Residential Elevator Planning Guide

Models **EZ3**, **EZ4**, **EZ5** and **EZ6** Inside a Hoistway

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Staying Home Corporation
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Introduction

This Planning Guide is designed to assist architects, contractors, home owners and elevator professionals in planning for a home elevator that meets the requirements of ASME A17.1 Section 5.3. We strongly recommend you contact the codes authority having jurisdiction in the area 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 877-378-4275 to find a dealer in your area or visit our website, www.stayinghome.com to request information.

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 Staying Home Corp. 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 codes authorities for any variation to standards.

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.

Codes:
While Staying Home Corporation builds all elevators to meet ASME A17.1, Part 5.3, Residential Elevator Standards when installed correctly, some states, cities and/or counties implement local codes that override these standards. Always check with the local authority having jurisdiction to verify the codes that must be adhered to in you location.

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About Staying Home Corporation

Staying Home Corp. (SHC) is a manufacturer of accessibility related products. Each of our associates take a great deal of pride in designing and building products to assist people in staying in the homes they have grown to love.

Our products include residential elevators, dumbwaiters, stair lifts, wheelchair lifts and tornado shelters.

Located just south of Kansas City, MO in the small town of Harrisonville, we understand what it means to work hard and how important it is to spend your money wisely. Our toll-free number is 877-378-4275 and we are open Monday – Friday from 7:00 – 5:00 CST. Visit our website at www.stayinghome.com to see other products available to enable you to safely reside in your home.

Residential Elevators

SHC's elevators comply with ASME A17.1 Section 5.3, the elevators are designed with the home owner in mind. Our elevators have a small footprint and requires no pit or machine room. These elevators focus on providing safe accessibility in the home with minimum construction, cost and maintenance. The integrated sliding door rides with the car, keeping the user safely enclosed while the elevator is in motion.

Powered by two batteries, which are continually charged with standard household current, the elevator will operate even during a power outage. It is controlled by radio frequency push button controls, so no additional wiring is required for a new installation.

SHC elevators are provided through our national dealer network. Please consult with your local authorized distributor to see if the SHC Residential Elevator is the right fit for your project.

Basic Equipment

Model	EZ3	EZ4	EZ5	EZ5L or R	EZ6
Car size	33"W X 26"D X 76"H	33"W X 35"D X 76"H	33"W X 39"D X 76"H	33"W X 39"D X 76"H	42"W X 41"D X 76"H
Car configuration	Single Front Entry	Single Front Entry	Pass-thru Double Entry	Single Left or Right Entry	Single Entry any side or double entry any two sides
Capacity	400 lbs	400 lbs	400 lbs	400 lbs	500 lbs
Travel up to 31'	✓	✓	✓	✓	✓
Max. Stops up to 5	✓	✓	✓	✓	✓
Speed: 15 fpm	✓	✓	✓	✓	✓
Dual winding cable drums	✓	✓	✓	✓	✓
Extruded aluminum rails	✓	✓	✓	✓	✓
Clear vision wall panels	✓	✓	✓	✓	Optional
Sliding car door with clear panels	1	1	2	1	1 or 2
Automatic lighting	-	-	-	-	✓
Fold down car seat	✓	✓	✓	✓	✓
Carpeted floor	✓	✓	✓	✓	-
Slimline telephone	✓	✓	✓	✓	✓

Key Features

- Full time battery powered for use during power outages
- Compact design with small footprint
- Extruded aluminum rails
- Integrated sliding door
- Uses a standard 120 VAC outlet
- No pit or machine room required
- Minimum overhead clearance: 86"
- For new or existing construction
- 3 year warranty on drive train
  1 year on batteries
  2 years on other parts

Safety Features

- Limit switches at each stop
- Final limit at top
- Emergency stop and alarm
- Car door switch
- Honeywell residential door interlocks
- Slack cable device
- Gate/bypass monitor
- Pit switch

Controls

- Battery powered
- Operation: Automatic
- Car Operating Panel: Floor buttons, key switch, emergency stop, alarm and diagnostic indicator
- Controller: Circuit board
- Battery charger
- RF wireless hall stations

Car Finishes

- Finish: RAL 9002 (gray white) powder coated with clear vision panels
- Sliding car door with clear vision panels
- Recessed LED car lighting with silver bezel

