

STORAGE NAME: h0993.brc

DATE: March 17, 2000

**HOUSE OF REPRESENTATIVES
COMMITTEE ON
BUSINESS REGULATION AND CONSUMER AFFAIRS
ANALYSIS**

BILL #: HB 993

RELATING TO: Fire Protection Systems

SPONSOR(S): Representative Brown

TIED BILL(S):

ORIGINATING COMMITTEE(S)/COMMITTEE(S) OF REFERENCE:

- (1) BUSINESS REGULATION AND CONSUMER AFFAIRS
 - (2) INSURANCE
 - (3) GOVERNMENTAL RULES & REGULATIONS
 - (4) COMMUNITY AFFAIRS
 - (5) GENERAL GOVERNMENT APPROPRIATIONS
-

I. SUMMARY:

This bill clarifies the roles and responsibilities of professional engineers and fire protection contractors in the design and installation of fire sprinkler systems.

The bill does not have a fiscal impact upon state or local government.

II. SUBSTANTIVE ANALYSIS:

A. DOES THE BILL SUPPORT THE FOLLOWING PRINCIPLES:

- | | | | |
|-----------------------------------|------------------------------|-----------------------------|---|
| 1. <u>Less Government</u> | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input checked="" type="checkbox"/> |
| 2. <u>Lower Taxes</u> | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input checked="" type="checkbox"/> |
| 3. <u>Individual Freedom</u> | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input checked="" type="checkbox"/> |
| 4. <u>Personal Responsibility</u> | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input checked="" type="checkbox"/> |
| 5. <u>Family Empowerment</u> | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input checked="" type="checkbox"/> |

For any principle that received a "no" above, please explain:

B. PRESENT SITUATION:

Engineers are licensed and regulated by the Board of Professional Engineers, under the Department of Business and Professional Regulation, pursuant to ch. 471, F.S. Engineers perform consultation, planning, and design of engineering systems. Chapter 471, F. S., provides for testing, licensure, and discipline of engineers.

Fire protection contractors are licensed and regulated by the Division of the State Fire Marshal, within the Department of Insurance. Fire protection contractors design, install, test, and service fire sprinkler and other types of fire protection systems. Chapter 633, F.S., provides for testing, licensure, and discipline of fire protection contractors.

Currently, engineers design fire sprinkler systems over a certain size, and fire sprinkler contractors develop installation drawings from the engineer design direction. There is a dispute as to the scope of work for the engineer and the contractor, with each side arguing the other is doing work that they should be performing.

Section 553.79(6), F.S., requires the following documents, sealed by an engineer, in order for the construction or alteration project to receive a building permit:

(a) Electrical documents for any new building or addition which requires an aggregate service capacity of 600 amperes (240 volts) or more on a residential electrical system or 800 amperes (240 volts) or more on a commercial or industrial electrical system and which costs more than \$50,000.

(b) Plumbing documents for any new building or addition which requires a plumbing system with more than 250 fixture units or which costs more than \$50,000.

(c) *Fire sprinkler documents for any new building or addition which includes a fire sprinkler system which contains 50 or more sprinkler heads. A fire protection Contractor I, Contractor II, or Contractor IV, certified under s. 633.521, may design a fire sprinkler system of 49 or fewer heads and may design the alteration of an existing fire sprinkler system if the alteration consists of the relocation, addition, or deletion of not more than 49 heads, notwithstanding the size of the existing fire sprinkler system.*

(d) Heating, ventilation, and air-conditioning documents for any new building or addition which requires more than a 15-ton-per-system capacity which is designed to accommodate 100 or more persons or for which the system costs more than \$50,000. This paragraph does not include any document for the replacement or repair of an existing system in which the work does not require altering a structural part of the building or for work on a residential one-family, two-family, three-family, or four-family structure.

(e) Any specialized mechanical, electrical, or plumbing document for any new building or addition which includes a medical gas, oxygen, steam, vacuum, toxic air filtration, halon, or fire detection and alarm system which costs more than \$5,000.

Paragraph (c) of s. 553.79(6), F.S., as set forth above, prohibits fire protection contractors from doing the design (i.e, sealing the plans) of documents for fire sprinkler systems with 50 or more heads. Such plans must be sealed by an engineer. This same limitation appears in s. 633.021(5), F.S. There is no definition of what constitutes "documents" for fire sprinkler systems in the law. The Board of Professional Engineers (BPE) adopted Rule 61G15-32, F.A.C., in which it defines the contents of the "documents." The fire sprinkler contractors argue that the BPE rule identifies activities that are typically done by a fire protection contractor and that the force and effect of the BPE rule, coupled with the absence of defining clarity in the law, is the shifting of roles and responsibilities from the contractor to the engineer.

