

HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: HB 835 w/CS Wind-Protection Provisions of the Florida Building Code
SPONSOR(S): Detert and others
TIED BILLS: **IDEN./SIM. BILLS:** SB 1232

| REFERENCE | ACTION | ANALYST | STAFF DIRECTOR |
|--|------------------------|---------------|-----------------|
| 1) <u>Growth Management Committee</u> | <u>10 Y, 0 N, w/CS</u> | <u>Porter</u> | <u>Grayson</u> |
| 2) <u>Local Government Council</u> | <u>7 Y, 0 N, w/CS</u> | <u>Smith</u> | <u>Hamby</u> |
| 3) <u>State Infrastructure Council</u> | <u>9 Y, 0 N</u> | <u>Porter</u> | <u>Havlicak</u> |
| 4) _____ | _____ | _____ | _____ |
| 5) _____ | _____ | _____ | _____ |

SUMMARY ANALYSIS

HB 835 w/CS directs the Florida Building Commission to update the Florida Building Code, within their existing rule making authority, with the most current edition of the wind protection requirements of the American Society of Civil Engineers (ASCE Standard 7).

The bill provides for the repeal of the current option of designing buildings to resist internal pressures when the Florida Building Commission adopts the standards and conditions of the International Building Code or International Residential Code prohibiting such design options.

The bill appropriates for fiscal year 2005-2006 only, the sum of \$200,000 to the Department of Financial Services to develop a joint program between the Florida Insurance Council and the Florida Home Builders Association to educate builders on the benefits and options of designing buildings for windborne debris protection.

The bill also requires the Commission and local building officials to evaluate the damage from Hurricane Ivan and make recommendations to the Legislature for changes to the Building Code as it relates to the region from the eastern border of Franklin County to the Florida-Alabama line.

The bill instructs the Florida Building Commission to evaluate the definition of "exposure category C" in the Florida Building Code and make recommendations for changing the definition to the Legislature.

The bill provides an effective date of July 1, 2005.

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. HOUSE PRINCIPLES ANALYSIS:

Provide limited government -- This bill requires the Florida Building Commission to adopt new rules regarding wind protection. See details below.

B. EFFECT OF PROPOSED CHANGES:

HB 835 w/CS requires the Florida Building Commission (FBC) to adopt the most current edition of the wind protection requirements of the American Society of Civil Engineers (ASCE) Standard 7 into the Florida Building Code and removes the obsolete standard (1998 edition) from the Laws of Florida. (See background for information on Standard 7.)

The bill provides for the repeal of the current option of designing buildings to resist internal pressures for buildings within the windborne debris region when the FBC adopts the standards and conditions of the International Building Code or International Residential Code prohibiting such design options.

The bill appropriates for fiscal year 2005-2006 only, the sum of \$200,000 from the Insurance Regulatory Trust Fund to the Department of Financial Services to develop a joint program between the Florida Insurance Council and the Florida Home Builders Association to educate builders on the benefits and options of designing buildings for windborne debris protection to reduce property loss during a windstorm and to develop an affidavit for verifying insurance discounts for techniques demonstrated to reduce the amount of loss during a windstorm.

The bill also requires the FBC and local building officials to evaluate the damage from Hurricane Ivan and make recommendations to the Legislature for changes to the Building Code as it relates to the region from the eastern border of Franklin County to the Florida-Alabama line.

The bill requires the FBC to evaluate the current definition of "exposure category C" as currently defined in s. 553.71(10), F.S., in the building code and make recommendations for updating the definition prior to the 2006 Legislative Session. This would allow the Legislature to update the definition to the most current and/or relevant available standards on this category of location (i.e. within 1500 feet of the mean high tide line or coastal construction control line...which ever is less).

Background

On February 15, 2000, the FBC adopted the Florida Building Code as an administrative rule and submitted it, together with proposed conforming amendments to the Florida Statutes, to the 2000 Legislature for consideration. The Code was noticed for rule adoption on February 18, 2000, in the Florida Administrative Weekly, and took effect January 1, 2001.

