

**The Florida Senate**  
**BILL ANALYSIS AND FISCAL IMPACT STATEMENT**

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

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Prepared By: The Professional Staff of the Committee on Committee on Fiscal Policy

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**BILL:** CS/CS/CS/SB 1602

**INTRODUCER:** Fiscal Policy Committee; Community Affairs Committee; Regulated Industries Committee; and Senator Galvano

**SUBJECT:** Elevators

**DATE:** February 18, 2016

**REVISED:** \_\_\_\_\_

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	<u>Oxamendi</u>	<u>Caldwell</u>	<u>RI</u>	<u>Fav/CS</u>
2.	<u>Present</u>	<u>Yeatman</u>	<u>CA</u>	<u>Fav/CS</u>
3.	<u>Pace</u>	<u>Hrdlicka</u>	<u>FP</u>	<u>Fav/CS</u>

**Please see Section IX. for Additional Information:**

COMMITTEE SUBSTITUTE - Substantial Changes

**I. Summary:**

CS/CS/CS/SB 1602 creates s. 399.031, F.S., and provides requirements for new elevators in private residences. Specifically, the bill requires all new elevators in private residences to:

- Meet minimum distance requirements between the hoistway face of the hoistway doors and the hoistway edge of the landing sill for swinging and sliding doors;
- Be equipped with doors or gates that can withstand a force of 75 pounds without permanent deformation or displacing the door from its guides or track;
- Meet minimum distance requirements between the hoistway face of the landing door and the hoistway face of the car door or gate for different types of doors and gates; and
- Be equipped with a device that stops the downward motion of the elevator car under certain circumstances.

The provisions must be adopted into the Florida Building Code by October 1, 2016.

The bill provides that s. 339.031, F.S., may be cited as the “Maxwell Erik ‘Max’ Grablin Act.”

The bill has no impact to state government.

## II. Present Situation:

### Elevator Regulation

The “Elevator Safety Act” (the act) establishes minimum standards for elevator safety.<sup>1</sup> The Bureau of Elevator Safety (bureau) of the Division of Hotels and Restaurants (division) within the Department of Business and Professional Regulation (department) is the agency charged with enforcing the provisions of the act.<sup>2</sup> The Elevator Safety and Technical Advisory Council within the department provides technical assistance to the division and makes recommendations regarding the rules for the operation, maintenance, servicing, construction, alteration, installation, and inspection of vertical conveyances.<sup>3</sup>

The term “elevator” includes a wide variety of mechanical devices, including escalators, dumbwaiters, moving walks, inclined stairway lifts, and inclined or vertical wheelchair lifts.<sup>4</sup> According to the division, there were approximately 51,070 active elevator accounts in Florida as of August 1, 2015.<sup>5</sup>

### Elevator Safety Code

Section 399.02(1), F.S., requires the Elevator Safety Code to be the same as or similar to the latest editions of the American Society of Mechanical Engineers (ASME) code, which provides minimum model standards for the installation, operation, and maintenance of elevators.<sup>6</sup> The ASME codes are intended to be adopted by the state and local agencies with jurisdiction over elevator safety. Standard ASME A17 serves as the basis for the Florida Elevator Safety Act and Florida Elevator Safety Code.<sup>7</sup> Standard ASME A17 establishes minimum safety requirements for the benefit of the general public and the operation of conveyances.

The Elevator Safety Code requires that any alteration, relocation, or reclassification of an existing elevator must be in compliance with the edition of the Florida Building Code that is in effect at the time of receipt of the construction permit application to alter, relocate, or change classification.<sup>8</sup>

### Elevator Inspections

The owner of the elevator is responsible for the safe operation, proper maintenance, inspection, and correction of code deficiencies of the elevator.<sup>9</sup> Elevators must have a certificate of

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<sup>1</sup> Section 399.001, F.S.

<sup>2</sup> Section 399.10, F.S. The department also has rulemaking authority to enforce the provisions of the act.

<sup>3</sup> See s. 399.1061, F.S.

<sup>4</sup> Section 399.01(6), F.S.

<sup>5</sup> See Department of Business and Professional Regulation, Division of Hotels and Restaurants, *2014-2015 Annual Report*, available at: [http://www.myfloridalicense.com/dbpr/hr/reports/annualreports/documents/ar2014\\_15.pdf](http://www.myfloridalicense.com/dbpr/hr/reports/annualreports/documents/ar2014_15.pdf) (last visited Feb. 10, 2016).

<sup>6</sup> The ASME standards specified in s. 399.02(1), F.S., are ASME A17.1, A17.3, and A18.1.

<sup>7</sup> Rule 61C-5.001(1), F.A.C. Additionally, the bureau is authorized to enforce the provisions of the Florida Building Code related to the inspection and regulation of elevators. Section 399.02(6)(a) and (7), F.S.

