



August 16, 2021

To: Our Valued Customers

Re: Residential Elevators in Vacation Rental Homes

Residential elevators are designed and manufactured in accordance with ASME A17.1, Section 5.3, Safety Code for Elevators and Escalators. They are intended for use in a private residence and not for commercial or public use. The use of these elevators is to be limited to the homeowner and family and must be operated under the direct supervision of the head of the household, who is responsible for ensuring the safe use and operation of the elevator <sup>[1]</sup>.

The rationale for developing this section of the Code was in response to demands for residential elevators where equipment was to be used for the convenience of elderly persons or persons with disabilities who are unable to walk up or down stairs in their private homes. Due to the limited size, speed, load, travel and the fact that use is limited to the members of a single family under the control of the head of the family, adequate safety of operation could be secured without requiring such equipment to meet the standards imposed in other parts of the Code for equipment installed in commercial buildings used by the general public<sup>[2]</sup>.

There have been several injuries and deaths reported on residential elevators that are installed in vacation rental homes. These elevators are often used without adequate training and supervision and may not be inspected or serviced when issues arise that would be observed by a single family using the elevator in their home. As recently as last week, the Consumer Product Safety Commission issued a press release urging rental companies or "hosts" to disable home elevators in their properties<sup>[3]</sup>.

Custom Elevator Mfg. Co. is urging our customers to comply with CPSC's request for immediate action. We recommend that, at a minimum, residential elevators installed in a vacation rental property must have periodic complete safety inspections performed to ensure that these elevators are in compliance with the most recent edition of the ASME code. Some states have adopted rental acts that already include this requirement. Custom Elevator Mfg. Co. is not responsible for the installation of our products nor the applications in which they are installed; therefore, it is imperative that those responsible for the installation of the elevators as well as the homeowner, service provider, and rental company, assure that these requirements are satisfied, particularly if the local code authorities fail to do so.

Thank you for your immediate attention to this matter.

References Attached:

1. Custom Elevator *Home Owner's Manual*
2. ASME A17.1 *Safety Code for Elevators & Escalators Handbook*
3. CPSC Release #21-166

# IMPORTANT SAFETY PRECAUTIONS

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This residential elevator is designed and manufactured in accordance with ASME A17.1 Part 5, safety code for elevators and escalators. It is intended for use in a private residence only and not for commercial or public use. Its use is to be limited and under the supervision of the homeowner who is responsible for ensuring the safety of the elevator operation as well as with persons using the elevator.



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**This safety alert symbol will be found throughout this manual and on various components of the elevator. This symbol is used to alert you of a hazard that could cause injury to yourself or others and what you can do to avoid the hazard.**

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The following is a list of safety instructions that must be understood and followed by everyone operating the elevator. Failure to follow these instructions can result in severe injury or death.

- Read and understand the contents of this manual prior to attempting to operate the elevator.
- Never allow children to access the machine equipment or operate the elevator unattended.
- Never overload the elevator beyond its rated capacity. Do not use the elevator to transport freight.
- Always watch your step when entering or exiting the elevator. Be certain that the elevator sill is level with the landing sill.
- Never extend your hands or feet outside the cab while the elevator is moving or between floors.
- Never use the elevator in case of smoke or a fire.
- Never operate the elevator if you should detect any abnormal operation, unusual sounds, or recognize damage to any parts of the elevator.
- Never bypass any safety devices.
- Never lean against the car doors or landing doors.
- Make certain that the telephone and alarm located in the elevator cab are operable at all times.
- Never enter the hoistway above or below the elevator.
- Never remove covers from the control equipment.
- Always keep equipment room locked and keep access to the equipment clear in case of an emergency.
- The elevator hoistway and machine area must be kept dry.
- Never try to extract anyone from the elevator if it has stopped between floor levels.
- Never allow pipes, conduits, ducts, and other unrelated utilities to run through the elevator hoistway.
- Never attempt to repair or service the elevator yourself. Call an authorized Custom Elevator Representative for service.

