

Planning Guide

Builder & Architect Edition

Elite Plus Hydraulic Residential Elevator

2024

All information found in Elite Plus Hydraulic Residential Elevator's Planning Guide reflects information at the time of printing. AmeriGlide reserves the right to change information without notice.



Planning Guide

Elite Plus Hydraulic Residential Elevator

This planning guide is designed to assist architects, contractors, homeowners, and elevator professionals in planning for a home elevator that meets the requirements of ASME A17.1 Part V Section 5.3.

We strongly recommend that you contact the codes authority having jurisdiction in the area(s) where the elevator will be installed. Become familiar with all requirements governing the installation and use of elevators in private residences. It is extremely important for you to know and adhere to all regulations concerning installation and use of elevators.

IMPORTANT NOTICE:

This planning guide provides nominal dimensions and specifications useful for **INITIAL** planning of an elevator project. **BEFORE** beginning actual construction, be sure to receive application drawings customized with specifications and dimensions for your specific project.

Call 1-800-790-1635 to find a dealer in your area or visit our website at AmeriGlide.com.

Elevator configurations and dimensions are in accordance with our interpretation of the standards set forth by ASME A17.1 Part V Section 5.3. Please consult AmeriGlide or an authorized dealer in your area for more specific information pertaining to your project,

including any deviation between referenced standards and those of any local codes or laws. Always contact local code authorities for any variation to standards.

Please note all dimensions and specifications contained herein are nominal and should only be used in the early planning stages. Construction of the actual hoistway and related Elite Plus Residential Elevator requirements should be based off job-specific application drawings.

This elevator requires 220 VAC - 30 AMP, single phase and separate 115 VAC, single phase 60 Hz circuit with ground fused 15 amp for light circuits.

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Technical Specifications

| General Specifications | Standard |
|------------------------|--|
| Drive Type | 2:1 Roped hydraulic |
| Rated Capacity | 1,000 lbs |
| Travel Speed | 40 fpm |
| Maximum Travel | 40' |
| Maximum Landings | 4 |
| Power Requirement | 220V single phase 30 amp 110V single phase 15 amp |

| Design Specifications | Standard | Optional |
|--|------------------------------------|--|
| Cabin Height | 84" | 96" |
| Cabin Doors | Manual Good Gate | Automatic Good Gate 2-speed or 3-speed Victory Door |
| Landing Doors <small>*3 speed victory landing doors only available for 84" cab height</small> | Landing doors by others | 2-speed or 3-speed Victory Door |
| Cabin Size ¹ | Width: 30 - 42" / Length: 36 - 50" | |

| Fixture Specifications | Standard |
|------------------------|-----------------------------------|
| Car Operating Panel | Digital Touch Screen |
| Phone | Cabinet with Standard Phone |
| Call Stations | Illuminated push buttons with DPI |

¹ For custom platform sizes not listed, please contact AmeriGlide.

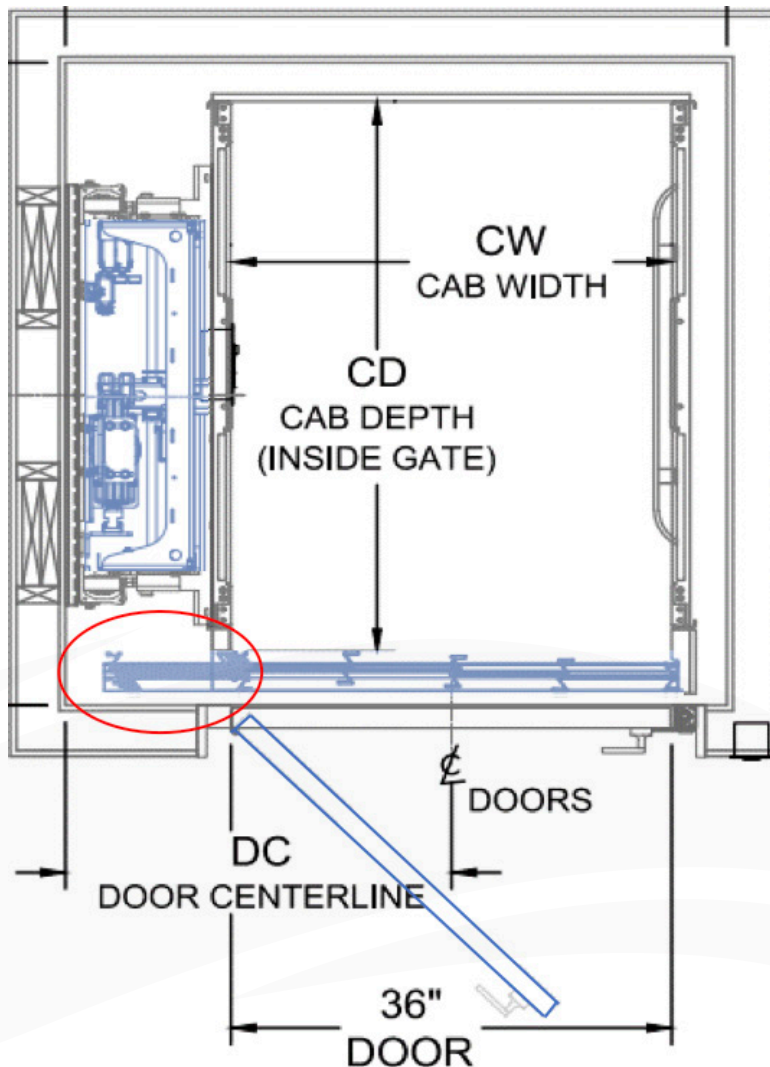
Note on Door Orientation

The sliding gate on all models is designed to recess towards the rail wall, allowing us to efficiently utilize hoistway space.

Since the gate collapses in the direction of the recess / rail wall, the opening will be on the opposite side of the rail wall.

It is recommended to try to align the opening of the landing door with the opening of the gate.

A good rule of thumb is to have the hinges of your landing door on the same side as the rail wall.

