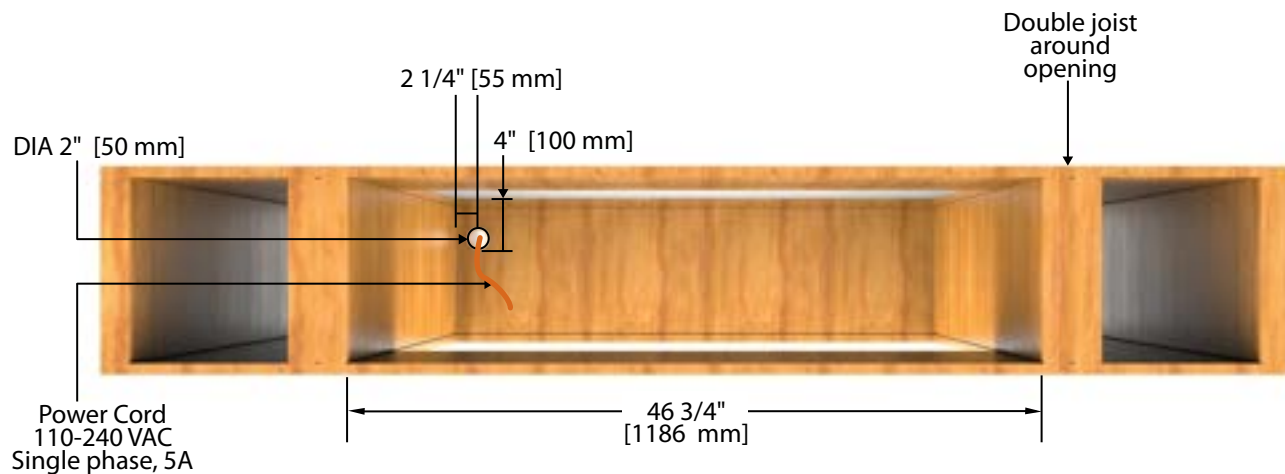


Figure 10: Hole for electrical provision

Electrical Provision:

110–240 VAC, single phase, capable of supplying 5 amps power source is required. As part of the site preparation, the power cable should be routed through the floor opening and made ready for installation (Figure 9). This preparation is the responsibility of the homeowner or contractor and should be completed prior to installation. Alternatively, a dedicated outlet located near the floor cut-out may be used to plug in the charger and route the necessary wiring to the elevator (Figure 10).

