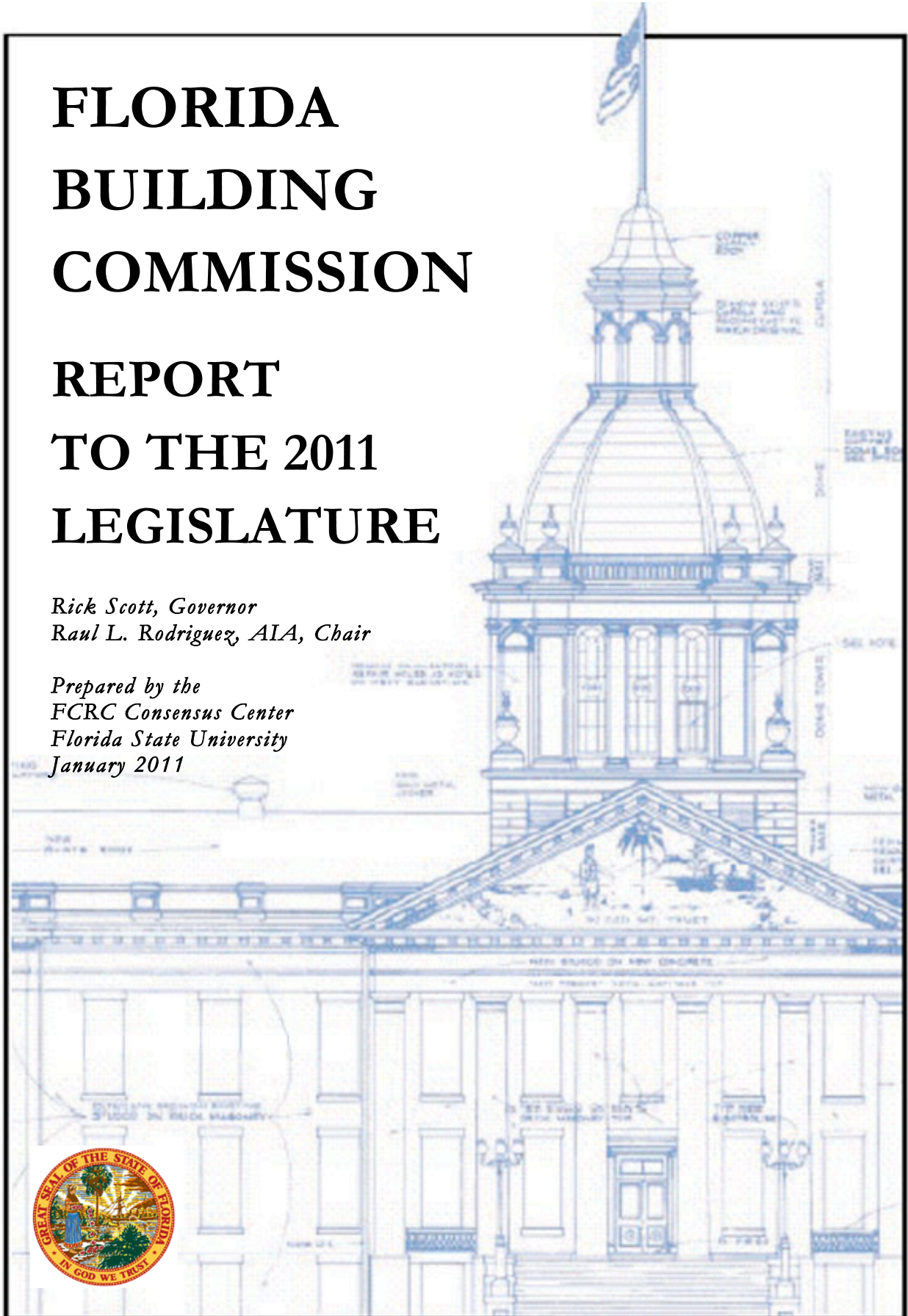


FLORIDA BUILDING COMMISSION REPORT TO THE 2011 LEGISLATURE

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**FLORIDA BUILDING COMMISSION REPORT AND
RECOMMENDATIONS TO THE 2011 FLORIDA
LEGISLATURE**

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FLORIDA BUILDING COMMISSION REPORT AND RECOMMENDATIONS TO THE 2011 FLORIDA LEGISLATURE

I. EXECUTIVE SUMMARY AND RECOMMENDATIONS

The primary focus of the Florida Building Commission during 2010 was the adoption of the 2010 Edition of the Building Code, adoption of the 2010 Florida Energy Code implementing provisions necessary to comply with the efficiency increases required by law, and adoption of expedited Product Approval. In addition to efficiency increases to the Florida Energy Code, major components of the Code Update process include enhancements to the wind, water intrusion and hurricane protection provisions of the Florida Building Code. The Commission is engaged in rule development for the adoption of the 2010 Florida Building Code. The Commission's TACs conducted rule development workshops in July and August and the Commission conducted a rule development workshop in December of 2010, and the target date for implementation of the 2010 Edition of the Code is December 31, 2011.

In addition, the Commission convened numerous workgroups comprised of affected stakeholder interests to develop recommendations on septic system sizing, Accessibility Code updates, Energy Code amendments, flood resistant standards, pool energy efficiency standards, and hurricane and storm resistant construction research and code amendments.

During 2010 the Commission once again focused on consensus-building efforts regarding the implementation of Commission policy, with extensive input from stakeholders and interests affected by Commission policy. Chairman Raul L. Rodriguez, AIA, encouraged and led the Commission's consensus-building initiatives. Finally, the Commission continued with its focus on storm damage investigations and research and adopting code amendments related to making Florida's structures, and the products that comprise them, more storm resistant.

As a result of declining revenues from building permit surcharge fees, during the past year the Commission made changes to their processes to adapt to a reduced budget, and it is probable the Commission will have to continue in this mode for the coming year. To date, Commission meetings have moved from 3 day meetings every 6 weeks to 2 or 3 day meetings every 8 weeks with workgroup meetings held in conjunction with Commission meetings, and TAC and POC meetings conducted by teleconference when the complexity of issues being addressed lends itself to the format. In addition, the Commission voted in favor of a policy requiring all programs to be self-supporting, and requested and received legislative authorization to charge fees for petitions for declaratory statements, non-binding interpretations, and accessibility code waiver applications and is in the process of implementing fees for accessibility code waiver applications.

The Florida Building Code System was developed after Hurricane Andrew to streamline statewide adoption and enforcement of improved hurricane protection standards. Hurricanes Charley, Frances, Ivan and Jeanne in 2004 and Dennis, Katrina and Wilma in 2005 demonstrated the overall effectiveness of the Code, and identified areas that need additional refinements. Analyses of building

systems and component failures identified in these storms were conducted throughout 2005, 2006, 2007, 2008 2009, and 2010 and will continue during the coming year (2011). Assessments indicate the design wind speeds required by the Code were adequate and buildings built to the new code did not experience nearly as severe damage as older buildings. While some new building technologies did have weaknesses, the major structural systems failures seen in older buildings were avoided in buildings complying with the Florida Building Code. The Commission addressed many of the weaknesses through implementation of the expedited code amendments authorized by the 2005 Legislature, the code enhancements adopted during the 2006 annual interim amendment process, and the adoption of the 2007 Edition of the Code, which became effective on March 1, 2009. With the continuing work of the Hurricane Research Advisory Committee and various building component specific workgroups (e.g., Window Wall, Soffit System), the Commission remains committed to addressing building and product weaknesses. Working with industry the Commission identified and funded research, and implemented additional code amendments designed to strengthen the Code's building envelope protection through development of the 2010 Edition of the Florida Building Code, which will become effective on December 31, 2011.

The Code establishes minimum requirements to protect buildings and their occupants from wind, rain, flood and storm surge based on well-researched and continually-evolving engineering standards for buildings and the products that go into their construction. It is important that the Commission be able to quickly integrate these standards into the Code to keep pace with changes in building technology and advances in the sciences of storm dynamics and building performance. In addition to conducting research, developing state of the art hurricane resistance standards and integrating those standards in the Code at each revision cycle, the Commission seeks to maintain the Code to be up-to-date with the national engineering and product standards. The 2010 Florida Building Code will include several significant advances.

