

# Residential Elevator

## Design Guide

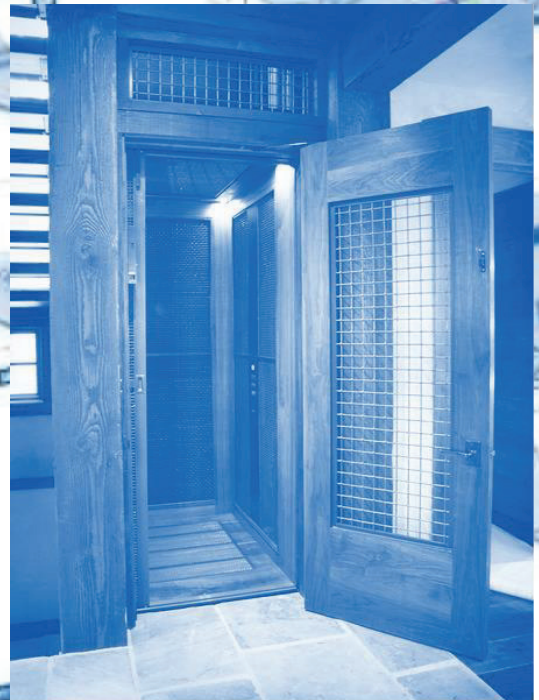
10-1-2020

These elevators meet the requirements of  
ASME A17.1 (2016) Part V,  
Section 5.3 for residential elevators.



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**ROCKY MOUNTAIN  
ELEVATOR PRODUCTS**  
LIVE LIFE ELEVATED

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About Rocky Mountain Elevator Products

RMEP started out 25 years ago installing and servicing elevators, we saw the need for a higher quality product with more options and features. We set out to create a higher level of safety and quality product with more options and features. We set out to create a higher level of safety and drew on our 25 years of knowledge and experience of what the best and worst ideas we have seen and serviced. We incorporated only the best along with new innovations to offer the best product the consumer can find.

Mission Statement

At Rocky Mountain Elevator Products LLC it is our mission to improve safety and customer experience by providing a superior level of design and innovation. We aspire to create industry-wide change by setting a higher level of excellence and always exceeding customer expectations.



## INTRODUCTION

This Planning Guide is to be used only as a reference to determine parameters of installation and the steps to achieve a proper elevator installation. This guide may be used by the architect, contractor, dealer or homeowner. The information in this guide is intended as an overview. Each installation will have site-specific specifications that must be followed. Do not attempt to construct a hoistway on this information. Before beginning actual construction, be sure you have and follow specific shop drawings engineered to fit your site conditions.

**The dimensions and specifications in this planning guide are subject to constant change, without notice, due to product enhancements and continually evolving codes.**

Elevator installation must be done by an authorized elevator contractor, and in accordance with engineered drawings provided by the manufacturer. Installation must also be in compliance with requirements of the National Electric Code, American Society of Mechanical Engineer's safety code, and local building codes. We strongly recommend you contact the code authority in the jurisdiction where the elevator will be installed. Rocky Mountain Elevator's products are designed to meet the requirements of the most recent ASME - A17.1 Part V Section 5 for residential elevators. Rocky Mountain Elevator's products are warranted for 3 years after meeting the above codes. Rocky Mountain Elevator Products assumes no liability for equipment not installed in compliance with these codes.

## ADVANTAGES

- ✓ Machine Room-Less (MRL) available, please see MRL Planning Guide.
- ✓ 2-6 stops, up to 50 feet.
- ✓ More options and features than any other manufacturer.
- ✓ Gate systems are 2016 code compliant for child safety.
- ✓ Superior and customizable design.
- ✓ Superior innovation.
- ✓ Multiple drive options.
- ✓ Plug and play wiring system for fast installation.
- ✓ Pre-tested components to ensure reliability.
- ✓ Smooth and quiet operation: Smooth Ride technology using the industry's best self-adjusting valves on hydraulic models.
- ✓ On-board LCD screen with self-diagnosis for quick and easy troubleshooting.
- ✓ Low Maintenance: the elevator is designed for minimal maintenance; the visual service alert and fault codes will tell you when it's time to consider a service inspection.
- ✓ All models have emergency battery lowering and lighting in case of power interruption.
- ✓ Stylish and modern: Our smooth stylish features are timeless and will blend with any décor for years to come. The fixtures feature long life LED push buttons for that classic elevator feel right in your own home!



MADE IN USA

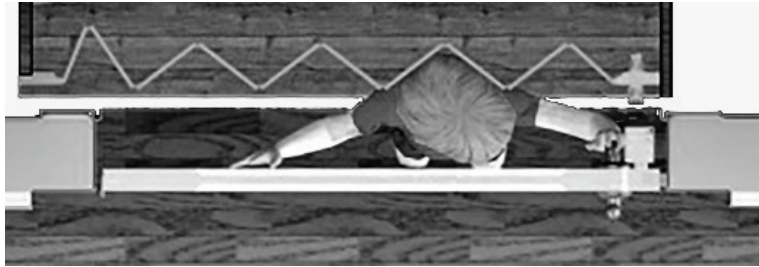


GREEN MANUFACTURING

## NEW RESIDENTIAL ELEVATOR SAFETY AS MANDATED BY THE NATIONAL CODE FOR ENHANCED CHILD SAFETY.

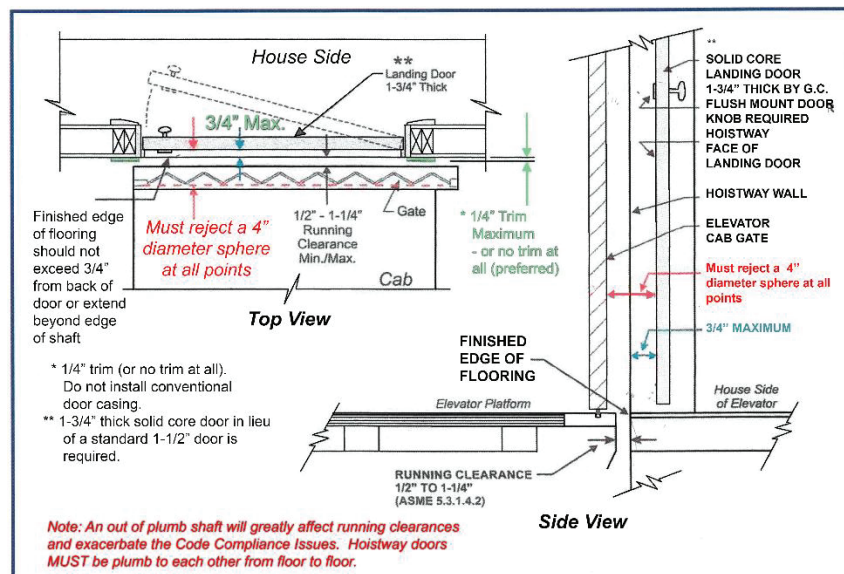
**ASME 5.3.7.2:** code clearance between the hoistway doors or gates and the landings sills and car doors or gates effective May 2016.

Clearance requirements within a private residence state: **The clearance between the hoistway doors or gates and the hoistway face of the landing door or gate and the car door or gate shall not exceed  $\frac{3}{4}$ " (0.75 Inches).** The distance between the hoistway face of the landing door or gate and the car door or gate shall not exceed 4" (inches).



*Figure 1: Illustration of actual 6 y.o. entrapment. Image used with permission.*

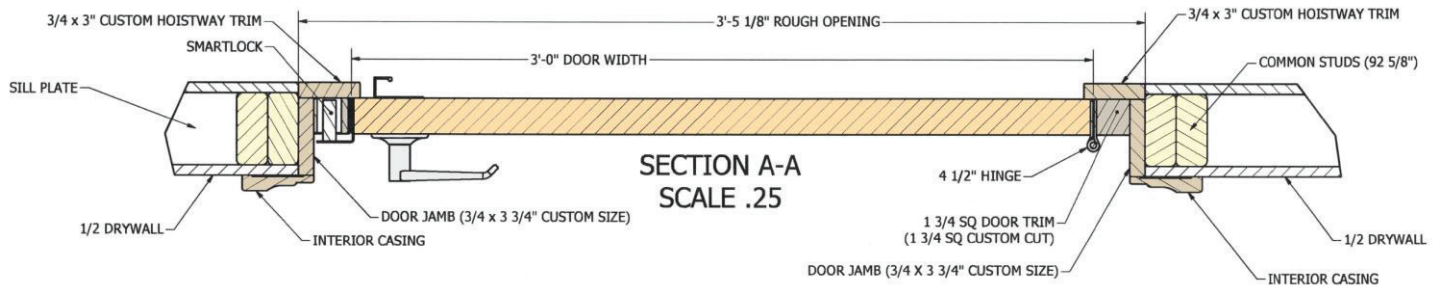
## HOISTWAY DOOR LAYOUT



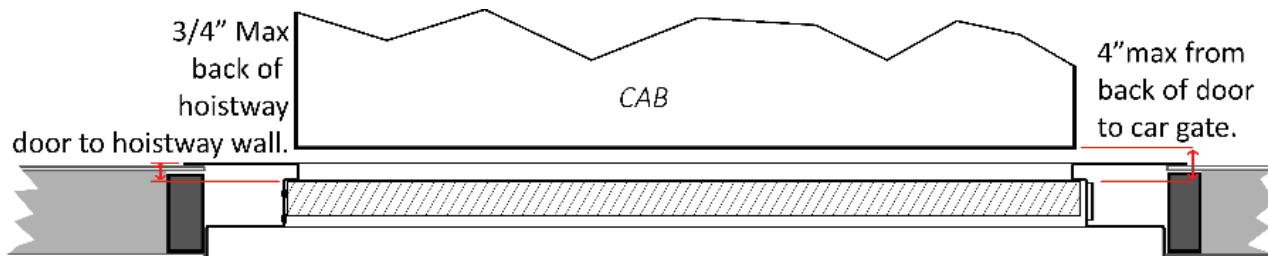
\*See chart for rough opening sizes



## 3/4" CLEARANCE/FLUSH HOISTWAY DOOR FRAMES



Wooden 3/4" door frame (by contractor)



RMEP 3/4" metal door frame (frame is RMEP, door not included)