Optional Equipment

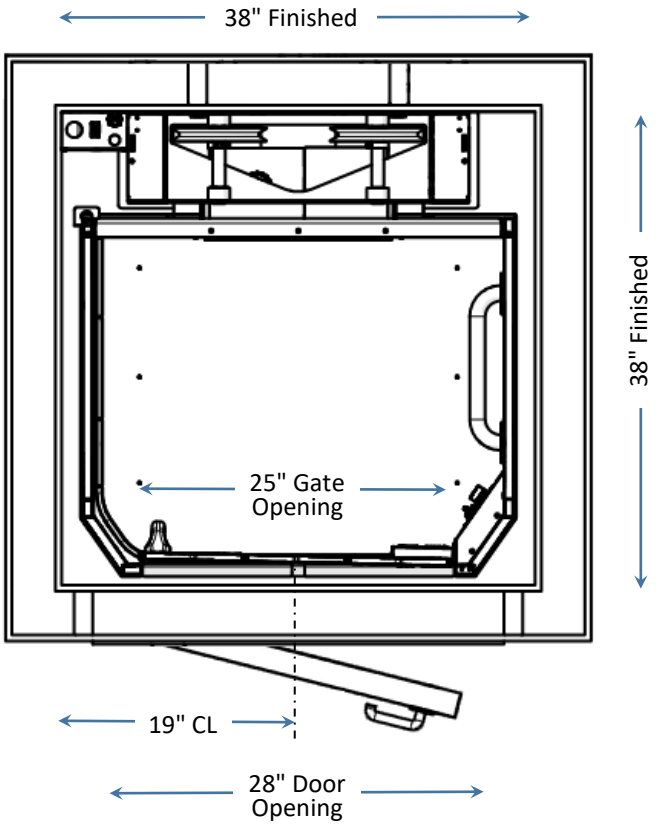
- Key switch on hall stations
- Custom colors available
- Automatic homing to a specific floor
- RF wireless key fob