The Commission is required by Florida law to update the Florida Building Code every three years, and the 2010 Edition will represent the third update and fourth edition of the Code. The update process is based on the code development cycle of the national model building codes, which serve as the "foundation" codes for the Florida Building Code.

Florida Statute, Chapter 553.77(1)(b), requires the Commission to make a continual study of the Florida Building Code and related laws and on a triennial basis report findings and recommendations to the Legislature for provisions of law that should be changed. The Commission conducted the first assessment in 2005 and effected changes to the System as a result of the assessment process. 2011 will mark the ten-year anniversary since the Florida Building Code became effective, and the Commission is initiating a comprehensive assessment of the Building Code System with recommendations being developed by the Commission's Building Code System Assessment Ad Hoc Committee. Public input will be a major component of the assessment process and an on-line Survey in addition to multiple public comment opportunities will be an important part of the Commission's analysis of the Building Code System. The Commission's recommendations will be a major component of their Report to the 2012 Legislature.

During 2009 the Commission initiated the 2010 Code Update process by selecting the 2009 I-Codes as the foundation codes for the 2010 Edition of the Florida Building Code. The Commission is in the process of developing and adopting the 2010 Edition of the Florida Building Code with an effective date of December 31, 2011. The Commission focused on removing (unnecessary) and maintaining (needed) Florida Specific requirements to the Code.

The Code is a complex interrelated document consisting of thousands of pages and containing myriad related standards and references that must be evaluated and updated on an ongoing basis. In the case of editorial and unintended glitches, it is important for the Commission to correct these non-controversial glitch and correlation issues as quickly as possible in order to prevent unintended consequences and unnecessary delays and complications for all of the building code system participants. With the addition of the expedited code amendment authority in 2007, the Commission is now capable of correcting code glitches as needed.

Energy efficiency issues were again a primary focus of the Commission during 2010, and the Commission's Energy Code Workgroup met throughout the year to develop Energy Code recommendations for the 2010 Code Update cycle. The Chair appointed a Pool Efficiency Subcommittee to the Florida Energy Code Workgroup to provide recommendations to the Workgroup regarding the pool equipment efficiencies subtask for pool pumps and heaters efficiencies and hydronic systems standards, and appointed a Green and Energy Efficient Roofs Subcommittee to the Energy Code Workgroup to provide recommendations on roof energy efficiency issues. The Commission adopted the 2009 International Energy Conservation Code (IECC) as the foundation for the 2010 FBC, Energy Volume; and evaluated energy conservation measures to ensure the 2010 Energy Code increased efficiency requirements by 20%; developed a strategic plan for achieving scheduled increases in energy efficiencies with subsequent editions of the code; and, evaluated specific building options for promoting the use of renewable energy technologies as required by law. The Commission's adopted strategic plan for achieving the energy standard revisions pursuant to requirements of Section 553.9061, F.S. requires the strategic plan to implement scheduled increases in the Code's energy performance standard, to recognize certain energy performance options, and to consider the cost effectiveness of the scheduled increases. The Commission is implementing the Florida Energy Code Workgroup's recommendations as follows: an energy efficiency cost-effectiveness tests for residential code consensus recommendations {adopted by Commission}; energy efficiency cost-effectiveness tests for commercial code consensus recommendations {adopted by Commission}; a definition of "consumer" (applies to both residential and commercial)" {adopted by Commission}; energy conservation measures for replacement of air conditioning equipment recommendations [proposed code amendment(s) for 2010 Update]; a strategic plan for increased efficiency requirements required by law for future FBC editions {adopted by Commission}; specific building options to achieve energy efficiency improvements recommendations [proposed code amendment(s) for 2010 Update]; design criteria for energy efficient pools recommendations (Pool Efficiency Subcommittee) [proposed code amendment(s) for 2010 Update]; and, proposed requirements for green roofs recognition in the Florida Building Code (Green and Energy Efficient Roofs Subcommittee) [proposed code amendment(s) for 2010 Update].

Florida has been a leader in addressing accessibility of buildings and sites for persons with disabilities with codes based on early national standards and Florida concerns beginning in the late 1970's. After adoption of the national Americans with Disabilities Act (ADA) Florida revised its code to be based on the US Department of Justice's (DOJ) regulations that established the ADA Standards for Accessible Design (ADA Standards). Florida also revised its law to ensure that its Code is maintained to ensure certification by DOJ as substantially equivalent to the ADA Standards so owners complying with the Code are also in compliance with the ADA. The fundamental guidelines the ADA Standards are based on, the Americans with Disabilities Act Accessibility Guidelines were updated in 2004 and in June 2008 the US Department of Justice published its Notice of Proposed Rule, "*Proposed ADA Standards for Accessible Design, June 2008*". In December 2008 the Commission convened an Accessibility Code/ADAAG 2.0 Workgroup to develop recommendations for amending the Florida Accessibility Code for Building Construction by integrating the relevant Florida standards of ss. 553.501-553.513, F.S., into the Proposed ADA Standards. Although DOJ's

process was not complete at the time, the Workgroup began working with the Proposed Standards to develop the new draft FACBC. The DOJ completed its adoption of revised regulations 28 CFR 35 and 28 CFR 36 establishing the 2010 ADA Standards for Accessible Design September 15, 2010 and the Workgroup revised the Draft 2012 Florida Accessibility Code for the few minor changes. The Commission will make recommendations for changes to law essential to conforming it to the 2010 ADA Standards references and to ensure Florida requirements are substantially equivalent to maintain the Code's certification by DOJ.

At the request of the Florida Division of Emergency Management (DEM) and the Federal Emergency Management Agency (FEMA), during 2009 and 2010 the Florida Building Commission convened a Flood Resistant Standards Workgroup charged with developing recommendations for integrating the International Code Series (I-Codes: IBC, IRC, etc.) flood damage-resistant provisions (for buildings and structures) in the Florida Building Code. The Commission conducted a facilitated stakeholder process culminating in a consensus package of recommendations regarding integrating flood resistant standards into the 2010 FBC. The Commission voted unanimously to adopt the package of recommendations for integrating flood resistant standards into the Code and is implementing the requirements through the adoption of the 2010 Edition of the Florida Building Code.

The product approval system is an internet based system administered by a contracted Product Approval Administrator. With major consensus-based revisions to the system implemented through rule development in 2007, the system is processing hundreds of applications monthly with efficiency and satisfaction by the product manufacturers who use the system. The Commission's Product Approval Program Oversight Committee (POC) convenes at every Commission meeting to review product and entity applications, address petitions for declaratory statements, and consider enhancements to the product approval system. Since the system went into effect in October 2003, the Commission has approved 9,579 product applications and 40,905 products for statewide use within limitations established by the approvals, as well as approved 150 product approval entities. During 2010 the Commission amended Rule 9N-3.002, 9N-3.007, 9N-3.008) (f.k.a. Rule 9B-72.090, 9B-72.100, and 9B-72.180) adjusting product approval fees for manufacturers and the administrators contract to ensure the program is self-supporting, added International Association of Plumbing and Mechanical Officials Evaluation Service (IAPMO ES) to the rule to be consistent with IAPMOs' inclusion in law, amended Rule 9N-3 Product Approval, for the purpose of limiting the number of lines in an application to 150 and revising the Building Code Information System (BCIS) screens to conform to the rule amendments, and amended Rule 9N-3 (equivalency of standards).

Education is one of the cornerstones of the Building Code System, and the effectiveness of the Building Code depends on the knowledge of professionals who design and construct buildings. The Commission continues to work with the Department of Business and Professional Regulation and representatives of the licensing boards to establish a cooperative system for approving building code courses and integrating building code continuing education into licensing requirements. In collaboration with the System Administrator the Commission is working to ensure the accountability and efficacy of the Education System. During 2010 the Commission initiated rule making to repeal the Building Code Administrative Core Curriculum.

The Commission's commitment to consensus-building on substantive issues was spotlighted during 2010, with Chairman Rodriguez appointing facilitated workgroups of Commission members and representative stakeholders to develop consensus on packages of recommendations in their

respective subject areas. The workgroups convened and/or meeting during 2010 include: the Florida Accessibility Code Workgroup, Florida Energy Code Workgroup, Pool Efficiency Subcommittee to the Energy Code Workgroup, Green and Energy Efficient Roofs Subcommittee to the Florida Energy Code Workgroup, Hurricane Research Advisory Committee, and the Flood Resistant Standards Workgroup. Each of these groups worked with stakeholders to identify issues, evaluate a full range of options, and submit consensus recommendations to the Florida Building Commission on their respective topics. In addition, the Chair convened an ad hoc committee of Commissioners, Building Code System Assessment Ad Hoc Committee, to evaluate the Florida Building Code System.

