

**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 Appropriations Subcommittee on General Government

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BILL: CS/SB 338

INTRODUCER: Regulated Industries Committee and Senator Altman

SUBJECT: Engineers

DATE: April 1, 2015

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

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	<u>Kraemer</u>	<u>Imhof</u>	<u>RI</u>	<b>Fav/CS</b>
2.	<u>Davis</u>	<u>DeLoach</u>	<u>AGG</u>	<b>Favorable</b>
3.	_____	_____	<u>FP</u>	_____

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

COMMITTEE SUBSTITUTE - Substantial Changes

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**I. Summary:**

CS/SB 338 amends existing law regulating engineers to specifically address the practice of structural engineering. Structural engineering, which is the analysis and design of threshold buildings and other structures of a certain height, size, or occupancy, is currently regulated as an aspect of engineering. The bill provides additional, more detailed regulation as significant injuries and loss of life occur when a structure fails or collapses due to the size and capacity of those structures.

The bill has a minimal fiscal impact on state funds.

The bill has an effective date of July 1, 2015.

**II. Present Situation:**

Regulation of the practice of engineering was reviewed and reenacted by the Legislature in 1979.<sup>1</sup> Professional engineers are regulated by the Board of Professional Engineers (FBPE) within the Department of Business and Professional Regulation (department) which enforces and administers the provisions of ch. 471, F.S. The Florida Engineers Management Corporation (FEMC) provides administrative, investigative, and prosecutorial services to the FBPE pursuant to ch. 455, F.S., and ch. 471, F.S.<sup>2</sup> The contract between the department and the FEMC for

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<sup>1</sup> See ch. 471, F.S., and ch. 79-243, L.O.F.

<sup>2</sup> See s. 471.038, F.S.

beginning July 1, 2013, through June 30, 2017, provides that the FEMC's services apply to all licensees under the jurisdiction of the FBPE.<sup>3</sup>

Section 471.015, F.S., requires applicants have certain qualifications in order to become licensed as an engineer, including passing a fundamentals examination and a principles and practice examination, having good moral character, obtaining a degree from a four year engineering curriculum at a school, college or university approved by the FBPE, and having four years of engineering experience.

According to industry representatives, there is a need to specifically license the practice of structural engineering as a separate component of engineering. The Florida Structural Engineers Association supports the creation of an additional license requirement for structural engineers in the state due to the increasingly technical nature of the work, and decreasing redundancies and safety measures in project design resulting from the effort to reduce construction costs.<sup>4</sup> In the event of failure of a threshold building, its mere size and capacity create a significant potential for injuries and loss of human life.<sup>5</sup>

### III. Effect of Proposed Changes:

The bill defines “structural engineering” as service or creative work that includes analysis and design of threshold structures.<sup>6</sup> The term includes services and work defined as “engineering.”<sup>7</sup>

Beginning March 1, 2019, no person other than a licensed structural engineer may practice structural engineering or use the title of structural engineer, or variations prefaced by the terms “licensed,” “professional,” “registered,” or any other term indicating that a person is actively licensed as a structural engineer. Similar to licensed engineers, structural engineers are required to pay fees, be of good moral character, and meet requirements for continuing education and the use of seals.

The requirements for licensure are set forth in **Section 5** of the bill. Section 471.015, F.S., is amended to direct the Florida Engineers Management Corporation to issue a structural engineer

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<sup>3</sup> See <http://www.fbpe.org/index.php/2014-12-08-17-12-31/corporate-contract/send/51-corporate-contracts/165-contract-2012-2013-dbpr-femc> (last visited Mar. 9, 2015).

<sup>4</sup> See <http://www.flsea.com/Structural-Engineering-Licensure> (last visited Mar. 9, 2015).

<sup>5</sup> *Id.*

<sup>6</sup> The committee substitute references “threshold buildings” in lieu of “significant buildings” for which structural analysis and design must be performed by a licensed structural engineer beginning March 1, 2019. A threshold building is defined in s. 553.71, F.S., as one that is greater than three stories or 50 feet in height, or has occupancy measurements exceeding 5,000 square feet or 500 persons.

<sup>7</sup> Section 471.005(7), F.S., provides the following definition of “engineering:” any service or creative work, the adequate performance of which requires engineering education, training, and experience in the application of special knowledge of the mathematical, physical, and engineering sciences to such services or creative work as consultation, investigation, evaluation, planning, and design of engineering works and systems, planning the use of land and water, teaching of the principles and methods of engineering design, engineering surveys, and the inspection of construction for the purpose of determining in general if the work is proceeding in compliance with drawings and specifications, any of which embraces such services or work, either public or private, in connection with any utilities, structures, buildings, machines, equipment, processes, work systems, projects, and industrial or consumer products or equipment of a mechanical, electrical, hydraulic, pneumatic, or thermal nature, insofar as they involve safeguarding life, health, or property; and includes such other professional services as may be necessary to the planning, progress, and completion of any engineering services.

license to applicants certified by the Florida Board of Engineers, who must:

- Be licensed as an engineer or be qualified for licensure as an engineer in Florida;
- Submit an application with the required fee;
- Provide evidence of good moral character as defined by the FBPE;<sup>8</sup>
- Provides a record of four years of active structural engineering experience, as defined by the FBPE board, under the supervision of a licensed engineer; and
- Pass the structural examination offered by the National Council of Examiners for Engineering and Surveying.

