Letter From The Chairman

Energy and Hurricanes - A History of the Legislature Using Code as a Tool

As reported in previous newsletters, the Florida Legislature has become more involved in the Florida Building Code. In the early years, most of the Legislature’s intervention was in response to industry groups and individual constituents who, when not successful in gaining Commission support for their issues, may have actually preferred this as a pathway to obtain code amendments, by requesting and receiving favorable response from lawmakers. That is the beauty of the American system! There are options available for appeal to higher authority.

As the Code has matured and more legislators have become aware of its success, they have turned more and more to it as a policy implementation tool. For instance, deaths due to drowning and carbon monoxide poisoning led to legislative directives for pool barriers and C.O. detectors. Economic disruption and insurance crises led to directives focusing the code on property protection from hurricane damages. Now global warming and energy costs have given rise to renewed focus on the Code as a tool to implement energy conservation.

Traditionally and until recently, the building code was intended to primarily address life safety and secondly, property protection. Two recent changes to Florida law significantly change that policy. First, the Commission must consider proposed Code amendments that address wind and water intrusion on a higher priority. Second, is the new policy that requires retrofitting of existing homes to better withstand hurricane-force winds. The new requirement for mitigation of existing homes’ roof structures and coverings is probably the best known consequence of this new policy. However, both of these fundamental changes will have far-reaching consequences in future editions of the Code.

Energy security through energy conservation is not a new policy addressed by Florida building codes, but the Code has received renewed attention as a tool this year. Both the Legislature and the Governor have drawn on the Florida Energy Code to address conservation. The Legislature directed the Commission to determine what cost-effective enhancements can be made. The Governor directed that the Code require fifteen percent more energy efficiency by January 2009. Indications from the Legislature’s Energy Commission and the Governor’s Action Team reflect ongoing interest in using the Code to achieve more conservation. We should expect more direction and changes as their planning processes produce a comprehensive plan for the future.

One of the signs of success of any program in government is when it becomes a choice of policy makers to implement new policies or to enhance existing policies. The attention the Code has received from the Legislature and Governor this year is an indicator that even though they may not always agree with the technical judgment of the Building Commission, they recognize the success of its management of the Code and policies it implements. We look forward to the challenges and opportunities of being a “go-to” program in the future.

Raul L. Rodriguez, AIA, is president of Rodriguez and Quiroga Architects Chartered, in Coral Gables.

It has been a busy year for the Commission. The 2007 edition of the Florida Building Code, the Commission’s core mission and responsibility, was completed, as were major changes to the state product approval system and a number of special assignments from the Legislature and Governor. The biggest task was the 2007 update to the Florida Building Code. This third edition of the Code will be available to the public by the time this newsletter is published and the hope is users will obtain a copy and review the changes this spring. The Commission’s plan is to fix any publishing errors or requirement changes that have unintended consequences before the new code takes effect October 1, 2008. The goal is to make sure the new code is in good shape by October 1, then defer any further major code changes until the next edition in 2010.

The Governor and 2007 Legislature recognized that the Code is an effective tool for implementing state policies and assigned the Commission several tasks. Chief among the Code-specific tasks were development of code criteria to implement the Legislature’s new policy for mandatory upgrades of existing residential building roof systems and the Governor’s directive to increase the energy efficiency of buildings by 15%. Policy makers also recognized the Commission as an effective resource for addressing building construction issues in general and gave it several assignments to assist other agencies and to address non-Code policy initiatives. The primary non-Code assignments were development of criteria for Citizens Insurance to use for insuring buildings built after January 1, 2009, within 2,500 feet of the coast, development of a model local ordinance to promote “Green Building” and assisting the Department of Community Affairs with establishing energy efficiency standards for products sold in Florida.

The Code has applied wind resistance requirements to the reroofing of existing buildings for some time, but the Legislature expanded the Code re nailing and covering material requirements by adding secondary water barriers, roof-to-wall connection and window protection requirements under certain circumstances. The Commission implemented the new requirements as directed in October 2007 and subsequently amended the rules to settle challenges by roofing contractors. Further clarifications and enhancements of mitigation requirements will be amended into the 2007 Florida Building Code before it takes effect in October 2008.