<sup>8</sup> See s. 399.03, F.S.

<sup>9</sup> Section 399.02(5)(b), F.S.

operation before they may be operated.<sup>10</sup> Certificates of operation are valid for 2 years and expire at the end of the period unless revoked.<sup>11</sup>

Elevators are generally required to have a pre-use inspection by a certified elevator inspector who is not employed or associated, or does not have a conflict of interest, with the elevator construction permit holder or elevator owner and who is certified as meeting the safety provisions of the Florida Building Code, including the performance of all required safety tests.<sup>12</sup>

Elevators must be annually inspected by a certified elevator inspector.<sup>13</sup> The certified elevator inspector may be a private elevator inspector, a state-employed elevator inspector, or an inspector for a municipality or county under contract with the department.<sup>14</sup>

An elevator inspection is not required if the elevator is not an escalator or a dumbwaiter, serves only two adjacent floors, and is covered by a service maintenance contract that remains in effect. A statement verifying the existence and performance of each service maintenance contract must be filed at least annually with the division, and if the service maintenance contract is cancelled, then the cancellation must be reported to the division.<sup>15</sup>

### **Elevators in Private Residences**

An inspection upon installation and a certificate of operation are not required for vertical conveyances, including stairway chairlifts and inclined or vertical wheelchair lifts, located in private residences.<sup>16</sup>

Section 399.01(9), F.S., defines the term “private residence” to mean a separate dwelling or a separate apartment in a multiple unit dwelling which is occupied by members of a single-family.

### ***Safety Concerns***

There are multiple reports of injuries or fatalities involving children and elevators in private residences.<sup>17</sup>

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<sup>10</sup> Section 399.07(5), F.S.

<sup>11</sup> Section 399.07(1), F.S. The certificates may only be renewed for vertical conveyances that have a current satisfactory inspection.

<sup>12</sup> Section 339.03(5), F.S.

<sup>13</sup> Section 399.061(1), F.S.

<sup>14</sup> *Id.* In 2000, the Legislature amended s. 399.061, F.S., (s. 4, ch. 2000-356, L.O.F.) to provide for the use of private elevator inspectors. The privatization of elevator inspections has helped to increase the number of licensed inspectors and has helped the bureau increase the number of inspections conducted each year, as mandated by the annual inspection requirement. *See* Office of Program Policy Analysis & Governmental Accountability, *Privatization Has Helped Improve Elevator Safety: Additional State Oversight is Needed*, Report No. 08-18, (April 2008).

<sup>14</sup> *Id.*

<sup>15</sup> *Id.*

<sup>16</sup> Section 399.03(5), F.S.

<sup>17</sup> *See* The Safety Institute, *Safety Advocates Petition CPSC for Mandatory Residential Elevator Standard Citing Numerous Deaths* (November 10, 2014) available at: <http://www.thesafetyinstitute.org/safety-advocates-petition-cpsc-for-mandatory-residential-elevator-standard-citing-numerous-deaths/> (last visited Feb. 10, 2016), and CBS News, *In-home elevator accidents causing catastrophic harm to kids* (November 10, 2014) available at: <http://www.cbsnews.com/news/in-home-elevator-accidents-causing-catastrophic-harm-to-kids/> (last visited Feb. 10, 2016).

Safety advocates filed a petition with the Consumer Product Safety Commission (commission) requesting mandatory safety standards for the design and installation of residential elevators to reduce the space between the interior elevator doors (elevator car/gate) and the exterior doors (hoistway or swing doors).<sup>18</sup> The petition is based on concerns related to injuries and fatalities to children caused when a child gains access to the space between the interior and exterior door. Injuries occur when a child is trapped between the doors or between a door and the landing. If the elevator is called, the child can be carried along and may be crushed when the child's body meets the sill.

The ASME standard for residential elevators requires a 5-inch clearance between interior and exterior doors. ASME A17.1, s. 5.3.1.7.2, provides:

Clearance Between Hoistway Doors or Gates and Landing Sills and Car Doors or 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 or gate shall not exceed 125 mm (5 in.).

The petition noted that some states have enacted standards that are more stringent than those required by the ASME. The petition also noted that elevator codes in other states restrict any gaps between the hoistway doors and the car doors or gates to 3 inches.<sup>19</sup>

The commission invited written comments concerning the petition but has not taken further action.<sup>20</sup>

Maxwell Erik Grablin, of Bradenton, Florida, was crushed by an elevator in his three-story home while in the elevator shaft searching for his pet hamster. Reports indicate that the elevator did not have a sensor. A sensor would have stopped the elevator when it detected his presence, e.g., a sensor similar in function to the sensor on garage doors that stops and reverses the descent of the door when faced with an obstruction.<sup>21</sup>

### III. Effect of Proposed Changes:

**Section 1** creates s. 399.031, F.S., to provide clearance and safety device requirements for elevators in private residences.