Hurricane Protection

The FBC established standards for hurricane protection in the Florida Building Code that are based on a national model building code, federal regulations, and standards evolving out of southeast Florida's experience with Hurricane Andrew. Specifically, for protection against hurricane waters, the Code incorporates the flood plain management standards of the Federal Emergency Management Agency's National Flood Insurance Program for the entire state. It also incorporates the Florida "coastal building zone" storm surge protection standards for coastal construction.

For protection against hurricane winds, the Florida Building Code adopts the national model building code engineering standard. Buildings constructed in regions that are expected to experience hurricane

winds of less than 120 mph must be designed to withstand external wind pressures identified for their location. Buildings constructed in regions that are expected to see hurricane winds of 120 mph or greater must not only be able to withstand external wind pressures but also internal pressures that may result inside a building when a window or door is broken or a hole is created in its walls or roof by large debris. Areas within one mile of the coast that experience at least 110 mph winds are also required to meet the 120 mph standards for external and internal pressures.

The Florida Building Code requires that new homes throughout the state be designed to resist external wind speeds that the American Society of Civil Engineers standard (ASCE 7-98) predicts these homes will experience sometime within a 50 to 100-year time period. In November of 1999, the Commission agreed with the developers of ASCE 7-98 and applied additional requirements in what is called the "wind-borne debris region" to ensure that buildings inside this region will also be able to withstand internal wind pressure caused by the penetration of flying debris. This region includes areas expected to experience winds of 120 mph or greater as well as areas within one mile of the coast that experience at least 110 mph winds.

Subsection (3) of s. 109 of ch. 2000-141, L.O.F., directs the Commission to adopt for areas of the state not within the high velocity hurricane zone, pursuant to s. 553.73, F.S., the wind protection requirements of the ASCE, Standard 7, 1998 edition as modified by the Commission in its February 15, 2000, adoption of the Florida Building Code. However, the Legislature stipulated that from the eastern border of Franklin County to the Florida-Alabama line, only land within 1 mile of the coast is subject to the windborne-debris requirements adopted by the Commission. This subsection provides for the exact location of wind speed lines to be established by ordinance using specified physical landmarks, and provides that buildings constructed within the windborne debris region must be either designed for internal pressures resulting from a broken window or door or a hole in the walls or roof, or be designed with protected openings. The subsection further provides that except in the high velocity hurricane zone, local governments may not prohibit the option of designing buildings to resist internal pressures.

The ASCE 7 standard considers both wind speeds that can be developed by hurricanes and factors such as terrain and shielding by other buildings which affect the strength of those winds when they impact buildings. Exposure A is characteristic of large cities with large expanses of tall buildings. Exposure B is characteristic of suburban areas with large expanses of short and medium height buildings and wooded areas. Exposure C is characteristic of areas of exposed expanses of open terrain or open water. Section 553.71, F.S., defines "exposure category C" to mean, except in the high velocity hurricane zone, that area which lies within 1,500 feet of the coastal construction control line, or within 1,500 feet of the mean high tide line, whichever is less. On barrier islands, exposure category C is applicable in the coastal building zone set forth in s. 161.55(5), F.S.

C. SECTION DIRECTORY:

Section 1. Amends subsection 3 of s. 109 of ch. 2000-141, L.O.F., relating to the Florida Building Code, to require the FBC to adopt the most current edition of the wind protection requirements of the American Society of Civil Engineers (ASCE) 7 Standard for the Minimum Design Loads for Buildings and Other Structures as the basis for structural design for wind in the Florida Building Code and removes the obsolete standard (1998 edition) from the Laws of Florida.

Section 2. Creates a new section of law to remove the option for designing for internal pressure for buildings within the windborne debris region consistent with the International Building Code and International Residential Code. This section also requires the Commission to initiate rulemaking to incorporate the prohibition into the Florida Building Code when the base code is updated.