Monitoring the building code system and determining refinements that will make it function better is a primary responsibility of the Commission, and consequently the Commission is continually effecting refinements to the building code system by administrative rule amendment(s) where the statutes provide authority. However, the building code system is established in law, requiring that some refinements must be implemented through changes to law. The Commission's recommendations for 2010 legislative actions designed to improve the system's effectiveness are summarized on the following page.

The Florida Building Commission's Recommendations for Legislative Actions Designed to Improve the System's Effectiveness are Summarized as Follows:

Commission's 2010 Recommendations to the 2011 Florida Legislature:

The recommendations adopted by the Commission for submittal to the 2011 Legislature are as follows:

- 1.) The Commission recommends amendments to Part II, Chapter 553, Florida Statutes, essential to conforming the law to the references in the 2010 ADA Standards for Accessible Design and ensuring the equivalency of requirements necessary to maintain federal certification of the Florida Accessibility Code as required by current law.*

- 2.) The Commission supports the consensus recommendation for sizing residential septic systems developed by the Septic System Sizing Workgroup (Interagency Workgroup: FBC and DOH), and further requests that the Florida Legislature grant jurisdictional authority to the Florida Building Commission to implement the recommendation by integration into Chapter 26-Section P2602.1 of the most current edition of the Residential Florida Building Code.*

- 3. The Commission requests ratification of the 2010 Florida Building Code and modifications thereto adopted pursuant to 553.73(8), and/ or exemption of the code development and adoption process from requirements for legislative ratifications.*

- 4. The Commission supports industry's initiative seeking a legislative solution regarding the unauthorized use of documents submitted in support of product approval applications.*

II. INTRODUCTION

In 1974, Florida adopted a state minimum building code law requiring all local governments to adopt and enforce a building code. The system provided four separate model codes that local governments could consider and adopt to establish minimum standards of health and life safety for the public. In that system the state's role was limited to adopting all or relevant parts of new editions of the four model codes. Local governments could amend and enforce their local codes as they saw fit.

Hurricane Andrew demonstrated in 1992 that this system of local codes did not provide the level of public protection that was necessary. The South Florida Building Code, that was the local code universally acknowledged as the strongest standard for hurricane protection, essentially failed. The resulting problems had impacts well beyond southern Miami-Dade County. The state filled the property insurer void left by failed and fleeing private insurance companies and the federal government poured billions of dollars of aid into the disaster area. It became starkly apparent the state had a significant interest in the effectiveness of building codes.

After Andrew, Miami-Dade County conducted an exhaustive review of its building code and made significant changes to both the code and support systems for code enforcement. In other areas of the state the Florida Board of Building Codes and Standards (predecessor to the Florida Building Commission) adopted significant upgrades to the wind resistance standards of the model state minimum code that was used by the majority of other local governments. The state also began licensing local governments' building code enforcement personnel. These steps proved critical in leading to the building codes that produced improved building performance in the 2004 hurricane season.

Like Miami-Dade County, the state went beyond just modernizing the minimum building codes. In 1996 a study commission was appointed to review the system of local codes created by the 1974 law and make recommendations for modernizing the entire system. The 1998 Legislature adopted the study commission's recommendations for a single state building code and an enhanced oversight role for the state in local code enforcement. The 2000 Legislature authorized implementation of the Florida Building Code, and the first edition replaced all local codes on March 1, 2002.

To implement the new Florida Building Code, the Florida Building Commission was established in law. The Florida Building Commission, originally a 23 member, is now a 25 member Governor-appointed stakeholder group who successfully created, implemented, and maintains the statewide Florida Building Code, which became effective in 2002. The Commission is comprised of the Governor's Chair, and 24 members representing various industries and governmental interests as follows: four code officials, two state government representatives, a local government representative, a representative of persons with disability, and a representative of the green building industry; an architect, a structural engineer, a mechanical or electrical engineer, representatives of fire protection technology, the building management industry, and the insurance industry; and a general contractor, residential contractor, mechanical or air conditioning contractor, plumbing contractor, electrical contractor, roofing/sheet metal contractor, a manufactured building representative, a building product manufacturer, and a swimming pool contractor.

The first major tests of the building code enhancements put in place after Hurricane Andrew came with 2004's Hurricanes Charley, Frances, Ivan and Jeanne. All but Hurricane Charley produced winds below the design speeds required by the Code but they were long in duration and produced extensive rainfall. Hurricane Charley was a design wind speed storm that moved quickly across the state and produced less rainfall. Hurricane Ivan, similar to Hurricane Opal in 1995, was a category 4-5 storm in the Gulf but its winds diminished dramatically when it approached land, lowering winds below building code design wind speeds, but maintaining storm surges that wreaked havoc along barrier islands and mainland waterways. Each storm provided different kinds of tests and exposed different types of building failures. The difference in the building failures experienced by buildings built to older codes and those built to the new Florida Building Code was that older buildings had major damage to property and proved to be unsafe shelters. In contrast, buildings built to the Code had less property damage and provided safe shelter. The testimony of homeowners, who in 2002 were skeptical of the new code requirements and their added costs, was that they felt safe in their homes and found value in the additional costs associated with complying with the Florida Building Code.

During 2005 the code was again tested when Florida was battered by another series of hurricanes. Although Hurricanes Dennis, Katrina, and Wilma were devastating to the citizens of the state, they added further evidence that the Florida Building Code is working. In addition, the observations, investigations and research regarding storm-related damage provided additional insight on how to improve the products and construction methods used in Florida. The Commission continues to study how to enhance the Code through the work of its Hurricane Research Advisory Committee.

Engineering standards progress as new real-world tests like hurricanes provide the laboratory for expanding knowledge. It is essential that Florida maintain pace with the evolving standards because its coastal exposure and rapidly expanding population create a major risk and limit options for ensuring the safety of its citizens. The Commission keeps pace by amending the Code to adopt updated national codes and reference standards, and by implementing enhancements coming from its research and consensus-building standards development projects.

The Florida Building Commission's Hurricane Research Advisory Committee continues to meet to review research and make recommendations to the Commission regarding proposed code enhancements. Some of the Committee's recommendations were implemented in a specially authorized "expedited" code amendment process conducted in 2005. Other recommendations that required additional development effort were adopted with the Glitch Code amendments in 2006, and with adoption of the 2007 Edition of the Florida Building Code. Workgroup's formed as a result of the Committee's work are developing recommendations for additional code amendment enhancements for the 2010 Code Update Process including soffit systems performance and enhancing the window and wall interface. The Committee continues to recommend and monitor research projects designed to enhance the performance of Florida's buildings during storms.

A primary focus for the Commission during 2009 was to develop a strategic plan for energy standard revisions pursuant to requirements of Section 553.9061, F.S., requiring the strategic plan to implement scheduled increases in the Code's energy performance standard, to recognize certain energy performance options, and to consider the cost effectiveness of the scheduled increases. During 2008 the Commission amended the Florida Energy Code to require 15% more efficiency in buildings by reviewing energy related code requirements adopted in the 2007 Florida Building Code Update, and then adopting additional requirements necessary to achieve Governor Crist's directive

of 15% increased efficiency. The efficiency increases took effect March 1, 2009 concurrent with the 2007 Florida Building Code.

The Commission is currently in the process of evaluating options for achieving an additional 5% increase in efficiencies for the 2010 Code Update consistent with their charge to increase the energy performance of new buildings by at least 20% as compared to the energy efficiency provisions of the 2007 Florida Building Code. Working with stakeholders using consensus-building workgroups, the Commission is working to achieve the increases in efficiency in buildings stipulated in Florida Law, and implementing code amendments that are efficient, consistent, understandable and enforceable for the full spectrum of Energy Code users.

The Florida Building Commission seeks to develop consensus decisions on its recommendations and policy decisions. Consensus is a participatory process whereby, on matters of substance, the members strive for agreements they all can accept, support, live with or agree not to oppose. In instances where unanimity is not possible, final decision on substantive decisions, and the Commission finds that 100% acceptance or support is not achievable, final decisions require at least 75% favorable vote of all members present and voting. This super-majority decision rule underscores the importance of actively developing consensus throughout the process on substantive issues. The Commission's consensus process is conducted as an open public process with multiple opportunities for the public to provide input to the Commission on substantive issues.