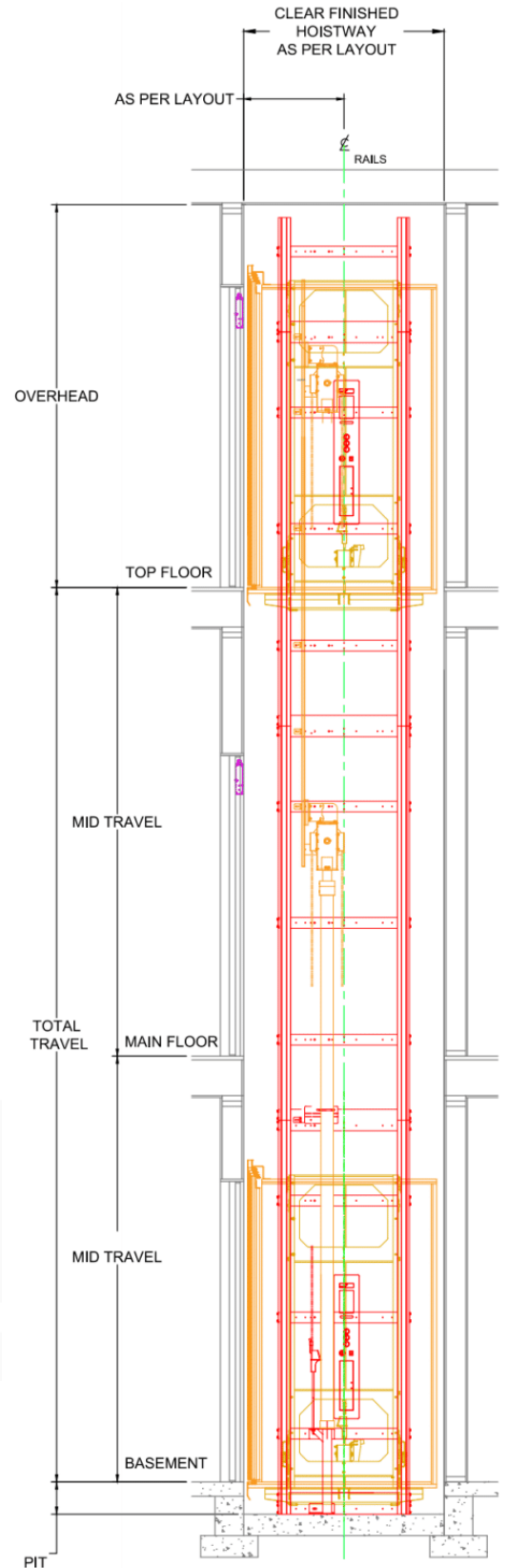


Pit and Overhead Requirements

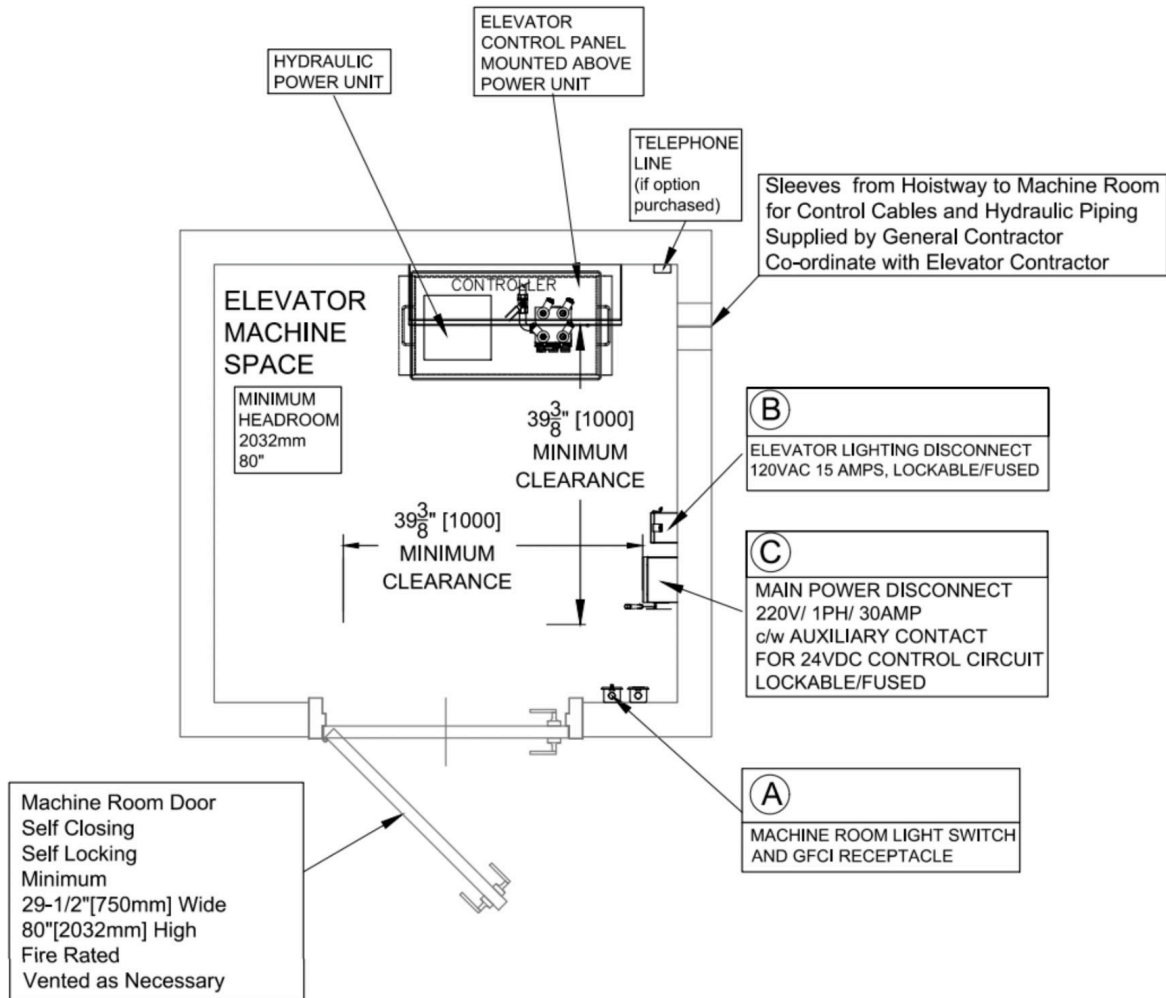
| Door Type | Minimum Overhead Required |
|---|------------------------------|
| Good Gate 84" - Manual | 96" |
| Good Gate 84" - Automatic | 96" minimum, 102" preferred |
| Good Gate 96" - Manual | 108" |
| Good Gate 96" - Automatic | 108" minimum, 114" preferred |
| 2-Speed Victory Door 78 3/4" | 98" |
| 2-Speed Victory Door 84" | 104" |
| 2-Speed Victory Door 96" | 118" |
| 3-Speed Victory Door 78 3/4" | Consult Factory |
| 3-Speed Victory Door 84" | Consult Factory |
| 3-Speed Victory Door 96" 84" and 96" available on cab door only . | Consult Factory |