Section 3. Appropriates \$200,000 from the Insurance Regulatory Trust Fund to the Department of Financial Services to be used to develop a joint program between the insurance industry and the homebuilding industry to educate contractors on the benefits and options available

for designing buildings for windborne protection to reduce property loss during a windstorm and to develop a standardized affidavit for verifying insurance discounts for storm-resistant residential construction techniques.

Section 4. Provides that the FBC, in conjunction with local building officials, shall conduct a review of damage resulting from Hurricane Ivan and make recommendations to the Legislature for changes to the Florida Building Code as it relates to region from the eastern border of Franklin County to the Florida-Alabama line. The FBC must issue a report summarizing its findings and recommendations prior to the 2006 Legislative Session.

Section 5. Creates a new section to require the FBC to evaluate the definition of "exposure category C" as currently defined in s. 553.71(10), F.S., and make recommendations for a new definition that more accurately depicts the Florida-specific conditions prior to the 2006 Legislative Session.

Section 6. Provides and effective date of July 1, 2005.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

The bill does not appear to impact the revenue of state government.

2. Expenditures:

The bill appropriates from the Insurance Regulatory Trust Fund \$200,000 for FY 2005-2006 only, to the Department of Financial Services to develop a joint program between the Florida Insurance Council and the Florida Home Builders Association to educate builders on the benefits and options of designing buildings for windborne debris protection and to develop an affidavit for verifying insurance discounts for techniques demonstrated to reduce the amount of loss during a windstorm.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

The bill does not appear to impact the revenue of local governments.

2. Expenditures:

The bill does not appear to impact the expenditures of local governments.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

The bill does not appear to have an economic impact on the private sector. However, the appropriation in the bill is intended to create an education program on building techniques designed to decrease windborne debris damage to buildings that is intended to benefit the private sector.

D. FISCAL COMMENTS:

None.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

The bill does not require counties or municipalities to spend funds or to take an action requiring the expenditure of funds. The bill does not reduce the percentage of a state tax shared with counties or municipalities. The bill does not reduce the authority that municipalities have to raise revenue.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

The bill requires the FBC to initiate rulemaking to incorporate the bill's provisions into the Florida Building Code when the base code is updated.

C. DRAFTING ISSUES OR OTHER COMMENTS:

None.

IV. AMENDMENTS/COMMITTEE SUBSTITUTE & COMBINED BILL CHANGES

On **March 15, 2005**, the Growth Management Committee adopted a strike-all amendment that included the following changes:

Section 1. Requires the FBC mission to adopt the most current edition of the wind protection requirements of the American Society of Civil Engineers (ASCE) 7 Standard for the Minimum Design Loads for Buildings and Other Structures as the basis for structural design for wind in the Florida Building Code and removes the obsolete standard from the Laws of Florida. Deletes the windborne-debris requirement provision regarding the coastal region of the Florida panhandle.

Section 2. Removes the option for designing for internal pressure for buildings within the windborne debris region consistent with the International Building Code and International Residential Code and requires the FBC to initiate rulemaking to incorporate the prohibition into the Florida Building Code when the base code is updated.

Section 3. Creates a joint program between the insurance industry and the homebuilding industry to educate contractors on the benefits and options available for designing buildings for windborne protection to reduce property loss during a windstorm and to develop a standardized affidavit for verifying insurance discounts for storm-resistant residential construction techniques.

Section 4. Requires the FBC to evaluate the definition of "exposure category C" and make recommendations for a Florida specific definition prior to the 2006 Legislative Session.

The bill, as amended, was reported favorably with committee substitute.

On **March 30, 2005**, the Council on Local Government adopted a strike-all amendment. The strike-all amendment conforms the bill to CS/SB 1232 by requiring the FBC, in conjunction with local building officials, to conduct a review of damage resulting from Hurricane Ivan and any other data to evaluate, and to make recommendations to the Legislature for any changes to Florida's Building Code, specifically as it applies to the region from the eastern border of Franklin County to the Florida - Alabama line. The FBC must issue a report prior to the 2006 Regular Session. The amendment also clarifies that the appropriation is one-time only instead of recurring.

The bill, as amended, was reported favorably with committee substitute.