At each Commission meeting, the public is provided opportunity to speak during the public comment period provided for each substantive issue under consideration, as well as during general public comment periods provided at the end of each day's meeting. In addition, most substantive issues before the Commission go through a workgroup process where consensus recommendations are developed by appointed representative stakeholder groups, providing additional opportunities for public input. Workgroup recommendations approved by the Commission usually require rule development to implement, affording at least two additional opportunities for public comment.

Since its formation in July 1998, the Commission has demonstrated a commitment to working with affected interests to build consensus on complex issues. The adoption of the first edition of the Florida Building Code (2001 Edition), developed from September 1998 through January 2001, involved 27 Commission meetings, dozens of facilitated public workshops, and hundreds of Technical Advisory Council meetings. The Commission consistently works with all affected interests in building the best possible consensus-based decisions for the citizens of Florida.

Through its committees and workgroups of experts, the Commission develops its decisions on the results of the best engineering-based science available. Although the Code is by law a minimum building code, the Florida Building Code is the strongest consensus and science-based building code in the country.

In summary, the Florida Building Commission provides a forum for stakeholders representing different interests to participate in a consensus-building process where issues affecting the construction industry are discussed and evaluated on both their technical merits and cost-benefits to the citizens of the State of Florida.

III. COMMISSION REPRESENTATION AND PROCESS

Commission Representation. The Florida Building Commission is a 25 member Governor appointed stakeholder group who successfully created, implemented, and maintains the statewide Florida Building Code, which became effective in 2002. The Commission is comprised of the Governor's Chair, and 24 members appointed according to criteria established by the American National Standards Institute (ANSI) for representation. They are as follows: in the *general interest category*: four code officials, two state government representatives, a local government representative, a representative of persons with disability, and a representative of the green building industry; in the *consumer category*: an architect, a structural engineer, a mechanical or electrical engineer, representatives of fire protection technology, the building management industry, and the insurance industry; and in the *producer category*: a general contractor, residential contractor, mechanical contractor, plumbing contractor, electrical contractor, roofing/sheet metal/air conditioning contractor, a manufactured building representative, a building product manufacturer, and a swimming pool contractor.

Consensus Process. The Florida Building Commission (FBC) seeks to develop consensus decisions on its recommendations and policy decisions. General consensus is a participatory process whereby, on matters of substance, the members strive for agreements which all of the members can accept, support, live with or agree not to oppose. In instances where, after vigorously exploring possible ways to enhance the members' support for the final decision on substantive decisions, and the Commission finds that 100% acceptance or support is not achievable, final decisions require at least 75% favorable vote of all members present and voting. This super majority decision rule underscores the importance of actively developing consensus throughout the process on substantive issues with the participation of all members and which all can live with and support.

The Commission's consensus process is conducted as an open public process with multiple opportunities for the public to provide input to the Commission on substantive issues.

At each Commission meeting, the public is welcome to speak during the public comment period provided for each substantive issue under consideration, as well as general public comment periods provided at the end of each day's meeting. In addition, most substantive issues before the Commission go through a workgroup process where consensus recommendations are developed by appointed representative stakeholder groups, providing additional opportunities for public input. Workgroup recommendations approved by the Commission usually require rule development to implement, affording at least two additional entry points for public comment.

Since its formation in July of 1998, The Commission has demonstrated a commitment to working with affected interests to build consensus on complex issues. The adoption of the first edition of the Florida Building Code (2001 Edition), developed from September 1998 through January of 2001, involved 27 Commission meetings, dozens of facilitated public workshops, and hundreds of TAC meetings. The Commission has consistently worked with all affected interests to build the best possible consensus-based decisions for the citizens of Florida. Through its committees and workgroups comprised of experts, the Commission has always developed its decisions based on the results of the best engineering and science available. Although the Code is by law a minimum building code, the Florida Building Code is the strongest consensus and science based building code in the country. In summary, the Florida Building Commission provides a forum for stakeholders representing different interests to participate in a consensus-building process where issues affecting the construction industry are discussed and evaluated on their technical merits and cost-benefits to the citizens of the State of Florida.

IV. LEGISLATIVE ASSIGNMENTS

The 2010 Florida Legislature through the passage of a number of bills during the 2010 session, charged the Commission with a range of assignments including Energy Code enhancements, wind protections, and revising specific Building Code provisions that required the Commission to implement through rule development to the Florida Building Code and the Product Approval Rule.

In response, the Commission worked with stakeholders and affected interests to address each of the legislative assignments through facilitated processes yielding consensus-based recommendations and Commission decisions. The Commission's actions are detailed in the following section of this report. The recommendations are organized into two categories: code related recommendations and energy related recommendations.

2010 Legislative Code Assignments Status

The 2010 Florida Legislature through passage of HB 663 delivered the following assignments to the Florida Building Commission, all of which were implemented through the development of the 2010 Florida Building Code:

- Require upgrade of elevators in condos and multi-family buildings having a C.O. before July 1, 2008 for Phase II Firefighter Service pursuant to ASME 17.1 and 17.3 when it is replaced or undergoing a major modification.
- Coordinate the Code with statutory changes to SFM requirements for uniform lock boxes for elevator keys.
- Require illumination in classrooms for ALL schools to be an average 40 foot-candles of light at each desk-top.
- Exempt from the Code certain pre-manufactured/site assembled family mausoleums.
- Exempt temporary housing provided by Department of Corrections for prisoners.
- Remove from the IRC foundation code requirements for sprinklers.
- Clarify AC equipment must meet wind resistance standards.
- Require existing AC equipment on roof surfaces to comply when they are required to be removed or replaced.
- Implement changes to statutory requirements for CO detectors.
- Include energy saving options and elements for buildings added to the law that are not already included in the Code, e.g. energy efficient centralized computer data centers in office buildings.
- Clarify energy performance requirements for pool pumps apply only to filtration pumps and change the maximum run time cycle override at high speed from 2 hours to 24 hours (or on changeover cycle whichever is less).
- Clarify sprinklers cannot be required for certain residential property used as rental property or changed in use category to primary rental use.

The 2010 Florida Legislature through passage of HB 663 delivered the following assignments to the Florida Building Commission regarding the Product Approval System, all of which were implemented through amendments to Rule 9N-3 (f.k.a. 9B-72), Product Approval:

- Require payment of Administrator portion of application fee directly to the Administrator.
- Implement new expedited process for approval of products based on certificate from a Certification Agency.
- Eliminate ICBO ES, BOCA ES and SBCCI ES from list of approved Evaluation Entities.

The 2010 Florida Legislature through passage of HB 7243 delivered the following assignments to the Florida Building Commission, which the Commission is in the process of evaluating and implementing:

- Develop recommendations that increase recycling and composting and the use of recyclable construction materials and construction and demolition debris.

V. The FLORIDA BUILDING CODE

The Commission is required by law to update the Florida Building Code (FBC) every three years, and the 2007 Edition represented the second update and third edition of the Code. The Commission is currently conducting the 2010 Code Update process that will result in the third update and fourth edition of the Code. The update process is based on the code development cycle of the national model building codes, which serve as the “foundation” codes for the Florida Building Code, and 2009 represented the first time the Commission adopted the International Energy Conservation Code (IECC) as the foundation for the 2010 Florida Energy Code. National model building codes and most engineering standards are updated every three years and the intent is to keep the Code up-to-date with evolving national standards of health, safety and welfare of the public.