Overhead is measured from the floor of the upper landing to the top of the hoistway.

| Elevator Capacity | Minimum Pit Depth |
|-------------------|-------------------|
| 1,000 lbs | 9-12" |



Machine Room Recommended Layout



Machine Space Requirements (by others)

Machine Room / Space
Lighting & Service Receptacle

Provide a 120 VAC GFCI duplex receptacle at the machine location. Provide adequate lighting in the machine space with a switch located within easy reach of the point of entry. Power to be supplied from distribution panel as an independent branch circuit. Provide a telephone line to the machine room and connected to the elevator controller (if applicable)

Lighting Supply Disconnect

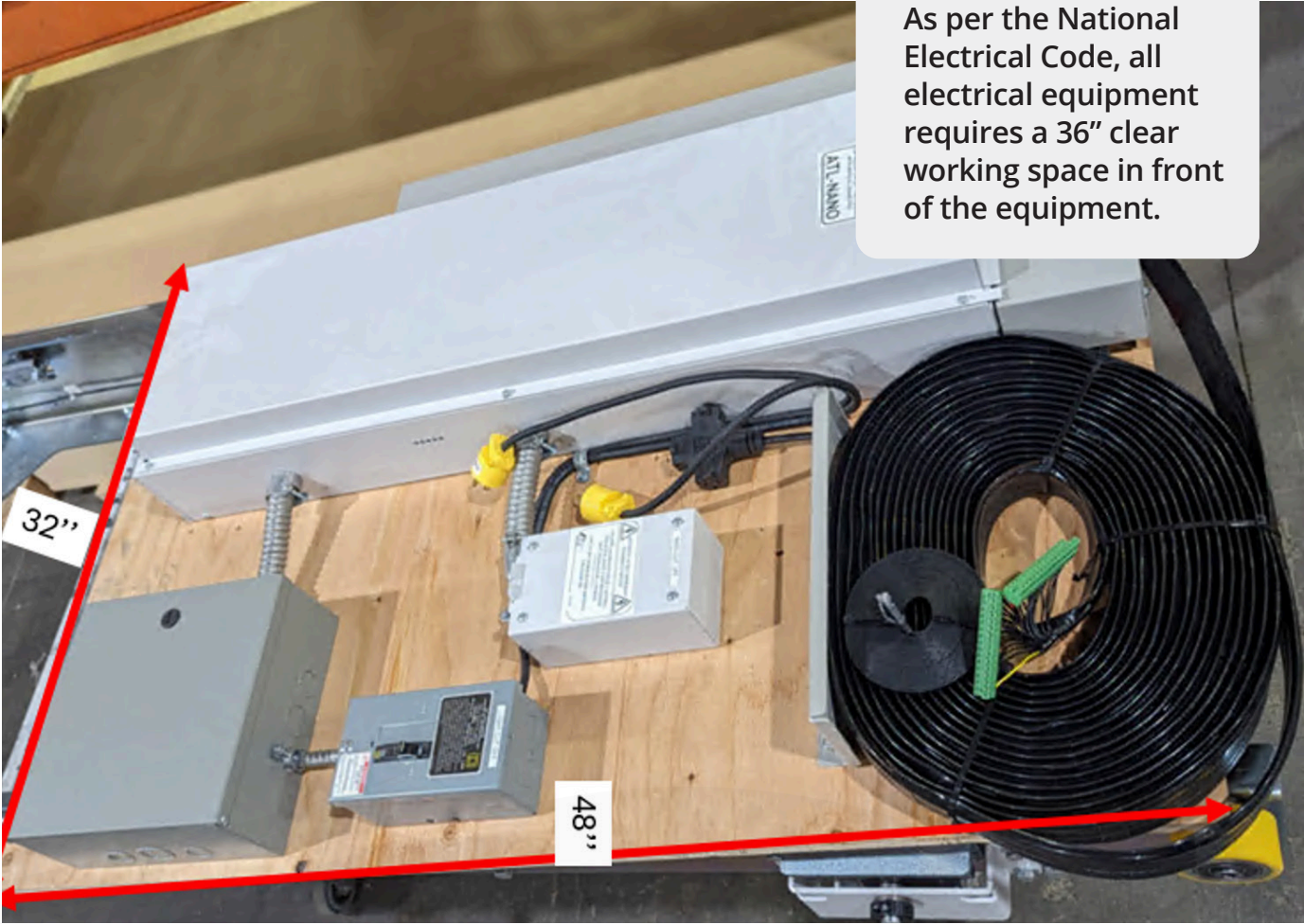
15 AMP fused lockable disconnect switch for 120-1-60 power supply. Power to be supplied from distribution panel as an independent branch switch circuit. Switch to be fused at 15 AMP.

Main Disconnect

30AMP Fused lockable disconnect switch for main power supply provided with neutral. Switch must also be provided with an auxiliary contact designed to open when the disconnect switch is opened.