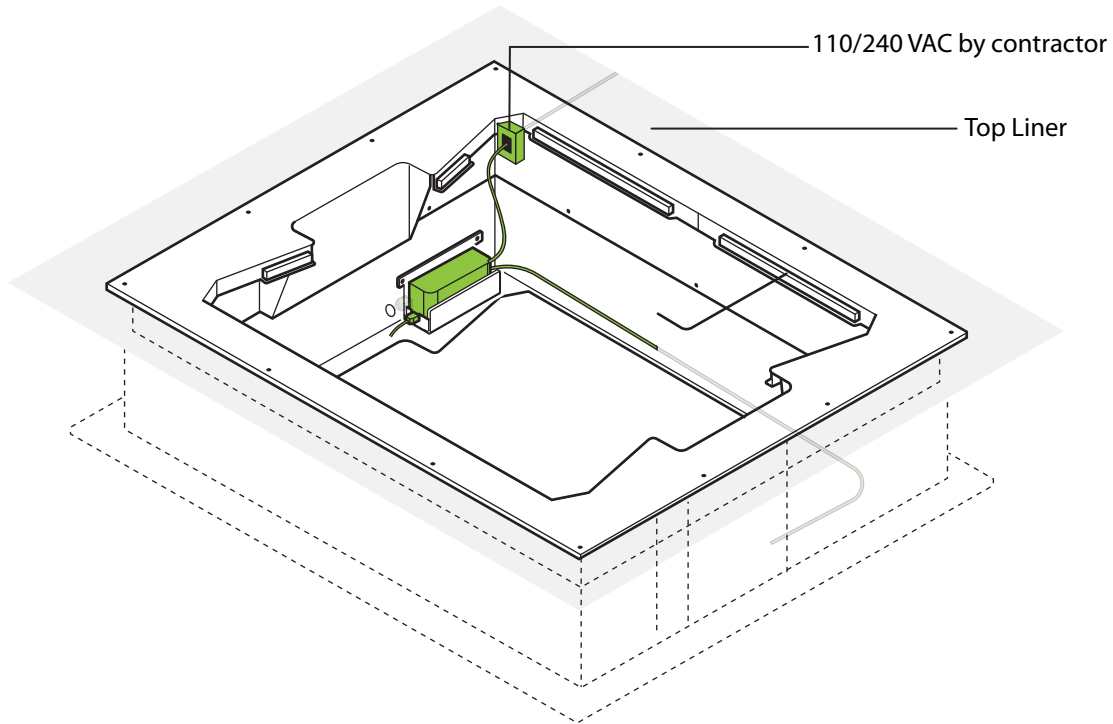


Figure 11: Option A - Power cord on floor liner (by contractor)

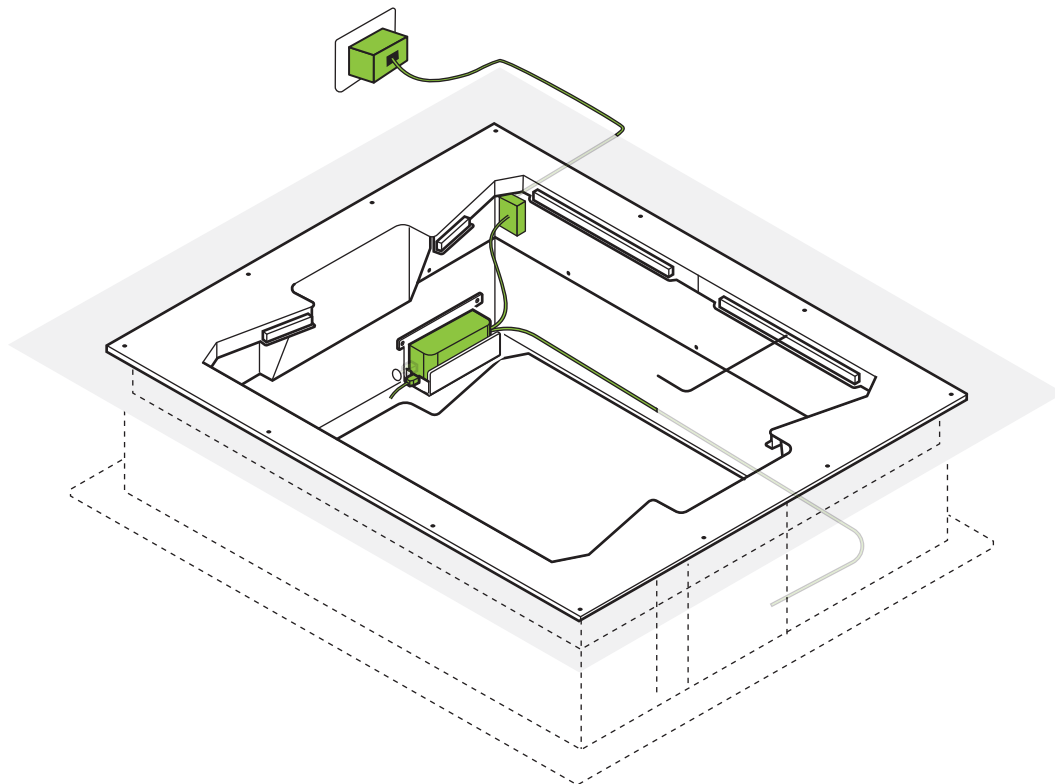


Figure 12: Option B - Power connected to near by outlet

Floor Hatch:



Figure 13: Hatch view from top landing



Figure 14: Floor liner view from bottom landing

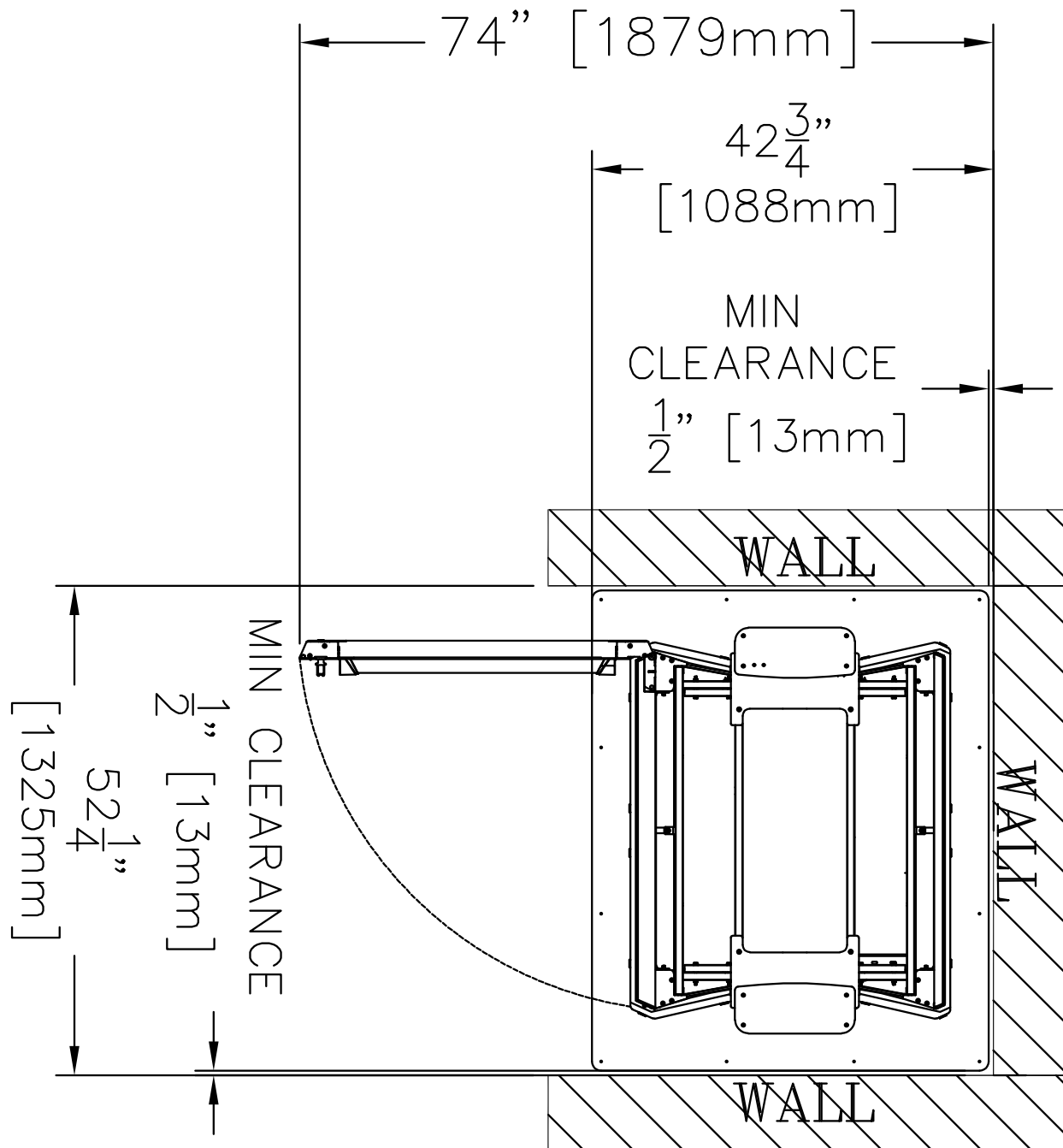
Minimum Space requirement:

Figure 15: Type 1

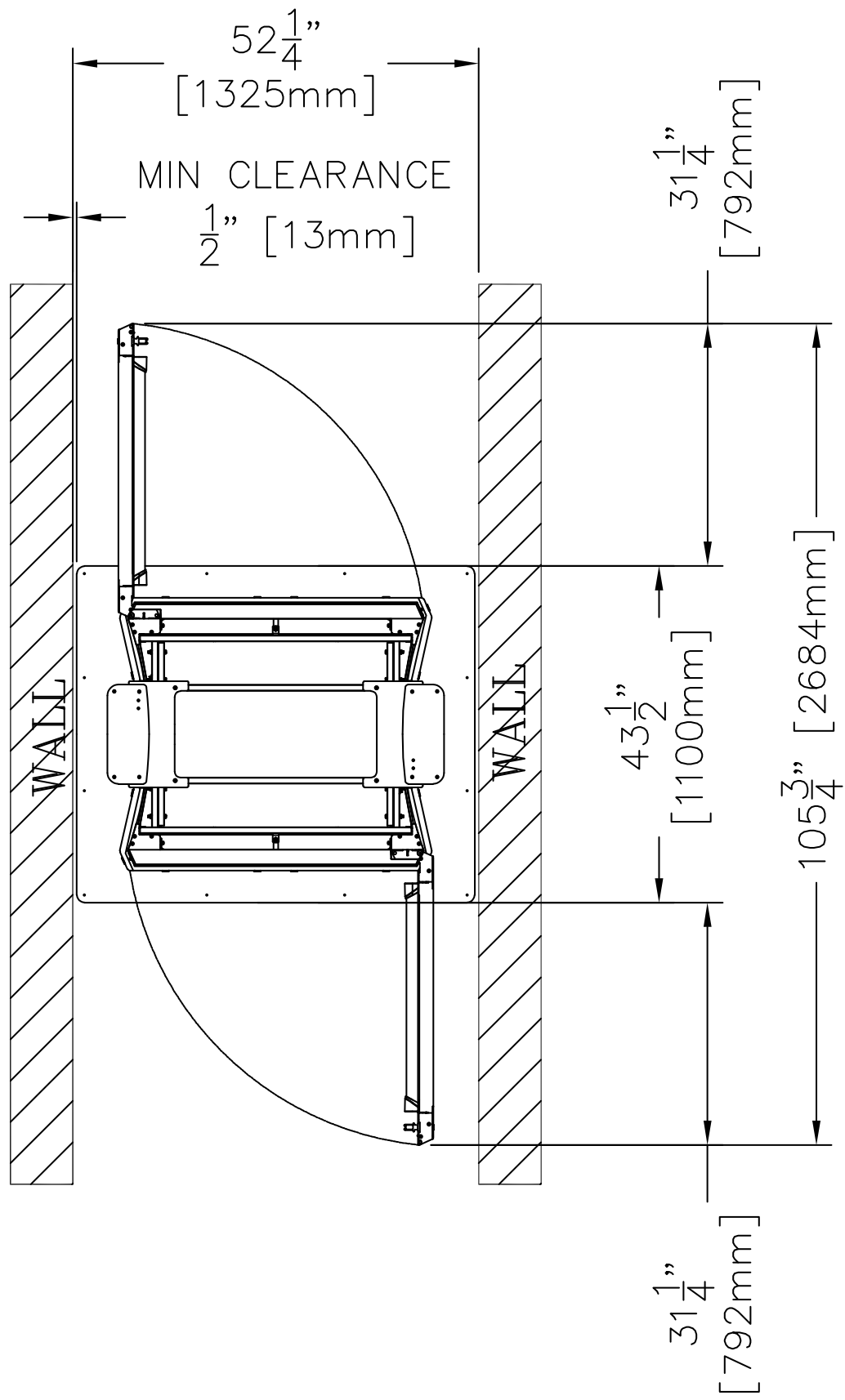


Figure 16: Type 2

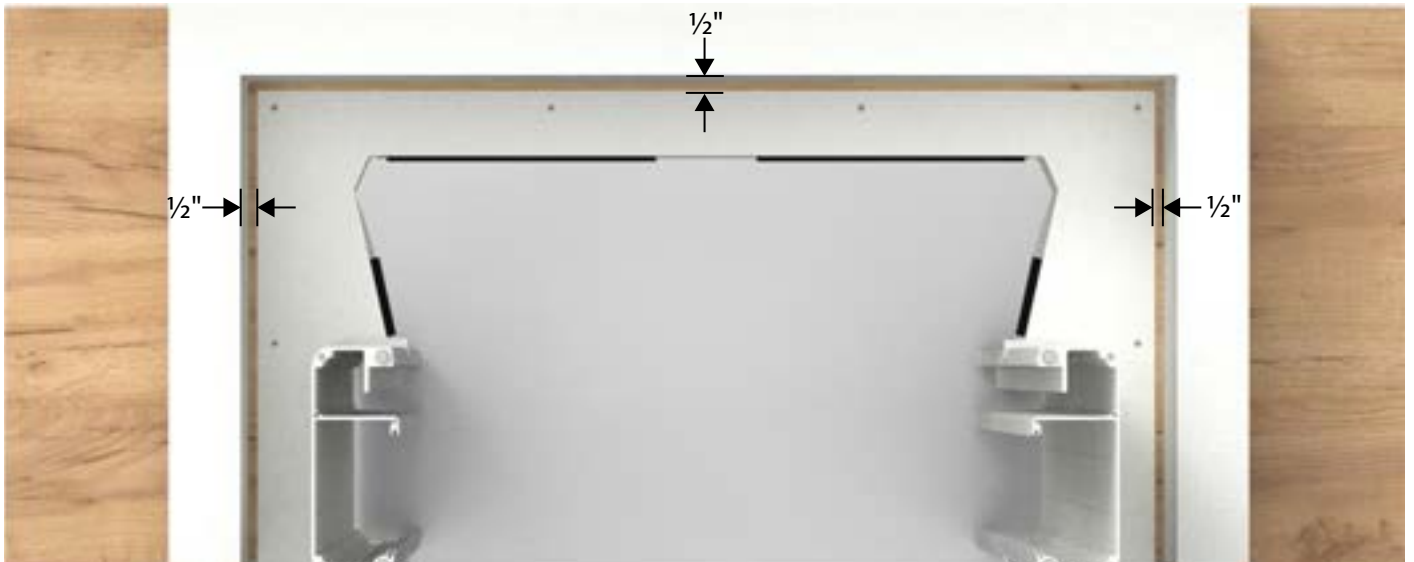


Figure 17: Floor liner minimal clearance

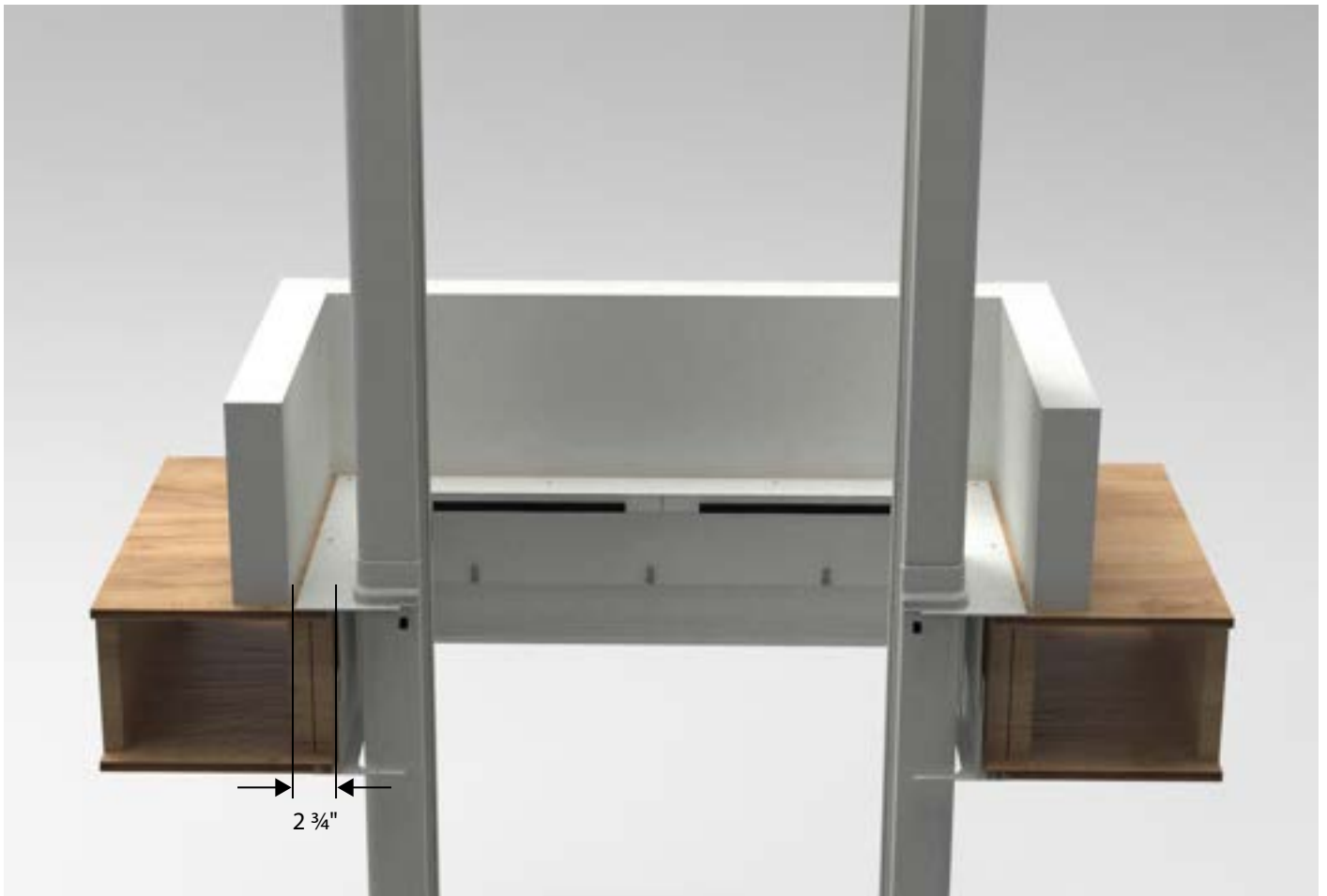


Figure 18: Minimal clearance from wall to floor opening

Elevation View

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

The minimum overhead clearance is **2400 mm (94 1/2")** for a **2000 mm (78 3/4") inside height cab** and **2310 mm (91")** for a **1905 mm (75") inside height cab**. Please refer to your site-specific installation drawings for details relevant to your job site.

NOTE: Below shows the standard dimensions for upper landing floor thickness. For custom floor thickness, a minimum of 100 mm (4") to a maximum of 914 mm (36") is available.