The model building codes on which the Florida Building Code is based have undergone a major transformation since work began on the Florida Building Code in 1998. In 1998 there were three model code organizations, each with a separate model code that included a “building” code for structural, fire safety and general building design requirements and separate plumbing and mechanical (heating, cooling and ventilation) codes. The code for electrical systems and fuel gas systems are essentially based on common reference standards developed by separate organizations. During the late 1990s the three regional model code organizations transitioned into a single organization, the International Code Council, which was to develop a single national model code. When that code was completed and the organizations merged, the three prior model codes were abandoned. In late 1998 when the Commission selected a model code to provide the base requirements for the Florida Building Code, the International Plumbing, Mechanical and Fuel Gas sub-codes were in place but the “Building” Codes were still under development. The first edition of the Florida Building Code was based on the International sub-codes, the National Electrical Code, and the Standard Building Code, which was used in sixty-five Florida counties, municipalities and state agencies since the mid-1970s, for the “building” volume. The last edition of the Standard code was published in 1999. The first edition of the new International Building Code was in place by 2000 and has since been updated with a fourth edition, the 2009 International Building Code and has added a Residential Code and Existing Building Code. With the adoption of the Second Edition of the Florida Building Code, the Code is now based on the International Family of Codes, modified with Florida-specific amendments. Florida-specific amendments go through a rigorous review process including posting to the Building Code Information System (BCIS) for 45 days prior to a review by the Commission’s Technical Advisory Committees (TAC), posting the TAC’s recommendations for 45 days prior to Commission consideration, and then the Chapter 120 rule development process. The Commission provides multiple input opportunities for public comment, and once the Code is published six months must pass before the Code’s effective date.

Florida Statute, Chapter 553.73(6), requires the Commission to update the Florida Building Code every 3 years; by selecting the most current version of the International Family of Codes; the commission may modify any portion of the foundation codes only as needed to accommodate the specific needs of this state, maintaining Florida-specific amendments previously adopted by the commission and not addressed by the updated foundation code.

The initiation of the 2010 Florida Building Code Update process represents the development of the third update and fourth edition of the Code. Commencing the triennial code update process for the 2010 Edition of the FBC was a major focus of the Commission during 2010. The Update process was initiated with selection of the 2009 I Codes as foundation for the 2010 Florida Building Code. Section 553.73(8) requires that existing Florida amendments that overlap with changes to foundation codes from one edition to the next must be reviewed for retention or deletion. The Commission technical advisory committees conducted the preliminary review and developed recommendations for which to retain or delete. In addition, the Fire TAC reviewed and developed recommendations regarding overlaps and correlation issues between the Florida Fire Prevention Code and the Florida Building Code.

The Commission's TACs reviewed over 900 proposed code amendments during rule development workshops conducted during July and August of 2010. The Commission's TACs then met in November to review comments submitted during the 45 day review period for the purpose of providing the Commission with TAC feedback on the comments. The Commission conducted a rule adoption hearing during December for the purpose of adopting amendments to the Florida Building Code, and will conduct a glitch review process during 2011. The 2010 Edition of the Florida Building Code and Florida Energy Code have a schedule effective date of December 31, 2011.

Adoption of the 2011 National Electric Code by Separate 2011 Glitch Amendment

The 2010 FBC development and adoption proceeded consistent with the process required by law and Florida amendments to the 2009 I-Codes (the new foundation codes as required by law) were published online as a Supplement to the 2009 I-Codes. The codebooks publishing process began when the Supplement was posted to the web. The glitch amendment proceeding began at this point also with the intent to limit glitch amendments to those identified by code professionals contracted to monitor the development of the 2010 FBC and to adopt the 2011 National Electric Code pursuant to law.

Integration of Florida Accessibility Law into the New ADAAG Being Adopted by the US Department of Justice

The Commission's Accessibility TAC recommended and the Commission approved convening a workgroup to evaluate and develop recommendations regarding the integration of the Florida Accessibility Law, ss. 553.501-553.513, F.S., into the 2004 ADAAG that was the core of the new ADA Standards proposed by the U.S. Department of Justice. The Commission convened a Florida Accessibility Code Workgroup in December 2008 and the Workgroup developed consensus recommendations to the Commission during 2009 and 2010 regarding integrating Florida Specific Requirements from law into the new DOJ Standards for Accessible Design. The DOJ finalized regulation development and published the final 2010 ADA Standards for Accessible Design September 15, 2010, and the Workgroup made final modifications to integrate the final regulations into a draft of the 2012 Florida Accessibility Code. The Florida requirements are written in law so the law must be modified to match new ADA Standards section numbers and some requirements of law must be modified to correlate with the new ADA Standards. The Commission has conducted several workshops and public meetings to review and approve the initial draft code and is currently conducting workshops to develop consensus on changes to law essential to adopting the updated code. Additional detail is included as "Appendix F" of this Report.

(Appendix F—Florida Accessibility Code Workgroup Project)

VI. ENERGY EFFICIENCY INITIATIVES AND CODE CHANGES

The Florida Legislature charged the Commission with implementing a series of energy efficiency increases as follows:

553.9061 Scheduled Increases In Thermal Efficiency Standards.--

(1) The purpose of this section is to establish a schedule of increases in the energy performance of buildings subject to the Florida Energy Efficiency Code for Building Construction. The Florida Building Commission shall:

(a) Include the necessary provisions by the 2010 edition of the Florida Energy Efficiency Code for Building Construction to increase the energy performance of new buildings by at least 20 percent as compared to the energy efficiency provisions of the 2007 Florida Building Code adopted October 31, 2007.

(b) Increase energy efficiency requirements by the 2013 edition of the Florida Energy Efficiency Code for Building Construction by at least 30 percent as compared to the energy efficiency provisions of the 2007 Florida Building Code adopted October 31, 2007.

(c) Increase energy efficiency requirements by the 2016 edition of the Florida Energy Efficiency Code for Building Construction by at least 40 percent as compared to the energy efficiency provisions of the 2007 Florida Building Code adopted October 31, 2007.

(d) Increase energy efficiency requirements by the 2019 edition of the Florida Energy Efficiency Code for Building Construction by at least 50 percent as compared to the energy efficiency provisions of the 2007 Florida Building Code adopted October 31, 2007.

(2) The Florida Building Commission shall identify within code support and compliance documentation the specific building options and elements available to meet the energy performance goals established in subsection (1). Energy efficiency performance options and elements include, but are not limited to: solar water heating; energy-efficient appliances; energy-efficient windows, doors, and skylights; low solar-absorption roofs; enhanced ceiling and wall insulation; reduced-leak duct systems; programmable thermostats; and, energy efficient lighting systems.

(3) The Florida Building Commission shall, prior to implementing the goals established in subsection (1), adopt by rule and implement a cost-effectiveness test for proposed increases in energy efficiency. The cost-effectiveness test shall measure cost-effectiveness and shall ensure that energy efficiency increases result in a positive net financial impact.

Florida Energy Code Workgroup 2010 Consensus Recommendations

In its 2010 Report to the Florida Legislature the Commission reported in great detail energy related actions and recommendations. The Commission has completed all of its legislative assignments and implementation will be through adoption of the 2010 Florida Energy Code being conducted concurrently with adoption of the 2010 Florida Building Code.

The Commission's Florida Energy Code Workgroup developed energy efficiency enhancement recommendations as follows: a energy efficiency cost-effectiveness tests for residential code consensus recommendations {adopted by Commission}; energy efficiency cost-effectiveness tests for commercial code consensus recommendations {adopted by Commission}; a definition of "consumer" (applies to both residential and commercial") {adopted by Commission}; energy conservation measures for replacement of air conditioning equipment recommendations [proposed

code amendment(s) for 2010 Update]; a strategic plan for increased efficiency requirements required by law for future FBC editions {adopted by Commission}; specific building options to achieve energy efficiency improvements recommendations [proposed code amendment(s) for 2010 Update]; design criteria for energy efficient pools recommendations (Pool Efficiency Subcommittee) [proposed code amendment(s) for 2010 Update]; and, proposed requirements for green roofs recognition in the Florida Building Code (Green and Energy Efficient Roofs Subcommittee) [proposed code amendment(s) for 2010 Update].

Options for Design Criteria for Energy Efficient Pools

The Energy Act of 2008 (HB 7135) directs adoption of pool pump efficiencies in the 2010 FBC. During discussions with the Florida Spa and Pool Association regarding energy efficiency requirements for pool pumps members suggested improved efficiency could be achieved through criteria for pool hydronic system design. This task was evaluated by the Commission's Pool Efficiency Subcommittee to the Energy Code Workgroup in coordination with the national industry and other state's initiatives currently underway.

The Florida Energy Code Workgroup voted to adopt the Pool Efficiency Subcommittee to the Energy Code Workgroup's recommendation that APSP-15 (Standard for Energy Efficiency for Residential In-ground Swimming Pools) as revised by the Subcommittee should serve as the draft Code language for inclusion in the Florida Building Code, Energy Volume.

