# 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

June 24, 2025 - Initial release

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# Product Elements Diagram

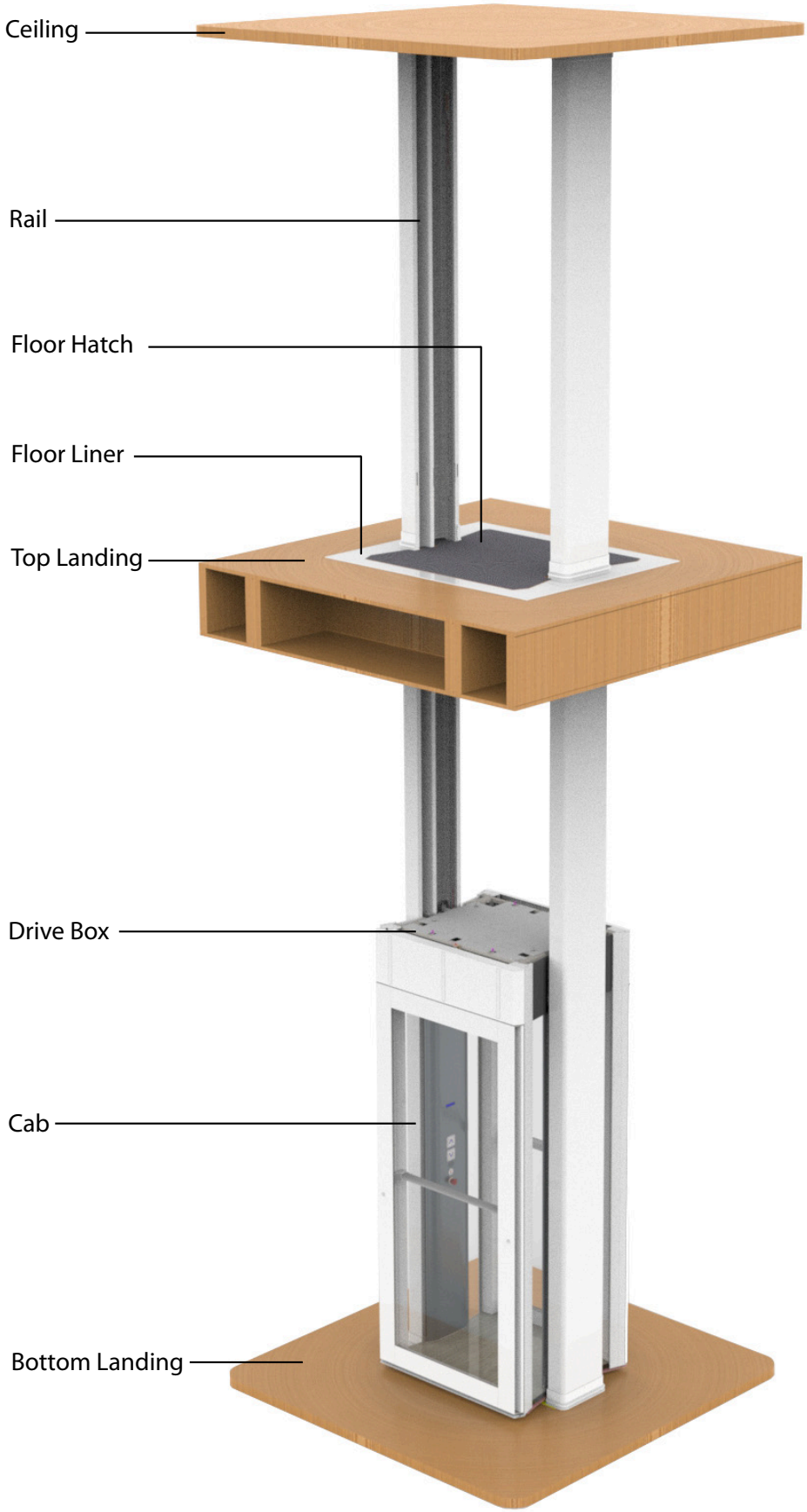


Figure 1: Luma lift diagram

# Technical Specifications

| 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:<br>739 mm x 706 mm (29.1" X 27.8")<br>Type 2:<br>739 mm x 655 mm (29.1" X 25.8") |
| Cab panel finish | Clear Acrylic |
| Cab interior height | 2000 mm (78.74") / 1905 mm (75") |
| Cab floor area | Type 1:<br>0.52 $m^2$ (809 $in^2$)<br>Type 2:<br>0.48 $m^2$ (751 $in^2$) |
| Maximum travel | 4200 mm (165.35") |
| Noise Level (Typical Installation) | 60 db (average inside cab) |
| Daily Cycle | 10 starts per hour (5 round trips)<br>30 starts per day (15 round trips) |
| Levels Serviced | 2 |
| Minimum ceiling height from top floor to ceiling (2000 mm cab) | 2400 mm (94.5") |
| Minimum ceiling height from top floor to ceiling (1905 mm cab) | 2307 mm (90.8") |
| Minimum Lower ceiling height (2000mm cab) | 2100 mm (82.64") |
| Minimum Lower ceiling height (1905mm cab) | 2000 mm (78.9") |
| Max distance from lower landing to top ceiling (2000 mm Cab) | 6600 mm (259.9") |
| Max distance from lower landing to top ceiling (1905 mm Cab) | 6505 mm (256.14") |
| Site Floor Thickness | Standard:<br>Min - 200 mm (7.8")<br>Max - 360 mm (14.17")<br>Custom: (Additional charges will apply)<br>Min- 100 mm (4")<br>Max -914 mm (36") |
| Control system | Savaria Universal Vertical Controller |
| Compliance | ASME 17.1, CSA B44, EN 81-41 |

| Specification | Specification Data |
|---|---|
| Safety feature | Overspeed Protection<br>Slack rope<br>Manual lowering<br>E-stop<br>Top & Bottom safety pans<br>Emergency Power<br>Cab Door Interlocks |
| Phone System | One Touch Alert GSM Based (SIM card by others)<br>-Supported: 4G LTE / Volte nano sim<br>-Not supported: 5G, E-sim |
| Ventilation Mode | Fan |
| Color of unit | Cab- White Powder coating PS111W2<br>Rails- White Powder coating PS111W2<br>COP and Opposite panel- Silver Velvacoat PK612s3 |
| Interior Cab Floor Finish | Altro- Bleached Oak (WSA2001) |
| Floor Hatch Finish | Altro- Symphonia Hibiscus (SY20005) |
| Cop Panel | Reversible to other side |
| Call station | Handheld, Wall mounted<br>2 Button Remote- 868MHz for EU<br>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 | Type 1<br>  <br><br>Type 2<br>  <br><br>Standard Height (2000 mm)<br>Lower height (1905 mm)<br>Door - Left hand/Right hand |

# 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

**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)
- Mid 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)**. **The loads mentioned below (Figure 3) are per rail**.