Both the Governor, through his climate change initiative, and the Legislature, through its energy initiative, directed changes to the Florida Energy Code component of the Florida Building Code. The Legislature directed the Commission to evaluate the costs and benefits of higher standards for building efficiency and to report on proposed standards. The Governor directed the Commission to increase building efficiency requirements 15% by January 1, 2009. The Commission had the Florida Solar Energy Center study the cost effectiveness of energy conservation measures and will adopt simple changes for residential buildings and adopt updates to current ASHRAE standards for commercial buildings for implementation in the 2007 FBC October 1, 2008. See the Commission’s Report to the Legislature for more details.

The legislatively mandated model green building ordinance was developed by a special work group made up of local and state officials, building officials, conservation advocates and industry representatives using the commission’s facilitated consensus process. “Building Green” incorporates energy and water conservation, use of environment friendly building materials and practices and building stronger natural disaster-resistant buildings. The model ordinance identified several rating systems and offers options for local governments to provide incentives. It relies on voluntary compliance and is intended to encourage building to better than minimum code standards.

A result of the insurance crisis following the 2004 and 2005 hurricanes was that the Legislature saw the impact the Code can have on building damage and insurance losses. Last year it revised state building code law to enhance the impact of the Code even more. The law now prioritizes property protection from hurricane winds and water intrusion and mitigation of existing buildings. The Commission directed much of its resources to researching and developing requirements that will improve the code’s effectiveness. It continues to focus significant resources on developing the fundamental science essential to good engineering standards and building codes.

Early indications are the 2008 Legislature has a significant level of interest in the Code. If past interest is any indicator of potential legislative direction, the commission can count on a busy year ahead. The hope is the many outside agendas can be corralled to fit within the Commission’s intentions to reduce the rapid pace of code changes so industry and local government can catch up and prepare for the future.

Rick Dixon is the Executive Director of the Florida Building Commission housed within the Florida Department of Community Affairs.
New coastal buildings must be stronger to be insured by Citizens Property Insurance Corporation, the State of Florida insurance company.

The Florida Building Commission recently recommended to the Legislature stricter requirements for buildings built within one-half mile of Florida's coasts.

The Legislature tasked the Building Commission with developing requirements greater than the standard building codes for Citizens Insurance, to apply to buildings built after 2009 close to the oceans and Gulf of Mexico.

“These buildings are exposed to the strongest winds and pounding surf of oncoming hurricanes and the risks to the tax-backed insurance company are enormous,” said Commission Chairman Raul L. Rodriguez, AIA. “The Commission considered the risks and the latest science in developing its recommendations and decided those buildings insured by the State should be able to stand up to a hurricane expected only every 500 years. A 500-year hurricane is a little less than the worst historic storms on record but it has wind speeds between five and 25 miles per hour greater than the minimum building code requires. They would have to be elevated up to a foot and a half higher than required by code. They would be required to meet the Miami-Dade County Stringent Wind-Borne Debris Protection Requirements for the entire building instead of just windows and glass doors. These three requirements would be applied in all coastal areas of Florida in order to qualify for State insurance provided by Citizens Insurance.

Building Code standards currently depend on where in the State you look.

The Building Commission’s recommended building requirements for State-insured coastal buildings address three major risks that hurricanes create for coastal buildings: high wind, high water with pounding waves and wind-borne debris. Buildings would be required to withstand winds between five and 25 miles per hour greater than the minimum building code requires. They would have to be elevated up to a foot and a half higher than required by code. They would be required to meet the Miami-Dade County Stringent Wind-Borne Debris Protection Requirements for the entire building instead of just windows and glass doors. These three requirements would be applied in all coastal areas of Florida in order to qualify for State insurance provided by Citizens Insurance.

The Florida Building Commission is a 23-member board of building experts who write the Florida Building Code. Its recommendations for “Code Plus” requirements to be used by Citizens Insurance for qualifying new buildings built after Jan. 1, 2009, will be considered by the 2008 Florida Legislature during this Legislative session.
Frequent Changes an Ongoing Concern

One of the questions asked often by building departments and industry is why the Florida Building Code (FBC) changes so frequently. This is a significant concern and the short answer is that the transition from the previous Codes resulted in two consecutive editions of the FBC. Consequently, it took six years rather then three for the FBC to move out of the development phase and to settle into a maintenance phase. As the Florida Building Commission was completing the development stage, it requested changes to the law, which should limit future major Code Amendments to once every three years.