# PART V

## PRIVATE RESIDENCE ELEVATORS

### SCOPE

The Scope indicates this Part applies to elevators installed in or at a private residence. It also applies to similar elevators installed in buildings other than private residences as a means of access to a private residence in that building, provided the elevator is installed so that it is not accessible to the general public or to other occupants of the building. A private residence is defined in this Code as "a separate dwelling or separate apartment in a multiple dwelling which is occupied by the members of a single family unit."

This Code does not permit the installation of a private residence elevator in locations other than described above even if the elevator is key-operated.

The rationale for this Part is best described by the introduction to ASA A17.1.5-1953 when this Part was first added to the Code.

"This part of the Code has been developed in response to demands for a separate section of Rules to cover the installation in a private residence of a small electric power passenger elevator or inclined lift which serves only the members of a single family. These elevators or inclined lifts are installed primarily for the convenience of elderly persons or invalids who are unable to walk up or down stairs. In such cases equipment of very low speed and small capacity meets the requirements. Such elevators and lifts, while usually installed in single family private residences, may be installed within a separate apartment in a multiple dwelling.

"It is frequently necessary to install such elevators in open stairwells, as the construction of the building does not provide space to permit installing a standard type of enclosed hoistway inside the building.

"Due to their limited size, speed, load, and travel, and the fact that their use is limited to the members of a single family and is under the control of the head of the family, adequate safety of operation can be secured without requiring that such equipment meet the standards set up in other parts of this Code for equipment installed in buildings of other types which is used by the general public and is thus subjected to much more severe and frequent service. The Rules of this Part of

the Code have, therefore, been developed to set up minimum standards for equipment of the type described which, if conformed to, should result in adequate safety of operation and use.

"It should be noted that the Rules of this Part of the Code do not apply to all power elevators installed in private residences, but only to those which meet the definition for Private Residence Elevator as given in this Code and which are installed in a Private Residence as defined in this Code. All other elevators in private residences, even when the latter terms conform to the definition in this Code, are required to comply with all the Rules of the other Parts of this Code."

See Diagram V of a typical traction private residence elevator.

### SECTION 500

#### HOISTWAYS, HOISTWAY ENCLOSURES, AND RELATED CONSTRUCTION

##### Rule 500.1 Hoistway Enclosure Construction

*500.1(a)* The under-platform pressure device is commonly found on a private residence elevator and normally consists of sensitive switches covered by an operating surface of metal or plywood for the full width and depth of the platform. See Diagram 500.1(a).

*500.1(c)* When 20 lb (9 kg) is placed on the cover, the springs or cushioning materials are compressed sufficiently to activate the electric contacts which stop the car from moving in the up direction. This also can be accomplished by a lift frame with switch gear located on the car top which will stop the upward motion of the car when the lift frame attempts to lift the hatch with the 20 lb (9 kg) situated on it. See Diagram 500.1(c).

*500.1(c)/3)* The electric contact can be located on the car or on the cover supports.



## CPSC Urges Vacation Rental Platforms, AirBnB, Vrbo, TripAdvisor and Others to Require Owners to Disable Home Elevators Immediately

Release date: July 20, 2021

Release number: 21-166

### Release Details

WASHINGTON, D.C. –Following another report of a tragic death of a young child in a residential elevator, U.S. Consumer Product Safety Commission (CPSC) Acting Chairman Robert Adler today asked the vacation rental community for help. In a [letter](#) to vacation rental platforms, AirBnB, Vrbo, and others, Adler urged the companies to take steps immediately to protect vulnerable consumers.

“The agency is taking steps with the manufacturers, but we need the businesses that facilitate vacation rentals to join us,” said Adler. “These injuries and deaths are horrific, and we need property owners and rental agencies to disable elevators immediately until they have been inspected.”

Residential elevators pose a hidden and deadly hazard: small children can be crushed to death in a gap that may exist between the doors. If the gap between any exterior (*i.e.*, hoistway) door, and the farthest point of the inner door (which is often an accordion door) is too deep, a child can enter and close the hoistway door without opening the interior car door, and become entrapped between the two doors, resulting in serious injuries or death when the elevator car moves. Children, some as young as two, and as old as 12, have been crushed to death in this gap, suffering multiple skull fractures, fractured vertebrae and traumatic asphyxia. Other children have suffered devastating and lifelong injuries. Last week, a 7-year-old child was reported to have tragically died in a vacation home elevator in North Carolina.

