

Specializing in Elevator Consulting and Inspections

Arundel Inspection Services, LLC

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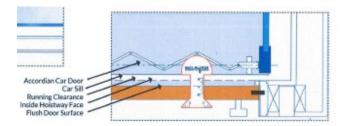
January 21, 2022

Economic Matters Committee General Assembly of Maryland 90 State Circle Annapolis, MD 21401

In support with amendments, and include the bill number: HB257.

Dear Members of the Economic Matter Committee,

Kids are being killed by residential elevators and our state is doing nothing to prevent it. Currently there is no inspections or any type of oversight for the installation of residential elevators. Residential elevator companies install the elevator as a subcontractor, and they have no support to make sure the installation meets the ANSI A17.1 elevator code. The big issue is the elevator contractor does not normally supply the hoistway doors, because they typically match the other doors in the house. The doors typically do not meet the current code requirement.



5.3.1.7 Protection of Hoistway Openings

5.3.1.7.1 Where Required. Where a hoistway enclosure is required, landing openings shall be protected by swinging or horizontally sliding doors or gates. Landing openings in solid hoistway enclosures shall be protected the full height by solid swinging or horizontally sliding doors. Their fire-protection rating shall be not less than required by the building code (see 1.3). The doors or gates shall be designed to withstand a force of 670 N (150 lbf) applied horizontally over an area 100 mm × 100 mm (4 in. × 4 in.) in the center of the doors or gates without permanent displacement or deformation.

5.3.1.7.2 Clearance Between Hoistway Doors or Gates and Landing Sills and Car Doors and Gates. The clearance between the hoistway doors or gates and the hoistway edge of the landing sill shall not exceed 75 mm (3 in.). The distance between the hoistway face of the landing door or gate and the car door gate shall not exceed 125 mm (5 in.).

I recently was selected to be an expert witness for a case in North Carolina and I saw firsthand how easily this loss of life could have been prevented. Just like Maryland, North Carolina does not any type of residential elevator inspections. The maximum clearance allowed between the accordion gate and the hoistway door is 5". This elevator in North Carolina was installed in 2003. It was installed with a clearance that measured more than 8". This child was seven years old. The elevator moved in the up direction with the young boy hiding in the elevator threshold. His father acted heroically and tried to free his child, but to no avail. The lifeless body of his child was dropped into his arms as the fire fighters were able to lower the elevator down. The manufacturer provided a statement below prior to our site investigation. We are better than this.

Several house bills have been submitted to prevent these types of accidents, but our legislatures have done nothing.

SENATE BILL 546 would require all new installations per tested and another inspection would be required when the house was sold or transferred to a new owner. This will help but I think all existing elevators should be inspected to prevent serious injury or loss of life.

During the site inspection, I met with Eric Toussaint, Product Safety Investigator, with the US consumer Product Safety Commission. They have recently announced a public service announcement on residential elevator safety for a simple guide to identifying dangerous elevators. Release Number 11-050.

I am in favor of the House Bill 257 with the following amendments:

- Make sure the gap between the doors is no more than code requirements. Have a qualified elevator inspector examine the residential elevator for this dangerous gap and other potential safety hazards.
- Remove the exemption for units installed prior to January 1, 2023, and have any dangerous gap made safer by placing space guards on the hoistway door or installing an electronic monitoring device that deactivates the elevator when a child is detected in the gap.
- Provide a requirement for all residential units to be registered with the State of Maryland DLLR.

Sincerely,

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Timothy A. Marshall Arundel Elevator Consulting



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Company Statement

Posted by Custom Elevator | News, Statements | No Comments

The Custom Elevator family is deeply saddened by the tragic death of the 7-year-old boy that occurred on a residential elevator installed in a rental property in Corolla, North Carolina. It is impossible to know the pain and suffering this family is experiencing. Our thoughts and prayers are with the family and friends of this young child.

We have little knowledge of what occurred. The information we do have is primarily from media reports, including The Washington Post article stating that the elevator involved in this tragedy "was manufactured by Custom Elevator." The Washington Post reporter contacted our office for comment. We are unable to meaningfully comment until a full and complete investigation of the incident. We can, however, share that our company is in the business of manufacturing and supplying elevator components that comprise a home elevator system. Several parts, including the outside entry door (hoistway door) to an elevator are typically supplied by local contractors. Further, Custom Elevator is not involved with the installation of the elevator system. As a manufacturer, our responsibility is to design and manufacture safe and effective elevators. Custom Elevator prioritizes safety with standards that meet or surpass governing laws and regulations.

As our responsibility does not extend to the installation of elevators, we cannot comment on whether our elevators are being installed properly and in accordance with applicable code. That responsibility falls on those responsible for installing residential elevators. Responsibility also falls on government officials who enact our laws and, in many jurisdictions, inspect the installation of elevators before issuing a certificate of occupancy. Certain jurisdictions, including North Carolina, require rental properties to comply with all current applicable building and housing codes. North Carolina follows ASME A17.1/CSA B44, which sets forth the current safety standards for elevators, including the placement of the hoistway elevator door when the elevator is being installed. Many tragedies occur if the hoistway door is installed improperly or not in accordance with applicable Code.

Additional resources:

The Consumer Product Safety Commission (CPSC) estimates that over a 2-year period, some 1,600 people were hurt on home elevators, which typically don't have the same safety features as commercial elevators. Most of the deaths and serious injuries occur when children get trapped in the gap between the elevators' exterior and interior doors. (Courtesy of Microsoft Bing)

Residential Elevators are killing small children, and little is being done to stop it. Feldman Shephard 02/09/2021 Home Elevator Accidents (feldmanshepherd.com)

Risk of Injury Due to Residential Elevator Accidents on the Rise June 23, 2021

By The Doan Law Firm

Growing Risk of Injury Due to Residential Elevators (thedoanlawfirm.com)