

AmeriGlide Elite Residential Elevator PLANNING GUIDE

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Contents

Helping You Plan	3
Planning Steps	3
Elite Residential Ele	
Elite Residential	5
Hoistway Layout and Dimensions	
Side Entry Cars	<i>6</i>
Straight-thru Cars	6
90° Entry Cars	
Hoistway Construction Notes	8
Hoistway: Section Thru Top of Hoistway	9
Elite Residential	10
Elevator Specifications for ASME A.17.1-2010	
Section 5.3 Compliance	12

HELPING YOU PLAN A HOME ELEVATOR INSTALLATION

This Elevator Planning Guide is designed to provide the information that architects, contractors, elevator professionals, and home owners need to meet the elevator installation requirements of ASME A17.1-2010/CSA B44-10 Section 5.3.

You must comply with all local regulations for elevator installation. Prior to installing the elevator, please contact your local codes authority to ascertain the area's regulations relating to the installation and inspection of residential elevators.

You must know and follow all the requirements that govern the installation and use of elevators in a private residence.

NOTE: This Planning Guide may provide sample dimensions and specifications that are helpful in the initial stages of planning an elevator installation. However, prior to beginning physical construction, you must have application drawings customized with the exact dimensions for your specific project. In addition, be aware that the actual dimensions and specifications are subject to change without notice due

to product improvements and code changes.

Please call AmeriGlide at 855-595-0281 or an authorized AmeriGlide dealer in your area for specific information including deviations between referenced standards and any variations that may occur based on local codes or laws. Always contact local codes authorities if any variation to standards exist.

PLANNING STEPS

Your AmeriGlide Elevator dealer can help you plan, order, and install your elevator.

Determine the following:

- Car configuration
- National, state and local code requirements
- Hoistway size
- Car size, layout and options
- Machine room location and layout (if required)
- **Electrical requirements**
- Use site-specific field drawings to construct the hoistway, doorways and other elevator-related construction.
- Coordinate with dealer for elevator delivery and installation.



ELITE RESIDENTIAL ELEVATOR EQUIPMENT

This elevator meets the requirements of ASME A17.1—2010 Section 5.3 for a residential elevator.

GENERAL

In-line Geared
950 lbs. (431 kg.); 750 lbs. (340 kg.) optional
40 fpm
10' Standard; Up to 50' optional
7′ (2.1 m)
9' min (2.7 m)
6" (15 cm) Standard
2 Standard
24"

CONTROLS

CONTROLS	
Programmable Logic Controller (PLC):	Yes
Nonselective Collective Automatic Operation:	Yes
Self-Diagnostic System with Digital Display:	Yes
Single Floor Designated Car Homing:	Yes
Alarm and E-stop:	Yes
Uninterrupted Power:	Optional
Slack Chain Safety Device:	Yes
Car Operating Panel:	Digital Touch Screen on Brushed Stainless Steel Panel;

CAR & APPOINTMENTS

Car Size:	36" x 48" (.9 x 1.2 m) 40" x 54" (1 x 1.4 m) optional
Inside Car Height:	7' (2.1 m)
Melamine Wall Panels:	Yes
Accordion Car Gate with Wooden Sill:	Yes
Unfinished Plywood Floor:	Yes
Car Light Supply:	12 VDC

SAFETY

JAILII	
Upper and Lower Final Limits:	Yes
Pit Switch:	Yes
Car Top Switch:	Yes
Car Gate Safety Switch:	Yes
Electromechanical Hoistway Door Interlocks:	Yes
Manual Lowering Device:	Yes
230 VAC Lockable Auxiliary Disconnect:	Yes

GREEN FEATURES

Counterweighted in-line gear system	
Small Footprint	
Energy-Efficient LED Lighting	



Integrated Telephone

OPTIONS

Digital Display Floor Position Indicator: Hall Call Stations w/ **Brushed Stainless** Call Button & Car Steel Standard; Here Indicator: **Ethernet Connectivity** to House Network

Available

Recessed LED Lights: Up to 4 Available

Single Auto Push-button Operations

Wood Veneer Wall Panels

Wood Veneer Ceiling

Accordion Gate with Vision Panels

Brushed Stainless Steel Gate Sill

Grab Rail in Wood, Stainless Steel or Bronze

Battery Backup Emergency Lighting and Alarm

Brushed Bronze Control Fixtures

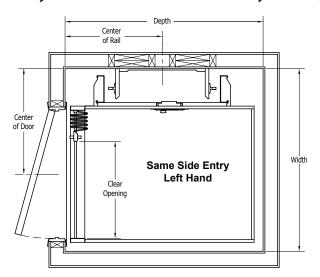
Remote Located Controller

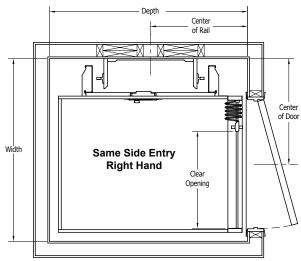
PLC with Ethernet Port for Internet Connection

via Home Network

HOISTWAY LAYOUT & DIMENSIONS

Hoistway Construction: Side Entry Cars (Enter/Exit Same Side)