In 1998 the Legislature established the Commission and directed it to develop the first edition of the FBC by 2000. At the time development began, the International Building (IBC), Residential (IRC) and Existing Building (IEBC) Codes were not yet completed. The 2001 FBC was, therefore, an interim Code based on the Standard Building Code. The first complete version of the FBC based on the International Code was the 2004 FBC. The transition to the IBC, IRC and IEBC constituted the biggest shift in Code fundamentals, and required the most adjustments and applications implemented through the triennial update process and subsequent annual amendment processes. The hurricanes of 2004 also increased the urgency for hurricane protection code enhancements reflected in legislative directives and commission initiatives. While further refinement will continue, the major hurdles have been cleared and the next edition of the Code, the 2007 FBC, will have fewer subsequent amendments before the 2010 FBC.

No one can foresee what policies and directives may come from the Legislature over the next three years that might dictate Code changes. However, the Commission has decided to change the past practice of amending the Code annually and has not scheduled interim amendment cycles between the 2007 and 2010 editions. As foreseen now, when the 2007 FBC goes into effect there will be no major supplements issued. There may, however, be minor supplements such as a glitch fix or emergency rule, a planned supplement “glitches” in the 2007 FBC, which will be provided after code books are made available and before the Code takes effect October 1, 2008. In order to reduce pressure to consider annual amendments, the Commission obtained authority to correct errors in printing and unintended consequences of amendments in new editions. These will streamline processes before the codes go into effect. Identification of such problems in time to fix them before October 1, 2008, will require building departments and industry to obtain code books and review code changes. The code books can be purchased now and will be ready for shipping soon. Don’t put off reviewing the changes, though. Corrections must go through the State Rule Amendment process, which will begin June 1. Contact Commission staff for more information.
Why Different Accessibility Requirements for Businesses and Housing?

By Jeffery Gross, AIA

During the past few years, new construction practices and building alterations have created improved environments for persons with disabilities to live and work in. A lot of confusion has occurred in understanding and following the codes and laws which produced these changes.

One of the most frequent misunderstandings is the difference between business and housing accessibility requirements. The answer lies in the laws and regulations that govern these facilities.

Businesses are covered by the Americans with Disabilities Act. This law, passed in the early '90s by Congress, covers all “public accommodations,” which are designated as places where the public visits. This includes supermarkets, schools, retail facilities, stores, offices, restaurants, stadiums, hotels, and other business type uses. Government buildings such as city halls and parks are also covered under a separate “title” section. The Department of Justice was designated as the federal agency to develop and enforce regulations. They turned to the Federal Access Board, a group that previously developed transportation and federal building accessibility standards. This group authored the Americans with Disabilities Act Accessibility Guidelines, affectionately called ADAAG, which was adopted as the federal standard.

Housing accessibility laws and codes were developed separately from those for businesses. Congress extended existing housing laws, which limited discrimination in sales and leasing to persons because of race, religion or sex, to include disabilities. These laws are called the Fair Housing Act.

Housing involves renting or purchasing living quarters for specific persons or families. Only certain units may be occupied by a person with disabilities. A different approach was therefore developed for this sector of the market. Instead of the one ADAAG code that was developed for businesses, seven “safe harbor” codes were formed, any of which could be followed for compliance. The safe harbors contained regulations such as lower light switches, wider doors and level entrance access so units could accommodate disabled guests and later residents with certain needs. Kitchens and bathrooms had to be convertible, also for future residents' use.

While housing generally does not have to comply with business accessibility regulations, there are a few exceptions to the rule. Rental offices and spaces leased to the public, such as clubhouses, have to comply with the business accessibility requirements.

Condominium hotels and some other uses may also have to comply with both Fair Housing and ADAAG regulations. For more information, visit the following websites:
Fair Housing – www.FairHousingFirst.gov
ADA/ADAAG – www.ADA.gov

Jeffery Gross is the founder and managing partner of Jeffery Gross Associates/ Architects/P.A. As the managing partner, he has led the firm to the successful completion of many prominent projects, both renovations and new construction. He is currently working “hands on” in integrating and updating accessibility requirements into the State Building Code.
Florida Building Code, Building, 1519.16
Petitioner: TRG-Block One, Ltd.
DCA07-DEC017

Conclusion: The Commission concluded that the balconies and parking decks in a multi family project are not part of the building roof assembly and thus Section 1519.16 does not apply to this specific project. However, the project in question is subject to comply with Section 1926.5.5 of the Florida Building Code, Building.