The Florida Energy Code Workgroup voted to adopt the Pool Efficiency Subcommittee to the Energy Code Workgroup's recommendation that the Florida Building Code, Energy, shall provide energy code credits (points) for PV and alternative/renewable technologies that reduce energy consumption for pool pump motors.

The Florida Energy Code Workgroup voted to adopt the Pool Efficiency Subcommittee to the Energy Code Workgroup's recommendation that APSP-14 (Portable Spa Energy Efficiency Standard) is an appliance standard and therefore not within the scope of the Florida Building Code. These recommendations are included in the development of the 2010 Edition of the Florida Building Code. Additional detail is included as "Appendix E" of this Report.

(Appendix E—Pool Efficiency Subcommittee Project)

Evaluate Requirements For Green Roofs Recognition In the Florida Building Code

The Energy Act of 2008 (HB 7135) directs the Commission to include, as a minimum, certain technologies for achieving enhanced building efficiency targets established by the Act in the Florida Energy Code. Energy efficient roofs are one category. The Building Code act of 2008 (HB 697) directs the Commission to facilitate and promote the use of certain renewable energy technologies. This task was evaluated by the Commission's Green and Energy Efficient Roofs Subcommittee to the Florida Energy Code Workgroup.

The Florida Energy Code Workgroup voted to adopt the Green and Energy Efficient Roofs Subcommittee to the Florida Energy Code Workgroup's recommendation that the Florida Building Code, Energy, shall be amended to provide minimum energy code credits (points) for the use of vegetative roofs. Additional energy credits may be achieved if documentation is provided to support the additional energy efficiency credits. These recommendations are proposed as modifications to be

implemented with the adoption of the 2010 Edition of the Florida Building Code. Additional detail is included as “Appendix D” of this Report.

(Appendix D—Green and Energy Efficient Roofs Subcommittee Project)

Identify Specific Building Options to Achieve the Energy Efficiency Improvements

The Energy Act of 2008 (HB 7135) directs the Commission to include, as a minimum, certain technologies for achieving enhanced building efficiency targets established by the Act in the Florida Energy Code. The Building Code Act of 2008 (HB 697) directs the Commission to facilitate and promote the use of certain renewable energy technologies.

The Commission’s Energy Code Workgroup worked with stakeholders beginning in early 2009 on a comprehensive evaluation of options for achieving energy efficiency initiatives for the Florida Building Code including: mandated increases in energy efficiencies for subsequent editions of the Code, criteria for cost effectiveness test for increases in energy efficiency, studying energy conservation measures for replacement of air conditioning equipment, investigating humidity and moisture control problems for hot and humid climates, and evaluating rainwater collection and reuse and waste water recycling techniques. The Workgroup concluded their recommendations in 2010 and delivered consensus-based recommendations to the Commission that are being implemented through amendments to the Florida Energy Code as part of the 2010 Code Update process.

The law instructs the Commission to evaluate energy efficiency performance options and elements including, but not limited to: solar water heating; energy-efficient appliances; energy-efficient windows, doors, and skylights; low solar-absorption roofs, also known as "cool roofs"; enhanced ceiling and wall insulation; reduced-leak duct systems; programmable thermostats; and, energy-efficient lighting systems. Following are the Workgroup’s adopted recommendations regarding including specific building technologies/options in the Florida Building Code, Energy Conservation: The Commission evaluated the following energy efficiency performance options and elements and determined as follows:

The following software is capable of simulating the performance of the technology, and energy allowances for the technology should be included in the Code:
• Energy-efficient appliances
• Energy-efficient lighting systems
• Solar photovoltaic systems
The following technology is already accounted for in the Code:
• Solar water heating
• Energy-efficient windows, doors, and skylights
• Low solar-absorption roofs, also known as "cool roofs"
• Enhanced ceiling and wall insulation
• Reduced-leak duct systems
• Programmable thermostats
• Water source, geo-thermal HVAC systems
• Induction lighting and new lighting technologies
• Passive energy efficient design and day-lighting
• Building envelop efficiencies

The following technology and/or software is not ready for use in the Code:
• Variable refrigerant flow mechanical systems
• Data center efficiencies
• Under-floor duct systems
• HVAC System Zoning

Additional detail is included as “Appendix C” of this Report.

(Appendix C—Florida Energy Code Workgroup Project)

VII. HURRICANE RESPONSE AND CODE CHANGES

Developing the scientific foundation for the building code is fundamental to solving hurricane problems in the most efficient and effective ways. To support code development and other legislative assignments the Commission contracted with the University of Florida and Applied Research Associates for studies in 2007 to address wind-borne debris risks, water intrusion, wind resistance of roof systems and “code plus” requirements that go beyond the Code minimums for coastal buildings.

As a result of hurricanes affecting Florida during the 2004 and 2005 seasons, the Florida Building Commission’s Hurricane Research Advisory Committee (HRAC) continues to meet at selected Commission meetings to review research and make recommendations to the Commission regarding proposed code enhancements and research needs. Many of the Committee’s recommendations were adopted in a special legislatively authorized amendment process in 2005. Other recommendations were adopted with the 2006 Code amendments to the 2004 Code and during the 2007 Code Update cycle, and additional proposals were evaluated during the 2010 Code Update process. The Committee continues to consider enhancements to the Florida Building Code based on sound science. In addition, the Committee recommended research to advance the science and allow the Commission to continually study and update the storm protection provisions of the Florida Building Code. The Committee is continuously monitoring current research and recommending the development of standards and installation practices related to protecting against wind damage and water infiltration.

Research for Hurricane Resistance Code Enhancements

During 2007, the Committee prioritized for funding of research including: sealing of masonry walls, soffit systems, window water infiltration standards, aggregate roof blow-off, testing procedures for hurricane zones, lightening protection systems, and tile roof systems. During 2008 the Committee recommended and the Commission approved funding a variety of research projects including evaluating water leakage at the window/wall interface, and soffit system performance. During 2009 the Committee recommended continuing these studies and expanded research to include studies of the resistance of residential window glass to lightweight windborne debris including shingles and tree branches, study of the residual resistance of steel and aluminum storm panels to roof tiles, study of the structural resistance of commercial soffit systems, study of the resistance of field fabricated and factory manufactured residential window mullions to water intrusion and studies of primary and secondary roof coverings.

Research was begun on roof coverings and components during 2008-2009 in response in part to the Legislature’s Hurricane Mitigation (Roofing) Initiative and in part as extension of the Wind-Borne Debris Studies begun in prior years. The studies included construction and testing of large scale model roof samples at the UF hurricane simulator test facility and testing of soffit components of the roof system. Experimental work also was conducted in wind tunnel test facilities via contract with UF that evaluated wind pressures on roof systems and roof component failure. Results of these tests verified the under-prediction of wind forces at roof edges by the ASCE 7 design standard and demonstrated the acceleration nature of roof cladding failures.

In 2009-2010 the Commission sponsored roof systems research that leveraged larger sources of funding at UF. Commission resources provided wind tunnel tests to determine large scale wind simulator design characteristics and begin test equipment construction. This project leverages larger resources from Florida State University and Oak Ridge National Laboratory to begin roof system evaluations with shingle systems. A small source of funds also went to supplement research and testing of closed cell foam adhesive systems for increasing roof diaphragm resistance to wind forces that is funded primarily by a NOAA Sea Grant.

Each project investigates questions identified during the Commission and its committees and workgroups deliberations of systems for improving hurricane performance of roofing systems. It is proposed that this funding track of leveraging outside funded roof research projects that answer fundamental building construction questions be continued in 2010-2011. Roof research would continue to look at shingle system evaluation and improvement, innovative roof deck strength enhancement systems and innovative roof covering system wind performance. The goal to be ensuring technologies being introduced into the Florida market are appropriately evaluated for their application to this high wind region and ultimately establishing standards for uniform evaluation of different manufacturers' systems.

The study of roof component and cladding and roof attached structures and equipment must be conducted by various hurricane wind effects simulation methods. The beginning point of any such simulation studies is accurate characterization of the wind field and its effects. Then simulation models can be constructed to test various components and attachments. Research conducted in response to the 2004 and 2005 hurricanes has been directed primarily to window and wall components and cladding. Work was begun last year on roof systems. Current year funding will be directed to supporting studies to characterize the wind field on roofs and to leveraging funding for roof systems related research provided by federal organizations including FEMA/DHS, NOAA/Sea Grant and RCMP/DEM.