Front Opening Configurations

Model **EZ3**

Front Entry

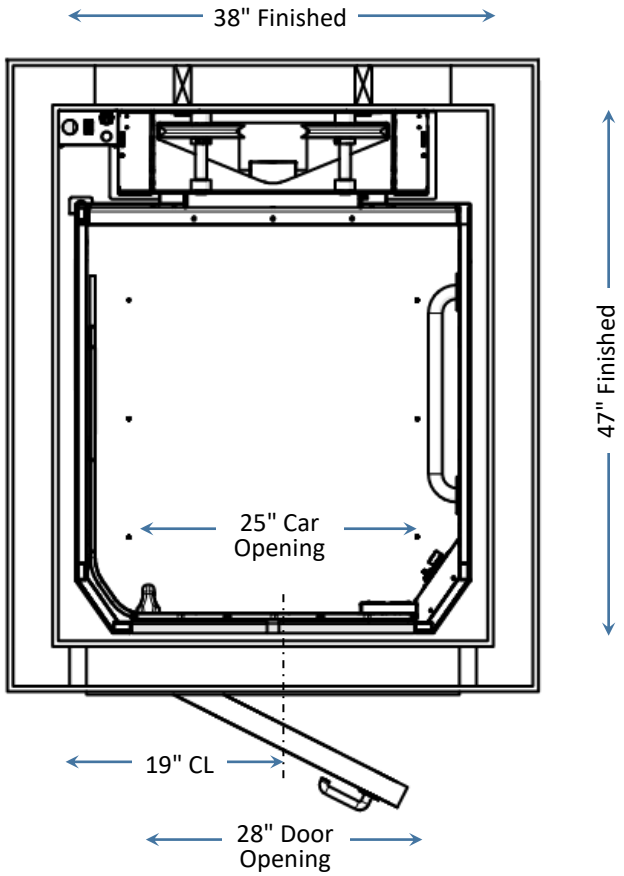
33"W x 26"D x 76"H



Model **EZ4**

Front Entry

33"W x 35"D x 76"H

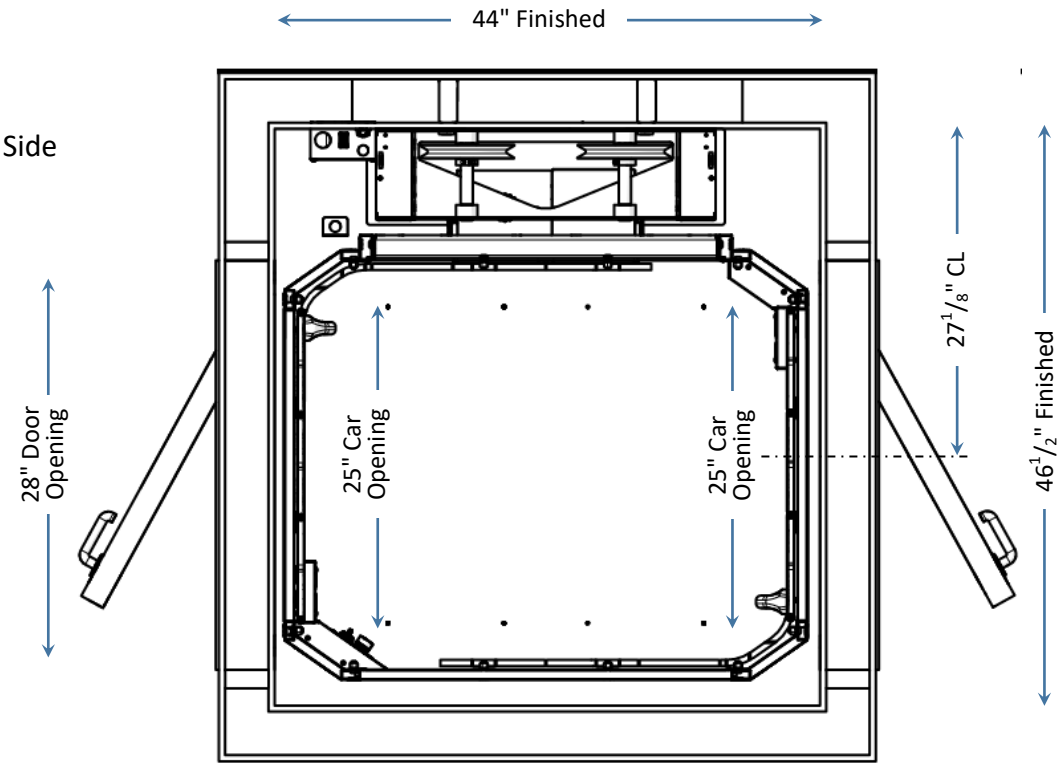


Side Opening Configurations

Model **EZ5**

Pass-thru Entry Each Side

33"W x 39"D x 76"H

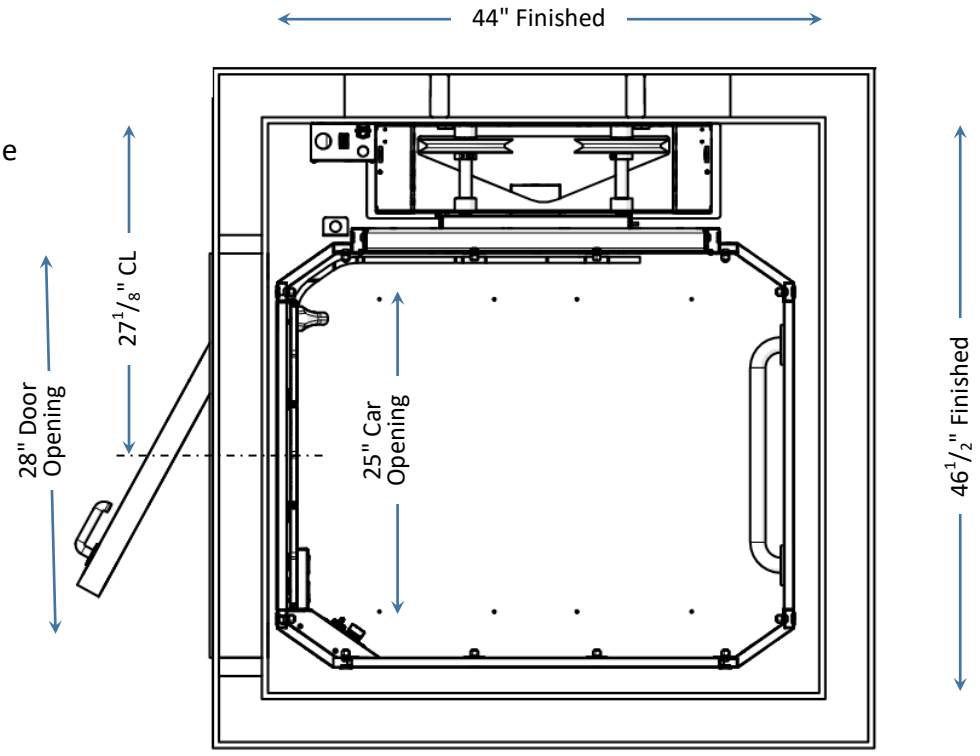


Model **EZ5L** (**R**)