Today’s letter is the first time the agency has publicly called on vacation rental businesses to take immediate action. Specifically, the letter asks rental companies to notify all renters immediately about the potential hazard via email, or in a warning box on their reservation or booking pages; immediately require all members or “hosts” using the platforms to lock outer access doors or otherwise disable the elevators in their properties, unless and until those members provide proof of an inspection, certifying that no hazardous gap exists; and require elevator inspections of anyone posting a listing going forward.

CPSC has issued warnings, recalls and a lawsuit concerning residential elevators.

- CPSC Sues thyssenkrupp Access Corp., July 7, 2021 [CPSC Sues thyssenkrupp Access Corp. Over Deadly Gap Hazard in Residential Elevators; Action Prompted by Three Incidents: One Child Died, Another Permanently Disabled, and a Third Hospitalized After Becoming Entrapped | CPSC.gov](#)
- Otis Elevator Company Residential Elevators, December 17, 2020 <https://www.cpsc.gov/Recalls/2020/otis-elevator-company-recalls-to-inspect-private-residence-elevators-due-to-entrapment>.
- Cambridge Elevating Home Elevators, March 27, 2019 <https://www.cpsc.gov/Recalls/2019/Cambridge-Elevating-Recalls-Home-Elevators-Due-to-Fall-Hazard>.
- Waupaca Elevator Home Elevators, October 25, 2018 <https://www.cpsc.gov/Recalls/2019/Waupaca-Elevator-Recalls-to-Inspect-Elevators-Due-to-Injury-Hazard>.
- Porta Residential Elevators, August 3, 2016 <https://www.cpsc.gov/Recalls/2016/Porta-Recalls-Residential-Elevators>.
- Coastal Carolina Residential Elevators, March 19, 2015 <https://www.cpsc.gov/Recalls/2015/Childs-Catastrophic-Brain-Injury-Prompts-Recall-of-Residential-Elevators>.
- ThyssenKrupp Access Manufacturing Residential Elevators, September 20, 2012 <https://www.cpsc.gov/Recalls/2012/Residential-Elevators-Recalled-for-Repair-by-ThyssenKrupp-Access-Manufacturing-Due-to-Fall-Hazard>.

For more safety information, see CPSC's safety education messages on residential elevators.

- [Vacation Rental Homes Can Pose a Deadly Hazard - Kids Can Be Crushed to Death in Dangerous Home Elevator Gaps | CPSC.gov](#)
- [As Family Vacations Resume, CPSC Warns of Safety Hazards in Vacation Rental Homes | CPSC.gov](#)

CPSC will continue its investigation into the safety of residential elevators, and advises consumers to report any safety incident involving residential elevators at [www.SaferProducts.gov](http://www.SaferProducts.gov).

### **About the U.S. CPSC**

The U.S. Consumer Product Safety Commission (CPSC) is charged with protecting the public from unreasonable risks of injury or death associated with the use of thousands of types of consumer products. Deaths, injuries, and property damage from consumer product incidents cost the nation more than \$1 trillion annually. CPSC's work to ensure the safety of consumer products has contributed to a decline in the rate of deaths and injuries associated with consumer products over the past 40 years.

Federal law bars any person from selling products subject to a publicly announced voluntary recall by a manufacturer or a mandatory recall ordered by the Commission.

### **For lifesaving information:**

- Visit [CPSC.gov](http://CPSC.gov).
- Sign up to receive our [e-mail alerts](#).
- Follow us on [Facebook](#), Instagram [@USCPSC](#) and Twitter [@USCPSC](#).
- Report a dangerous product or a product-related injury on [www.SaferProducts.gov](http://www.SaferProducts.gov).
- Call CPSC's Hotline at 800-638-2772 (TTY 301-595-7054).
- Contact a [media specialist](#).