HOUSE OF REPRESENTATIVES
FINAL BILL ANALYSIS

BILL #:	CS/CS/HB 1289	**FINAL HOUSE FLOOR ACTION:**	
SPONSOR(S):	Regulatory Affairs Committee; Business & Professions Subcommittee; Steube	117 **Y's**	0 **N's**
COMPANION BILLS:	CS/CS/CS/SB 1602	**GOVERNOR'S ACTION:**	Approved

SUMMARY ANALYSIS

CS/CS/HB 1289 passed the House on March 8, 2016, as CS/CS/CS/SB 1602.

The bill creates s. 399.031, F.S., the "Maxwell Erik 'Max' Grablin Act," to provide requirements for new elevators in private residences.

The bill provides specific measurements for clearances and requires specified force amounts for doors and gates of elevators within private residences.

The bill also provides that the underside of the platform of an elevator car must be equipped with a device that, if the platform of the elevator car is obstructed anywhere on its underside in its downward travel, interrupts the electric power to the driving machine motor and brake and stops the elevator car's downward motion within two inches. The downward motion can only be resumed after the elevator has been manually reset.

The bill directs the Florida Building Commission to adopt the Act's provisions into the Florida Building Code by October 1, 2016.

There is no fiscal impact on state government. Local governments will enforce the provisions of the bill while conducting building inspections, so no fiscal impact is anticipated on local governments.

The bill was approved by the Governor on April 8, 2016, ch. 2016-211, L.O.F., and will become effective on July 1, 2016.

I. SUBSTANTIVE INFORMATION

A. EFFECT OF CHANGES:

Present Situation

Relevant Residential Elevator Requirements

Chapter 399, F.S., Elevator Safety, is enforced by the Division of Hotels and Restaurants within the Department of Business and Professional Regulation. Section 399.02(3)(u), F.S., lists elevators located in private residences as equipment not covered by the chapter.

The Florida Building Code, Residential (Code) provides the requirements for "the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height… ."[1] The Code provides that private residence elevators shall comply with American Society of Mechanical Engineers (ASME) requirements.[2]

ASME develops and maintains major codes addressing safety in design, construction, installation, operation, inspection, testing, maintenance, alteration, and repair of elevators, dumbwaiters, escalators, moving walks, material lifts, and dumbwaiters with automatic transfer devices, wheelchair lifts, or inclined-stairway chair lifts.[3]

With regard to private residence elevator hoistway doors or gates,[4] the ASME requires the following:

> The clearance between the hoistway doors or gates and the hoistway edge of the landing sill shall not exceed 75 mm (3 inches). The distance between the hoistway face of the landing door or gate and the car door or gate shall not exceed 125 mm (5 inches).[5]

Residential Elevator Accidents

In the last few years, the media has reported several private residential elevator accidents involving children.[6, 7] A major concern is that many residential elevators have a dangerous gap between the elevator and hoistway door allowing children as old as 12 to fit between them. When the elevator is called to another floor, the hoistway door automatically locks, and the child's body is carried along with the elevator car, often crushing the child, leading to death or permanent injuries.[8]

In November 2014, safety advocates filed a petition with the U.S. Consumer Product Safety Commission requesting mandatory safety standards for the design and installation of residential elevators to eliminate excessive space between the elevator car door/gate (interior door) and the

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[1] Section R101.2 of the 2014 Florida Building Code, Residential.
[2] Section R321.1 of the 2014 Florida Building Code, Residential.
[3] American Society of Mechanical Engineers, Safety Codes and Standards, https://www.asme.org/about-asme/standards/safety-codes-for-elevators-and-escalators (last visited Jan. 24, 2016).
[4] A hoistway door or gate is the door between an elevator shaft or hoistway and the floor landing and is normally closed except when the elevator is stopped at the floor for passengers or freight.
[5] Section 5.3.1.7.2 of ASME A17.1-2007/CSA B44-07.
[6] Jamie Schaefer-Wilson, *Safety Advocates Petition CPSC for Mandatory Residential Elevator Standard Citing Numerous Deaths*,THE SAFETY INSTITUTE, http://www.thesafetyinstitute.org/safety-advocates-petition-cpsc-for-mandatory-residential-elevator-standard-citing-numerous-deaths/ (last visited Jan. 25, 2016).
[7] CBS News, *In-home elevator accidents causing catastrophic harm to kids,* http://www.cbsnews.com/news/in-home-elevator-accidents-causing-catastrophic-harm-to-kids/ (last visited Jan. 25, 2016).
[8] *Id.*

hoistway or swing door (exterior door).[9] The Miami Herald reports that, "Elevator deaths are not common - incidents involving both elevators and escalators kill about 30 people every year and seriously injure about 17,000 people a year, according to the U.S. Bureau of Labor Statistics and the Consumer Product Safety Commission. The two major causes of death are falls and being caught between moving parts… ."[10]

Most recently, in January 2015, 12-year-old Maxwell Erik "Max" Grablin crawled into the elevator shaft in his home in Bradenton to find his pet hamster. The hoistway door to the elevator locked behind him, trapping him below the elevator. The elevator, having no sensor to detect that something was in the shaft, was lowered and crushed him.[11]

Effects of Proposed Changes

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The bill also provides that the underside of the platform of an elevator car is required to be equipped with a device that, if the platform of the elevator car is obstructed anywhere on its underside in its downward travel, interrupts the electric power to the driving machine motor and brake and stops the elevator car's downward motion within two inches. The downward motion can only be resumed after the elevator has been manually reset.

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II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

   None.

2. Expenditures:

   None.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

   None.

2. Expenditures:

[9] 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 on Nov. 13, 2014. A copy of the petition is available at: http://www.regulations.gov/#!documentDetail;D=CPSC-2015-0001-0002 (last visited Jan. 25, 2016).
[10] Irby, Kate, *After Florida boy suffocates in elevator shaft chasing pet hamster, his parents on safety mission*, The Miami Herald, Jan. 18, 2016 at http://www.miamiherald.com/news/state/florida/article55252190.html (last visited Jan. 25, 2016).
[11] *Id.*

See *Fiscal Comments*.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

Homeowners will incur indeterminate costs of complying with the new provisions when installing new residential elevators.

D. FISCAL COMMENTS:

Residential elevators are not regulated by DBPR, so there is no fiscal impact to the state.[12] Local governments will enforce the provisions of the bill while conducting building inspections, so no fiscal impact is anticipated on local governments.

[12] Department of Business and Professional Regulation Bill Analysis of CS/CS/SB 1602, Feb. 11, 2016.