The DCA has spending authority identified in the legislature approved budget for hurricane related research in FY 2009-2010 that comes from fees collected by DBPR that are transferred to DCA for research and from building permit surcharge fees. However, it anticipates encumbering just half the spending authority this year dependent upon the status of fee collections by next spring.

The Commission previously voted to support DCA funding research projects that leverage the funding of other agencies for projects that support resolution of Florida hurricane related building failures.

Due to the ongoing recession's impact on the construction industry and resulting decline in fees the Committee recommended prioritizing research projects that leverage the funding of other agencies for projects that support resolution of Florida hurricane related building failures. The Commission voted unanimously in favor of the recommendation. Research projects will evaluate shingle roof covering systems and roof deck attachment alternatives.

The Committee met during 2010 to receive updates on ongoing research projects, and to continue developing consensus on recommendations to the Commission for additional code enhancements for consideration during the 2010 Code Update process.

During 2010 the HRAC voted and the Commission approved that current year funding be directed to supporting studies to characterize the wind field on roofs and to leveraging funding for roof

systems related research provided by federal organizations including FEMA/DHS, NOAA/Sea Grant and RCMP/DEM, and to continue funding post-hurricane buildings investigation research on a contingency basis.

Of particular note was the extensive opportunity for public input during Hurricane Research Advisory Committee and Commission meetings. In addition, each Hurricane Research Advisory Committee meeting provided opportunities for individuals and entities to present the results of their observations, studies, and research regarding the effects of the 2004, 2005 and 2008 hurricanes on the citizens of Florida and the built environment.

Additional information on the Hurricane Research Advisory Committee's activities are found in "Appendix D" of this Report.

(Appendix D—Hurricane Research Advisory Committee Project)

VIII. PRODUCT APPROVAL

The Florida Building Code establishes standards for products integrated into buildings in addition to standards for the design of buildings themselves. Where compliance with prescriptive standards such as location of fire exits can be determined by reviewing building plans and onsite inspections during construction, how well products such as windows perform cannot be determined by review of drawings or inspection of the product alone. Yet compliance of the individual products is fundamental to compliance of the overall building. To determine whether products and building systems comply, the building official must rely on engineers and testing laboratories to evaluate performance then rely on the manufacturers to maintain quality control of production to ensure that production products perform like the ones tested. The product approval system framed in law and implemented through rule requires accreditation of the product evaluators and quality assurance monitors and standardizes the information that must be provided to demonstrate code compliance.

The Commission directed a major part of its efforts since its inception in 1998 to developing a standardized system for public regulation from the many combinations of product evaluation and quality control monitoring services provided by private companies. The diversity of approaches used in different industries for product evaluation and quality control monitoring make standardization particularly difficult, and a considerable amount of time and effort have been dedicated to this task. Patience and hard work characterize the contributions of all parties.

With the significant enhancements to the Product Approval system implemented through revisions to Rule 9N-3 (f.k.a. 9B-72), State Product Approval—details of the revisions were described in the 2006 and 2007 Reports to the Legislature—and the hiring of a Product Approval administrator to process applications, the Product Approval System is functioning more efficiently and user satisfaction, as determined by surveys, is very high.

During 2010 the Commission revoked product approvals for products that no longer complied with the requirements of their product approvals. The ability to determine the need for product revocation demonstrates the efficacy of the Product Approval System.

During 2010 the Product Approval Rule, Rule 9N-3 (f.k.a. 9B-72), was amended to expedite approval of products that rely on a product certification mark or listing from an approved certification agency, updated the Rule to conform to the approved validation entities in statute, and revised the Building Code Information System to allow payment of fees to the administrator and to add a provision for approval of products by DCA. In order to implement this Legislative assignment the Commission voted to proceed with rule adoption for Rule 9N-3 (9N-3.002, 9N-3.007, 9N-3.008), Product Approval {f.k.a. Rule 9B-72}, to implement HB 663 product approval provisions, including expedited product approval for the certification method and revision to the list of approved evaluation entities.

In the past the Commission subsidized costs to develop, revise and maintain the Building Code Information System (BCIS) for product approval. The Commission agreed that the true costs of implementing program changes will should be reflected in the fees charged for these programs. As a result of declining funds during 2009 the Commission revised the fee schedule for product approvals to make them self-supporting and to repay some of the development costs funded by the Commission for the product approval system.

Since inception, the Commission has approved 5,593 product applications under the 2004 Florida Building Code, and 5,119 product applications under the 2007 Florida Building Code. In addition, the Commission approved 2 accreditation body, 45 certification agencies, 7 evaluation entity, 86 quality assurance entities, 88 testing laboratories, and 64 validation entities. In addition, the Commission has approved 22,575 products under the 2004 Code, and 24,335 products under the 2007 Code. Following are relevant product approval system statistics:

Product Approval and Entities Statistics Update

Entities	Accreditation Body	Certification Agency	Evaluation Entity	Quality Assurance Entity	Testing Laboratory	Validation Entity	Totals
Approved	9	18	7	35	59	18	146
Pending	0	0	0	4	0	0	4
Pending Accreditation	0	0	0	0	0	0	0
Denied	0	0	0	0	0	0	0
Suspended	0	0	0	0	0	1	1
Expired	2	11	0	15	43	21	92
Renewed / Revised	0	16	0	32	65	24	137
Totals	11	45	7	86	167	64	380

CODE VERSION	2004		2007	
	Applications	Products	Applications	Products
Approved	5,593	22,575	5,119	24,335
Applied For	31	39	79	322
Denied	154	482	10	13
Validated	15	28	66	262
Suspended	0	0	0	0
Re-Apply	3	3	16	50
Pending FBC Approval	1	1	117	538
Revoked	6	17	0	0
Archived	528	1828	560	2,096
Over 180 Days Old and Not Approved, Denied, Validated, or Pending Status	3	7	27	71
Totals	6,334	24,980	5,994	27,687

IX. BUILDING CODE TRAINING PROGRAM

Education is one of the cornerstones of the Building Code System, and the effectiveness of the Building Code depends on the knowledge of professionals who design and construct buildings. The Commission continues to work with the Department of Business and Professional Regulation and representatives of the licensing boards to establish a cooperative system for approving building code courses and integrating building code continuing education into licensing requirements.

The state building code system, first established in 1974, was overhauled in 1998 to improve its effectiveness. The Legislature recognized that the effectiveness of the Florida Building Code depended on the various participants' knowledge of the codes. The Building Code Training Program was intended to improve compliance and enforcement by providing a focus for code-related education through coordination of existing training resources, including those of universities, community colleges, vocational technical schools, private construction schools and industry and professional associations.

During 2010, the Commission, based on recommendations developed by the Commission's Education Program Oversight Committee (POC) in collaboration with the program administrator and other entities, implemented education and outreach initiatives designed to ensure that Florida construction and design industries licensees are informed about Florida Building Code requirements and related specific duties.

The Commission coordinated the review, research, development, and implementation of revisions to update and enhance the Disaster Contractors Network website to reflect current design and construction-related emergency management information, building code, mitigation, and licensure requirements. This website may be accessed at: <http://www.dcnonline.org>.

During 2010, the Commission amended the Education Rule, 9B-70, as follows:

- Initiated rule making and adopted rules for Rule 9B-70, Education regarding allowing providers to make specific minor technical changes by self-affirmation to approved advanced courses without going through reaccreditation.
- Voted to initiate rule development to repeal the Building Code Administrative Core Curriculum requirement in Rule 9B-70.001, Florida Administrative Code.

During 2010 the Commission's Education Program Oversight Committee conducted six meetings and in which they managed the review and approval of course and accreditor applications; handled inquiries from licensees, providers, and the public; and, developed and refined guidelines and information on course development and processing.