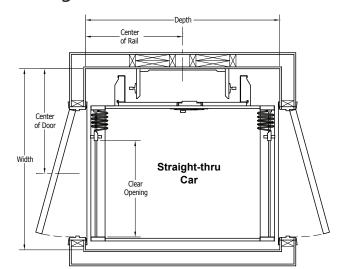




Car Size	Width	Depth	Center of Rail	Center of Door	Clear Opening
36 x 48	51	55 1/4	27	29 ½29	1⁄4
40 x 54	55	61 1/430)	33 ½ 29 ½*	33 1⁄4

(Car Size	Width	Depth	Center of Rail	Center of Door	Clear Opening
	36 x 48	51	55 1/4	27	29 ½29	1/4
	40 x 54	55	61 1/430)	33 ½ 29 ½*	33 1/4

Hoistway Construction: Straight-thru Cars



Car Size	Width	Depth	Center of Rail	Center of Door	Clear Opening
36 x 48	51	54 ½27	7 ½29	1/229	1⁄4
40 x 54	55	60 1/230) 1/4	33 ½ 29 ½*	33 ¼

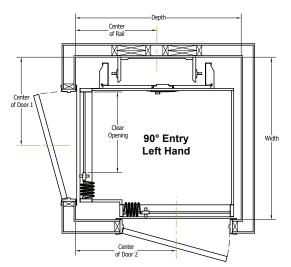
^{*}Dimension when car gate is mounted on opposite side of entry.



^{*}Dimension when car gate is mounted on opposite side of entry.

HOISTWAY LAYOUT & DIMENSIONS

Hoistway Construction: 90° Entry Cars (Adjacent Openings)

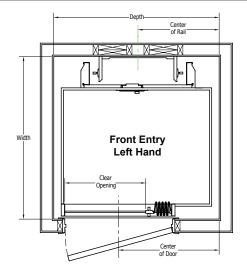


	Depth————————————————————————————————————
Width	90° Entry Right Hand Center of Door 1 Center of Door 1

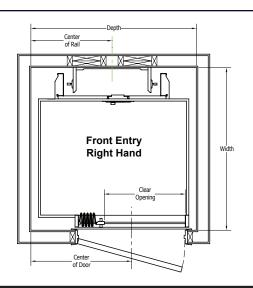
Car Size	Width	Depth	Center of Rail	Center of Door 1	Center of Door 2	Clear Opening
36 x 48	54 3/8	55	28 ½	27 31*	33 ½ 29 ½*	28 5/8
40 x 54	58 3/8	61	30 ½	34 ¾ 30 ¾	39 ½ 35 ¼*	32 1/8

Car Size	Width	Depth	Center of Rail	Center of Door 1	Center of Door 2	Clear Opening
36 x 48	54 3/8	55	25 ½	27 31*	33 ½ 29 ½*	28 5/8
40 x 54	58 3/8	61	30 ½	34 ¾ 30 ¾*	39 ½ 35 ¼*	32 1/8

^{*}Dimension when car gate is mounted on opposite side of entry.



Car Size	Width	Depth	Center of Rail	Center of Door
36 x 48	54 3/8	55	28 ½	30 33 ½*
40 x 54	58 3/8	61	30 ½	36 31 ½*



Car Size	Width	Depth	Center of Rail	Center of Door
36 x 48	54 3/8	55	28 ½	30 33 ½*
40 x 54	58 3/8	61	30 ½	36 39 ½*

^{*}Dimension when car gate is mounted on opposite side of entry.

HOISTWAY CONSTRUCTION NOTES

Note: Be sure to obtain and use job-specific documentation to construct the elevator hoistway.

A load bearing wall is required, see recommended construction below.

All points of the pit floor must be a minimum of 6" below the lower landing finished floor.

Pit floor construction should withstand a 3,200 lb. impact load.

Hoistway sizes reflect running and access clearances only. Consult your local authority so assure compliance with state and local codes.

Minimum overhead clearance is 9'-0" above the top landing finished floor. (8'-6" with remotely located controller).

Due to limited clearances, it is imperative that the walls are square and plumb throughout the hoistway. The finished hoistway must be within 1/4" tolerance from top to bottom.

Hoistway doors provided by others We recommend 3'-0" x 6'-8" doors.