Entry Left or Right Side

(Left shown)

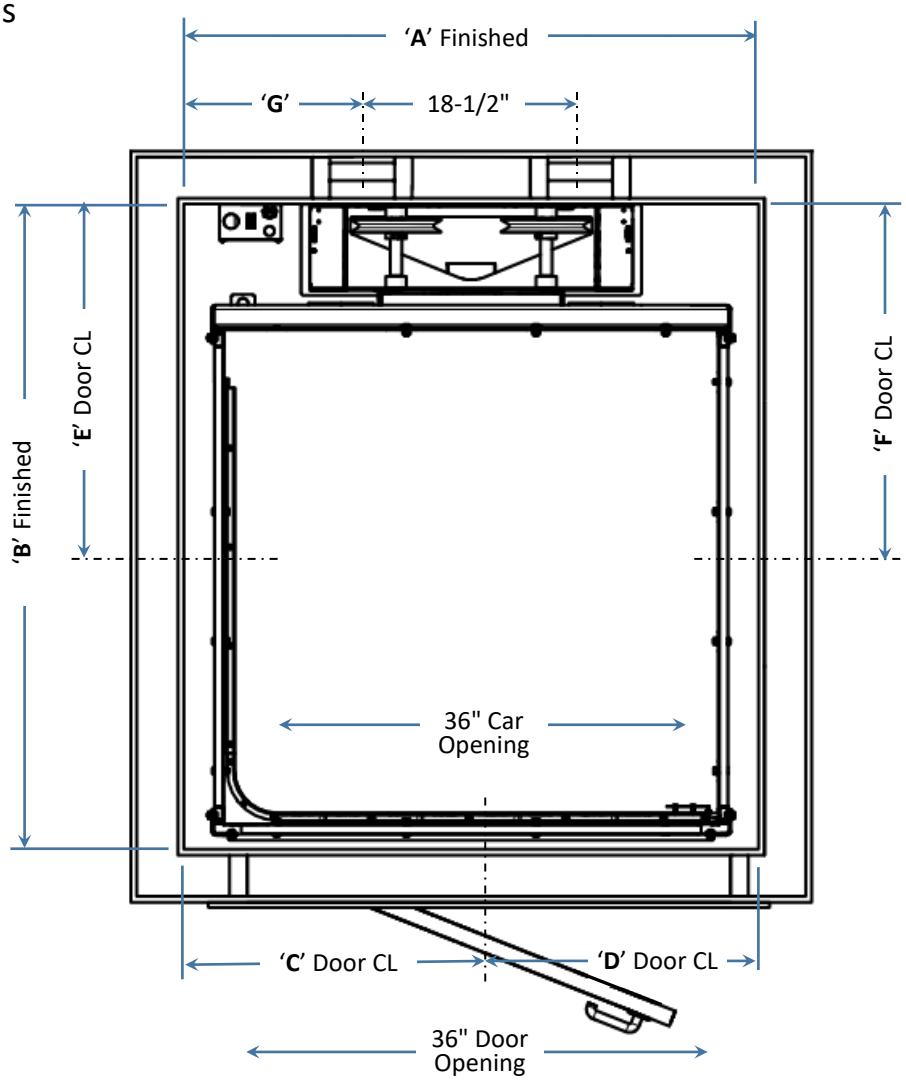
33"W x 39"D x 76"H

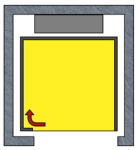
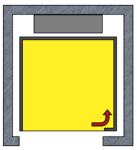
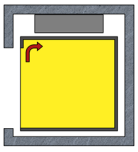
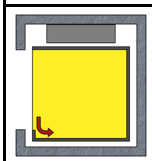


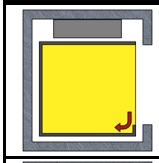
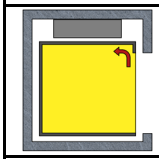
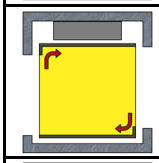
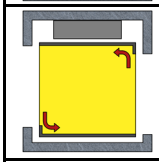
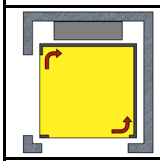
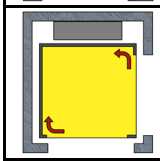
Entry Opening Configurations