Florida Building Code, Building, 103.3.1.2
Petitioner: Leedy Electric Corporation
DCA07-DEC-047

Conclusion: The Commission concluded that Section 471.003, Florida Statutes and/or Section 103.5.3.1.2, Building Volume (2004, as amended 12/05 and 12/06) requires an engineer to prepare design plans for an electrical project involving the addition of a 400 amp feeder circuit at the cost of $65,000.

Florida Building Code, Building, 13-415.1.ABC.1.1 and 13-415.ABC.1.2
Petitioner: Burgess Engineering, Inc.
DCA07-DEC-048

Conclusion: The Commission concluded that Section 13-415.1ABC.1.2 Subsection (a) of the FBC, Building Volume (2004, as amended 12/05 and 12/06) only requires classrooms (except shop classrooms, laboratory classrooms and preschool through 12th grade classrooms), conference/meeting rooms and employee lunch and break rooms to have a control device installed that automatically turns lighting off within 30 minutes of all occupants leaving a space, except spaces with multi-scene control. In addition, Section 13-415.1.ABC.1.1 only applies to buildings larger than 5,000 square feet, with certain limited exceptions. Therefore, the banks in question will not be required to have occupancy sensors installed to automatically turn off the lighting within 30 minutes of the occupants leaving a space.

Chapter 9B-72, F. A. C.
Petitioner: Hunker Down Systems.Com
DCA07-DEC-050

Conclusion: The Commission concluded that a system that can be used, in addition to nails or other anchoring required by the Code to further anchor roofs and other elements of homes and buildings is not a roofing product or system, which comprises the building envelope and structural frame. Such a product is not within the scope of 9B-72.005, F. A.C. and, therefore, product approval by the Commission is not required.

Florida Building Code, Existing Building Volume 505.1(2004, as amended 12/05 and 12/06)
Petitioner: Harbor Home Improvements
DCA07-DEC-065

Conclusion: The Commission concluded that Section 505.1 of the FBC, Existing Building (2004, as amended 12/05 and 12/06) does not require replacement windows to meet the current code requirements for emergency escape and rescue openings. An emergency escape and rescue opening is only required to meet the requirements for emergency escape and rescue opening in effect when the building was built. Additionally, the section allows a reduction of up to 4% in the size of the opening.

Florida Building Code Residential Volume (2004, as amended 12/05 and 12/06) Section R301.2.1.2
Petitioner: Door and Access Systems Manufacturers Association
DCA07-DEC-067

Conclusion: The Commission concluded that there is no affirmative requirement in the code that requires garage doors to be impact resistant outside of the high velocity hurricane zone. Outside the high velocity hurricane zone, impact resistant to wind borne debris only applies to glazed openings. Furthermore, there is no difference in the requirements between residential and non-residential occupancies.

continue to page 8
Rule Chapter 28-105.002, F. A. C.  
Petitioner: Siegfried W. Valentin  
DCA07-DEC-078

Conclusion: The Commission concluded that state product approval means the approval of a product or system of construction by the Commission if the product or system demonstrates compliance with the standards adopted in the Code. If the product’s use is consistent with its approval and complies with the standards in the code, within or outside the high velocity hurricane zone, the product’s use should be permitted.

Florida Building Code Mechanical Volume (2004, as amended 12/05 and 12/06) Section 607.5.5.1  
Petitioner: Kamm Consulting, Inc.  
DCA07-DEC-080

Conclusion: The Commission concluded that based on the NFPA Life Safety Code and the 2006 International Mechanical Code, the advantages of automatic sprinkler protection are equally applicable to group R occupancies, as compared to group B occupancies, subject to the approval of the building official. Also, subject to the approval of the building official, the omission of smoke dampers may be permissible as an acceptable alternative method of construction pursuant to 104.1.1 of the FBC Building Volume (2004, as amended 12/05 and 12/06).