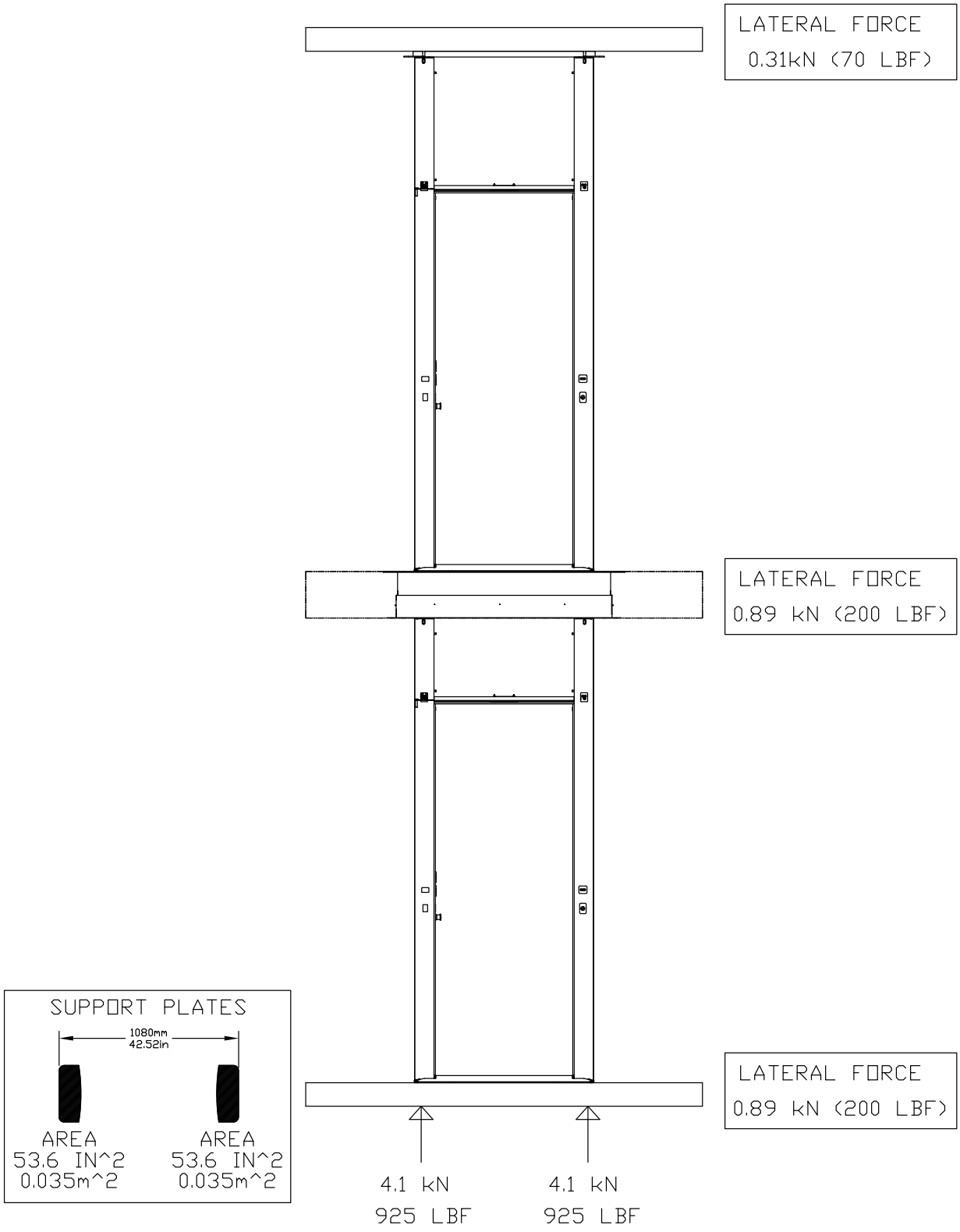


Figure 3: Support Load Diagram

**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.

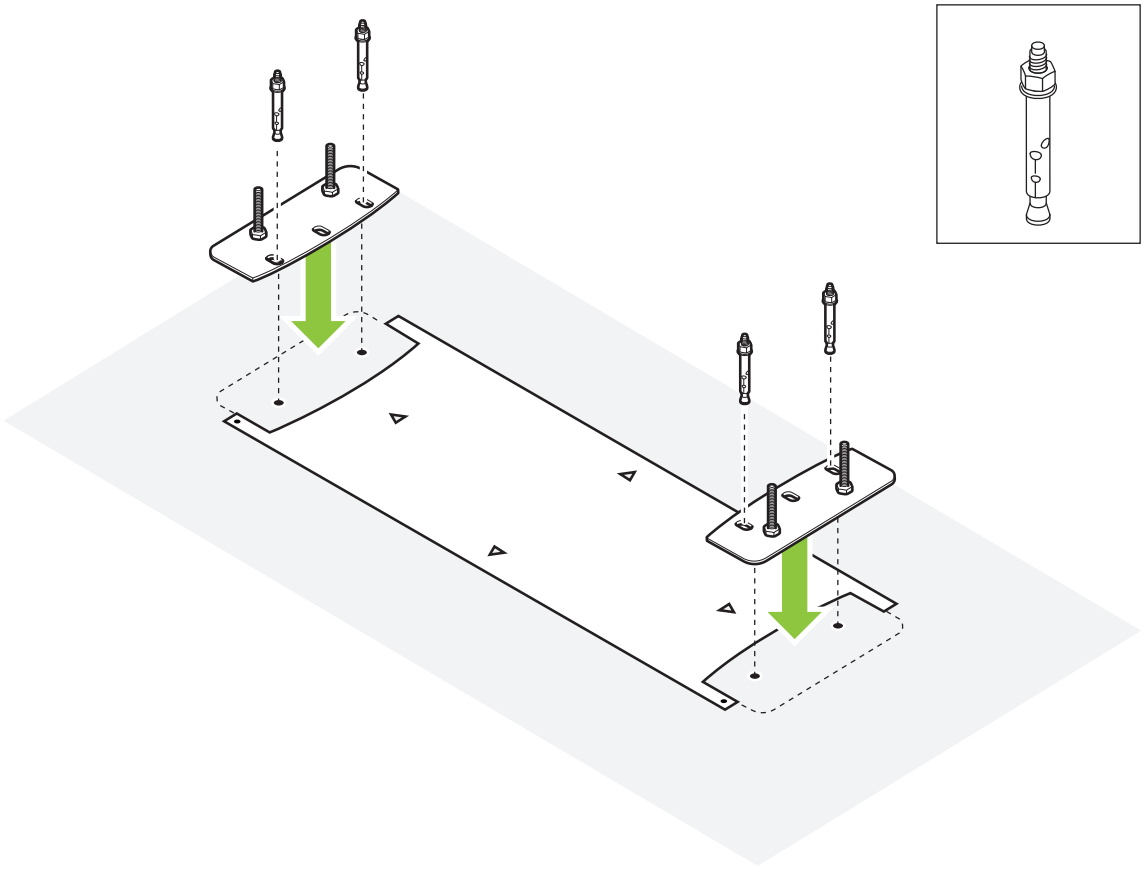

Figure 4: Floor anchor for concrete floor on bottom landing

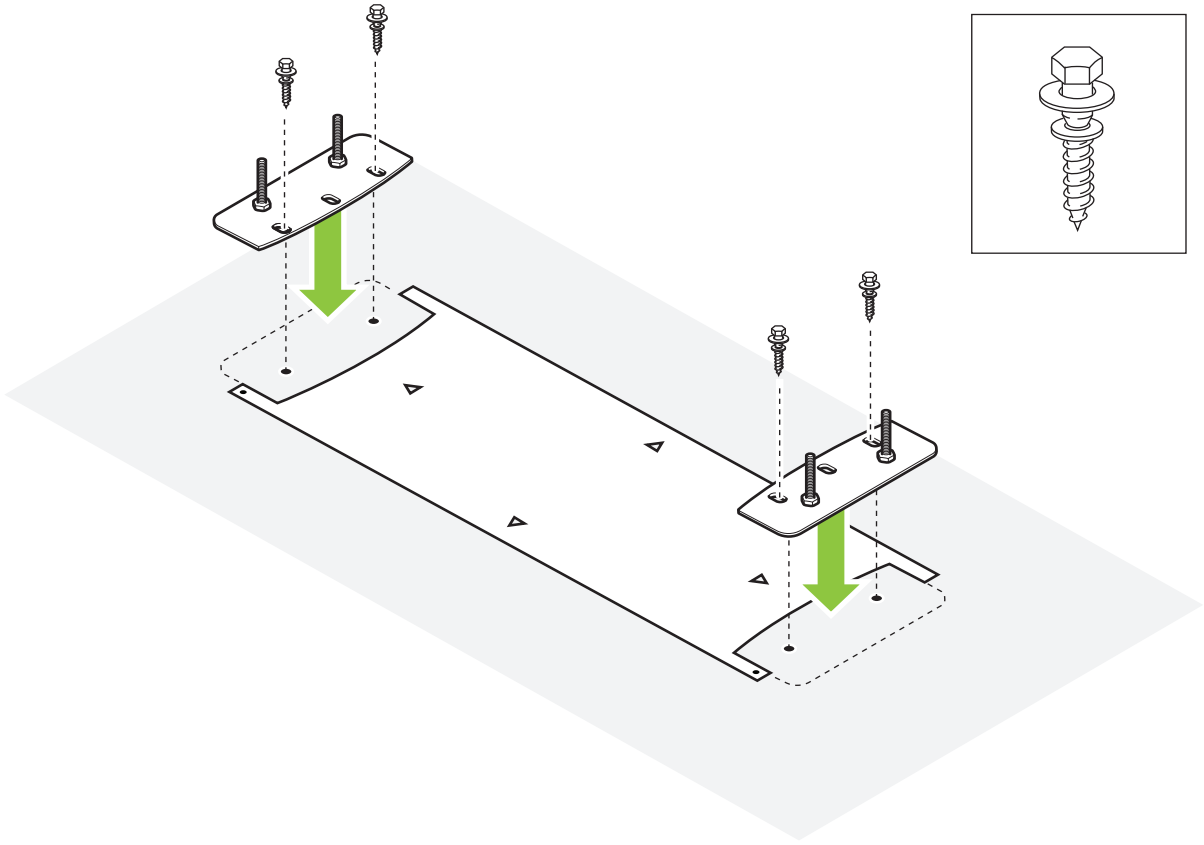

