# 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.)

|                              | Prepared By:                                       | The Professional Stat | ff of the Regulated I   | ndustries Comi                                     | mittee                |  |  |
|------------------------------|--|-----------------------|---|--|-----------------------|--|--|
| BILL:                        | CS/SB 846  |                       |   |  |                       |  |  |
| INTRODUCER:                  | Regulated Industries Committee and Senator Bennett |                       |   |  |                       |  |  |
| SUBJECT:                     | Fire Sprinklers                                    |                       |   |  |                       |  |  |
| DATE:                        | March 24, 2010                                     | REVISED:              |   |  |                       |  |  |
| ANAL Harrington  2. 3. 4. 5. |  | STAFF DIRECTOR  nhof  | REFERENCE RI CA BI  | Fav/CS   | ACTION                |  |  |
|                              | Please see  A. COMMITTEE SU  B. AMENDMENTS         |                       | for Addition Statement of Subs Technical amendr Amendments were Significant amend | stantial Chango<br>nents were rece<br>e recommende | es<br>commended<br>ed |  |  |

# I. Summary:

Section R313 of the 2009 Residential International Code requires the installation of automatic fire sprinkler systems in newly constructed one- and two-family residential dwellings and townhouses effective January 1, 2011. The committee substitute (CS) provides that local amendments to s. R313 of the Florida Building Code relating to mandatory fire sprinklers shall not be included in the Florida Building Code.

The CS provides that the act becomes effective upon becoming a law.

This CS amends section 553.73, F.S.

#### II. Present Situation:

## Florida Building Code

The Florida Building Code (code) was authorized in 1998 to be the sole document incorporating all building standards. Uniformity was created in a response to complex and confusing municipality codes and varying administrative processes. The code created a consistent building process across the state and only allows for variation when there are competing differences in local physical conditions.<sup>2</sup>

The first code was created by the Florida Building Commission (commission) in 2001.

## Florida Building Commission

The commission is established in part IV of ch. 553, F.S., and charged with adopting and maintaining the code as a single, unified state building code, and with enforcing requirements that provide effective and reasonable protection for the public safety, health and welfare. The commission consists of 25 members appointed by the governor to represent the various disciplines governed by the requirements of the building code, as well as local governments and code enforcement officials, the insurance industry, the Department of Financial Services, and one member appointed by the Governor to serve as chair of the commission.<sup>3</sup>

The commission is charged with amending the code on a triennial basis.<sup>4</sup> In addition to the triennial republishing of the code, the commission may approve technical amendments to the code once each year if the commission finds that such amendment:

- Is needed in order to accommodate the specific needs of this state;
- Has a reasonable and substantial connection with the health, safety, and welfare of the general public;
- Strengthens or improves the Florida Building Code or, in the case of innovation or new technology, will provide equivalent or better products or methods or systems of construction;
- Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities; and
- Does not degrade the effectiveness of the Florida Building Code.<sup>5</sup>

Local governments may amend the code for their jurisdiction not more than once every six months. Any local amendment must address a unique local condition and be more stringent than the code. Adopted local amendments are repealed or incorporated into the code every three years, upon the updating of the code.<sup>6</sup>

<sup>&</sup>lt;sup>1</sup> Chapter 98-419, L.O.F.

<sup>&</sup>lt;sup>2</sup> Section 553.73(4)(b), F.S.

<sup>&</sup>lt;sup>3</sup> Section 553.74(1), F.S.

<sup>&</sup>lt;sup>4</sup> Section 553.77(1)(b), F.S.

<sup>&</sup>lt;sup>5</sup> Section 553.73(8)(a), F.S.

<sup>&</sup>lt;sup>6</sup> Section 553.73(4)(b), F.S.

The last triennial edition of the code was published in 2007. The commission is currently working to update the code to the 2010 edition.<sup>7</sup>

#### **International Residential Code**

The primary resource used by the commission in formulating the residential building code is the International Residential Code (IRC). <sup>8</sup> The IRC is a comprehensive, stand-alone residential building code that creates minimum regulations for one- and two-family dwellings of three stories or less. This code contains all building, plumbing, mechanical, fuel gas, energy and electrical provisions for one- and two-family residences.