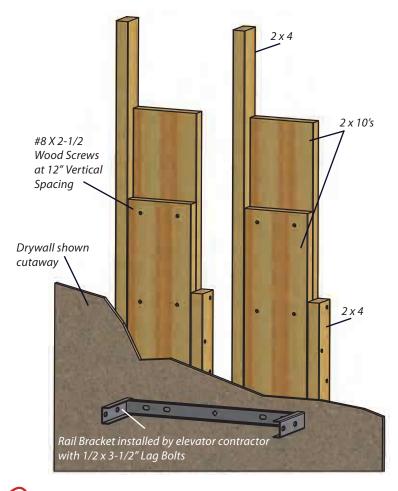
Hoistway is required to be free of all pipes, wiring and obstructions not related to the operation of the elevator.

Service access hatch is required in the controller / drive assembly area.

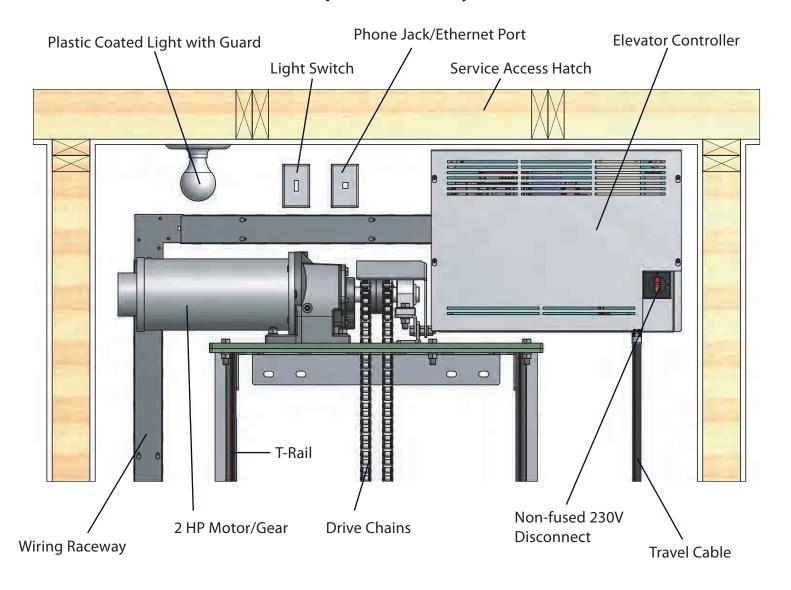
Building structure must provide for a means of a chain hoist for hoisting materials to the top of the hoistway during installation.

GUIDE RAIL BACKING CONSTRUCTION DETAILS

- Rail backing consists of (2) rails, mounted 17" apart at center. Follow the instructions below for each rail.
- Laminate (2) 2 x 10's and (2) 2 x 4's with glue and #8 x 2-1/2" wood screws (min).
- Overlap joints of the lumber as necessary for structural rigidity.
- Guide rail backing must be tied to a horizontal structural member (header or floor plate) at top, bottom and a maximum of 10' between.



HOISTWAY: Section thru Top of Hoistway



ELITE RESIDENTIAL ELEVATOR FEATURES

CAR OPERATING PANEL



Touch panel LCD screen used to control the elevator from inside the car

- Automatic car controls
- Floor position is shown on the screen
- Conditions preventing the elevator from running is shown on the screen
- Emergency stop switch with alarm
- Telephone integrated into standard brushed stainless steel or brushed bronze panel

HALL STATIONS



Used to call the elevator to that floor

- Automatic control
- LED indicates 'Car Here' when at that floor
- LED indicates 'Call' acknowledged
- One provided for each floor level
- Flush mounted standard brushed stainless steel or brushed brass face

CAR LIGHTING



Two recessed car lights provided

- Two low voltage LED lights
- Automatically turns on when elevator is in use and turns off 5 minutes after use
- Backup emergency light is optional
- 12 VDC



ELEVATOR CONTROLLER



Controls the electrical operation of the elevator

- Located in the top of the hoistway near the drive unit
- Programmable Logic Controller
- Includes non-fused electrical disconnect switch
- Can be located in a remote machine room for areas that do not allow the elevator controller to be located inside the hoistway

HOISTWAY DOOR INTERLOCKS



Locks the hoistway door when the car is not there

- Surface mounted electromechanical interlock
- Can be opened with a special key from outside the hoistway in case of emergency or servicing

ELEVATOR SPECIFICATIONS FOR ASME A17.1-2010 SECTION 5.3 COMPLIANCE

Part 1 GENERAL

1.01 SUMMARY

A. The product described herein, manufactured by AmeriGlide, is a private residence home elevator designed and dimensioned to provide access to all levels to the home based on the individual's requirements.