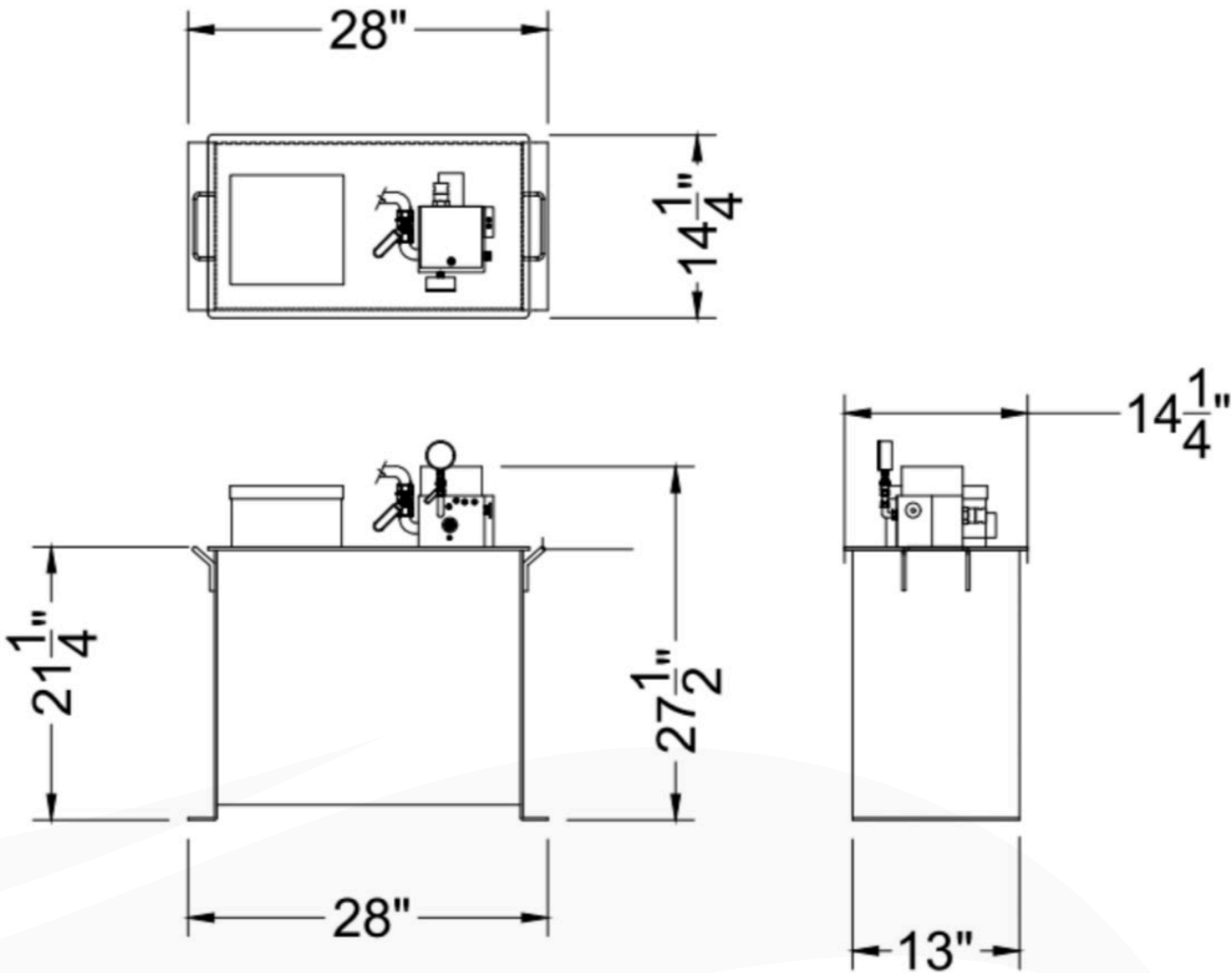
Typical Machine Room Equipment: Controller

Elevator Control Enclosure
(mounted on wall of machine room)



Typical Machine Room Equipment: Power Unit

Elevator Hydraulic Power Unit
(sits on floor of machine room)

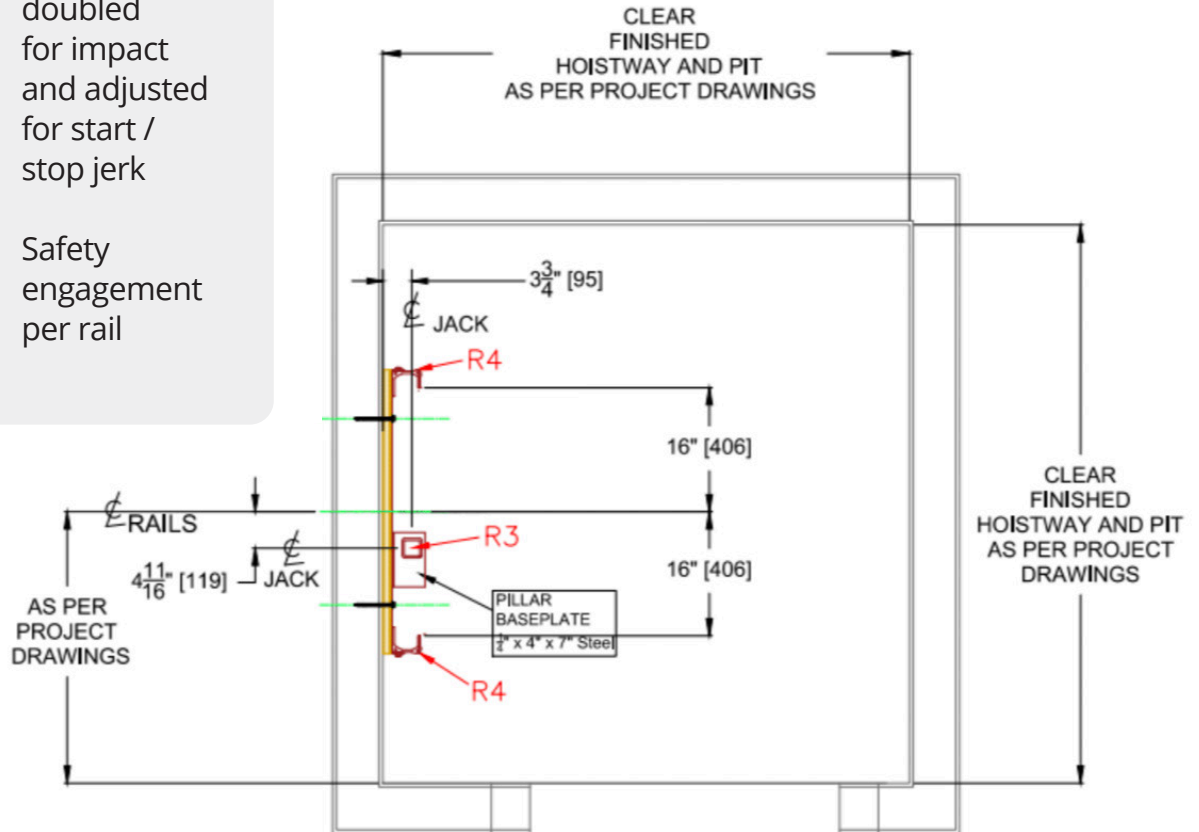


Typical Pit Loads

For elevators with a rated capacity of 1,000 lbs

Pit Loads

| | | |
|----|--------------------------|--|
| R3 | 7,300 lbs. [32.47 kN] | Reaction doubled for impact and adjusted for start / stop jerk |
| R4 | 1,500 lbs. [6.67 kN] | Safety engagement per rail |