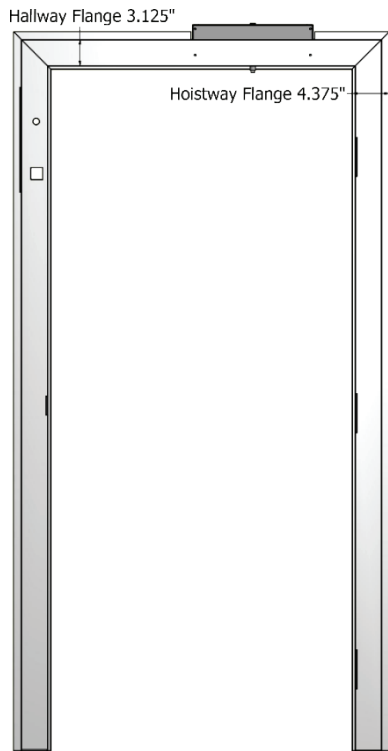
RMEP Strongly recommends use of the metal 3/4" door frame with integrated SMARTLOCK over contractor built hoistway door. (Frame only, door not supplied, see next page)

## CHART FOR ROUGH OPENING

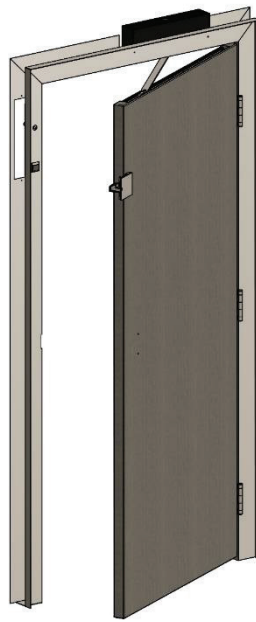
For rough opening size, add 3.5" over the HEIGHT of the door size, 6.75" over the WIDTH of the door size.

Door Size		Rough Framing Opening		With Opener
Width	Height	Width	Height	Height
3' X 6'-8"		3' - 6 3/4"	X 6' - 11 1/2"	7' - 1"
3' X 7'		3' - 6 3/4"	X 7' - 3 1/2"	7' - 5"
3' X 7'-6"		3' - 6 3/4"	X 7' - 9 1/2"	7' - 11"
3' X 8'		3' - 6 3/4"	X 8' - 3 1/2"	8' - 5"
2'-10" X 6'-8"		3' - 4 3/4"	X 6' - 11 1/2"	7' - 1"
2'-10" X 7'		3' - 4 3/4"	X 7' - 3 1/2"	7' - 5"
2'-10" X 7'-6"		3' - 4 3/4"	X 7' - 9 1/2"	7' - 11"
2'-10" X 8'		3' - 4 3/4"	X 8' - 3 1/2"	8' - 5"
2' - 8" X 6'-8"		3' - 2 3/4"	X 6' - 11 1/2"	7' - 1"
2' - 8" X 7'		3' - 2 3/4"	X 7' - 3 1/2"	7' - 5"
2' - 8" X 7'-6"		3' - 2 3/4"	X 7' - 9 1/2"	7' - 11"
2' - 8" X 8'		3' - 2 3/4"	X 8' - 3 1/2"	8' - 5"
2' - 6" X 6'-8"		3' - 3/4"	X 6' - 11 1/2"	7' - 1"
2' - 6" X 7'		3' - 3/4"	X 7' - 3 1/2"	7' - 5"
2' - 6" X 7'-6"		3' - 3/4"	X 7' - 9 1/2"	7' - 11"
2' - 6" X 8'		3' - 3/4"	X 8' - 3 1/2"	8' - 5"
2' - 4" X 6'-8"		2' - 10 3/4"	X 6' - 11 1/2"	7' - 1"
2' - 4" X 7'		2' - 10 3/4"	X 7' - 3 1/2"	7' - 5"
2' - 4" X 7'-6"		2' - 10 3/4"	X 7' - 9 1/2"	7' - 11"
2' - 4" X 8'		2' - 10 3/4"	X 8' - 3 1/2"	8' - 5"

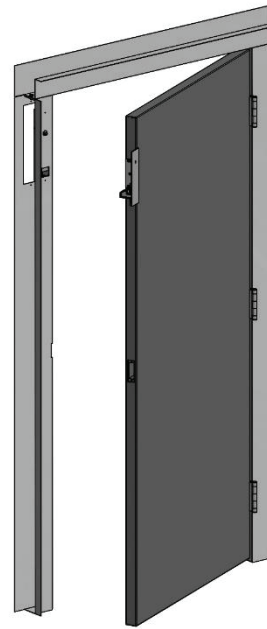
\*1/4" added for shims



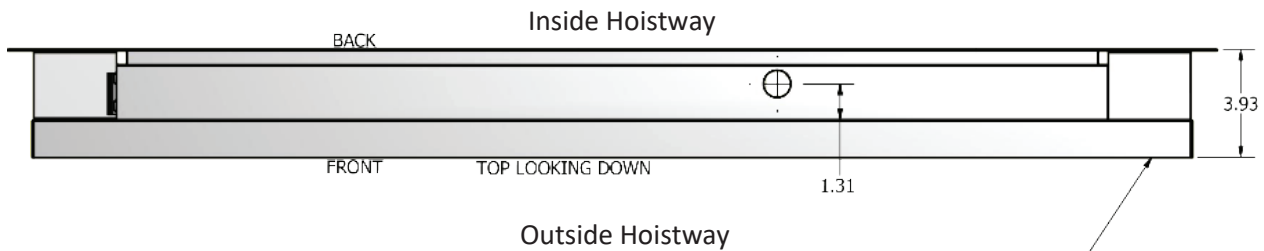
*RMEP metal 3/4" frame*



*With Concealed Door Operator*



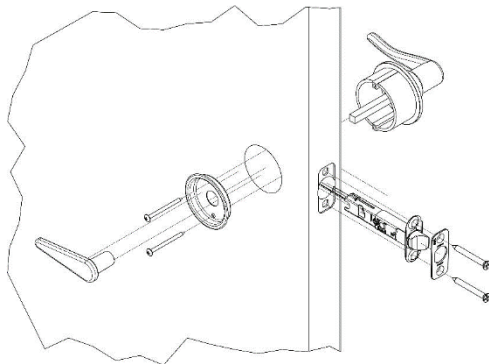
*Manual Swing*



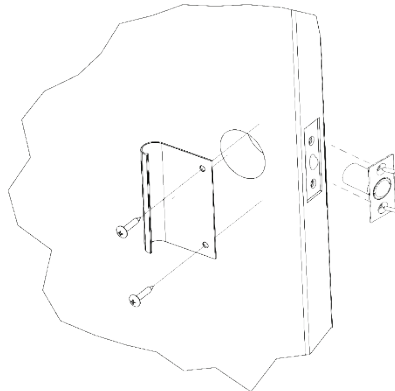
*Top down view*

Hinge side of door frame

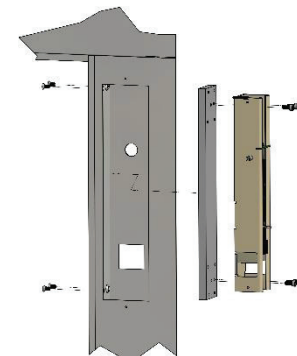
RMEP 3/4" Metal Door Frame, see rough opening chart for R.O. and common sizes.



RMEP Low Profile Turn Handle



Dummy handle with ball catch and J-handle pull covering



Hidden integrated interlock

*ASME 5.3.7.2 (2016) RMEP 3/4" compliant handle solutions prevent the interior handle from protruding into hoistway.*

## PRE-PLANNING STEPS

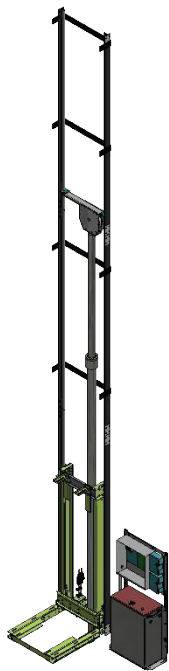
Locate a local dealer and plan your elevator together. Please use the steps below to guide you in the planning process. Many aspects affect what drive system will best suit your needs: car dimensions (accessibility), car and shaft door systems, ceiling heights, machine room size and location. Please refer to the Drive System Overview on page 7, and the hoistway door systems below.

### Pre-planning considerations

1. Determine what pit depth you can provide.
2. Determine what overhead space you can provide.
3. Determine machine room space and location you can provide.
4. Coordinate with your dealer to go over your options, interior finishes, and upgrades.

### Drive Systems

Drive System	Capacity Speed	Pit Depth	Machine Room	Car Door Options	Shaft Door Options	Power Requirements	Standard HP Rating
SRH 2:1 Roped Hydraulic	950 lbs. 40 FPM	10" for residential sling. 14" for HD sling	Machine Room required, preferred adjacent to shaft, can be up to 40' remote	Wrap Around Gate Accordion gate 2 Speed Gate 3 Speed Gate	Swing door 2 Speed 3 Speed	230VAC 1Ph 30Amp 230VAC (HD) 1 Ph 60 Amp	3HP HD 5HP
RMR Winding Drum	950 lbs. 40 FPM	10" for residential sling. No heavy-duty sling	Machine Room required adjacent to rail on bottom floor	Wrap Around Gate Accordion gate 2 Speed Gate 3 Speed Gate	Swing door 2 Speed 3 Speed	230VAC 1Ph 30 Amp	3 HP
RMD	950 lbs. 40 FPM	10" for residential sling. No heavy-duty sling	No Machine Room -	Wrap Around Gate Accordion gate 2 Speed Gate 3 Speed Gate	Swing door 2 Speed 3 Speed	230VAC 1Ph 30 Amp	3 HP

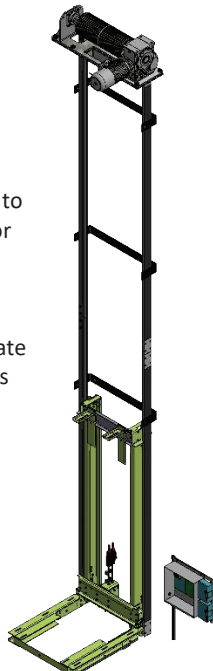


#### Hydraulic Drive

The Hydraulic Drive is one of the most popular choices for homeowners looking for quality, safety and the quietest ride.

Hydraulic systems utilize a piston to raise and lower the car by filling or releasing fluid into the oil tight cylinder.