Model **EZ6**

1 or 2 Entry Sides



Configuration		'A'	'B'	'C'	'D'	'E'	'F'	'G'
	Front Opening LH Gate Slide	48"	55"	N/A	22-1/2"	N/A	N/A	14-3/4"
	Front Opening RH Gate Slide	48"	55"	22-1/2"	N/A	N/A	N/A	14-3/4"
	Left Opening LH Gate Slide	47-1/2"	55-1/2"	N/A	N/A	33-1/8"	N/A	14-1/8"
	Left Opening RH Gate Slide	47-1/2"	55-1/2"	N/A	N/A	30-1/8"	N/A	14-1/8"

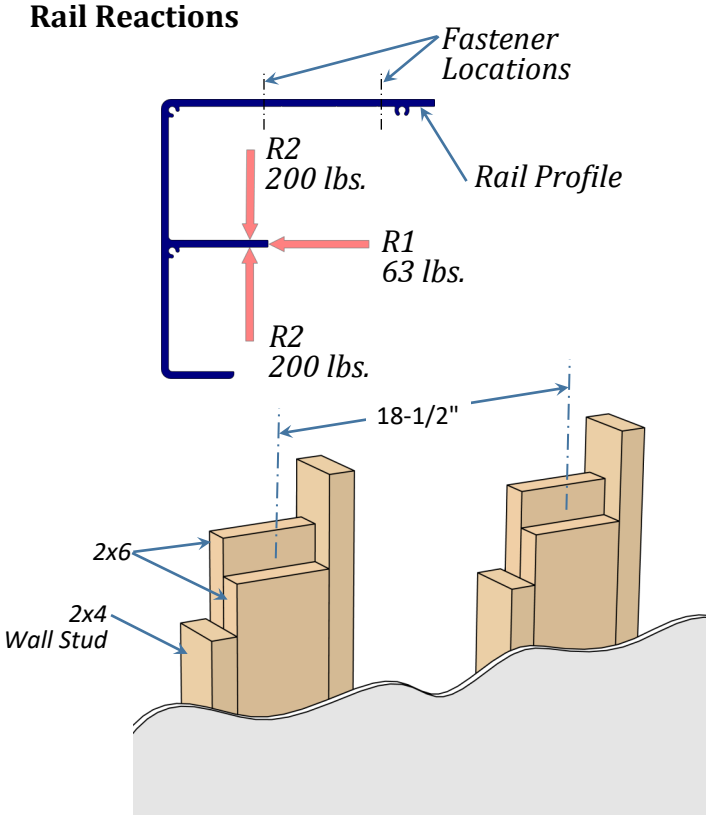
Configuration		'A'	'B'	'C'	'D'	'E'	'F'	'G'
	Right Opening LH Gate Slide	47-1/2"	55-1/2"	N/A	N/A	N/A	30-1/8	14-7/8"
	Right Opening RH Gate Slide	47-1/2"	55-1/2"	N/A	N/A	N/A	33-1/8"	14-7/8"
	Pass Thru Openings LH Gate Slides	46-3/4"	55-1/2"	N/A	N/A	33-1/8"	30-1/8"	14-1/8"
	Pass Thru Openings RH Gate Slides	46-3/4"	55-1/2"	N/A	N/A	30-1/8"	33-1/8"	14-1/8"
	90° Openings LH Gate Slides	47-1/2"	55"	22-1/4"	N/A	33-1/8"	N/A	14-1/8"
	90° Openings RH Gate Slides	47-1/2"	55"	N/A	22-1/4"	N/A	33-1/8"	14-7/8"

Construction Details

Model EZ6

- A load bearing wall is required to sustain rail reactions.
- Minimum overhead clearance is 86" above the top landing finished floor.
- Two rail fasteners are located at 6" from bottom floor and every 30" (min.) above that.
- Pull out force is 65 lbs. per fastener.
- Shear force is 47 lbs. per fastener.
- Static load is 1,484 lbs.
- Rail backing to be 2x4 and 2x6 lumber to be glued and screwed together. *See illustration.*