Figure 5: Floor anchor for wooded floors on bottom landing

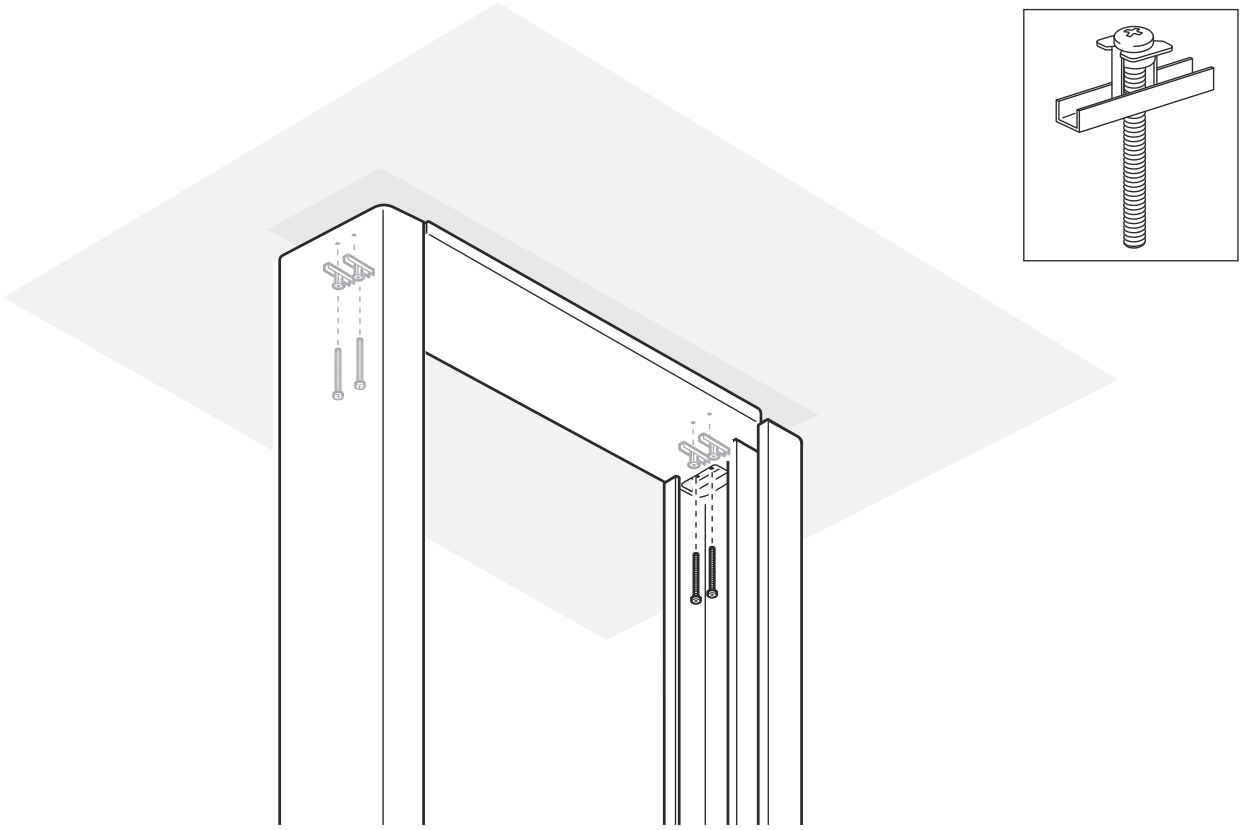

Figure 6: Top ceiling anchor system

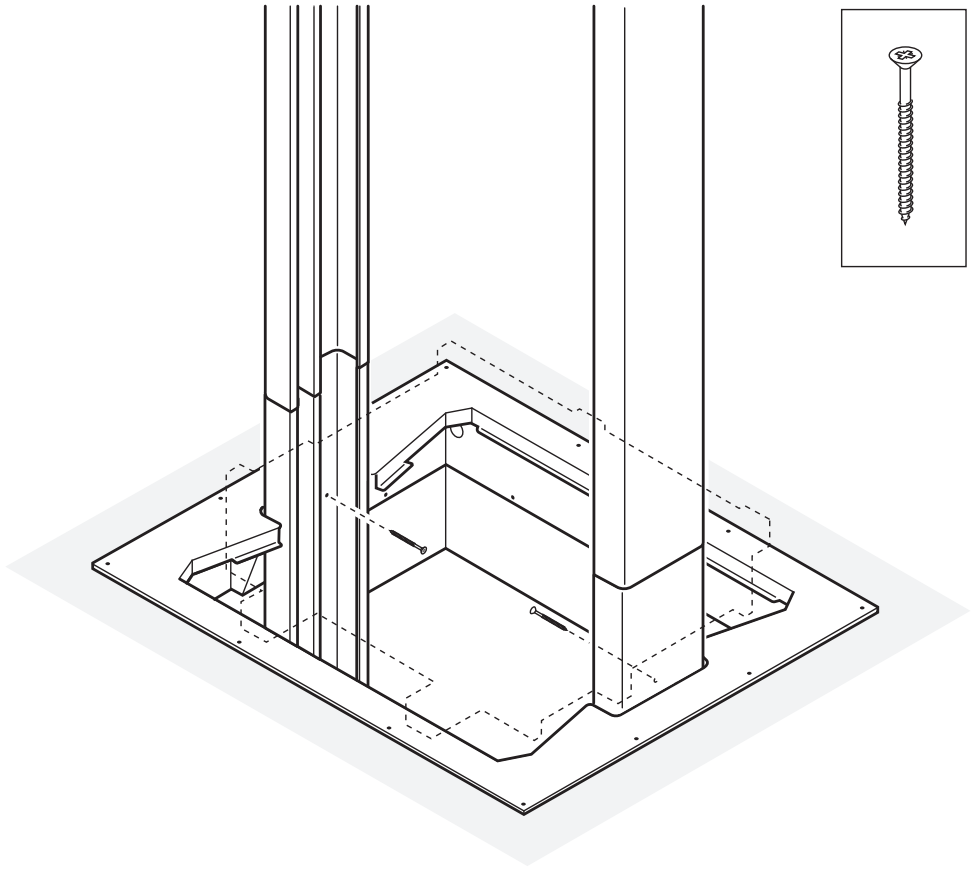

Figure 7: Floor liner anchor system

# 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).

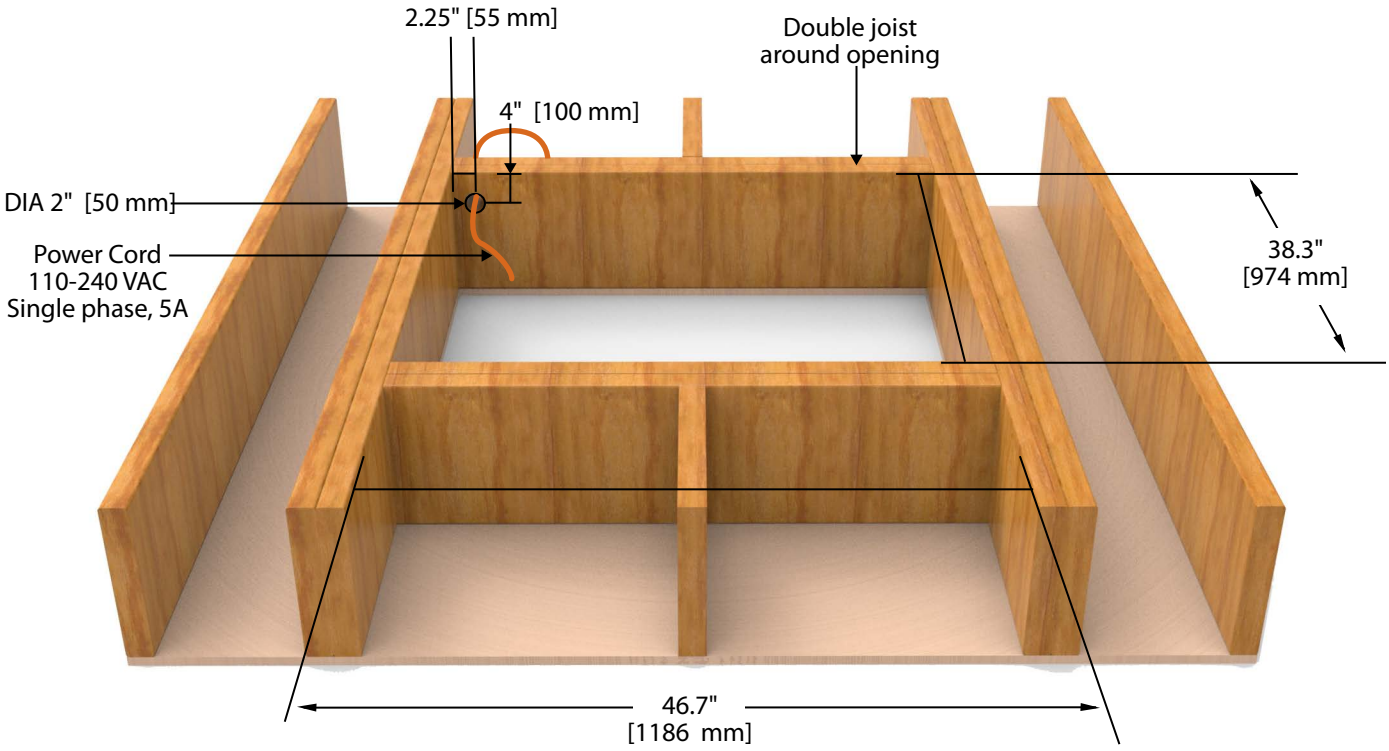