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<sup>18</sup> See Petition for Recall to Repair/Retrofit and Rulemaking, by petitioners: The Safety Institute, Carol Pollack-Nelson, Ph.D., and Cash, Krugler and Fredricks, L.L.C., filed with the United States Consumer Products Safety Commission (November 13, 2014), available at: <http://www.thesafetyinstitute.org/wp-content/uploads/2014/11/20141110-Elevator-Petition-For-Recall-To-Repair-and-Mandatory-Rulemaking.pdf> (last visited Feb. 10, 2016).

<sup>19</sup> *Id.*

<sup>20</sup> See Consumer Product Safety Commission, *Petition Requesting Rulemaking on Residential Elevators*, 80 FR 3226, Fed. Reg., pp. 3226-3227 (Jan. 22, 2015), available at: <https://www.federalregister.gov/articles/2015/01/22/2015-00907/petition-requesting-rulemaking-on-residential-elevators> (last visited Feb. 10, 2016).

<sup>21</sup> See Kate Irby, *After Florida boy suffocates in elevator shaft chasing pet hamster, his parents on safety mission*, The Miami Herald (January 18, 2016), available at: <http://www.miamiherald.com/news/state/florida/article55252190.html> (last visited Feb. 10, 2016).

The bill requires that elevators installed in a private residence provide a distance between the hoistway face of the hoistway doors and the hoistway edge of the landing sill that may not exceed 3/4 inch for swinging doors and 2 1/4 inches for sliding doors.

The bill also requires that horizontal sliding car doors and folding car doors be designed and installed to withstand a force of 75 pounds without permanent deformation or displacing the door from its guides or track. According to an elevator inspector, this provision relates to the rigidity of the elevator doors. Rigidity standards may prevent a child from warping the door in order to fit in the space provided.

The bill provides standards for different types of elevator car and hoistway doors, including manual and power-operated horizontal sliding doors, folding doors, and swinging doors. Generally, the gap between the hoistway doors and the car doors or gate cannot exceed 4 inches.

The bill also requires that all elevators in a private residence be equipped with a device that stops the downward motion of the elevator car within 2 inches of the platform if the elevator is interrupted anywhere on its underside during downward motion.<sup>22</sup> The force required to operate the device must not exceed 15 pounds. If the device is activated, the elevator could only resume its descent after the elevator has been manually reset.

The bill applies to all new elevators installed in a private residence.

The bill provides that this section may be cited as the “Maxwell Erik ‘Max’ Grablin Act.”

The bill requires the Florida Building Commission to adopt the clearance and safety device requirements for elevators in private residences into the Florida Building Code by October 1, 2016.

**Section 2** provides that the bill is effective on July 1, 2016.

#### **IV. Constitutional Issues:**

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

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<sup>22</sup> ASME 5.3.1.1.1 requires a stopping distance of 75 mm (3 inches) in private residence elevators.

**V. Fiscal Impact Statement:****A. Tax/Fee Issues:**

None.

**B. Private Sector Impact:**

None.

**C. Government Sector Impact:**

There is no impact to state government. Local government will enforce the provisions of the bill while conducting building inspections.

**VI. Technical Deficiencies:**

None.

**VII. Related Issues:**

None.

**VIII. Statutes Affected:**

This bill creates section 399.031 of the Florida Statutes.

**IX. Additional Information:****A. Committee Substitute – Statement of Substantial Changes:**  
(Summarizing differences between the Committee Substitute and the prior version of the bill.)**CS/CS/CS by Fiscal Policy on February 17, 2016:**

The committee substitute requires the Florida Building Commission to adopt into the Florida Building Code the requirements for elevators in private residences created by the bill by October 1, 2016.

**CS/CS by Community Affairs on February 9, 2016:**

Changes the phrase “residential dwelling” to “private residence” in line 83 to maintain consistent term usage.

**CS by Regulated Industries on January 27, 2016:**

- Increases the maximum permissible distance for the spaces between the edge of the landing sill, the hoistway doors, and the car doors to 4 inches.
  - Requires that horizontal sliding car doors and folding car doors must be designed to withstand a force of 75 pounds under specified conditions.
  - Provides these standards for different types of elevator car and hoistway doors.

- Requires that all elevators in a private residence be equipped with a device that stops the elevator car's downward motion within 2 inches if the platform of the elevator is interrupted anywhere on its underside in its downward motion, and provides additional requirements for operation of the device.
- Removes a definition of the term "private residence."
- Limits the application of the bill to all new elevators in a private residence, and does not apply to existing elevators.

B. Amendments:

None.

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This Senate Bill Analysis does not reflect the intent or official position of the bill's introducer or the Florida Senate.

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