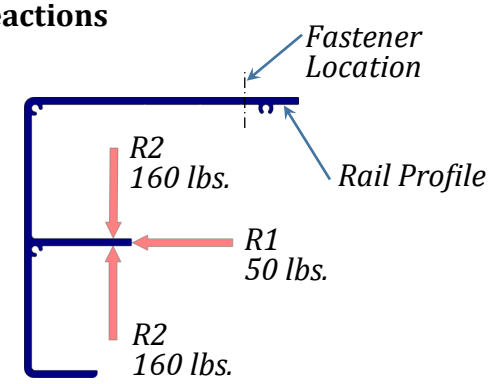
Rail Reactions



Models EZ3 EZ4 EZ5

- A load bearing wall is required to sustain rail reactions or with the semi-free standing option, a load bearing structure at the bottom, center and top of the elevator rails.
- Minimum overhead clearance is 86" above the top landing finished floor.
- Rail fasteners are located at 6" from bottom floor and every 30" (min.) above that.
- Pull out force is 92 lbs. per fastener.
- Shear force is 74 lbs. per fastener.
- Static load is 1,180 lbs.
- Rail backing to be 2x4 or 4x4's at 16" centers.

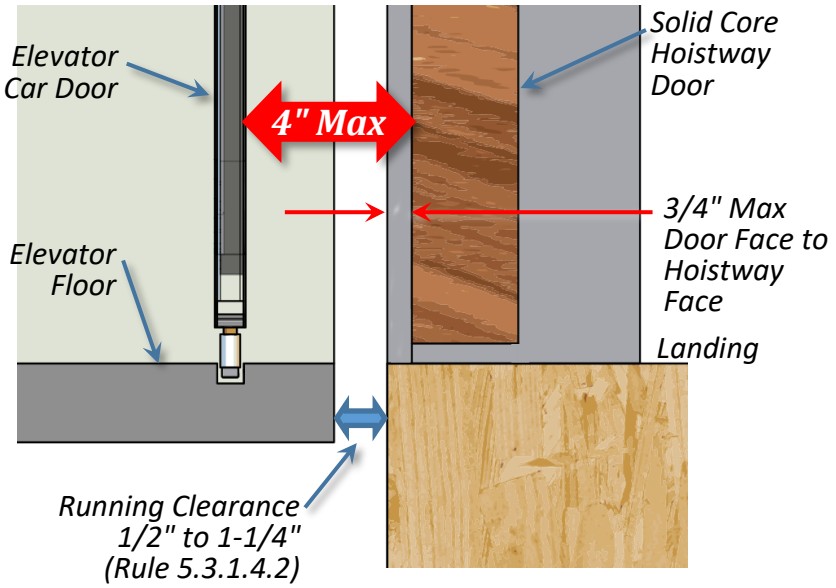
Rail Reactions



Residential Elevator Safety

Securing the space between the hoistway door and the car door/gate

In 2016, the Safety Code for Elevators and Escalators (ASME A17.1) was updated to adopt the new
3/4" x 4" rule. This rule was amended after it was determined that utilizing a standard residential hoistway door, installed under ASME A17.1 (2013 and prior), allows a space between the hoistway door and car gate/door large enough for a child to stand, thus subjecting the child to a potentially unsafe scenario which could result in serious injury **if the space is not protected by some other means**. *See illustration.*



Note: *If your jurisdiction has not adopted the 2016 version of ASME A17.1, we strongly recommend complying with the door gap requirements found in the 2016 version.*