This drive system can accommodate up to 6 stops in 50' of travel and is rated to 950 lbs standard. 1400 optional. Machine-Room-less available (see MRL guide)



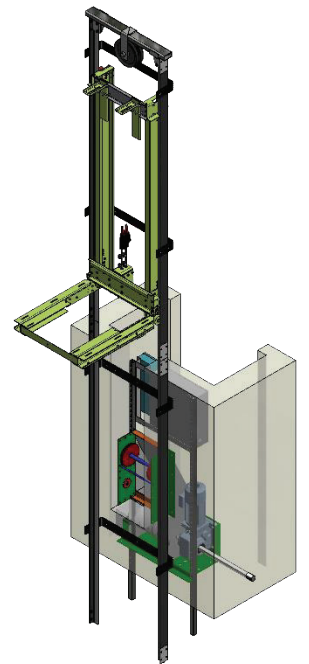
#### Winding Drum

Based on the first elevator systems that are still in use around the world.

Winding Drum systems utilize cables attached to a winding drum. Each cable is rated to support 5 times the full load.

The drum is attached to a modern motor speed controller that varies the speed for smooth starts and stops

This drive system is available in top mounted on the rail or floor mounted in an adjacent machine room. Machine-Room-Less available (see MRL Guide)



Hydraulic Drive (SRH)

Rail Mounted Winding Drum (RMD)

Floor Mounted Winding Drum (RMR)



# COMMON SPECIFICATIONS

## Standard Features

- Travel: Maximum 50'0"
- 2 stops standard (up to 6 stops)
- Minimum distance between floors 12"
- Speed: 40 feet per minute maximum per code
- Rated Capacity 950lbs (1400lb with variance)
- Pit depth: 10" minimum. (14" for HD sling)
- Single opening standard, front and rear or front and side opening optional.
- 3-year limited warranty

## Safety Features

- Child safe exclusive wrap around gate system
- UPS battery lowering and door activation in case of power failure
- Integrated emergency light in COP
- In car stop switch and alarm
- Integrated phone in COP
- Type A instantaneous safeties
- Pit stop switch
- Supplied controller and lighting disconnects
- Slack cable switch

## Controls

- PLC control board functions with hydro or drum
- COP (Car Operator Panel) with LED position Indicator and integrated push button phone
- Automatic car lighting
- Lockable floors upgrade available
- Floor homing: car returns to designated floor, doubles as flood zone protection.
- Vacation function for hydro elevators

## Car Features

- Up to 15 square feet
- 80", 84" and 96" cabs are standard
- Custom height cabs available
- Matching wood handrail
- Variety of metal handrails
- Wear resistant sill/track
- Unfinished plywood floor to accommodate ¾" finished floor
- Low energy LED recessed lights (2) standard, 4 optional, consult factory for available colors
- RMEP exclusive wrap around gate with solid wood, metal, wire mesh or glass inserts

## Equipment

- 230 VAC 60hz controller/motor/pump assembly
- 120VAC car lighting circuit
- Modular 8lb/foot T-rail structure
- Car frame assembly (sling)
- Maxton EMV-10 Valve, self-adjusts to load (Hydraulic only)
- Optional Blaine EV-100 valve (hydraulic only)
- Winding Drum: Rail mount or Remote Machine Room
- Code compliant disconnect included: Mounting options: high/low, left/right hand
- Machine Room-less (MRL) versions available for both hydraulic and winding Drum systems

## Upgrade Features

- Custom car size up to 18 square feet (may require approval from local AJH)
- Custom glass car upgrade
- 1" low profile dot LED lamps (6) optional in a variety of finishes
- Custom lighting optional
- Flat panel, raised panel, wire mesh, glass options for walls
- Accordion gate options
- Auto gate operator option
- Auto door operator option
- Gate & door options
  - RMEP 3 panel 3 speed gate and landing system
  - 2&3 speed commercial gate and landing systems
- Key or keypad operated floor lockouts available

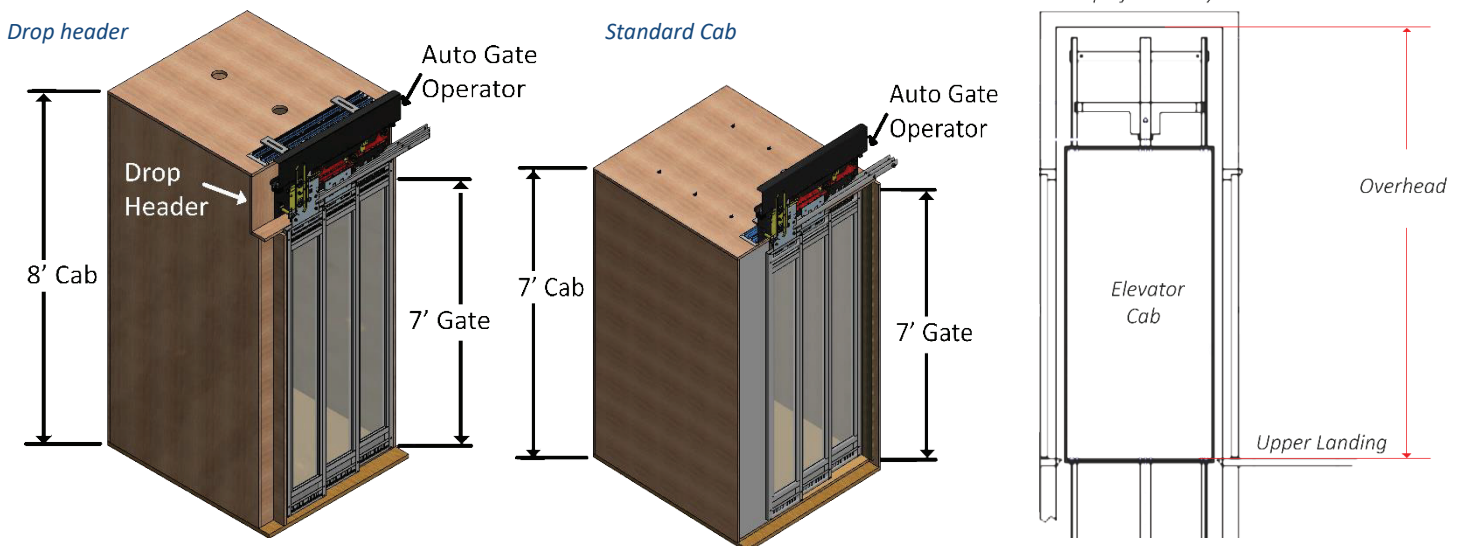
## REQUIRED OVERHEAD

Overhead is the distance from the top landing floor to the ceiling in the hoistway.

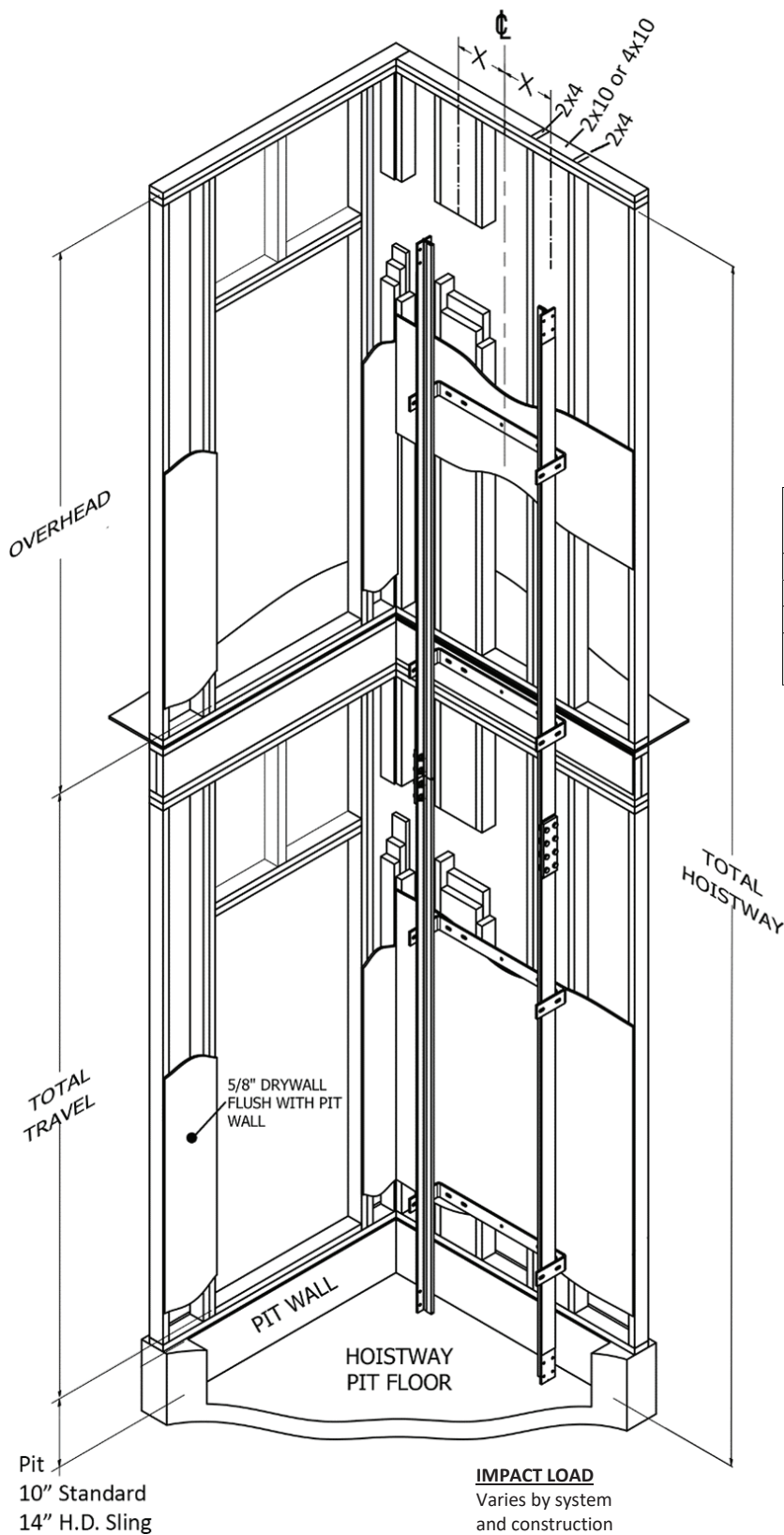
This room accounts for the cab as well as the equipment on top of the cab and any equipment on the rails (Overhead Winding Drum, Sheaves).