Typical Hoistway Pit Floor Construction

8" (203 mm) concrete slab poured on undisturbed or compacted soil with a minimum allowable bearing pressure of 1.0 ksf

Minimum compressive strength of concrete at 28 days must be no less than 20 mPa

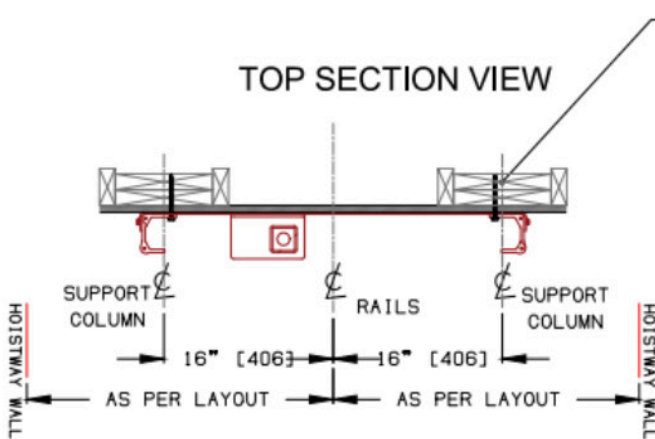
Reinforcing steel (#5, grade 60) must be placed at the bottom of the slab in 2 traverse directions and at a spacing of 12" (305 mm)

Hoistway pit floor to support a load of 10 KIPS (10,000 lbs.) / 44.48 kN (includes impact)

Recommended Rail Wall Construction

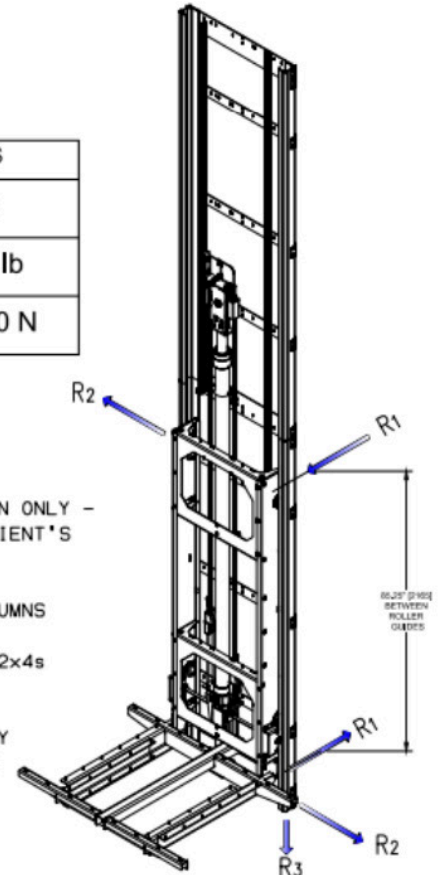
1,000 lbs Capacity

| STATIC REACTIONS | |
|------------------|--------|
| R1 | R2 |
| 570 lb | 225 lb |
| 2535 N | 1000 N |



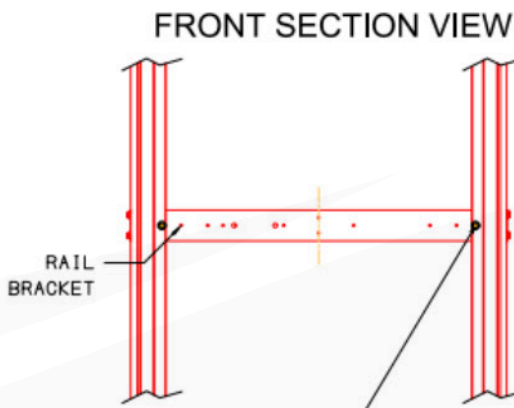
SUGGESTED CONSTRUCTION ONLY - TO BE VERIFIED BY CLIENT'S ARCHITECT/STRUCTURAL ENGINEER***
TWO RAIL SUPPORT COLUMNS EACH CONSTRUCTED OF:
TWO 2x10s INSIDE TWO 2x4s BETWEEN FLOORS

SPANS OVER 10 FEET MAY REQUIRE EXTRA BRACING

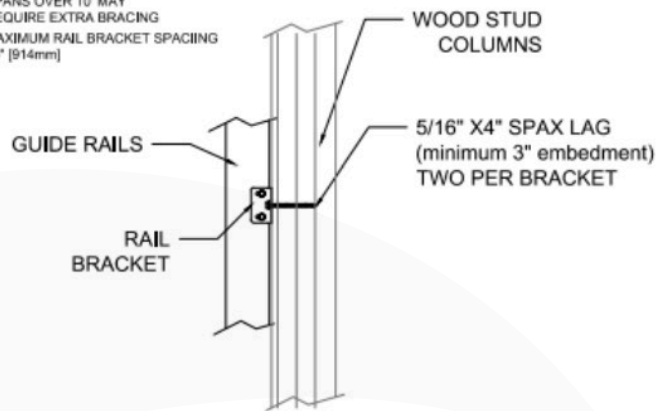


| PIT REACTIONS | |
|---------------|--------------------|
| R3 | 7300 lb [32.47 kN] |

REACTION DOUBLED FOR IMPACT AND ADJUSTED FOR START/STOP JERK



SPANS OVER 10' MAY REQUIRE EXTRA BRACING
MAXIMUM RAIL BRACKET SPACING 36" [914mm]



The elevator devices code requires that the building construction forming the supports for the guide rails & guide rail brackets shall be designed to withstand the forces as indicated in this drawing package. The general contractor shall ensure that the appropriate professional (architect and / or engineer) review the indicated forces to ensure that the building design / construction meets all required codes.