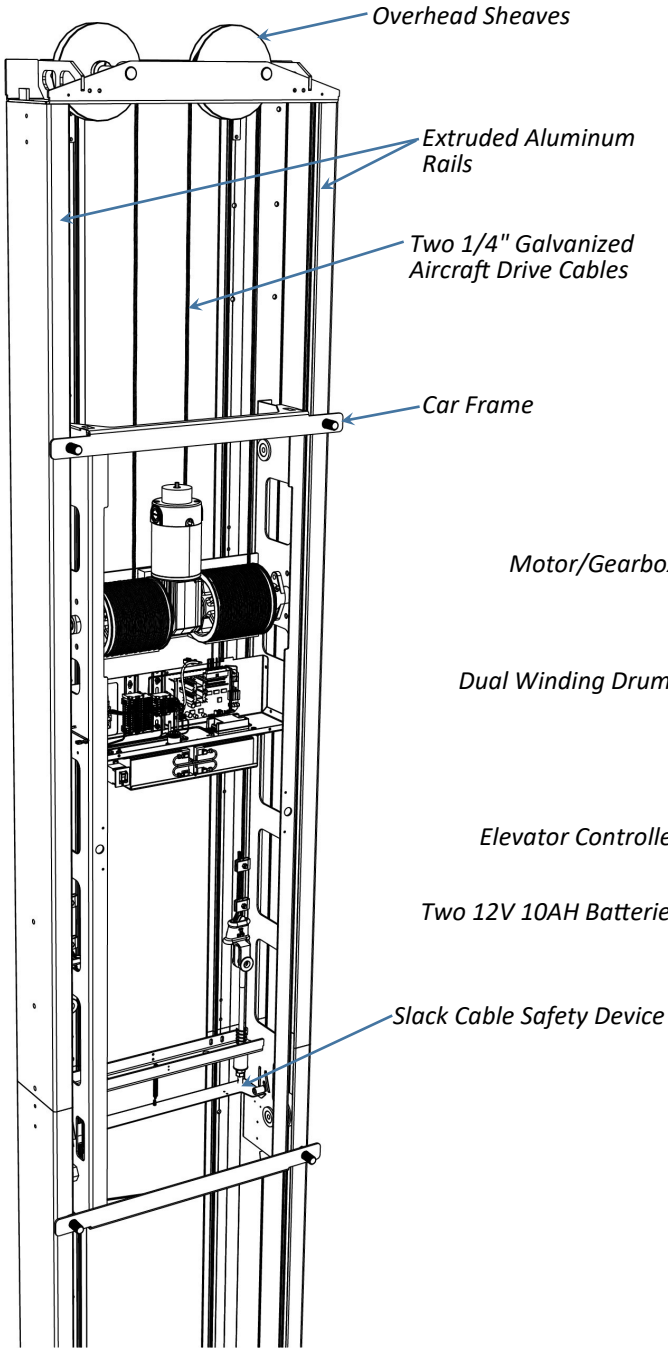
SHC Elevators have added safety features that protect this space

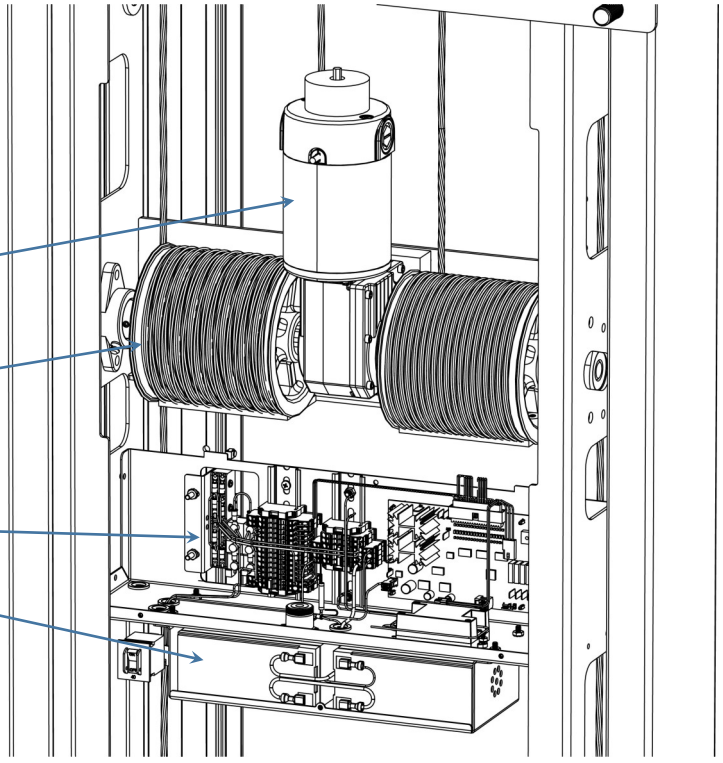
The elevators are provided with a standard, enhanced gate/bypass monitor that continuously monitors the elevator control system to detect a scenario where someone may enter the space between the hoistway and the car, without ever entering the car. The enhanced gate/bypass monitor will keep the elevator from leaving the landing should it detect the aforementioned event.

Electrical Details

- 120 VAC power source required on the back wall, 156" above the lower landing (on either side of the rails).
- Telephone line connection required in the area of the 120 VAC connection. A telephone is provided inside the elevator.
- Elevator runs on battery power. The batteries are continuously charged by a 2 amp smart battery charger.
- Wireless flush mounted hall station controls are provided for each landing. No wiring required. Optional key fob controls are available.

Winding Drum Drive System





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