Engineers argue that they are working within their responsibilities, in setting forth such a definition. They further insist that the engineer possesses the "big picture" information on fire protection factors inside and outside the building that the fire protection contractor lacks.

While the engineers' rule stipulating the contents of the design document and identifying certain details in the fire protection system (details that the contractors claim should be within their purview) does not explicitly prohibit fire protection contractors from making those decisions, it does create a problem for the contractors. If the engineer delineates the system in detail in his or her design document, the contractor must then either follow those details, or be required to obtain an engineer's approval for any and every change. Such approval takes time and increases the cost of construction. Contractors argue that the nature of fire protection system design is such that a viable and effective system may take any one of several forms and costs. They assert that the contractor will have knowledge of current fire protection technology options and material choices that most engineers cannot be expected to possess. Taking these facts into consideration, contractors argue that it makes no economic sense to bind them to system detail choices (implementation decisions) made by engineers who cannot be expected to be as knowledgeable as contractors regarding fire protection technologies and materials, and since engineers make these decisions prior to initiation of construction.

C. EFFECT OF PROPOSED CHANGES:

This bill clarifies the roles and responsibility of engineers and fire protection contractors in the design and installation of fire sprinkler systems, and increases the threshold for engineer involvement in sprinkler system design from systems with 50 sprinkler heads to systems with 100 heads.

HB 993 enumerates with specificity the criteria that an engineer must follow in the development of fire sprinkler design criteria. This bill provides for an increase in the

threshold for engineer involvement from 50 to 100 sprinkler heads; clarifies that the engineer develops the design criteria for a fire sprinkler system; provides that the engineer may specify existing prescriptive standards found in the National Fire Protection Association (NFPA) Code as the design criteria for that project, and in such an event, provides that the design criteria documents are not required to be sealed by an engineer; makes a distinction between the engineer design concepts and the contractor's installation layout drawings; and clarifies that local permitting authorities may not require an engineer's seal on plans for systems under the statutorily stipulated threshold (in this bill, 99, changed from 50 in existing law).

D. SECTION-BY-SECTION ANALYSIS:

Section 1. Amends ss. 553.79(6), F.S., clarifying the roles and responsibility of engineers and contractors in the design and installation of a fire sprinkler system.

Section 2. Amends ch. 98-287, L.O.F., making changes consistent with those made in section 1 of the bill.

Section 3. Amends s. 633.021, F.S., providing conforming language, and legislative intent clarifying the roles and responsibilities of the engineer and the contractor in the design and installation of a fire sprinkler system.

Section 4. Provides an effective date of July 1, 2000.

III. 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:

None.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

None.

D. FISCAL COMMENTS:

None.

IV. CONSEQUENCES OF ARTICLE VII, SECTION 18 OF THE FLORIDA CONSTITUTION:

A. APPLICABILITY OF THE MANDATES PROVISION:

The bill does not require local governments to expend funds or to take any action requiring the expenditure of funds.

B. REDUCTION OF REVENUE RAISING AUTHORITY:

This bill does not reduce the authority that municipalities or counties have to raise revenues in the aggregate.

C. REDUCTION OF STATE TAX SHARED WITH COUNTIES AND MUNICIPALITIES:

The bill does not reduce the state tax shared with counties and municipalities.

V. COMMENTS:

A. CONSTITUTIONAL ISSUES:

None.

B. RULE-MAKING AUTHORITY:

None.

C. OTHER COMMENTS:

The Florida Fire Sprinklers' Association provided the following comments:

This bill attempts to resolve issues that have been on the table for many years. Alleged ambiguities between s. 553.79 and Chapter 633 began to surface shortly after the s.553.79 was amended to require engineer oversight of fire sprinkler designs in 1983. The contractors argue that there are many different ways of installing a fire sprinkler system that meet the letter of the State Fire Marshal's adopted fire sprinkler installation standards. The contractors argue that fire sprinkler contracting is highly competitive and that this competition results in identifying a low-cost method of installing code-complying fire sprinkler systems. Therefore, clarifying the role of the engineer, who typically produces one method of installing a fire sprinkler system, as setting parameters for installation and allowing contractor competition to determine the least-cost solution of applying the engineer direction appears to be good public policy.

STORAGE NAME: h0993.brc

DATE: March 17, 2000

PAGE 6

VI. AMENDMENTS OR COMMITTEE SUBSTITUTE CHANGES:

None.

VII. SIGNATURES:

COMMITTEE ON BUSINESS REGULATION AND CONSUMER AFFAIRS:

Prepared by:

Staff Director:

Gip Arthur

Rebecca R. Everhart