Maximum allowable deflection of rail wall is 3mm [.125"]

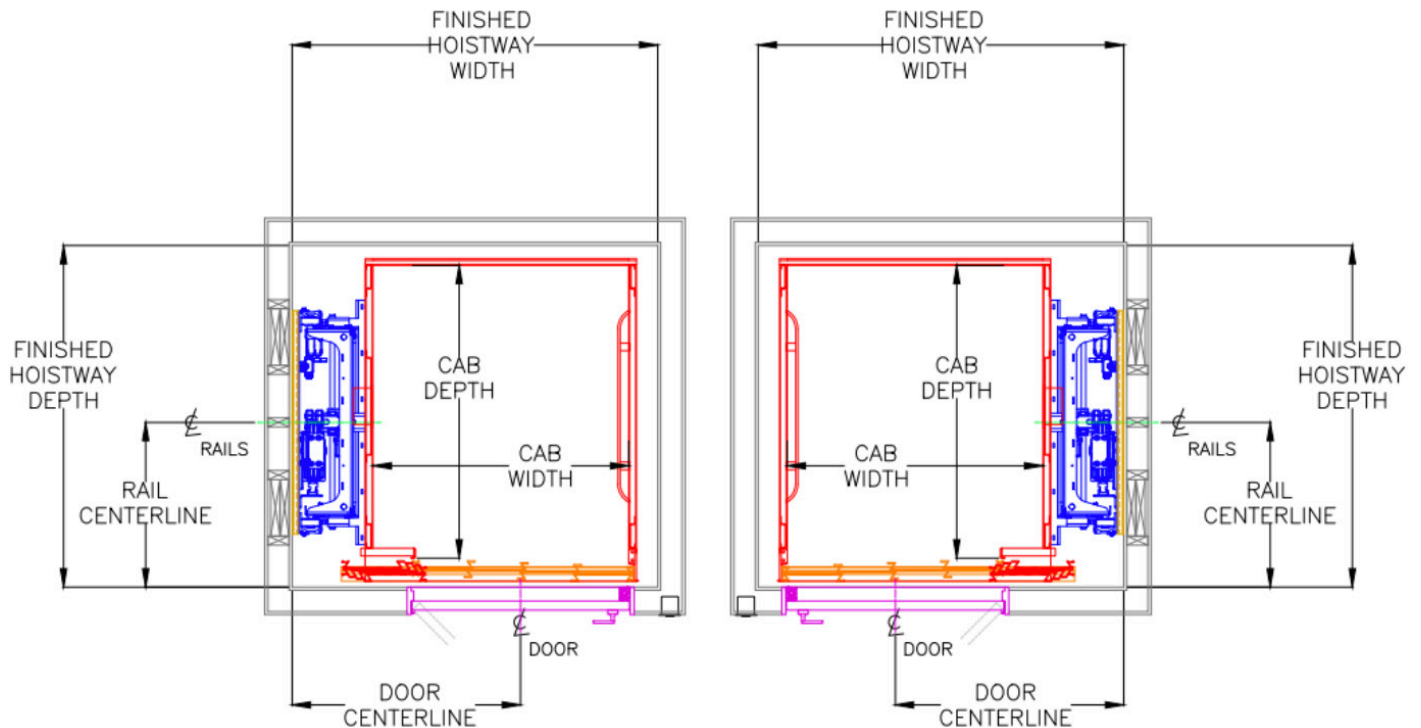
Typical Hoistway Configurations

Good Gate

Manual & Automatic

Typical Hoistway Configurations

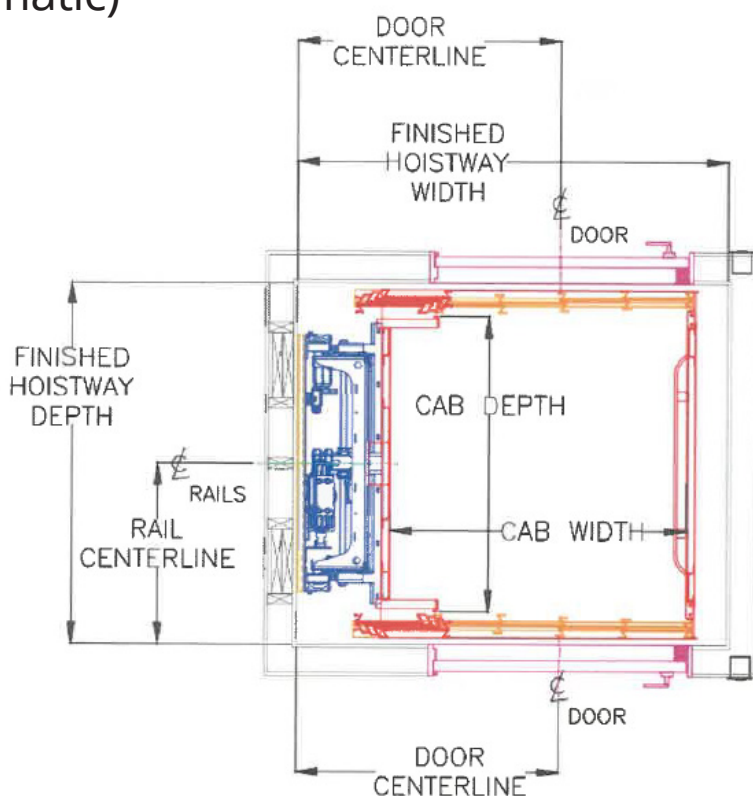
Inline Cab with Good Gate (Manual & Automatic)



| Cab Size W x D | Hoistway Width | Hoistway Depth | Rail Centerline | Door Centerline |
|-------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| 36" x 48" | 53 ¹ / ₄ " | 57 ¹ / ₄ " | 28 ⁵ / ₈ " | 30 ⁵ / ₈ " |
| 36" x 54" | 53 ¹ / ₄ " | 63 ¹ / ₄ " | 31 ⁵ / ₈ " | 30 ⁵ / ₈ " |
| 36" x 60" | 53 ¹ / ₄ " | 69 ¹ / ₄ " | 34 ⁵ / ₈ " | 30 ⁵ / ₈ " |
| 42" x 28" | 59 ¹ / ₄ " | 57 ¹ / ₄ " | 28 ⁵ / ₈ " | 36 ⁵ / ₈ " |
| 42" x 42" | 59 ¹ / ₄ " | 51 ¹ / ₄ " | 25 ⁵ / ₈ " | 36 ⁵ / ₈ " |
| 40" x 54" | 57 ¹ / ₄ " | 63 ¹ / ₄ " | 31 ⁵ / ₈ " | 34 ⁵ / ₈ " |
| 42" x 54" | 59 ¹ / ₄ " | 63 ¹ / ₄ " | 31 ⁵ / ₈ " | 36 ⁵ / ₈ " |