Figure 8: Top landing floor opening

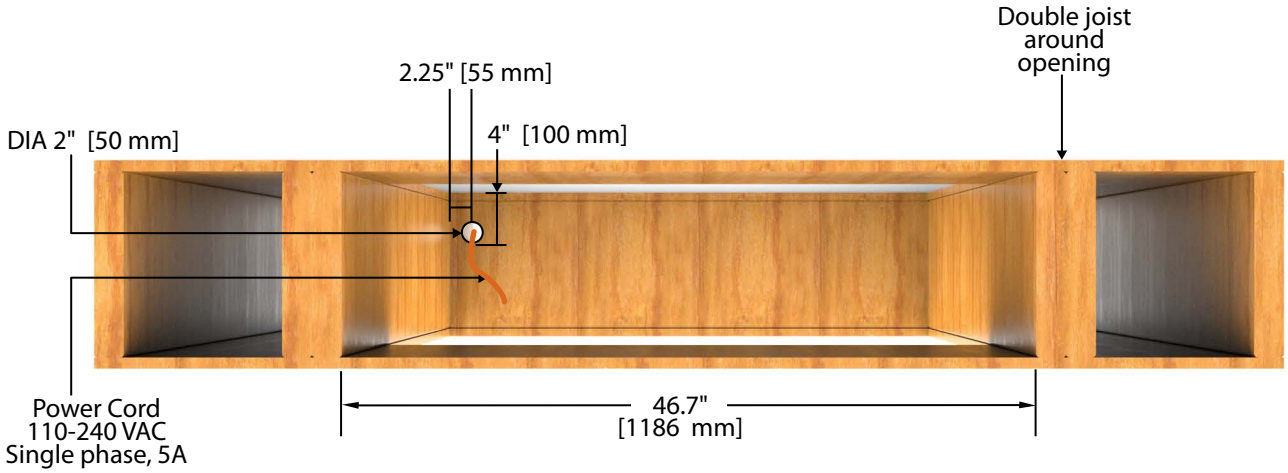


Figure 9: Hole for electrical provision

## 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).

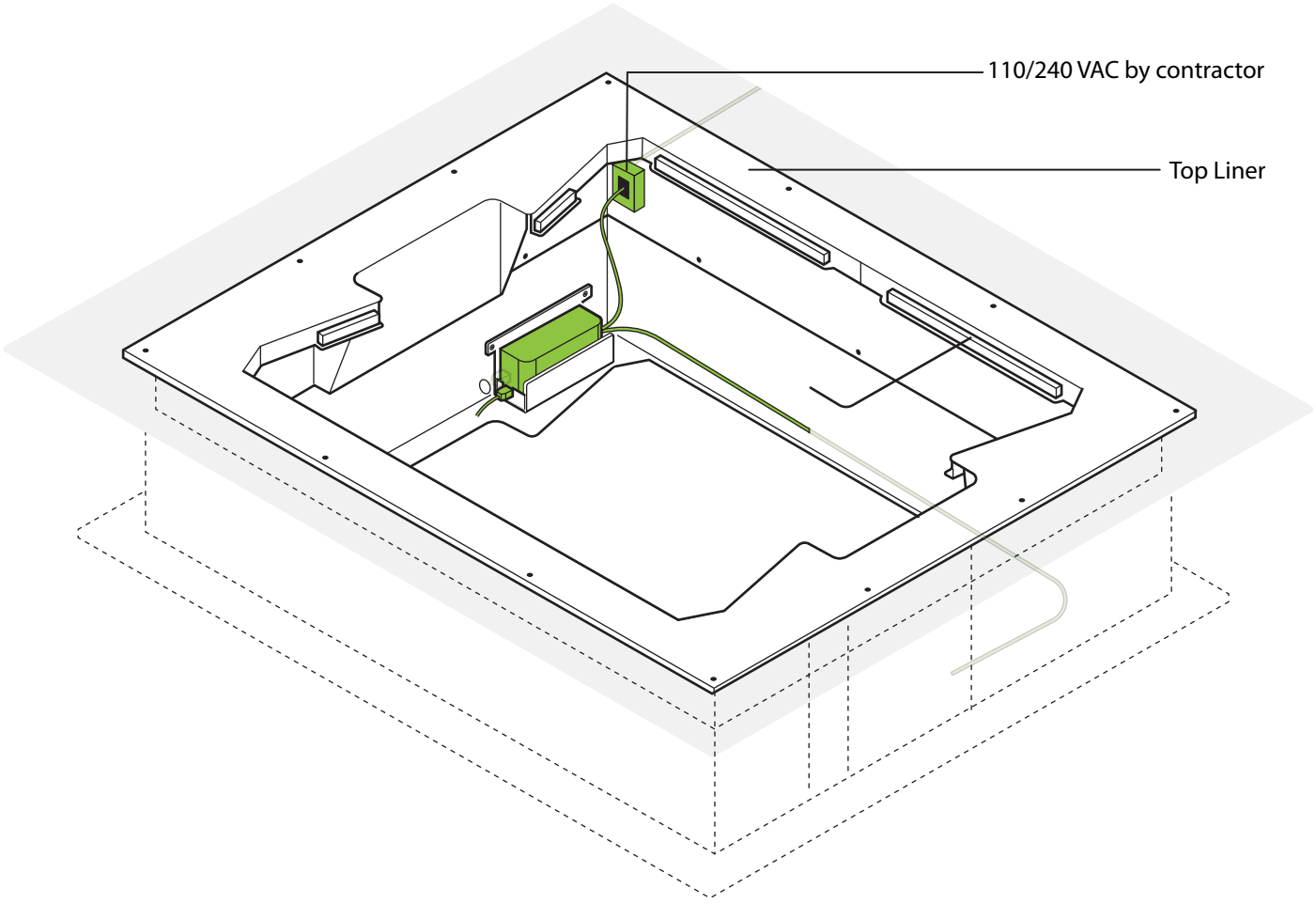


Figure 10: Option A - Power cord on floor liner (By contractor)