Florida Building Code Building Volume (2004, as amended 12/05 and 12/06) Section 130415.1.ABC.1.3, paragraph 3  
Petitioner: Leo A Daly Company  
DCA07-DEC-115

Conclusion: The Commission concluded that Section 13-415.1.ABC.1.3, paragraph 3 requires all permanently installed luminaires and switched receptacles to be controlled by a master control device at the main room entry. There is no exception for bathroom lighting.

Florida Building Code Residential Volume (2004, as amended 12/05 and 12/06) Section R301.2.1.4, No. 4  
Petitioner: Hulsberg Engineering, Inc.  
DCA07-DEC-116

Conclusion: The Commission concluded that it explicitly adopted Exposure D as a valid exposure category in Florida. Section 120.565, Florida Statutes, prohibits an answer to the petitioner’s question pertaining to whether Exposure D apply to only the first building on the shoreline next to the water. The Petitioner’s specific circumstances are that he proposes a home 900 feet from the shoreline with treed property and single family homes between the subject home and the shoreline. According to ASCE 7-02, Exposure D applies to the first building subjected to unobstructed approach of wind. Beyond the first building, engineering analysis must be performed to determine the appropriate exposure. The Commission further concluded that the length of the transition zone from Exposure D to the next applicable inland exposure category B is 1,500 feet.

Rule Chapter 28-105.565, F. A. C.  
Petitioner: Leedy Electronic Corp.  
DCA07-DEC-141

Conclusion: The Commission concluded that a licensed engineer is required to prepare the plans for a project exceeding 240 volts.

Rule Chapter 28-105.565, F. A. C.  
Petitioner: JLB Drafting  
DCA07-DEC-145

Conclusion: The Commission concluded that the Code authorizes a Building Official to accept alternative design in the form of an engineered foundation for a modular building to that of the prescriptive requirements of the code where he/she finds the proposed design/alternative complies with the intent of the code and provides for equivalent performance.
Rule Chapter 28-105.565, F. A. C.  
**Petitioner: JLB Drafting**  
**DCA07-DEC-146**

Conclusion: The Commission concluded that a temporary 48’x56’ modular sales office building is exempt from all of the Florida Building Code except for the requirements of Chapter 11 relative to accessibility. The Commission further concluded that the only part of the Florida Building Code that is applicable to exempt buildings is Chapter 11 and not Section 1805.2 relative to footings. The Commission found that a determination of whether a local government can pass a local ordinance that limits the amount of time for a building to be considered temporary exceeded the Commission’s jurisdiction; however, the statutory exemption from the code requirements led the Commission to conclude it is inappropriate to apply the provisions of the Florida Building Code to buildings that would otherwise be exempt.

---

**Florida Building Code Building Volume (2004, as amended 12/06) Section 905.1**  
**Petitioner: KTD Consulting Engineers**  
**DCA07-DEC-159**

Conclusion: The Commission concluded that Section 104.1.1, Building (2004 as amended 12/06) allows recognition of equivalent and alternate means of construction. A building official is authorized to consider a sprinkler system conforming with NFPA 13 rather than NFPA 13R as an alternative and permit the configuration if he or she finds that the sprinkler system is, for the purpose intended at least the equivalent of that prescribed by code in quality, strength, effectiveness, fire resistance, durability and safety.

---

**Rule Chapter 28–105-002, F. A. C.**  
**Petitioner: Gulf Coast Air Systems, Inc.**  
**DCA07-DEC-172**

Conclusion: The Commission concluded that Section 13-607.1.ABC.3.1.1, Florida Building Code, Building Volume (2007 as amended) requires verification of equipment efficiency to demonstrate compliance with U.S. Department of Energy certification requirements. Outdoor and indoor units that are not designed to be operated together must still meet the DOE standard. If the system does not meet the standard, it is considered to be “mismatched” and does not meet code. The code expressly authorizes “mix-matched” use of components which may be used to replace an exterior compressor and indoor air handler purchased from different manufacturers where they are designed to work together.