On September 21, 2008, the International Code Council adopted amendment RB64-07/08 to the 2009 IRC. The amendment requires the installation of fire sprinklers in all newly constructed one- and two-family residential dwellings and townhouses effective January 1, 2011. Because the IRC is the primary resource for the code, the Florida Home Builder's Association expects that the commission will adopt similar standards in the 2010 edition of the Florida Building Code.

#### **Life Safety Code**

The Life Safety Code operates in conjunction with the residential building code. Section 633.025, F.S., provides that local governments seeking to require fire sprinklers in newly constructed one- and two-family dwelling subdivisions must prepare an economic cost and benefit report prior to implementing such a mandate. Failure to prepare the report results in the invalidation of the requirement for one- or two-family dwellings or any proposed subdivision. In addition, a local jurisdiction may not charge an additional fee, above what is charged to a non-fire sprinklered dwelling, on the basis that a one- or two-family dwelling unit is protected by a fire sprinkler system. Local governments seeking to impose a residential fire sprinkler requirement must also provide affected owners a letter documenting the specific infrastructure or other tax or fee allowances and waivers that will be given to offset the approximate cost of the sprinkler system. <sup>10</sup>

## **Fire Sprinklers**

Fire sprinklers, also known in the construction industry as "Automatic Sprinkler Systems" are commonly used as primary fire-extinguishing systems in commercial buildings and multiple-family dwellings. Section 553.895(2), F.S., provides that except for one- or two-family dwellings, any building that is three stores or more and that is constructed after January 1, 1994, such building shall be equipped with an automatic fire sprinkler.

<sup>&</sup>lt;sup>7</sup> Scheduled meetings to work on revisions for the 2010 code are noticed on the commission's website at <a href="http://www.dca.state.fl.us/fbc/meetings/2\_meetings.htm">http://www.dca.state.fl.us/fbc/meetings/2\_meetings.htm</a> (last visited March 15, 2010).

<sup>&</sup>lt;sup>8</sup> The commission is required to select from national and international codes to form the foundation of the code. Section 553.73(3), F.S.

<sup>&</sup>lt;sup>9</sup> Section 633.025(9), F.S.

<sup>&</sup>lt;sup>10</sup> Section 633.025(10), F.S.

The need for fire sprinklers in one- or two-family residences and townhomes is widely debated. Those supporting the sprinkler systems emphasize increased safety both to life and property. Those who oppose residential fire sprinklers emphasize the costs associated with the mandate, restriction on homeowner's choice, and the effectiveness of smoke detectors.

In 2008, over 1.4 million fires were responded to by public fire departments; every 22 seconds a fire department responded to a fire across the nation. A residential fire occurs every 78 seconds. 62 percent of all firefighter deaths occur in residential structures. In 2008, fires in the home resulted in 2,755 deaths, which is the third lowest number of residential fire deaths since 1977. Approximately \$8.5 billion dollars worth of property loss resulted from residential fires in 2008. 12

The following graph illustrates the total number of residential fire related deaths from 1977 to 2008. 13

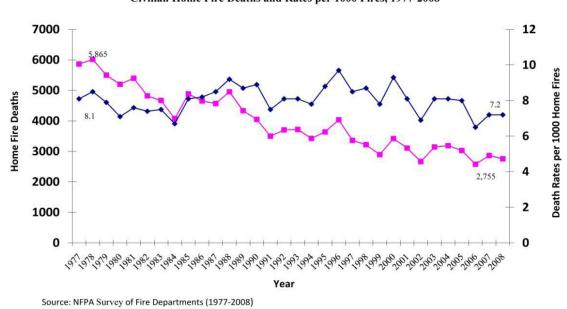


Figure 3. Civilian Home Fire Deaths and Rates per 1000 Fires, 1977-2008

Section R313 of the current Code, does not contain any provisions with regard to the application of automatic sprinkler systems in one- and two- family dwellings. Instead, R313 provides for provisions that are limited in scope to "fire smoke and carbon monoxide alarms." Section R324 of the current Code requires sprinkler systems for town homes that are three or more stories tall

and consist of three or more units.