Overhead Required for common cab and gate combinations. (Per Code ASME A17.1 - 5.3.1.3) Overhead may vary due to accessories and configurations.				
Gate Style	Gate & Door Height	Cab Height	Required Overhead Hydraulic and RMR	Required Overhead with Winding Drum
Wrap Around Gate Accordion Gate	6' 8"	6'8" (80")	93.5"	109.5"
	7"	7' (84")	96"	112"
	8"	8' (96")	108"	124"
Two Speed Fire Rated Victory	84.658" X 36"	7' (84")	108"	123.5"
		8' (96")*	108"	124"
Two Speed Victory	78.75" X 35.5"	6'8" (80")	101.75"	117.75"
		7' (84")*	101.75"	117.75"
		8' (96")*	108"	124"
Two Speed Victory	94.5" X 35.5"	8' (96")	121.25"	137.25"
Three Speed Victory	78.75" X 31.5"	6'8" (80")	105.5"	121.5"
		7' (84")*	105.5"	121.5"
		8' (96")*	108.25"	124.25"
Three Speed Victory	78.75" X 35.5"	6'8" (80")	105.5"	121.5"
		7' (84")*	105.5"	121.5"
		8' (96")*	108.25"	124.25"

\*INDICATES THAT A DROP HEADER IS REQUIRED.



# HOISTWAY ILLUSTRATION

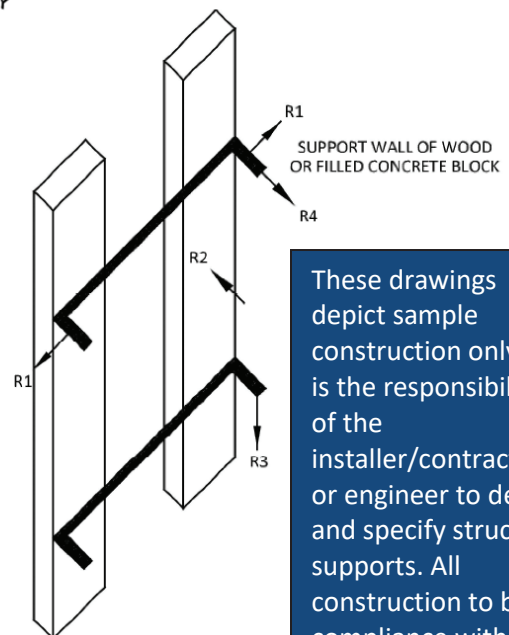


950 CAPACITY RAIL FORCES WITH EMPTY CAB		
R1	RAIL REACTION 1	83
R2	RAIL REACTION 2	166
R3	REACTION DUE TO SAFETY ENGAGEMENT	4421
R4	LOAD EMPOSED DURING PULL OUT FORCE ON RAIL SUPPORT	616

950 CAPACITY RAIL FORCES WITH + 40% CAPACITY		
R1	RAIL REACTION 1	114
R2	RAIL REACTION 2	229
R3	REACTION DUE TO SAFETY ENGAGEMENT	6726
R4	LOAD EMPOSED DURING PULL OUT FORCE ON RAIL SUPPORT	616

HD 950 CAPACITY RAIL FORCES WITH EMPTY CAB		
R1	RAIL REACTION 1	112
R2	RAIL REACTION 2	198
R3	REACTION DUE TO SAFETY ENGAGEMENT	5600
R4	LOAD EMPOSED DURING PULL OUT FORCE ON RAIL SUPPORT	616

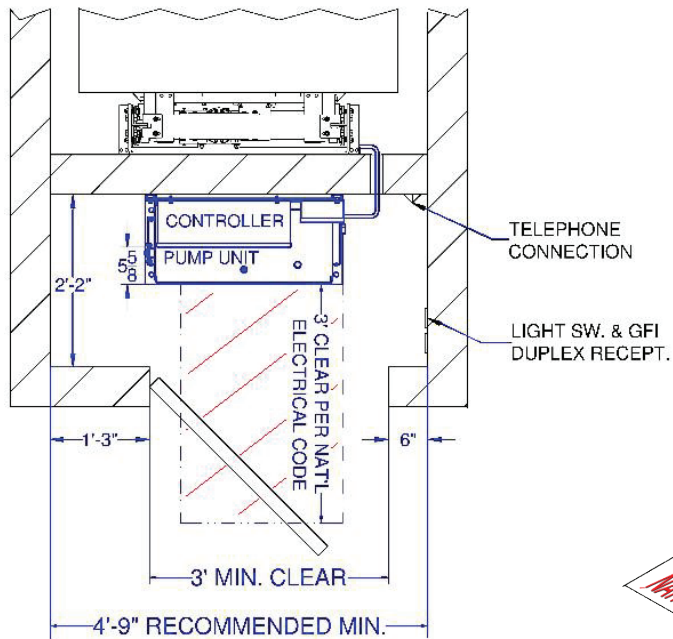
HD 950 CAPACITY RAIL FORCES WITH +40% CAPACITY		
R1	RAIL REACTION 1	145
R2	RAIL REACTION 2	291
R3	REACTION DUE TO SAFETY ENGAGEMENT	8981
R4	LOAD EMPOSED DURING PULL OUT FORCE ON RAIL SUPPORT	616



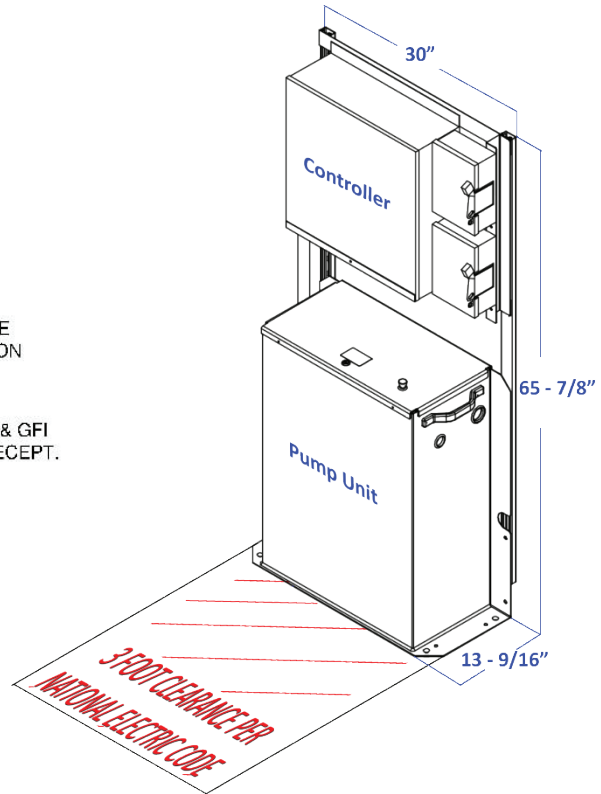
These drawings depict sample construction only. It is the responsibility of the installer/contractor or engineer to design and specify structural supports. All construction to be in compliance with local codes.



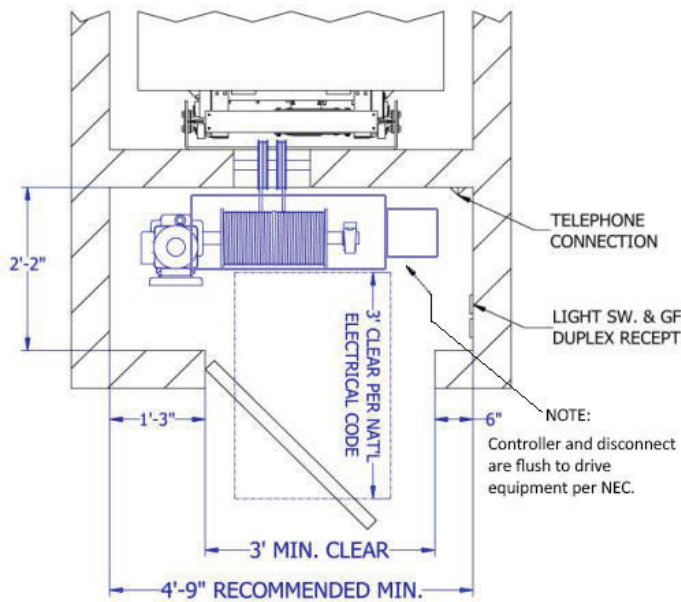
# MACHINE ROOM DESIGNS AND CONTROLLER SPACE



Machine Room – Hydraulic (SRH)

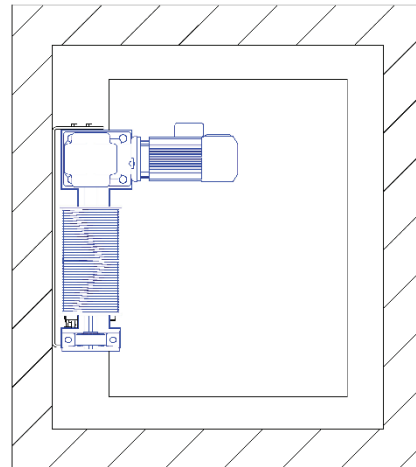


SRH Hydraulic Controller and Pump



Winding Drum (RMR)

NOTE: Controller space not shown, location by installation contractor.



Winding Drum (RMD)

# STEPS TO PLANNING YOUR HOME ELEVATOR

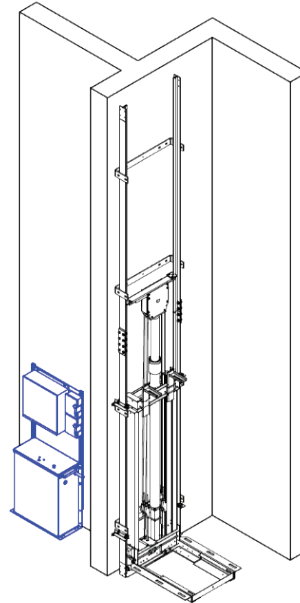
## Drive Systems Overview (Step 1)

Rocky Mountain Elevator Products offers you the choice of two configurations for the roped hydraulic and winding drum, (for machine room-less applications refer to MRL Planning Guide) giving you the flexibility to select the best drive system for your application.