To allow for licensure as a structural engineer, the bill provides a “grandfather” provision or an exception to the examination requirement to those applicants who, before February 28, 2019, are licensed as an engineer or qualified to be licensed as an engineer in Florida, have submitted an application with the required fee and are of good moral character as determined by the FBPE. The applicant must also submit a signed affidavit in the format prescribed by the FBPE indicating the applicant is currently a licensed engineer in the state and has been engaged in the practice of structural engineering with a record of at least four years of active structural engineering experience. The bill requires the applicant to attest that they are willing to meet with the FBPE or its representative, upon request, for the purpose of evaluating the applicant’s qualifications for licensure as a structural engineer.

The bill allows for simultaneous application for both an engineer license and a structural engineer license. An applicant who is qualified for licensure as an engineer under the chapter’s licensing and qualifications provisions may simultaneously apply for licensure as a structural engineer if all requirements of s. 471.013, F.S., and s. 471.015(3), F.S., are met.

The bill includes structural engineering in the provisions that provide for licensure of applicants currently licensed as structural engineers in other states.

The bill amends s. 471.031(1), F.S., to prohibit the practice of structural engineering by any person beginning March 1, 2019, unless the person is licensed as a structural engineer, or exempt from licensure. With respect to exemption from licensure as a structural engineer, the bill amends s. 471.031(1)(b)2., F.S. First, it adds additional terms to the listing of terms that may not be used by persons legally exempt from licensure as an engineer in Florida, such as certain defense, space, or aerospace employees.<sup>9</sup> In addition to terms already prohibited to be used by exempt persons, the terms “licensed engineer,” “licensed professional engineer,” “licensed structural engineer,” “professional structural engineer,” “registered structural engineer,” and “structural engineer” may not be used by those exempted from licensure as engineers under Florida law. Second, those terms may also not be used by those persons exempted from licensure who work for a manufacturer on a full-time basis on the design or fabrication of products, or are employees working in a company under the supervision of a licensed person.<sup>10</sup>

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<sup>8</sup> Section 471.005(1), F.S., provides that a reference to “board” means the Board of Professional Engineers, as contrasted with the term “board of directors,” which is defined in s. 471.005(2), F.S., as the board of directors of the Florida Engineers Management Corporation (FEMC).

<sup>9</sup> See s. 471.003(2)(j), F.S.

<sup>10</sup> See s. 471.003(2)(c) and (e), F.S.

The bill also provides that licensed structural engineers are subject to the same disciplinary proceedings and consequences that exist for engineers in current law. It includes the services of structural engineers to those services subject to local building codes, zoning codes, or ordinances, which are more restrictive than the provisions of ch. 471, F.S.

#### **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:

As provided in s. 471.011, F.S., CS/SB 338 authorizes the FBPE to establish fees relating to the licensure of structural engineers for applications, licensing and renewals, temporary registrations, late renewals, licensure by endorsement, reactivation fees, and replacement of certificate.

B. Private Sector Impact:

According to the FEMC, which provides administrative, investigative, and prosecutorial services to the FBPE pursuant to ch. 455, F.S., and ch. 471, F.S., the bill will restrict the performance of structural engineering to those licensed professional engineers who obtain licenses to perform structural engineering. In addition, the bill provides for a “grandfather” period through February 28, 2019, to allow licensed engineers to qualify for licensure as a structural engineer, if desired.

C. Government Sector Impact:

The new structural engineer license classification and fee require minimal information system program changes to the department’s information technology system. The department and the FEMC indicate the additional programming costs can be handled within existing resources.<sup>11</sup>

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<sup>11</sup> Department of Business and Professional Regulation, 2015 Agency Legislative Bill Analysis: SB 338 (March 9, 2015).

**VI. Technical Deficiencies:**

None.

**VII. Related Issues:**

None.

**VIII. Statutes Affected:**

This bill substantially amends the following sections of the Florida Statutes: 471.003, 471.005, 471.011, 471.013, 471.015, 471.019, 471.025, 471.031, 471.033, and 471.037.

**IX. 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 11, 2015:**

CS/SB 338 mandates that beginning March 1, 2019, no person other than a licensed structural engineer shall practice structural engineering or use the title of structural engineer, or variations prefaced by the terms “licensed,” “professional,” “registered,” or any other term indicating that a person is actively licensed as a structural engineer.

The committee substitute references “threshold buildings,” which are greater than three stories or 50 feet in height, or have occupancy measurements exceeding 5,000 square feet or 500 persons, for which structural analysis and design must be performed by a licensed structural engineer beginning March 1, 2019.

The committee substitute provides that structural engineering education, training, experience and examination will be defined by the Board of Professional Engineers. It provides for fees, licensure by endorsement, use of seals, licensure beginning March 1, 2019, discipline, and applicability of local ordinances to licensed structural engineers. The committee substitute allows certain applicants for licensure as structural engineers prior to February 28, 2019 to be licensed based on their prior experience and evaluation by the Board of Professional Engineers or its designee.

**B. Amendments:**

None.