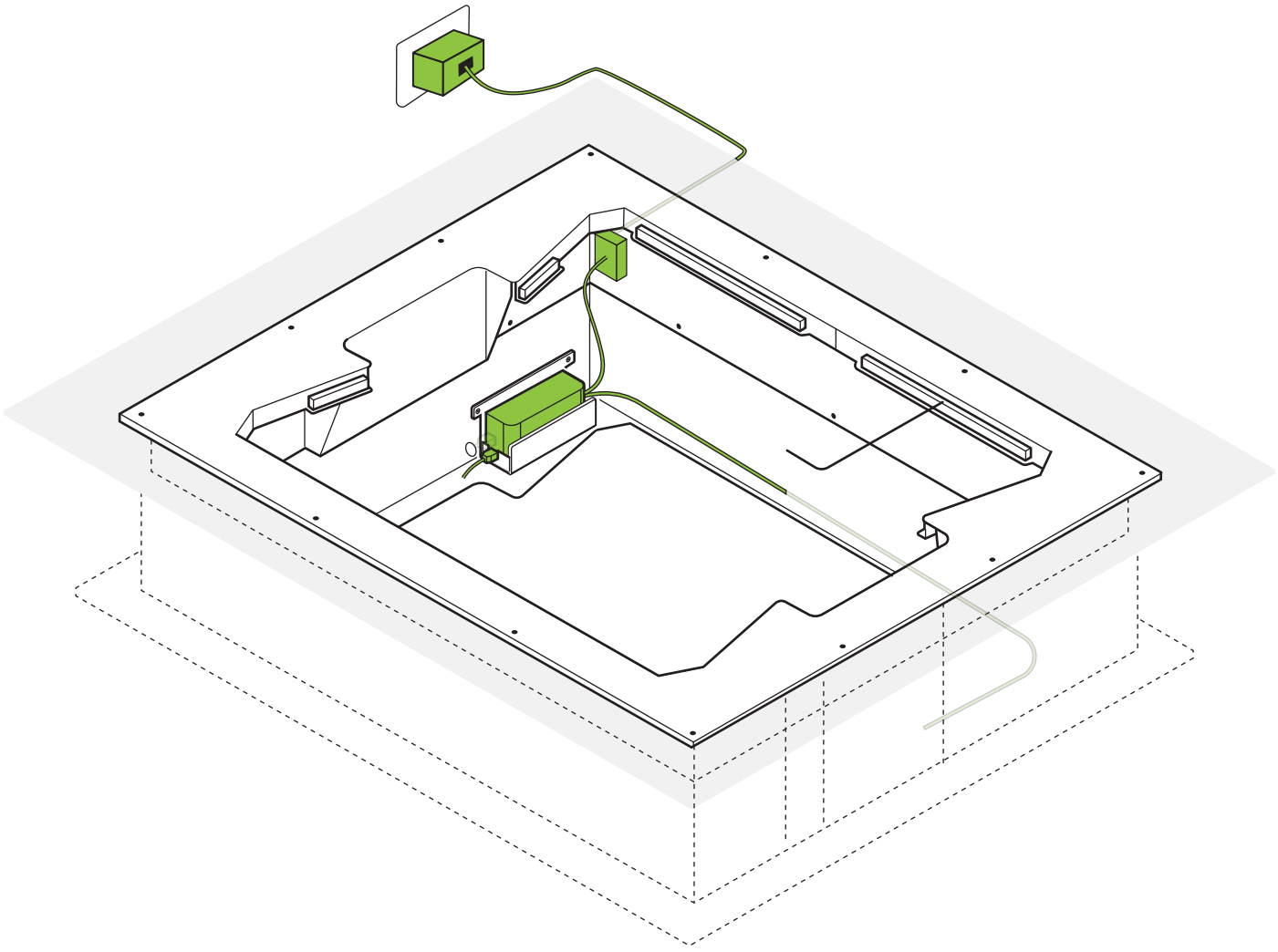

Figure 11: Option B - Power connected to near by outlet

## Floor Hatch:

Figure 12: Hatch view from top landing

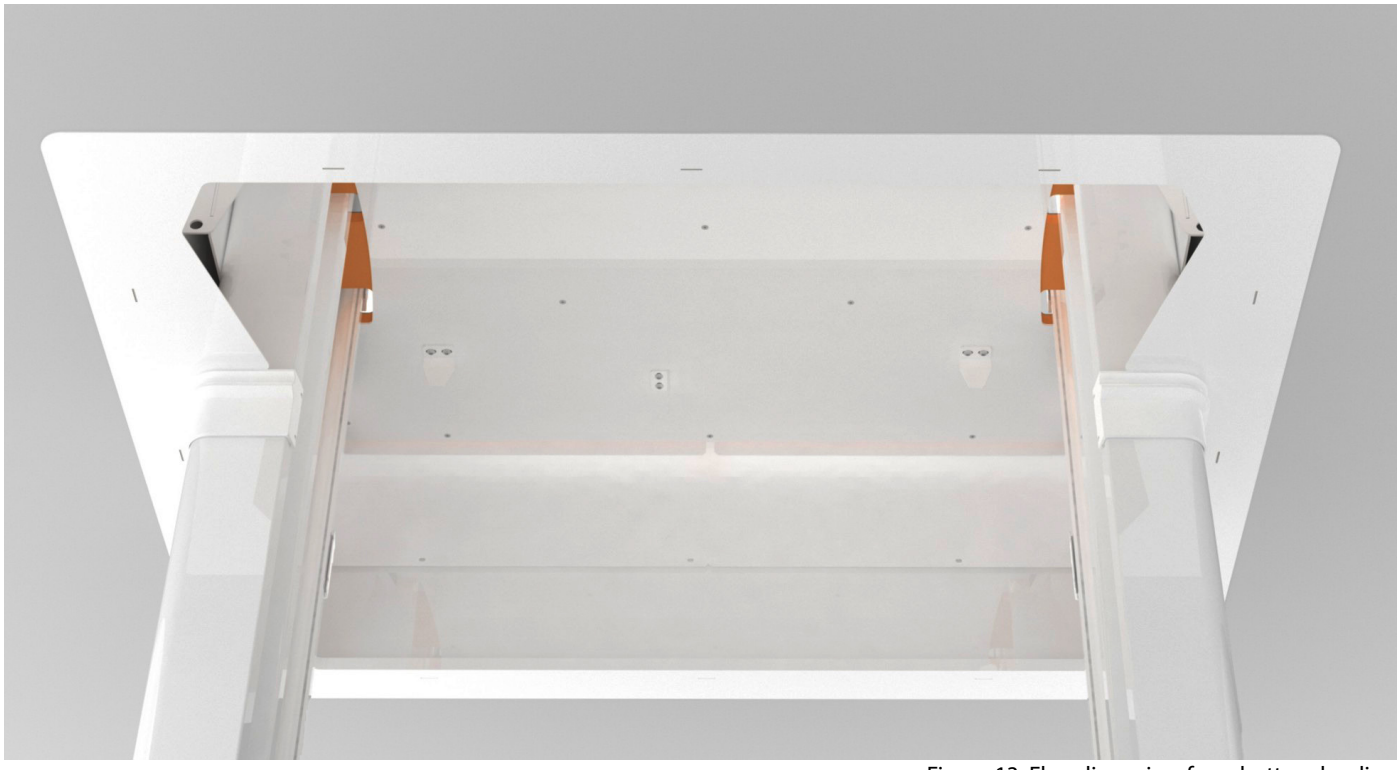

Figure 13: Floor liner view from bottom landing