### Standard Roped Hydraulic: (SRH)

- ✓ 2:1 rope hydraulic unit utilizing (2) 3/8" 8x19 wire ropes running over a sheave mounted atop a hydraulic cylinder
- ✓ 950 lbs. capacity
- ✓ Smooth Ride Technology using the industry's only self-adjusting ride
- ✓ Submerged motor for quiet operation
- ✓ Emergency battery lowering, (standard)
- ✓ 40 FPM travel speed (increased speed requires a variance)
- ✓ Slack cable safety device
- ✓ 230 V 1Phase 30 Amp with neutral and ground (4 wires)

Standard  
Hydro



### Winding Drum:

- ✓ Inverter controlled variable speed winding drum unit utilizing (2) 3/8" 8X19 steel core wire ropes as suspension means
- ✓ 950 lbs. capacity standard
- ✓ RMR drum behind the rail (Figure B)
- ✓ Variable speed for a quality ride
- ✓ Floor specific battery descent (optional)
- ✓ 40 FPM travel speed
- ✓ 230V 1 Phase 30 Amp with neutral and ground (4 wires)
- ✓ Slack cable safety device
- ✓ RMD –Rail Mounted Drum (requires attic access) (Figure A)

Figure A  
RMD

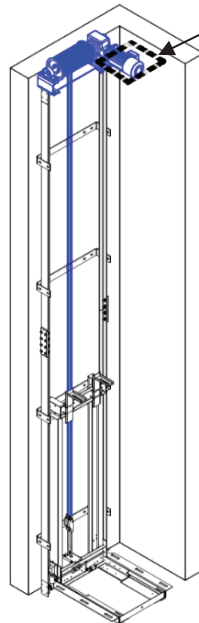
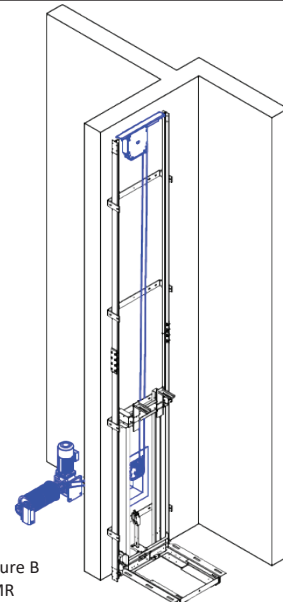
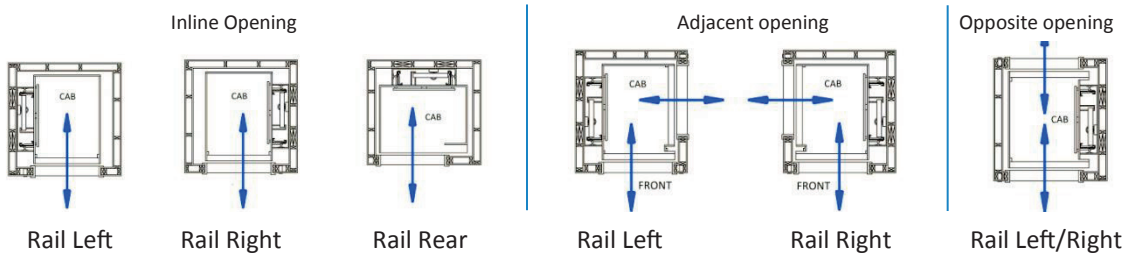


Figure B  
RMR

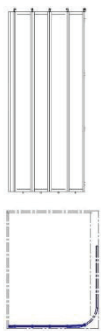


## Standard Car Layouts (Step 2)



## Gate Styles (Step 3)

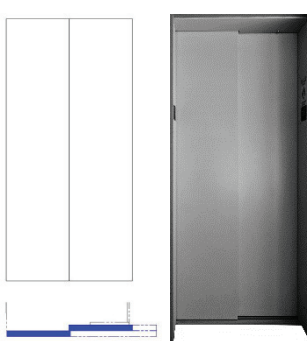
Wrap Around Gate



Accordion Gate



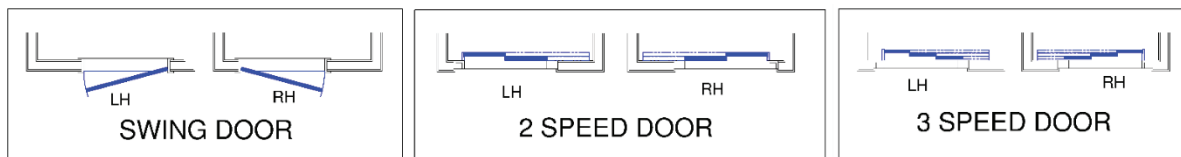
2 Speed Gate



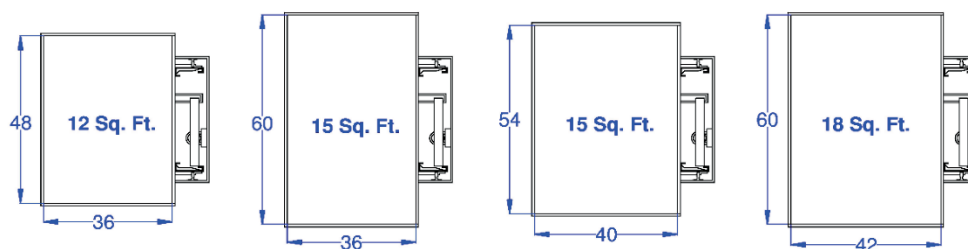
3 Speed Gate



## Hoistway/Entrance Doors (Step 4)



## Car Sizes (Common Sizes Shown) (Step 5)

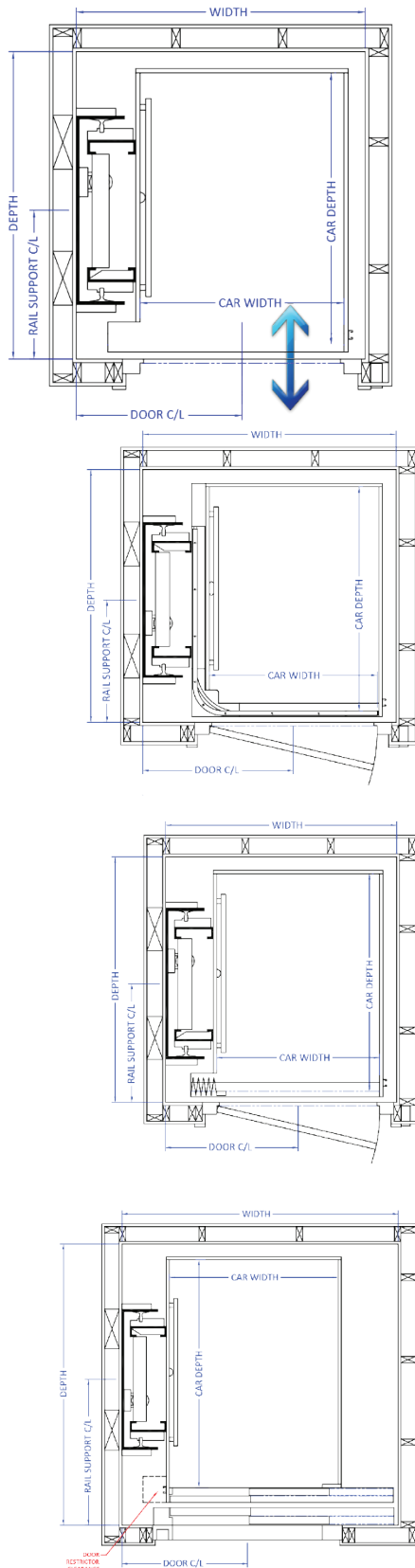


18 Sq. Ft. requires local variance- not A17.1 part 5 compliant, 14" pit required.



## HOISTWAY LAYOUTS (STEP 6)

### Common Standard Hoistway layouts for In-Line Opening Cabs (P.1)



\*Residential Sling requires a minimum 10" pit depth. Door centerlines represent 36" swing door (other widths available)

\*Common sizes shown for reference. Refer to [www.rockymountainelevatorproducts.com](http://www.rockymountainelevatorproducts.com) to download DWG files with additional sizes & configurations or contact RMEP.



This symbol is listed beside the car size indicates the car size is suitable for a wheelchair and attendant.

Rail left configurations are shown. Other configurations (Rail Right) are available on line.

INLINE SRH WRAP-AROUND (RMEP 3/4" Frame)					
CAR SIZE	HOISTWAY		RAIL SUPPORT C/L	FRONT DOOR C/L	CLEAR FRONT OPENING
	WIDTH	DEPTH			
36X48	54-3/8	54-1/4	26-1/4	32-1/4	34
36X60	54-3/8	66-1/4	32-1/4	32-1/4	34
40X54	58	60-1/4	29-1/4	32-1/4	34



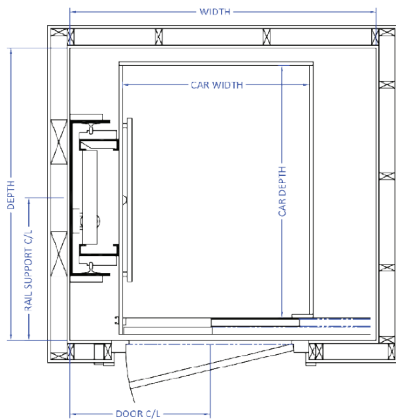
INLINE SRH ACCORDION (RMEP 3/4" Frame)					
CAR SIZE	HOISTWAY		RAIL SUPPORT C/L	FRONT DOOR C/L	CLEAR FRONT OPENING
	WIDTH	DEPTH			
36X48	51	54-1/4	26-1/4	29-1/4	34
36X60	51	66-1/4	32-1/4	29-1/4	34
40X54	55	60-1/4	29-1/4	33-1/4	34



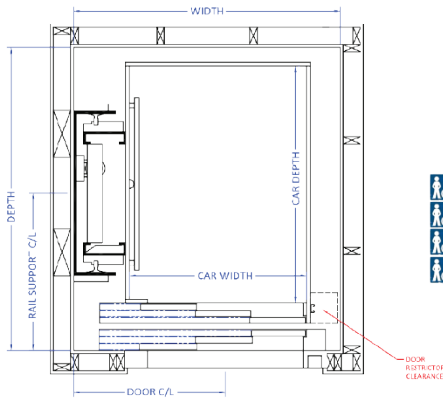
INLINE SRH 2-SPEED/2-SPEED						
CAR SIZE	HOISTWAY		RAIL SUPPORT C/L	FRONT DOOR C/L	CLEAR FRONT OPENING	STRIKE DIRECTION
	WIDTH	DEPTH				
40X54	65-1/2	66-11/16	34-9/16	29-3/4	35.5	LH
40X54	62-1/2	66-11/16	34-9/16	37-1/4	35.5	RH