Typical Hoistway Configurations

Through Cab with Good Gate (Manual & Automatic)

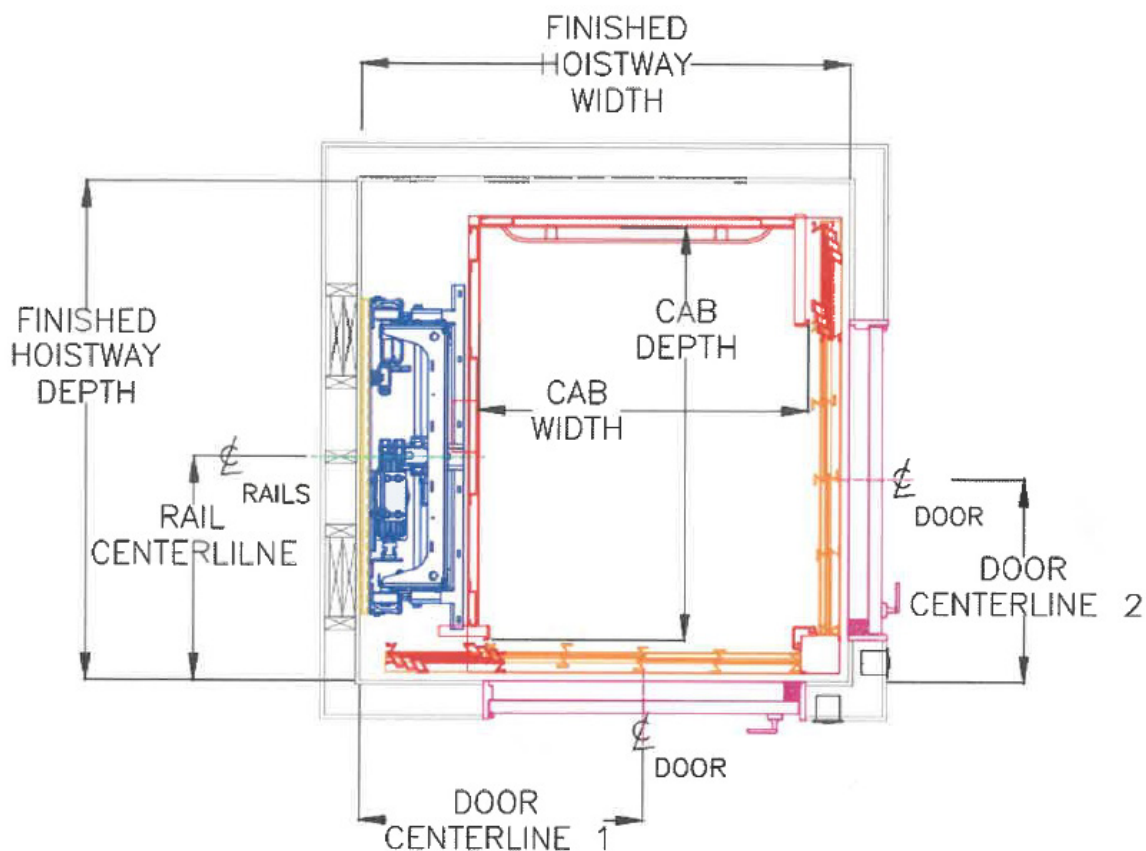


| Cab Size W x D | Hoistway Width | Hoistway Depth | Rail Centerline | Door Centerline |
|-------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| 36" x 48" | 53 ¹ / ₄ " | 57 ¹ / ₄ " | 28 ⁵ / ₈ " | 30 ⁵ / ₈ " |
| 36" x 54" | 53 ¹ / ₄ " | 63 ¹ / ₄ " | 31 ⁵ / ₈ " | 30 ⁵ / ₈ " |
| 36" x 60" | 53 ¹ / ₄ " | 69 ¹ / ₄ " | 34 ⁵ / ₈ " | 30 ⁵ / ₈ " |
| 42" x 28" | 57 ¹ / ₄ " | 63 ¹ / ₄ " | 31 ⁵ / ₈ " | 34 ⁵ / ₈ " |
| 42" x 42" | 59 ¹ / ₄ " | 51 ¹ / ₄ " | 25 ⁵ / ₈ " | 36 ⁵ / ₈ " |
| 40" x 54" | 59 ¹ / ₄ " | 57 ¹ / ₄ " | 28 ⁵ / ₈ " | 36 ⁵ / ₈ " |
| 42" x 54" | 59 ¹ / ₄ " | 63 ¹ / ₄ " | 31 ⁵ / ₈ " | 36 ⁵ / ₈ " |

Typical Hoistway Configurations

90° Cab with Good Gate

(Manual & Automatic)