**Minimum Space requirement:**

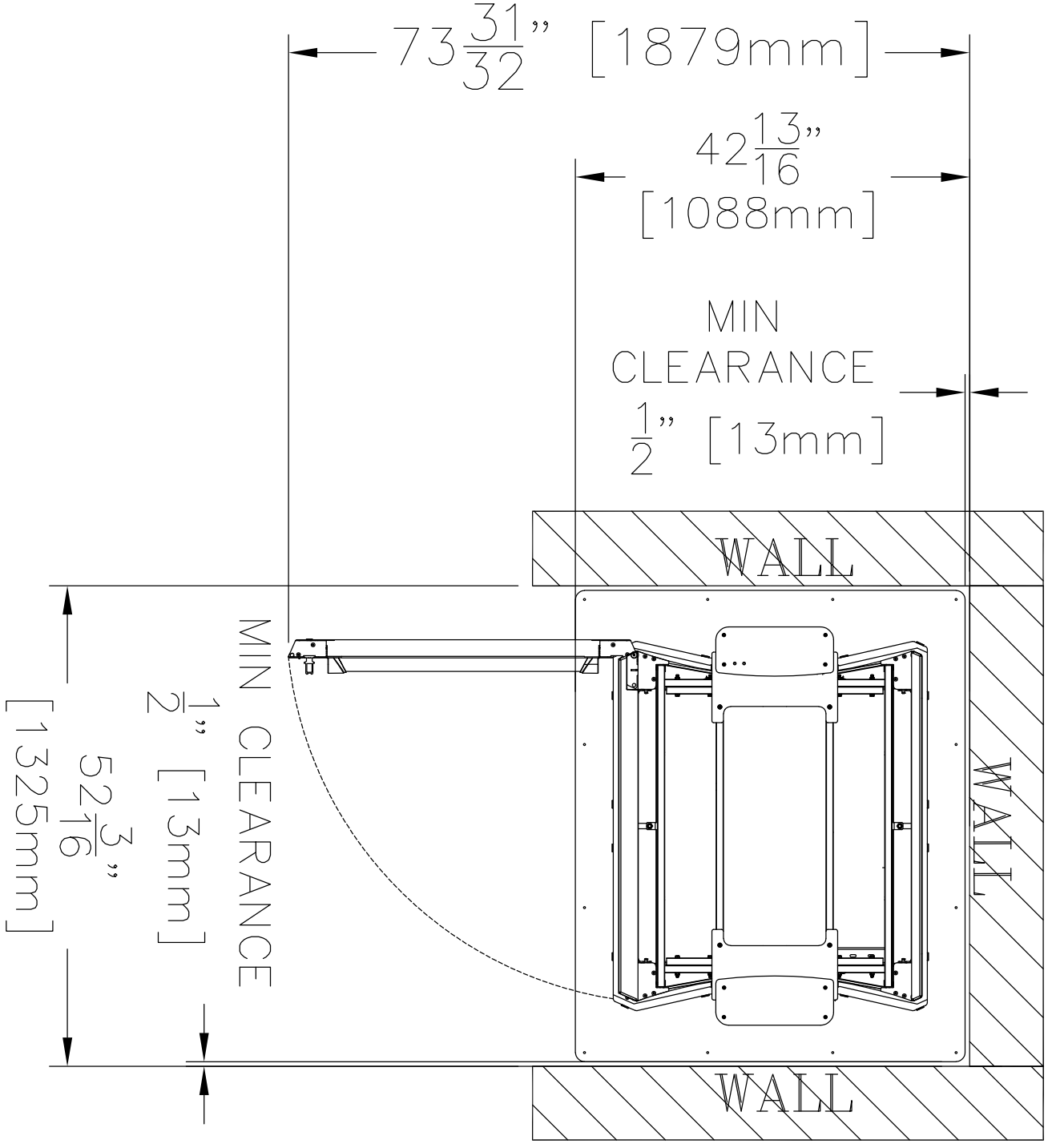


Figure 14: Type 1

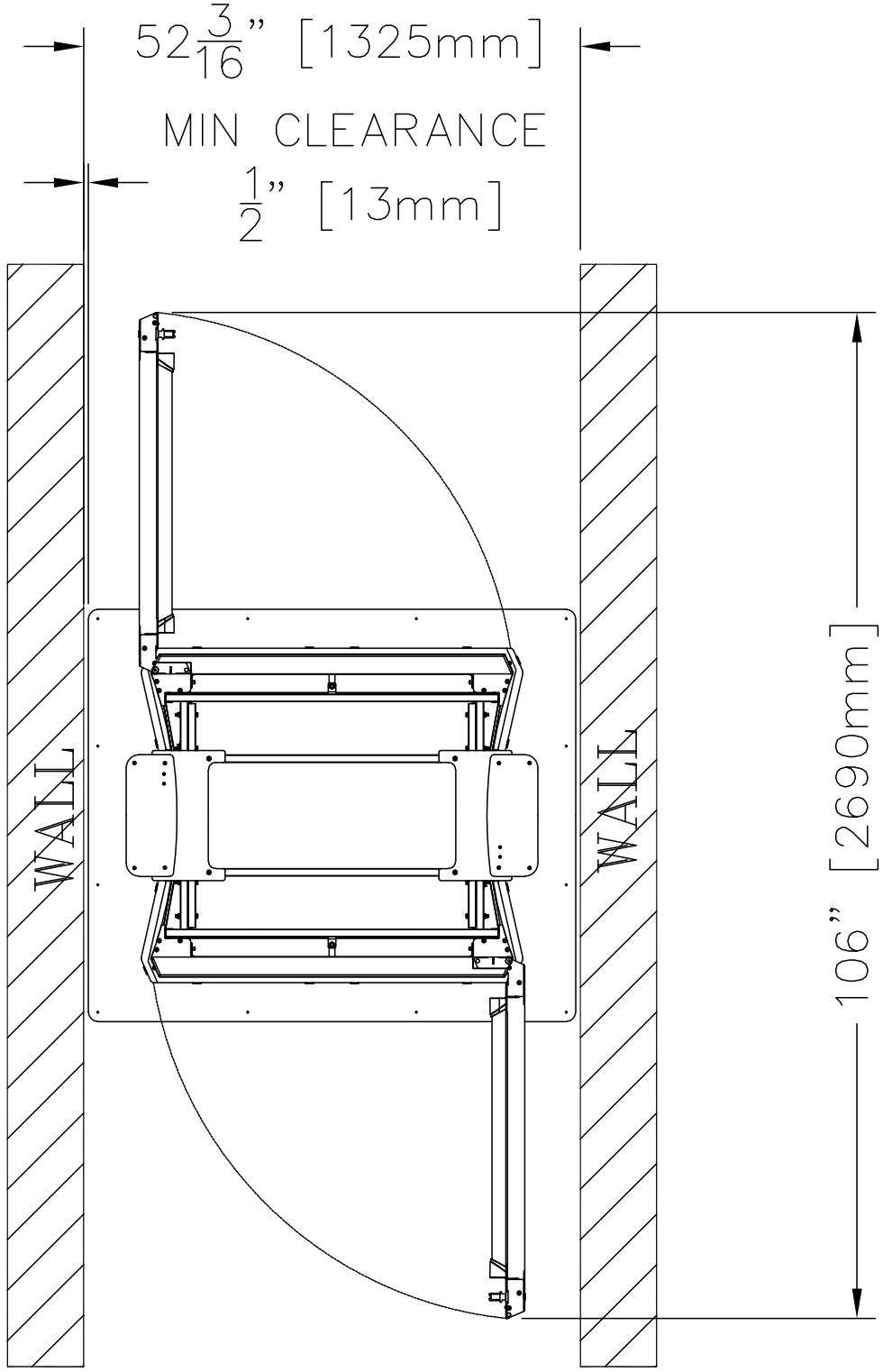


Figure 15: Type 2

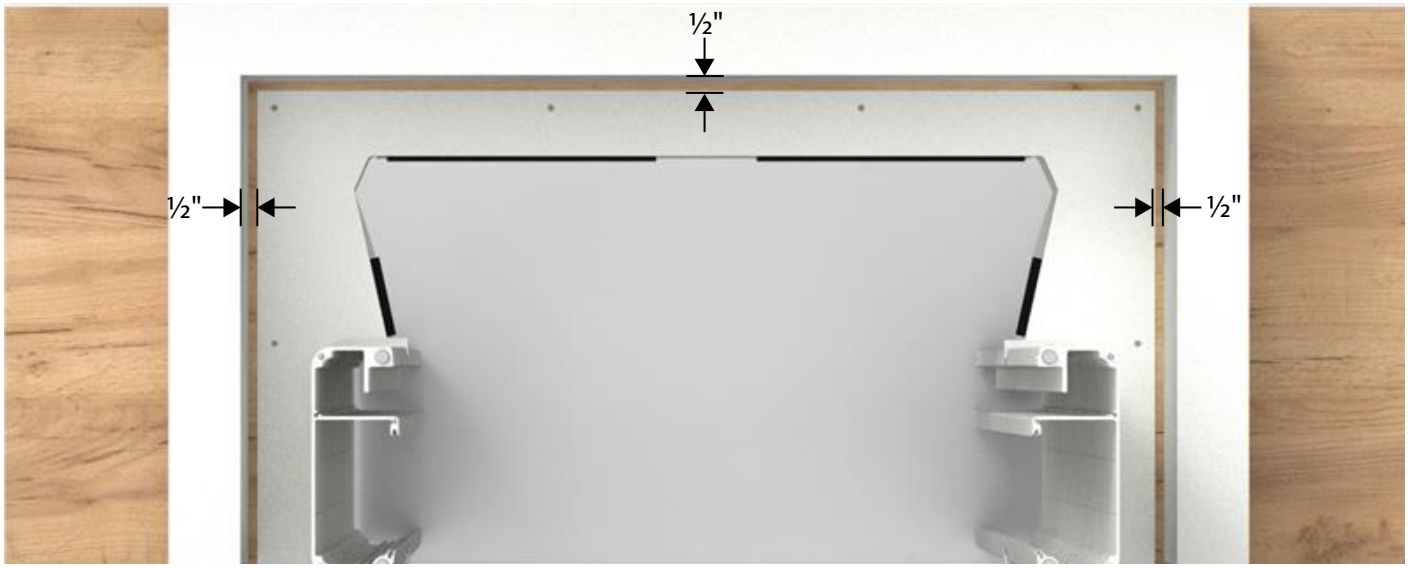


Figure 16: Floor liner minimal clearance

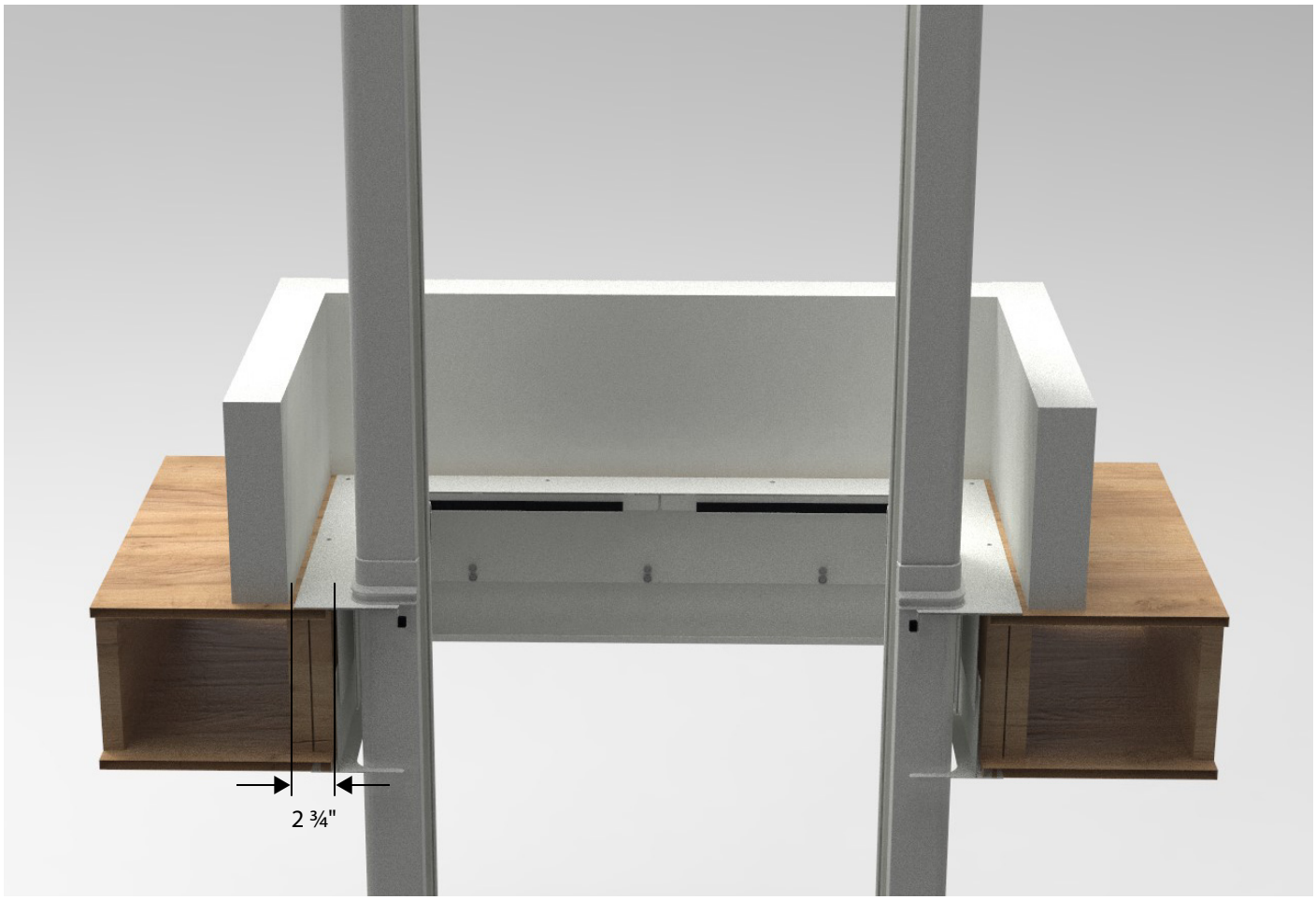


Figure 17: Minimal clearance from wall to floor opening

### Elevation View

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

The minimum overhead clearance is **2400 mm (94.5")** for a **2000 mm inside height cab** and **2307 mm (90.8")** for a **1905 mm 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.**