<sup>&</sup>lt;sup>11</sup> Fire Loss in the United States 2008, Michael J. Karter, Jr., National Fire Protection Association, August 2009 (Revised January 2010). Found at: <a href="http://www.nfpa.org/assets/files/pdf/os.fireloss.pdf">http://www.nfpa.org/assets/files/pdf/os.fireloss.pdf</a>. <a href="http://www.nfpa.org/assets/files/pdf/os.fireloss.pdf">http://www.nfpa.org/assets/files/pdf/os.fireloss.pdf</a>.

<sup>&</sup>lt;sup>13</sup> *Id*.

According to the commission, the proposed 2010 Code will utilize the 2009 International Building Codes as the foundation codes. As part of the foundation codes, the 2009 International Residential Code contains a requirement mandating the installation of sprinkler systems for one-and two-family dwellings. Section R313 of the IRC 2009 Edition Code provides the following:

- R313.1 **Townhouse automatic fire sprinkler systems.** An automatic residential fire sprinkler system shall be installed in townhouses. Except that automatic fire sprinkler systems shall not be required when additions or alterations are made to existing townhouses that do not have residential fire sprinkler systems installed.
- R313.2 One- and two-family dwellings automatic fire systems. An automatic residential fire sprinkler system shall be installed in one- and two-family dwellings. Except that an automatic fire sprinkler system shall not be required for additions or alterations to existing buildings that are not already provided with an automatic residential sprinkler system.

# III. Effect of Proposed Changes:

The CS amends s. 553.73, F.S., to prohibit the inclusion of s. R313 of the most current version of the IRC related to the mandated fire sprinklers from being adopted by the commission into the code.

The CS provides that the act shall take effect upon becoming a law.

## IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

# V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

The CS would prohibit an addition to the code that would add costs to the construction and final price of residential one- and two-family homes and townhouses.

The National Home Builders Research Center conducted a nationwide survey on the costs of residential sprinkler systems. The survey collected data from 102 builders who built a total of 5,527 homes. The median cost of the fire sprinkler system was approximately \$5,573 per home. <sup>14</sup> The average cost allocation was as follows:

| Residential Automatic Sprinkler Costs |         |  |  |  |
|---------------------------------------|---------|--|--|--|
| Fire Sprinkler Permit Fee             | \$198   |  |  |  |
| Fire Sprinkler Design Fee             | \$593   |  |  |  |
| Water Service Pipe Changes            | \$866   |  |  |  |
| Water Meter Changes                   | \$172   |  |  |  |
| Installation Costs                    | \$1,829 |  |  |  |
| <b>Total Median Cost to Builder</b>   | \$5,573 |  |  |  |

According to the National Association of Home Builders, the mandatory installation of automatic fire sprinklers in Florida homes would price out 64,118 potential buyers from the market. To contrast this argument, however, the Florida Professional Firefighters, Florida Fire Marshals and Inspectors Association, and the Florida Fire Chiefs Association, have noted that the additional costs associated with a fire sprinkler system are less than the average granite countertop upgrade. In additional, those organizations note that survival time in fires has decreased over the last three decades, and the additional time created by using a fire sprinkler system to exit a home during a fire will save lives.

## C. Government Sector Impact:

None.

#### VI. Technical Deficiencies:

None.

## VII. Related Issues:

None.

#### VIII. Additional Information:

A. Committee Substitute – Statement of Substantial Changes: (Summarizing differences between the Committee Substitute and the prior version of the bill.)

## CS by Regulated Industries on March 24, 2010:

The CS clarifies that the provision that may not be included in the code is s. R313 of the most current version of the IRC related to mandated fire sprinklers.

<sup>14</sup> Fire Sprinklers and Homeowner Insurance, Lanlan Xu, National Association of Home Builders, September 14, 2007.

<sup>&</sup>lt;sup>15</sup> The study assumed an average home price of \$243,298 and an additional \$5,000 for the installation of the sprinkler system.

# B. Amendments:

None.

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