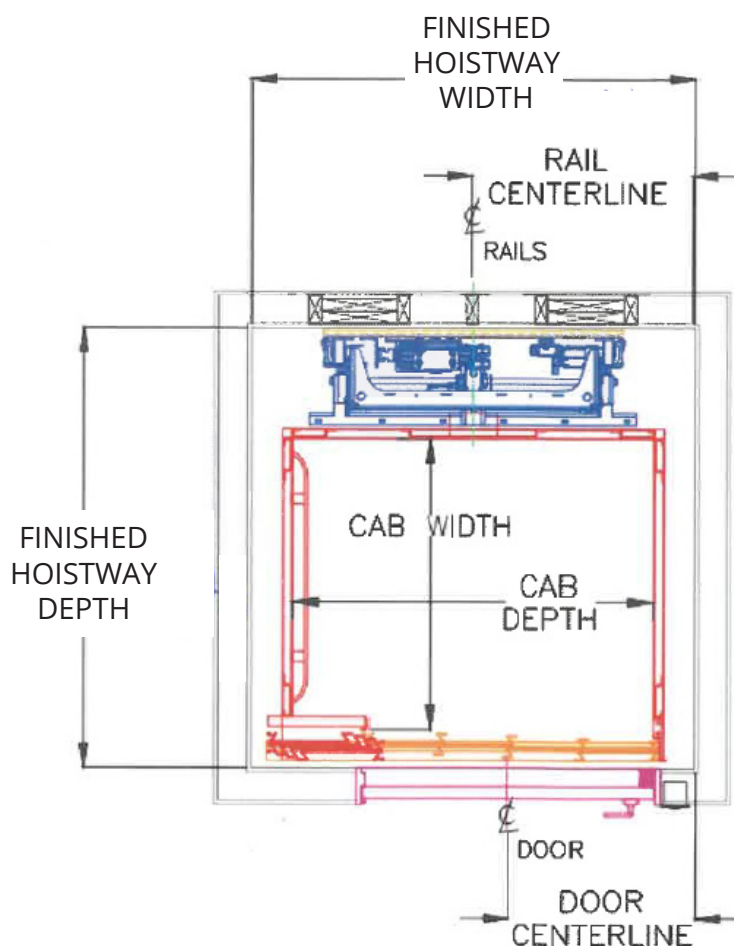


| Cab Size W x D | Hoistway Width | Hoistway Depth | Rail Centerline | Door Centerline 1 | Door Centerline 2 |
|-------------------|----------------------------------|----------------------------------|----------------------------------|------------------------------------|----------------------------------|
| 36" x 48" | 55 ¹ / ₄ " | 57 ¹ / ₄ " | 28 ⁵ / ₈ " | 31 ¹¹ / ₁₆ " | 23 ¹ / ₂ " |
| 36" x 54" | 55 ¹ / ₄ " | 63 ¹ / ₄ " | 31 ⁵ / ₈ " | 31 ¹¹ / ₁₆ " | 23 ¹ / ₂ " |
| 42" x 54" | 61 ¹ / ₄ " | 63 ¹ / ₄ " | 31 ⁵ / ₈ " | 37 ¹¹ / ₁₆ " | 23 ¹ / ₂ " |
| 42" x 48" | 61 ¹ / ₄ " | 57 ¹ / ₄ " | 28 ⁵ / ₈ " | 37 ¹¹ / ₁₆ " | 23 ¹ / ₂ " |

Typical Hoistway Configurations

Inline Rear Rails with Good Gate

(Manual or Automatic)



| Cab Size W x D | Hoistway Width | Hoistway Depth | Rail Centerline | Door Centerline |
|-------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| 36" x 42" | 51 ¹ / ₄ " | 53 ¹ / ₄ " | 25 ⁵ / ₈ " | 22 ⁵ / ₈ " |
| 36" x 48" | 57 ¹ / ₄ " | 53 ¹ / ₄ " | 28 ⁵ / ₈ " | 22 ⁵ / ₈ " |
| 42" x 54" | 59 ¹ / ₄ " | 63 ¹ / ₄ " | 31 ⁵ / ₈ " | 22 ⁵ / ₈ " |
| 42" x 48" | 57 ¹ / ₄ " | 59 ¹ / ₄ " | 28 ⁵ / ₈ " | 22 ⁵ / ₈ " |

Typical Hoistway Configurations

2-Speed and 3-Speed Victory Doors

Consult Factory

Elevate Your Space:

Design Your Elite Elevator

Design Guide

Design Your Elite Plus

Cabin Finishes

Wood veneer offers a sleek wood option or a base for a cabinet finisher to add moldings to match any home decor.

Available Finishes:



Eclipse



Frisquet



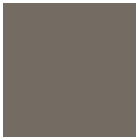
Dorato Grey



Classic
Chocolate



Otter Grey



Shipsaw



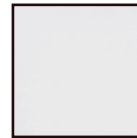
Serenity



Etrusco



Charcoal



Sheer Linen



Ceiling Finishes

Note: the ceiling finish will be the same as the cabin finish.

- Eclipse
- Frisquet
- Dorato Grey
- Classic Chocolate
- Otter Grey
- Shipsaw
- Serenity
- Etrusco
- Charcoal
- Sheer Linen

Ceiling Lighting



Two Recessed
LED Lights
(Standard)



Four Recessed
LED Lights

Design Your Elite Plus

Fixtures and Call Station

There are several options for the Control Operating Panel (COP) to choose from.



Touch Screen COP
(Standard)



Call Station
(Standard)



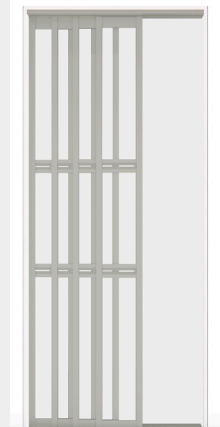
COP with Push Buttons
(Optional)

Good Gate Finishes

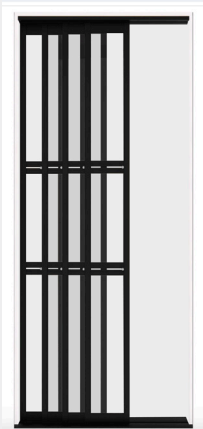
We offer a variety of gate styles.



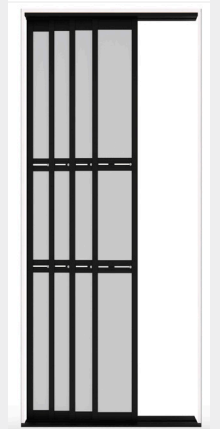
White with
Silver Frame
(Standard)



Clear Acrylic with
Silver Frame
(Standard)



Clear Acrylic with
Black
Frame
(Custom)



White with
Black Frame
(Custom)

2-speed and 3-speed doors are available in both stainless and in glass.



Stainless



Glass