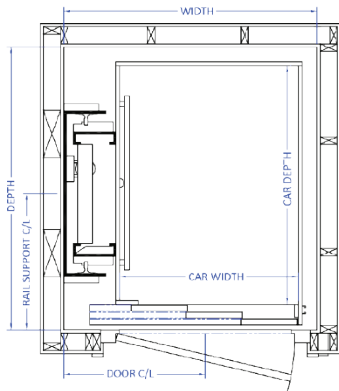
## Common Standard Hoistway layouts for In-Line Opening Cabs (P.2)



INLINE SRH 2-SPEED/SWING						
CAR SIZE	HOISTWAY		RAIL SUPPORT C/L	FRONT DOOR C/L	CLEAR FRONT OPENING	STRIKE DIRECTION
	WIDTH	DEPTH				
40X54	65-1/2	62-9/16	30-7/16	30	35.5	LH
40X54	58-1/2	62-9/16	30-7/16	36	35.5	RH

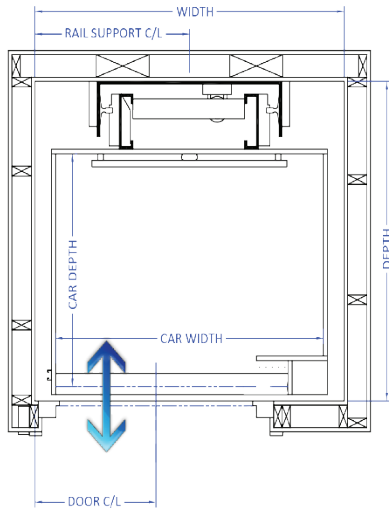


INLINE SRH 3-SPEED/3-SPEED						
CAR SIZE	HOISTWAY		RAIL SUPPORT C/L	FRONT DOOR C/L	CLEAR FRONT OPENING	STRIKE DIRECTION
	WIDTH	DEPTH				
36X48	54	61-3/8	31-15/16	30-3/4	31.5	RH
36X60	54	73-3/8	37-15/16	30-3/4	31.5	RH
40X54	58	67-3/8	34-15/16	34-3/4	31.5	RH
40X54	58	67-3/8	34-15/16	32-3/4	35.5	RH



INLINE SRH 3-SPEED/SWING						
CAR SIZE	HOISTWAY		RAIL SUPPORT C/L	FRONT DOOR C/L	CLEAR FRONT OPENING	STRIKE DIRECTION
	WIDTH	DEPTH				
36X48	51	56-7/8	27-7/16	28-1/2	31.5	RH
36X60	51	68-7/8	33-7/16	28-1/2	31.5	RH
40X54	55	62-7/8	30-7/16	32-1/2	31.5	RH
40X54	55	62-7/8	30-7/16	32-1/2	35.5	RH

# Common Standard Hoistway Layouts for In-Line Rail Rear Opening Cabs (P.1)



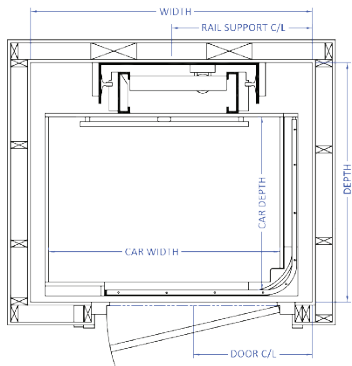
\*Residential Sling requires a minimum 10" pit depth. Door centerlines represent 36" swing door (other widths available)

\*Common sizes shown for reference. Refer to [www.rockymountainelevatorproducts.com](http://www.rockymountainelevatorproducts.com) to download DWG files with additional sizes & configurations or contact RMEP.

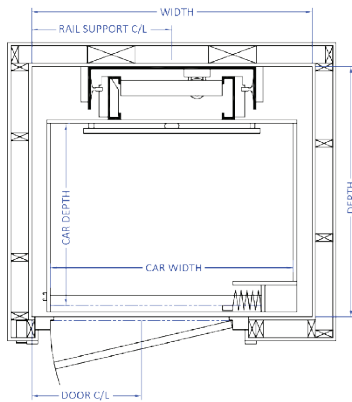


This symbol is listed beside the car size indicates the car size is suitable for a wheelchair and attendant.

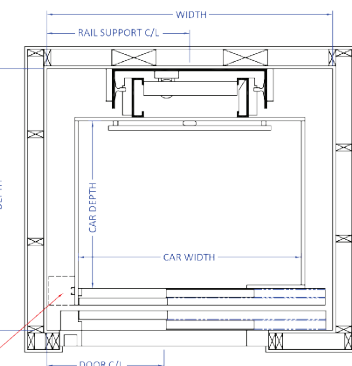
Rail left configurations are shown. Other configurations (Rail Right) are available on line.



INLINE SRH WRAP-AROUND (Wood Frame)					
CAR SIZE	HOISTWAY		RAIL SUPPORT C/L	FRONT DOOR C/L	CLEAR FRONT OPENING
	WIDTH	DEPTH			
48X36	58-1/2	49-3/4	29-1/4	24-3/4	34
60X36	70-1/2	49-3/4	35-1/2	24-3/4	34
54X40	64-1/2	53-3/4	32-1/4	24-3/4	34



INLINE SRH ACCORDION (RMEP 3/4" Frame)					
CAR SIZE	HOISTWAY		RAIL SUPPORT C/L	FRONT DOOR C/L	CLEAR FRONT OPENING
	WIDTH	DEPTH			
48X36	55-1/2	49-3/4	27-3/4	21-3/4	34
60X36	67-1/2	49-3/4	33-3/4	21-3/4	34
54X40	61-1/2	53-3/4	30-3/4	21-3/4	34

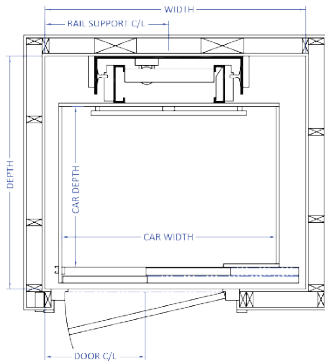


INLINE SRH 2-SPEED/2-SPEED						
CAR SIZE	HOISTWAY		RAIL SUPPORT C/L	FRONT DOOR C/L	CLEAR FRONT OPENING	STRIKE DIRECTION
	WIDTH	DEPTH				
48X36	61-1/2	56-3/16	30-3/4	25-1/4	35.5	LH
60X36	70-1/2	56-3/16	36-3/4	25-1/4	35.5	LH
54X40	64-1/2	60-3/16	33-3/4	25-1/4	35.5	LH

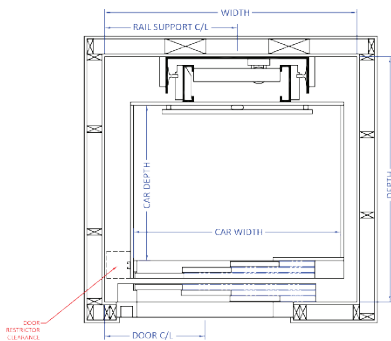




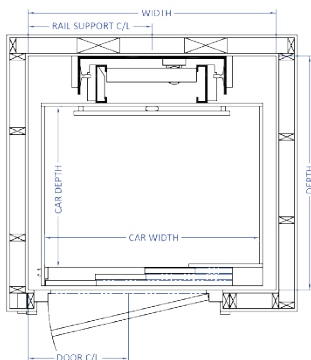
## Common Standard Hoistway Layouts for In-Line Rail Rear Opening Cabs (P.2)



INLINE SRH 2-SPEED/SWING (RMEP 3/4" Frame)						
CAR SIZE	HOISTWAY		RAIL SUPPORT C/L	FRONT DOOR C/L	CLEAR FRONT OPENING	STRIKE DIRECTION
	WIDTH	DEPTH				
48X36	58-1/2	52-1/16	27-3/4	22-1/2	35.5	LH
60X36	67-1/2	52-1/16	33-3/4	22-1/2	35.5	LH
54X40	61-1/2	56-1/16	30-3/4	22-1/2	35.5	LH

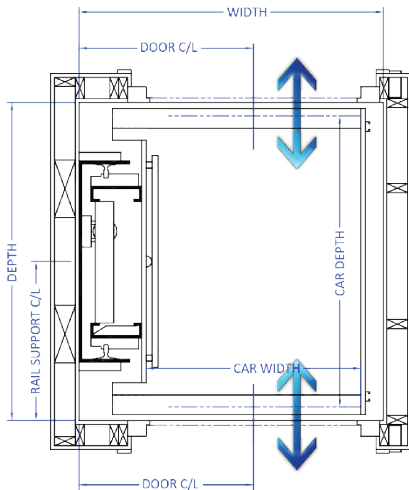


INLINE SRH 3-SPEED/3-SPEED						
CAR SIZE	HOISTWAY		RAIL SUPPORT C/L	FRONT DOOR C/L	CLEAR FRONT OPENING	STRIKE DIRECTION
	WIDTH	DEPTH				
48X36	58-1/2	56-7/8	30-3/4	23-1/4	31.5	LH
48X36	58-1/2	56-7/8	30-3/4	25-1/4	35.5	LH
60X36	70-1/2	56-7/8	36-3/4	23-1/4	31.5	LH
60X36	70-1/2	56-7/8	36-3/4	25-1/4	35.5	LH
40X54	64-1/2	60-7/8	33-3/4	23-1/4	31.5	LH
40X54	64-1/2	60-7/8	33-3/4	25-1/4	35.5	LH



INLINE SRH 3-SPEED/SWING (RMEP 3/4" Frame)						
CAR SIZE	HOISTWAY		RAIL SUPPORT C/L	FRONT DOOR C/L	CLEAR FRONT OPENING	STRIKE DIRECTION
	WIDTH	DEPTH				
48X36	55-1/2	52-3/8	27-3/4	22-1/2	31.5	LH
48X36	55-1/2	52-3/8	27-3/4	22-1/2	35.5	LH
60X36	67-1/2	52-3/8	33-3/4	22-1/2	31.5	LH
60X36	67-1/2	52-3/8	33-3/4	22-1/2	35.5	LH
54X40	61-1/2	56-3/8	30-3/4	22-1/2	31.5	LH
54X40	61-1/2	56-3/8	30-3/4	22-1/2	35.5	LH

## Common Standard Hoist-way Layouts for Opposite Opening Cabs (P.1)



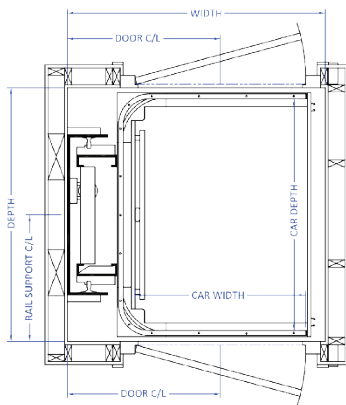
\*Residential Sling requires a minimum 10" pit depth. Door centerlines represent 36" swing door (other widths available)

\*Common sizes shown for reference. Refer to [www.rockymountainelevatorproducts.com](http://www.rockymountainelevatorproducts.com) to download DWG files with additional sizes & configurations or contact RMEP.