---

**Rule Chapter 28-105.002, F. A. C.**  
**Petitioner: International Hurricane Protection Association**  
**DCA07-DEC-181**

Conclusion: The Commission concluded that an association which is the owner of a proprietary system of construction may obtain state product approval provided the manufacturing process, including fabrication, is completed pursuant to a quality assurance program designated on the application.
Florida Building Commission Legislative Recommendations

The Commission is required by law to report to the Legislature on the state building code system. This year it recommends the Legislature pursue the following initiatives during the 2008 Legislative Session:

- Repeal of Section 553.751, F. S. The statute requires enforcement of specific provisions of the International Building Code and International Residential Code that, in turn, adopt ASCE 7-02 as the standard for wind-resistant construction. This requirement creates the potential for confusion among Building Officials who are obligated to enforce the Florida Building Code and unnecessarily restricts the ability of the Commission to ensure that the state uses the most current standards that incorporate advanced technology and improved data and research.

- Amend Chapter 553.79(9). The Department of Children and Families recommends placing construction regulations for more secure mental health facilities under its jurisdiction. The Commission supports this.

- Support enforcement of construction regulations relating to correctional facilities under the jurisdiction of the Department of Corrections and the Department of Juvenile Justice and secure mental health treatment facilities under the jurisdiction of the Department of Children and Family Services. These regulations are to be enforced exclusively by those departments.

- Increase energy efficiency as recommended by the Florida Energy Commission by at least 50%. This includes a recommendation that the time frame for achieving the goal be indexed to the Code's 2004 edition and 2006 supplement instead of the Energy Commission's recommended 2007 edition of the Code. This would provide 15 rather than 12 years to achieve the proposed energy efficiency.

- Amend the law to prohibit any state or local zoning or building authority, or homeowners' cooperative or condominium association, from preventing or restricting the use of building systems and construction practices promoting energy conservation.

- Amend Section 553.844, F. S., regarding mitigation retrofits. This would allow sufficient flexibility to work with stakeholders to amend the Wind Mitigation Rule. Specific requirements would be removed from the law to allow the Commission to work with interest groups to develop the mitigation techniques in the code.

- Amend Chapter 489, F.S., to modify the scope of practice for roofing contractors to allow nailing and replacing roof sheathing.

- Clarify in law the Commission's authority to update editions of the National Electrical Code as well as Florida-specific amendments as needed outside of the triennial code update cycle.

- Direct the Department of Community Affairs and the Department of Health to work collaboratively to conduct a study regarding the sizing of residential private sewer systems and to report recommendations to the 2009 Legislature. The study should include input from affected stakeholder interest groups.
Florida Building Commission

May 5-7, 2008
Melbourne Crowne Plaza, Melbourne

June 23-25, 2008
Rosen Centre Hotel, Orlando
  • Rule Development Workshop for proposed glitch amendments

August 18-20, 2008
Naples Grande Hotel, Naples
  • Rule Adoption Hearing for glitch amendments

Other dates of interest:

June 1, 2008
Deadline for submission of proposed glitch amendments

October 1, 2008
2007 Code, with glitch amendments, becomes effective

If you would like your event added, please email: codesquarterly@floridabuilding.org
Need answers about the Florida Building Code?
Check here first!

www.floridabuilding.org
or 850-487-1824

Advisory Opinions/Interpretations
Alternative Plans Review and Inspection
Declaratory Statements/Interpretations
Local Amendments
Modular (Manufactured) Building/Schools/Sheds
Product Approval
Technical Assistance on the Florida Building Code
Wind-Borne Debris and GIS Windline Maps

For more information regarding the Florida Building Commission, please visit www.dca.state.fl.us.
To receive the News Journal, email codesquarterly@floridabuilding.org.

Florida Building Commission
Florida Department of Community Affairs
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2100
(850) 487-1824

Charlie Crist
Governor
Raul L. Rodriguez, Chairman
Florida Building Commission
Thomas G. Pelham, Secretary
Department of Community Affairs
Rick Dixon, Executive Director
Florida Building Commission
Department of Community Affairs
Ila Jones, Administrator
Codes and Standards
Department of Community Affairs
Owen Roach
Editor
Department of Community Affairs
Jon Peck
Director of Public Affairs
Department of Community Affairs
Lida Maxwell, Graphic Design
Department of Community Affairs

About the Florida Building Commission:
The Florida Building Commission is a 23-member body appointed by the Governor and housed within the Florida Department of Community Affairs. The Florida Building Commission is the governing body for establishing the law for building code development, interpretation and updates in Florida.

About the Department of Community Affairs: We will meet the needs of Floridians by investing in communities and working with them to plan and manage growth.