LUMA - 78³/₄" [2000 mm] CAB

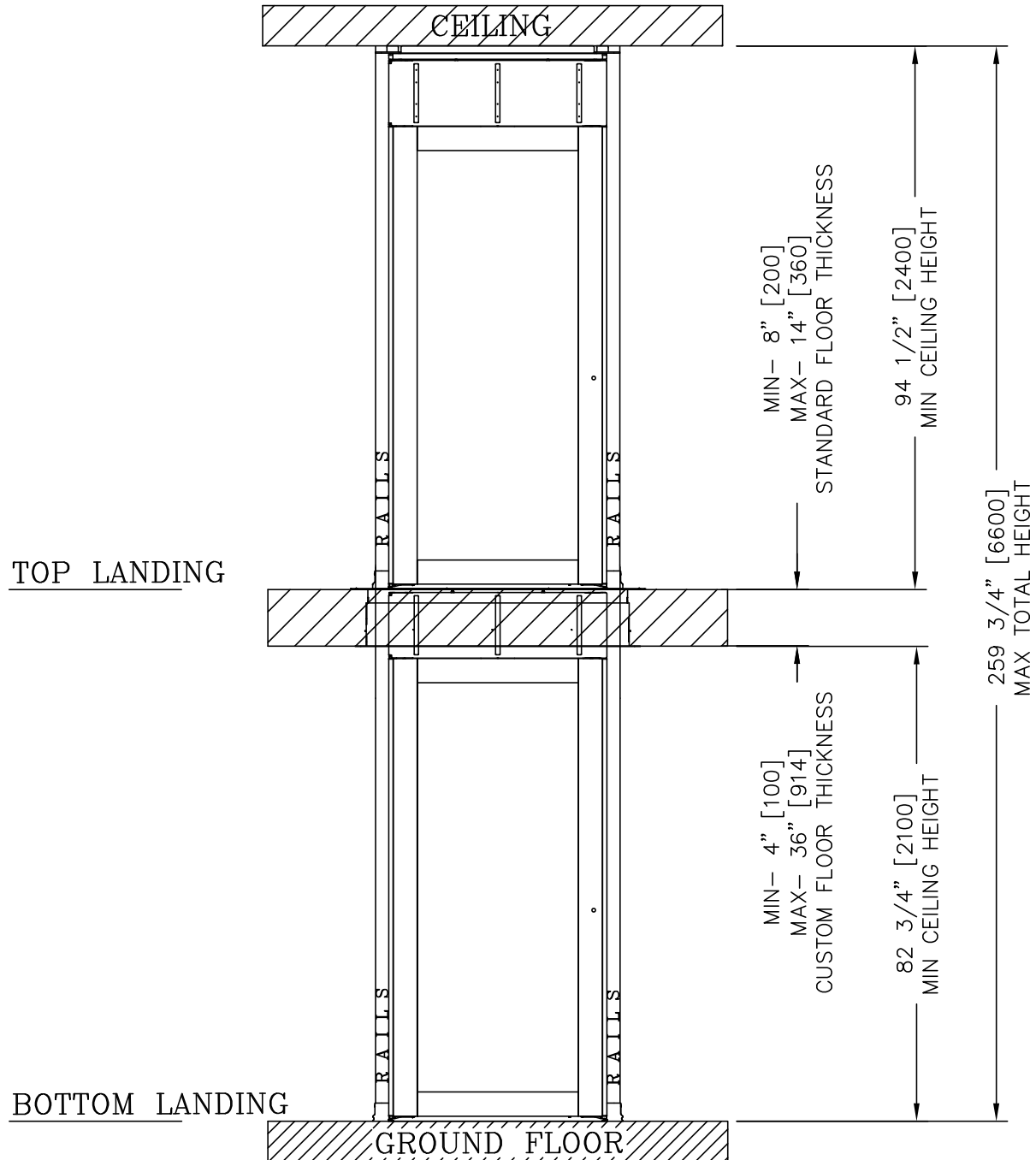


Figure 19: Elevation view - 2000 mm (78 3/4") cab

LUMA - 75 " [1905 mm] CAB

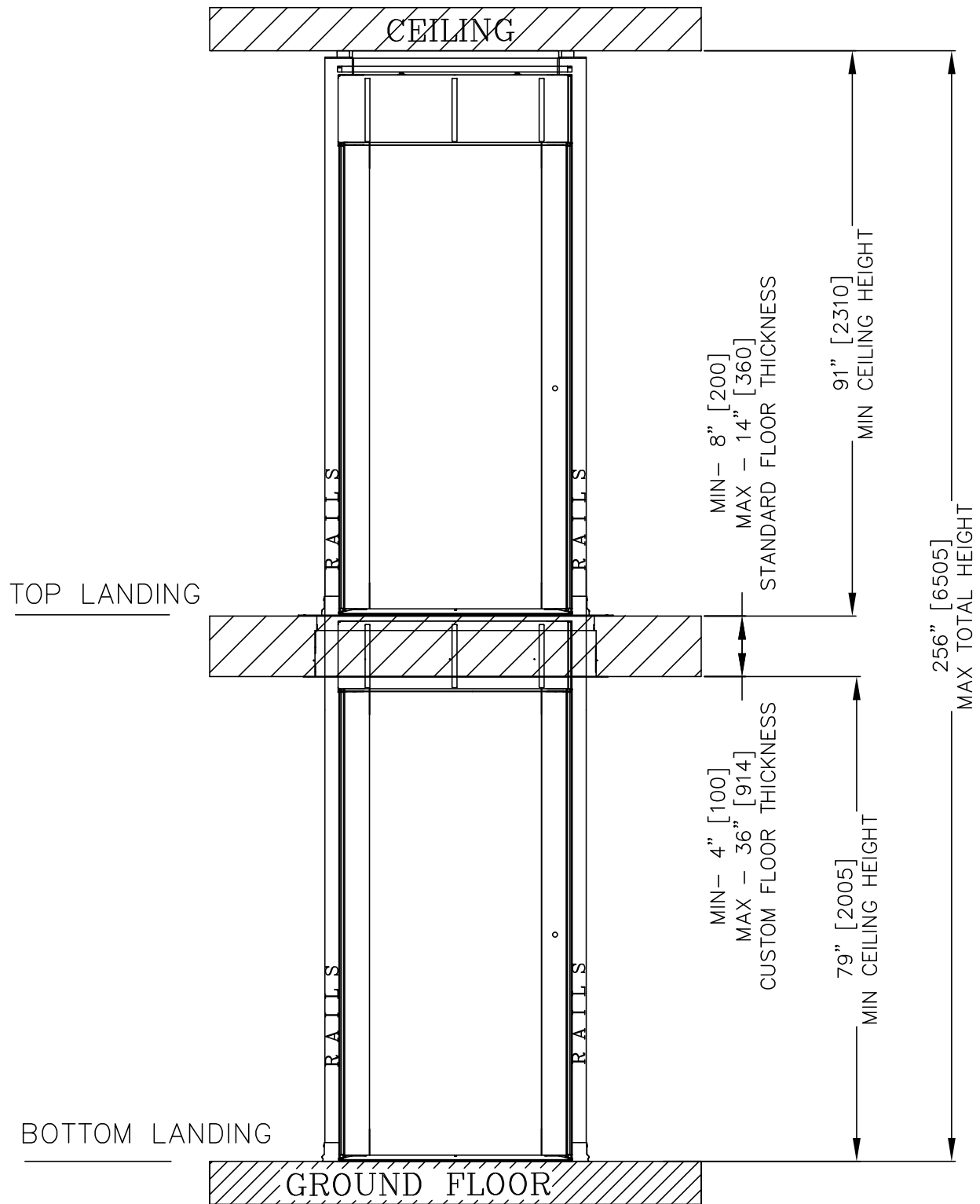


Figure 20: Elevation view - 1905 mm (75") cab

Savaria Luma

Through-floor Lift

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Savaria Concord Lifts, Inc.
www.savaria.com

Sales
2 Walker Drive
Brampton, Ontario L6T 5E1
Canada
Tel: (905) 791-5555
Fax: (905) 791-2222
Toll Free: 1-800-661-5112