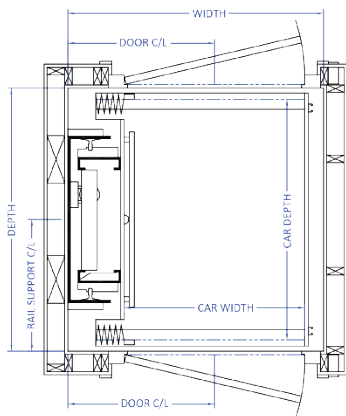


This symbol is listed beside the car size indicates the car size is suitable for a wheelchair and attendant.

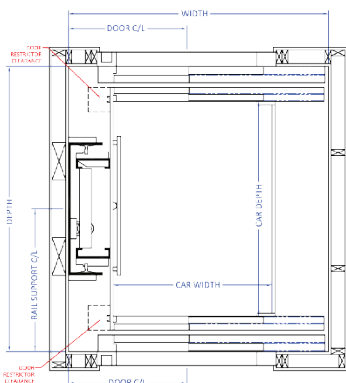
Rail left configurations are shown. Other configurations (Rail Right) are available on line.



OPPOSITE SRH WRAP-AROUND (RMEP 3/4" Frame)							
CAR SIZE	HOISTWAY		RAIL SUPPORT C/L	FRONT DOOR C/L	REAR DOOR C/L	CLEAR FRONT OPENING	CLEAR REAR OPENING
	WIDTH	DEPTH					
36X48	54-3/8	52-1/2	26-1/4	32-1/4	32-1/4	34	34
36X60	54-3/8	64-1/2	32-1/4	32-1/4	32-1/4	34	34
40X54	58	58-1/2	29-1/4	32-1/4	32-1/4	34	34

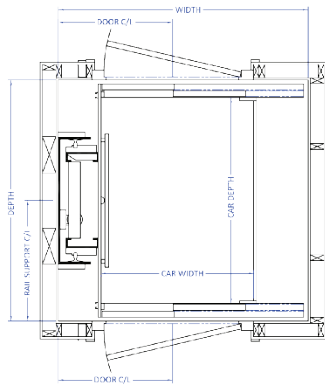


OPPOSITE SRH ACCORDION (RMEP 3/4" Frame)							
CAR SIZE	HOISTWAY		RAIL SUPPORT C/L	FRONT DOOR C/L	REAR DOOR C/L	CLEAR FRONT OPENING	CLEAR REAR OPENING
	WIDTH	DEPTH					
36X48	51	52-1/2	26-1/4	29-1/4	29-1/4	34	34
36X60	51	64-1/2	32-1/4	29-1/4	29-1/4	34	34
40X54	55	58-1/2	29-1/4	33-1/4	33-1/4	34	34

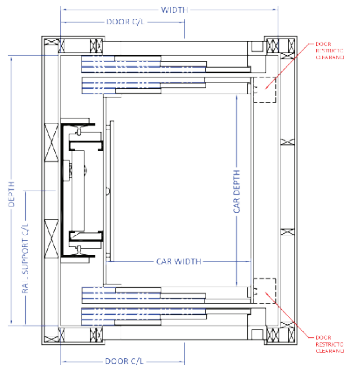


OPPOSITE SRH 2-SPEED/2-SPEED								
CAR SIZE	HOISTWAY		RAIL SUPPORT C/L	FRONT DOOR C/L	REAR DOOR C/L	CLEAR FRONT OPENING	CLEAR REAR OPENING	FRONT STRIKE DIRECTION
	WIDTH	DEPTH						
40X54	62-1/2	71-7/8	35-15/16	37-1/4	37-1/4	35.5	35.5	RH
40X54	65-1/2	71-7/8	35-15/16	29-3/4	29-3/4	35.5	35.5	LH

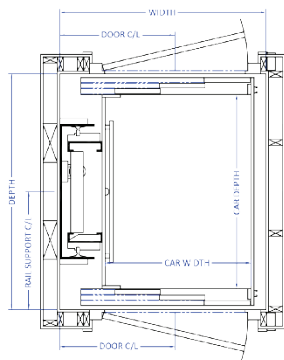
## Common Standard Hoist-way Layouts for Opposite Opening Cabs (P.2)



OPPOSITE SRH 2-SPEED/SWING (RMEP 3/4" Frame)									
CAR SIZE	HOISTWAY		RAIL SUPPORT C/L	FRONT DOOR	REAR DOOR	CLEAR FRONT	CLEAR REAR	FRONT STRIKE	REAR STRIKE
	WIDTH	DEPTH		C/L	C/L	OPENING	OPENING	DIRECTION	DIRECTION
40X54	65-1/2	63-1/8	31-9/16	30	30	35.5	35.5	LH	RH
40X54	58-3/8	63-1/8	31-9/16	35-7/8	35-7/8	35.5	35.5	RH	LH

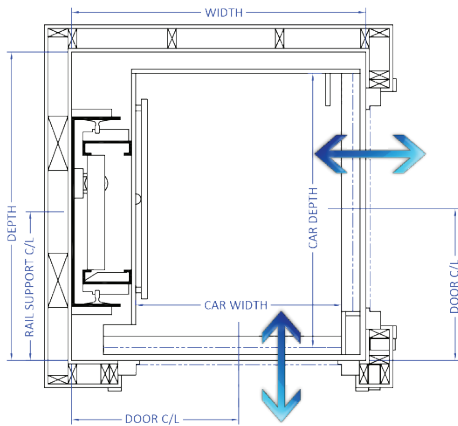


OPPOSITE SRH 3-SPEED/3-SPEED									
CAR SIZE	HOISTWAY		RAIL SUPPORT C/L	FRONT DOOR	REAR DOOR	CLEAR FRONT	CLEAR REAR	FRONT STRIKE	REAR STRIKE
	WIDTH	DEPTH		C/L	C/L	OPENING	OPENING	DIRECTION	DIRECTION
36X48	54	67-1/4	33-5/8	30-3/4	30-3/4	31.5	31.5	RH	LH
36X60	54	79-1/4	39-5/8	30-3/4	30-3/4	31.5	31.5	RH	LH
54X40	58	73-1/4	36-5/8	34-3/4	34-3/4	31.5	31.5	RH	LH
54X40	58	73-1/4	36-5/8	32-3/4	32-3/4	35.5	35.5	RH	LH



OPPOSITE SRH 3-SPEED/SWING (RMEP 3/4" Frame)									
CAR SIZE	HOISTWAY		RAIL SUPPORT C/L	FRONT DOOR	REAR DOOR	CLEAR FRONT	CLEAR REAR	FRONT STRIKE	REAR STRIKE
	WIDTH	DEPTH		C/L	C/L	OPENING	OPENING	DIRECTION	DIRECTION
36X48	51	58-1/4	29-1/8	28-1/2	28-1/2	31.5	31.5	RH	LH
36X60	51	70-1/4	35-1/8	28-1/2	28-1/2	31.5	31.5	RH	LH
40X54	55	64-1/4	32-1/8	32-1/2	32-1/2	31.5	31.5	RH	LH
40X54	55	64-1/4	32-1/8	32-1/2	32-1/2	35.5	35.5	RH	LH

# Common Standard Hoist-way Layouts for Adjacent Opening Cabs (P.1)



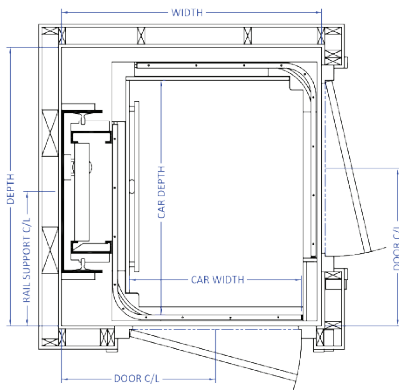
\*Residential Sling requires a minimum 10" pit depth. Door centerlines represent 36" swing door (other widths available)

\*Common sizes shown for reference. Refer to [www.rockymountainelevatorproducts.com](http://www.rockymountainelevatorproducts.com) to download DWG files with additional sizes & configurations or contact RMEP.

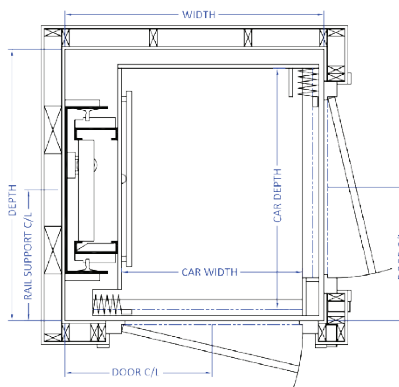


This symbol is listed beside the car size indicates the car size is suitable for a wheelchair and attendant.

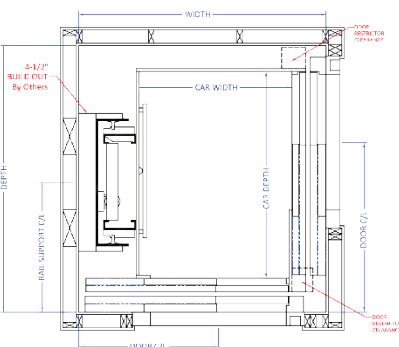
Rail left configurations are shown. Other configurations (Rail Right) are available on line.