1.02 REFERENCES

- A. Elevator shall be designed, manufactured and installed in accordance with the following
 - 1. American National Standards Institute (ANSI)
 - 2. American Society of Mechanical Engineers (ASME)
 - 3. International Building Code (IBC)
 - 4. Residential Code (IRC)
 - 5. National Electrical Code (NEC)
 - 6. American Society for Testing Materials (ASTM)
 - 7. American Welding Society (AWS)

1.03 SYSTEM DESCRIPTION

- A. Drive System: Counterweighted chain drive with inline geared machine with variable speed, 2 hp motor controlled by programmable logic controller with automatic operation
- B. Number of stops: (specify:) Two to four
- C. Car Configuration: (specify:) straight-thru, 90° exit or enter/exit same side.
- D. Maximum Travel: (specify:) Up to 50'
- E. Rated Load: (specify:) 950 or 750 lbs
- F. Rated Speed: 40 fpm.
- G. Car Size:
 - 1. (Specify:)36" x 48"or 40"x 54"
 - 2. 84" high ceiling
- H. Car Walls: Melamine panels (champagne, light oak, dark oak, or white), wood veneer panels, inset wood veneer panels, or raised panels (oak, cherry or birch).
- I. Car Ceiling: White or wood veneer to match wall
- J. Car Lighting: Recessed LED car lighting

- K. Handrail: (specify option:) Wooden, brushed stainless steel or brushed bronze
- L. Operating Features:
 - Car Operating Panel: (specify) (Everest) LED color touch screen on brushed stainless steel panel with emergency stop switch and integrated telephone
 - 2. Hall Stations: Brushed stainless steel with LED floor illuminated button
 - 3. Pit Switch and car top run/stop switch
 - Automatic Homing to (specify option:) floor 4.
 - Car Gate (s): Accordion folding with safety switch 5. (specify color:) champagne, chalk, white, light oak, dark oak, or 3 clear panels.
 - Hoistway Door Interlock: Electromechanical 6. interlocks at each landing door
 - Final Limits (Top and bottom) 7.
 - Slack Chain Safety 8.
 - 9. Non-fused disconnect switch at controller
 - 10. (Specify option) Battery backup emergency light and alarm

1.04 OUALITY ASSURANCE

- A. All designs, clearance, workmanship and material, unless specifically accepted, shall be in accordance with all codes having legal jurisdiction.
- B. All load ratings and safety factors shall meet or exceed those specified by all governing agencies with jurisdiction and shall be certified by a professional engineer.
- C. Elevator shall be subject to applicable state, local and city approval prior to installation and subject to inspection after installation. Determination of and adherence to these regulations is the responsibility of the elevator contractor.
- D. Welders certified in accordance with requirements of AWS D1.1shall perform all welding of all parts.
- E. Substitutions: No substitutions permitted

1.05 WARRANTY

A. Warranty: Manufacture shall warrant component parts of the Everest® home elevator for a period of 2 years after installation.



1.06 MAINTENANCE

A. The Elite Residential Elevator must be maintained in accordance with manufacturer's instructions.

PART 2 PRODUCT

2.01 MANUFACTURER

A. Provide the Elite Residential Elevator manufactured by AmeriGlide.

1. Telephone: 855-595-0281

2. Web site: www.ameriglide.com

2.02 MATERIAL

A. Guide Rail: Two 6 ¼ lbs steel T-rail sections

B. Chain: Two #60 roller chains

C. Sling: ¼" and 11 ga. Structural and formed steel plates

D. Platform Floor: Unfinished plywood

2.03 FINISHES

A. Steel components shall be prepared with 1) alkaline detergent wash, 2) clear water rinse, 3) iron phosphate coating, 4) clear water rinse and finished with electrostatically applied and baked thermostatic powder coat finish for indoor or outdoor use.

2.04 ELECTRICAL SYSTEMS

A. The electrical contractors shall provide:

- 1. 230 VAC, 10 amp, 60 Hz, single phase power source in the controller area.
- 2. Telephone circuit in the controller area.
- 3. (Optional) CAT 5 connection to home network.

PART 3 EXECUTION

3.01 ACCEPTABLE INSTALLER

- A. Installers shall be experienced in performing work of this section who have specialized in work comparable to that required for this project
- B. Installers shall be certified and trained by the manufacturer.

3.02 EXAMINATION

A. Use field dimensions and approved manufacturer's shop drawings to examine substrates, supports and other conditions under which this work is to be performed. Do not proceed with work until unsatisfactory conditions are corrected.

3.03 INSTALLATION

- A. The Elite Residential Eleveator shall be installed in accordance with manufacturer's instruction and as specified and approved by architect.
- B. Hoistway doors shall be installed by others.

3.04 DEMONSTRATION

A. The elevator contractor shall make a final check of the elevator's operation with the owner or owner's representative present prior to turning the elevator over for use. The elevator contractor shall determine that operating and safety devices are functioning properly.

Intent of specification is to broadly outline equipment required but does not cover details of design and construction.

Dimensions and specifications are subject to constant change and continually evolving codes and product applications. For additional technical information, contact AmeriGlide at 855-595-0281