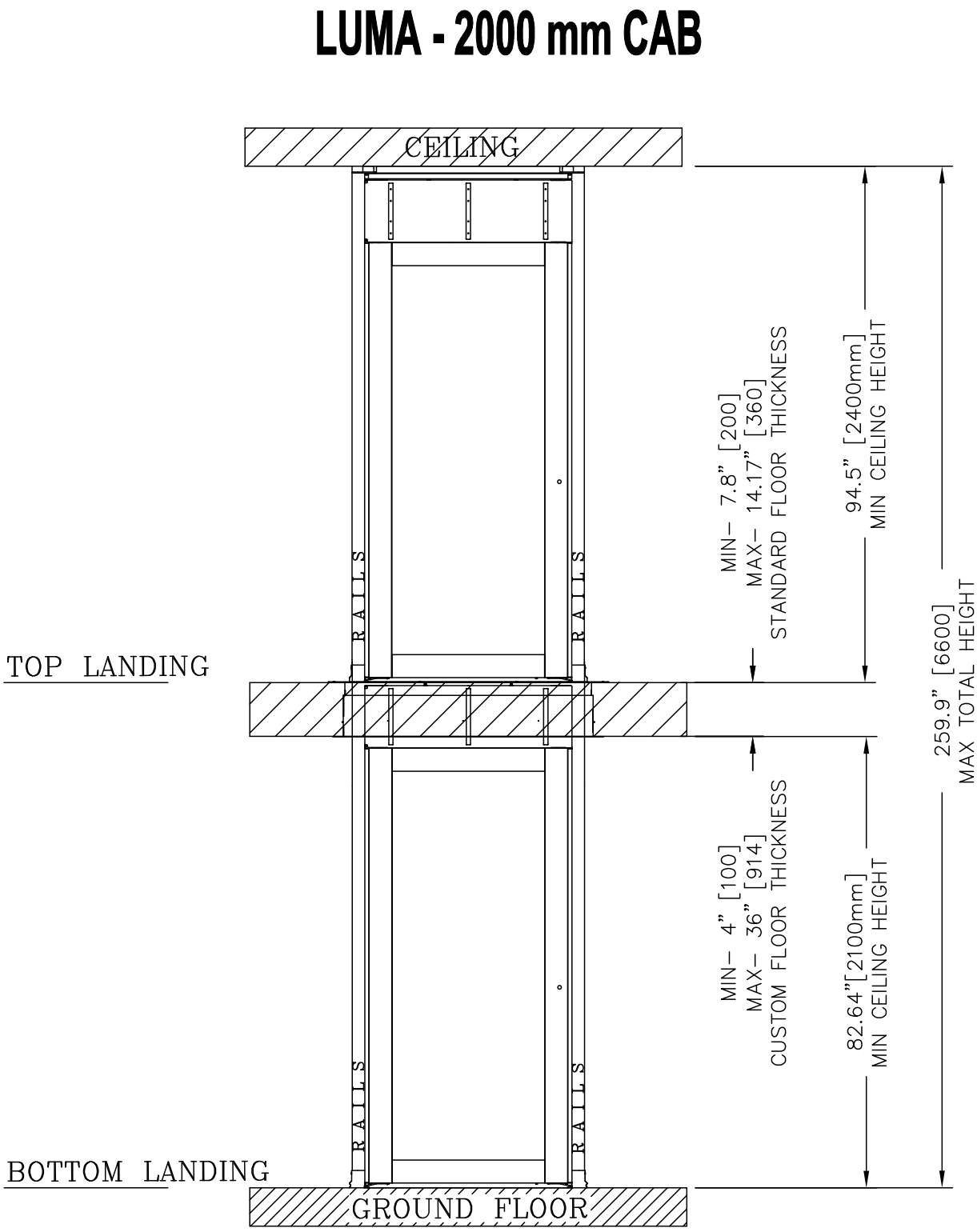


Figure 18: Elevation view - 2000 mm cab

# LUMA - 1905 mm CAB

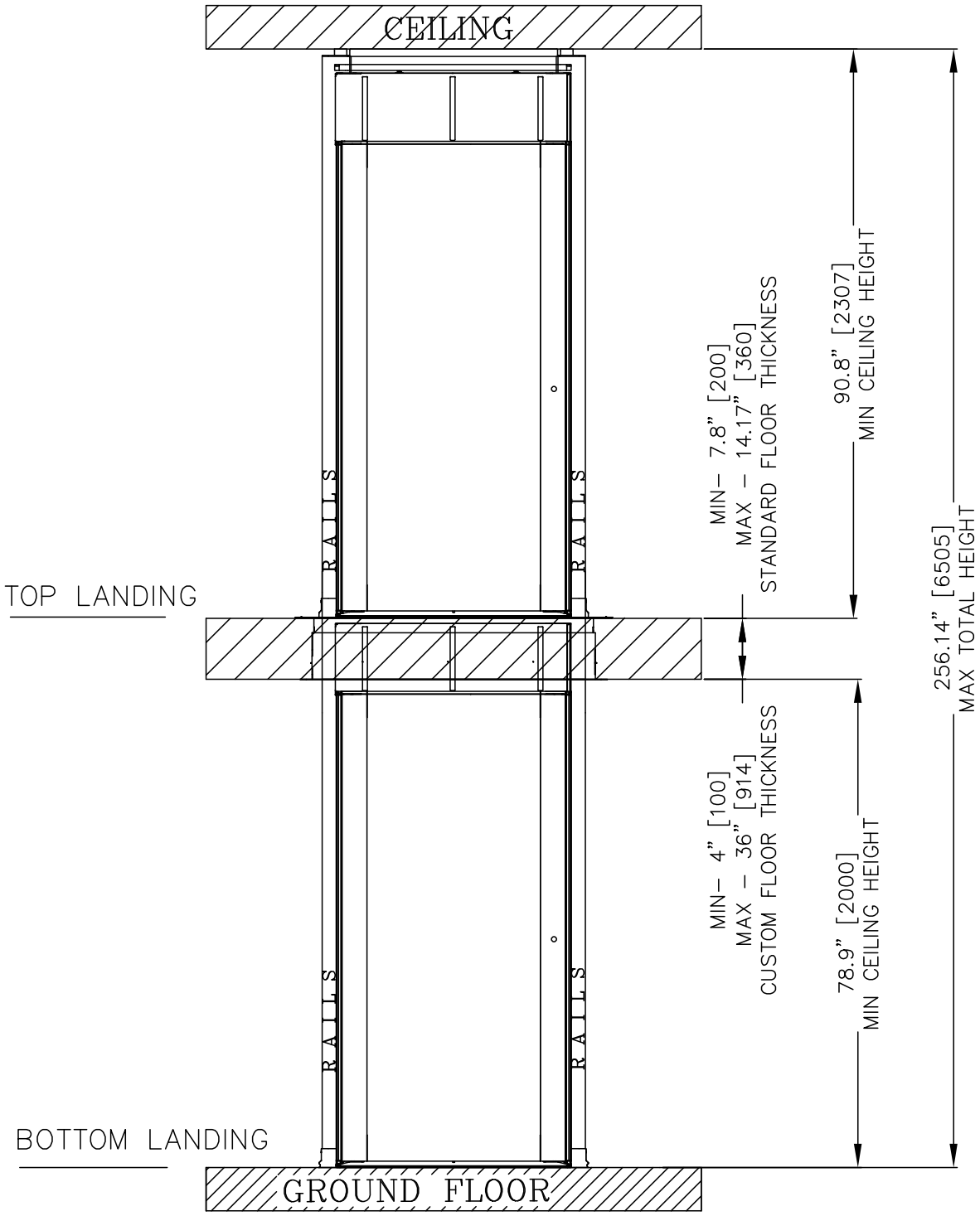


Figure 19: Elevation view - 1905 mm cab

# Savaria Luma

## Through-floor Lift
## PLANNING GUIDE

Part No. 001562, Rev. 000
24-m06-2025



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