ADJACENT SRH WRAP-AROUND (RMEP 3/4" Frame)							
CAR SIZE	HOISTWAY		RAIL SUPPORT C/L	FRONT DOOR C/L	SIDE DOOR C/L	CLEAR FRONT OPENING	CLEAR SIDE OPENING
	WIDTH	DEPTH					
36X48	54-1/2	57	27-1/2	32-1/4	32-1/4	34	34
36X60	54-1/2	69	33-1/2	32-1/4	44-1/4	34	34
40X54	56-1/2	63	30-1/2	32-1/4	38-1/4	34	34



ADJACENT SRH ACCORDION (RMEP 3/4" Frame)							
CAR SIZE	HOISTWAY		RAIL SUPPORT C/L	FRONT DOOR C/L	SIDE DOOR C/L	CLEAR FRONT OPENING	CLEAR SIDE OPENING
	WIDTH	DEPTH					
36X48	51-1/2	54	26	29-1/4	26	34	34
36X60	51-1/2	66	32	29-1/4	26	34	34
40X54	55-1/2	60	29	33-1/4	26	34	34

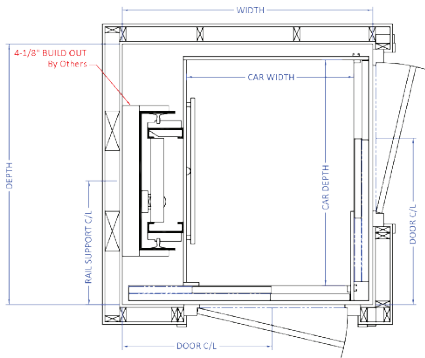


ADJACENT SRH 2-SPEED/2-SPEED									
CAR SIZE	HOISTW		RAIL	FRONT DOOR	SIDE DOOR	CLEAR FRONT	CLEAR SIDE	FRONT STRIKE	SIDE STRIKE
	WIDTH	DEPTH							
40X54	64-11/16	69-11/16	33-15/16	36-1/2	44-7/16	35.5	35.5	RH	RH

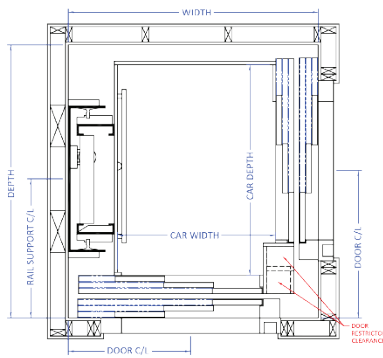




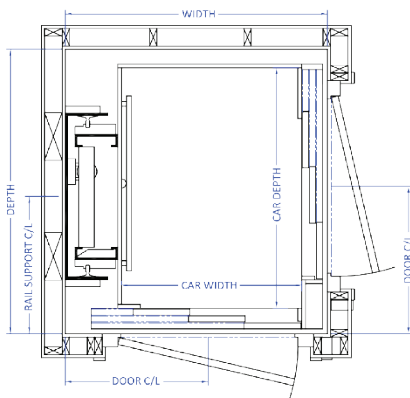
## Common Standard Hoist-way Layouts for Adjacent Opening Cabs (P.2)



ADJACENT SRH 2-SPEED/SWING (RMEP 3/4" Frame)									
CAR SIZE	HOISTWAY		RAIL SUPPORT C/L	FRONT DOOR C/L	SIDE DOOR C/L	CLEAR FRONT OPENING	CLEAR SIDE OPENING	FRONT STRIKE DIRECTION	SIDE STRIKE DIRECTION
	WIDTH	DEPTH							
40X54	59-7/8	62-5/16	29-5/8	35-7/8	39-7/8	35.5	35.5	RH	RH



ADJACENT SRH 3-SPEED/3-SPEED									
CAR SIZE	HOISTWAY		RAIL SUPPORT C/L	FRONT DOOR C/L	SIDE DOOR C/L	CLEAR FRONT OPENING	CLEAR SIDE OPENING	FRONT STRIKE DIRECTION	SIDE STRIKE DIRECTION
	WIDTH	DEPTH							
36X48	56-7/8	62-1/8	31-5/8	27-7/8	33-1/2	31.5	31.5	RH	LH
36X60	56-7/8	73-3/8	37-15/16	27-7/8	33-1/2	31.5	31.5	RH	LH
40X54	60-7/8	67-3/8	34-15/16	31-7/8	33-1/2	31.5	31.5	RH	LH
40X54	60-7/8	67-3/8	34-15/16	29-7/8	35-1/2	35.5	35.5	RH	LH



ADJACENT SRH 3-SPEED/SWING (RMEP 3/4" Frame)									
CAR SIZE	HOISTWAY		RAIL SUPPORT C/L	FRONT DOOR C/L	SIDE DOOR C/L	CLEAR FRONT OPENING	CLEAR SIDE OPENING	FRONT STRIKE DIRECTION	SIDE STRIKE DIRECTION
	WIDTH	DEPTH							
36X48	52-3/8	56-7/8	27-7/16	28-1/2	29-1/2	31.5	31.5	RH	LH
36X60	52-3/8	68-7/8	33-7/16	28-1/2	29-1/2	31.5	31.5	RH	LH
40X54	56-3/8	62-7/8	30-7/16	32-1/2	29-1/2	31.5	31.5	RH	LH
40X54	56-3/8	62-7/8	30-7/16	32-1/2	29-1/2	35.5	35.5	RH	LH



# WORK BY OTHERS

## Delivery

1. Provide smooth (roll-able) access as close as possible to the installation area.

## Hoistway

1. Hoistway wall must be framed on each level as per site-specific equipment shop drawings, not architectural drawings. (All dimensions are to finished wall)
2. Hoistway must be plumb and square within  $\frac{1}{4}$ ".
3. Hoistway doors must be installed on all floors/landings as per site-specific shop drawings.
4. Casing trim inside hoistway cannot protrude more than  $\frac{1}{4}$ " from wall.
5. Drywall and taping must be complete by time of install.
6. No other pipes, wires, liquids, gases, etc. are allowed in hoistway by code.
7. Hoistway temperature must be maintained within 60 to 100 degrees Fahrenheit.
8. Contractor will furnish appropriate rail backing for T-Rail.
9. Rail backing wall must be a load-bearing wall.
10. Consult Dealer for span greater than 10' between floor joists.
11. Maintain below  $\frac{1}{8}$ " tolerances throughout hoistway.
12. The structure of the hoistway must allow for installation of a chain hoist to transfer materials to the upper landings during elevator installation (Eye bolt of 1,000 lb. capacity).
13. 8'0" minimum hoistway overhead above the finished floor at the top landings required for 7'0" car with remote controller.
14. Provide an access hatch for servicing the controller/drive unit.

## Doors

1. Doorways must be framed with 2x4 construction for proper clearances by codes (reference shop drawings and/or hoistway door detail).
2. Doors must be a solid core (or equivalent) 20-minute minimum fire rating unless serving a garage, then a 1-hour fire rating is required.
3. The doors, hardware, and closers (spring loaded hinges) should be supplied and installed prior to installation.
4. When closed, the landing doors/jambs must leave only 3" of threshold space from inside of hoistway to the backside of the door to allow proper spacing for the hoistway door interlocks, and to meet code (reference shop drawings and/or hoistway door detail).
5. Door openings must be laid out and framed per elevator shop drawings, not architectural drawings.

## Pit

1. Pit must be poured to proper depth and size (reference shop drawings).
2. A clean, dry pit must be maintained.
3. Pit depth must be a minimum of 10" for the standard sling and 14" for HD sling, below the finished floor of the lowest landing.
4. Construction of pit floor must withstand an impact load specified by the configuration of the system.

## Machine Room/Equipment Room

1. Elevator Equipment must be within 40' of hoistway.
2. Must have a minimum of 3'0" clear area in front of controller as per electrical code.
3. Permanent telephone line to controller. Telephone must be live before inspection.
4. Machine room temperature must be maintained within 60-100 degrees Fahrenheit.
5. 230V 30Amp Single Phase service whip needs to be ran to Controller.
6. 120V 15Amp Single Phase dedicated car light service whip needs to be ran to Controller.

## Cab and Finish

1. All cab choices and any materials being supplied for finishes of this elevator must be provided a minimum of 10 weeks prior to the installation of the elevator.

## Safety

1. Hoistway doors or OSHA approved removable barricades must be installed and secured.

## Storage

1. A dry, clean and secure area needs to be provided for the elevator equipment not installed at time of delivery.

## Acceptance/Final Inspection

1. The elevator phone with dial tone must be present prior to inspection.
2. Cab interior, door hardware, door trim and door finishes must be complete prior to inspection.
3. The elevator cannot be turned over and/or used for construction until it has passed final inspection.

*NOTES:*

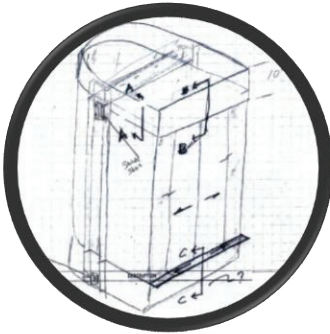
# TRANSEND SERIES GLASS

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*CUSTOM CAB DESIGN + 3D CONCEPTS AND MORE*

From concept to creation:

RMEP elevator designs are a mixture of code compliance and your imagination. From home design to custom themes we can build it. Wood, metal, glass, wire mesh designs that are not only good looking but safe and reliable. Common themes include wood and glass, metal and glass, industrial metal, mine shaft theme with wire mesh, Victorian raised and recessed panels, and many more. Check out our website and online brochures or visit a dealer today!



Concept



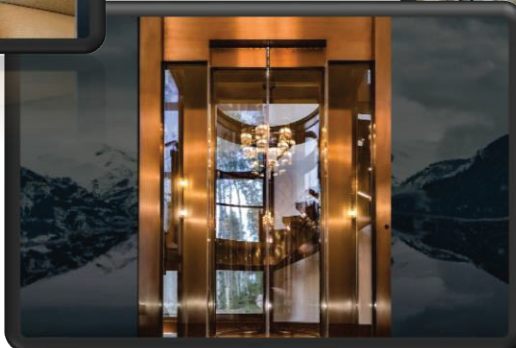
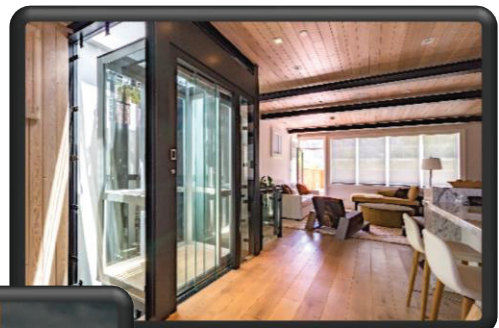
3D CAD Rendering



Reality!

RMEP uses CAD software to help you bring your imagination to reality. Computer-aided Design ensures a perfect fit to the numbers provided, safe solid construction and desired design.

***Check out our completed glass elevators projects in the  
'Transcend Series' of cabs by Rocky Mountain Elevator Products!***



***[www.rockymountainelevatorproducts.com](http://www.rockymountainelevatorproducts.com)***