Through the education administrator, and using the clearinghouse developed to bring together information on needs and availability of continuing education courses, process, and underlying information, the Commission addressed specific education and outreach needs as follows:

- Developed and executed modifications to the Building Code Information System adding enhancement and usefulness to the significant update of the system completed in 2008.
- Conducted extensive training for building department personnel and design and construction licensees on hurricane mitigation design and construction, property insurance code requirements and issues, Energy Code compliance, and residential code requirements and energy efficiency.
- Developed the comprehensive Building Florida Better awareness program, including a campaign and materials.
- Developed and disseminated a public awareness campaign on mitigation and Energy Code compliance, including print and electronic advertisement placement and promotion and development of the Building A Better Florida Day at the 2010 Southeastern Builders Conference /Green Building Show and promotion of the Hurricane Alley section for enhanced opportunities to learn about approved storm-related products and resources.
- Developed a video/DVD to explain Florida Building Code compliance/mitigation tools and techniques, including placement of this material on a number of websites.
- Compared international code Florida specific provisions to the Florida Building Code and prepared and submitted Florida Building Code modifications.
- Conducted a survey to solicit information on submission of permits and other design and construction documentation electronically.
- Performed random audits of approved courses to ensure compliance with laws and rules regulating development, approval, and instruction for advanced codes courses.

X. FLORIDA BUILDING CODE SYSTEM UPDATES AND COMMISSION 2010 ACTIONS

FLORIDA BUILDING CODE SYSTEM

Florida Statute, Chapter 553.77(1)(b), requires the Commission to make a continual study of the Florida Building Code and related laws and on a triennial basis report findings and recommendations to the Legislature for provisions of law that should be changed. The Commission conducted the first assessment in 2005 and effected changes to the System as a result of the assessment process. 2011 will mark the ten-year anniversary since the Florida Building Code became effective, and the Commission is initiating a comprehensive assessment of the Building Code System with recommendations being developed by the Commission's Building Code System Assessment Ad Hoc Committee. Public input will be a major component of the assessment process and an on-line Survey in addition to multiple public comment opportunities will be an important part of the Commission's analysis of the Building Code System. The Commission's recommendations will be a major component of their Report to the 2012 Legislature. Additional detail is included as "Appendix G" of this Report.

(Appendix G—Building Code System Assessment Ad Hoc Project)

Following are 2010 Commission initiatives and actions related to the Florida Building Code System:

The Florida Building Code and the Code Development Process. The new Florida Building Code is a statewide code implemented in 2001 and updated every three years. The Florida Building Commission developed the Florida Building Code from 1999 through 2001, and is responsible for maintaining the Code through annual interim amendments and a triennial foundation code update. In 2006, the Commission selected the 2006 I Codes as foundation for the 2007 Florida Building Code, and during 2007, it developed and adopted the 2007 Edition of the Code, representing the second update and Third Edition of the Florida Building Code. The Commission amended its rules to develop criteria ensuring that annual amendments are restricted to issues that are urgent and cannot wait for the triennial code updates, such as life-safety issues, and updating standards and changes to state and federal law(s). The Commission also developed rules for Technical Advisory Committee (TAC) proposed code amendments to include TAC comments on the its review of amendments to ensure the Commission has additional input from its technical experts.

The Commission. The Commission is an appointed representative stakeholder body that develops, amends and updates the Code. The Commission is composed of members representing each of the key interests in the Building Code System. The Commission meets every eight weeks and, in addition to its code development responsibilities, regularly considers petitions for declaratory statements, accessibility waiver requests, the approval of products and entities, and the approval of education courses and course accreditors. The Commission also monitors the Building Code System and reports to the Legislature annually with its recommendations for changes to statute and law.

Local Administration of the Code. Florida Law requires that the Code be administered and enforced by local government building and fire officials. The Commission has certain authorities in this respect such as the number and type of required inspections. In 2007, the Commission

conducted an assessment survey to review and address the code administration needs of local governments with consideration of measures to improve uniform and effective enforcement of the Code. The Commission identified a need to address the code administration needs of local governments with an emphasis on identifying measures to improve uniform and effective enforcement of the Code. During 2008 the Commission convened the Commission's Code Administration Technical Advisory Committee to develop recommendations to enhance the functioning of this important component of the Building Code System. This issue will be evaluated during 2011 as a part of the Building Code System Assessment project.

Strengthening Compliance and Enforcement. Compliance and enforcement of the Code is a critical component of the system, and the Commission's emphasis in this regard is on education and training. The Commission's Education Program Oversight Committee (POC), working with the program administrator and other entities, implemented initiatives collaboratively to ensure Florida construction and design industries licensees are informed about Florida Building Code requirements and aware of related specific duties. This issue will be evaluated during 2011 as a part of the Building Code System Assessment project.

Product Evaluation and Approval. To promote innovation and new technologies, a product and evaluation system was determined to be the fifth cornerstone of an effective Building Code System. The product approval process should have specific criteria and strong steps to determine that a product or system is appropriately tested and complies with the Code. Quality control should be performed by independent agencies and testing laboratories that meet stated criteria and are periodically inspected. A quality assurance program was also deemed essential. The Commission adopted a Product Approval System by rule and currently approves products for state approval and product approval entities. Local product approval remains under the purview of local building officials a part of the building permit approval process. This issue will be evaluated during 2011 as a part of the Building Code System Assessment project.

2010 COMMISSION ACTIONS

The following section provides an overview of Commission policy implementations, interagency collaboration initiatives, and planning initiatives. Commission milestones for 2010 are included as "Appendix A" of this Report.

(Appendix A—Commission 2010 Milestones)

COMMISSION 2010 POLICY IMPLEMENTATIONS

The following are policy decisions by the Commission implemented during 2010 with existing Commission authority through administrative rule development:

In order to provide a transparent and efficacious rule development process for the 2010 Code Update the Commission adopted a TAC rule development process for considering proposed amendments to the Florida Building Code (August 2010), and Commission rule adoptions process for considering TAC recommendations on proposed amendments to the Florida Building Code (December 2010).

The Commission voted unanimously to initiate a comprehensive assessment process to evaluate the

Florida Building Code System and to develop recommendations for enhancements to the System for delivery to the 2012 Florida Legislature. The process will include an on-line survey, public workshops conducted at Commission meetings, and an Ad Hoc Committee of Commissioners meeting several times throughout 2011 to identify and evaluate a full range of issues and options regarding System enhancements.

Streamlining Commission Proceedings and Adjusting Fees

As a result of a declining state budget and reduced permit surcharge receipts, during the past year the Commission has made changes to their processes to adapt to a reduced budget, and it is likely the Commission will have to continue in this mode for the coming year. To date, staff has moved Commission meetings from 3 day meetings every 6 weeks to 2 or 3 day meetings every 8 weeks, and most of the TACs and POCs are meeting by teleconference when the complexity of issues they are addressing lends itself to the format. The permit surcharge fee rule, Product Approval Rule fees, and Manufactured Building Program fees were all adjusted to ensure programs are self-supporting and cover funds expended to develop the Building Code Information System (BCIS) for the support of the programs.

Workshop on Fees for Non-Binding Interpretations, Declaratory Statements and Accessibility Code Waivers

To ensure that programs are self-supporting the Commission requested and received Legislative authority for the Commission to charge a fee for issuing accessibility code waivers and for parties requesting waivers to pay DCA for the service, authority for the Commission to charge a fee for issuing non-binding interpretations and for parties requesting interpretations to pay the interpretations contractor directly for the service, and authority for the Commission to charge a fee for issuing petitions for declaratory statements and for parties requesting declaratory statements to pay DCA for the service.

In October of 2010 the Commission conducted a workshop to solicit public feedback regarding the fee structure for the respective Commission functions, as follows:

Non-Binding Interpretations and Declaratory Statements: Section 553.775 (4) provides that the Commission may adopt by rule and impose a fee to recoup the cost of the proceedings which may not exceed \$125 for each request for non-binding interpretations and declaratory statements. Staff estimated the cost per non-binding opinion to be: \$118.12, and the cost per declaratory statement to be: \$1,405.68.

Accessibility Code Waivers: Section 553.512 (1) provides that the Commission shall establish by rule a fee to be paid upon submitting a request for an Accessibility Code waiver. Staff has estimated the cost per waiver application to be \$672.56 for in-person meetings and \$558.93 for teleconference meetings.

The Florida Accessibility Code Workgroup voted unanimously to recommend the Commission initiate rulemaking to implement fees for accessibility waiver requests as follows: fee per application shall be cost neutral or less; cost of fees reviewed at a regular frequency; indexed to scope of the project with clear criteria for same; provide a provision for evaluating the necessity for the waiver application (parallel the AHCA desk review process with a minimum fee if waiver is not required).

At the conclusion of the workshop the Commission voted to defer action on considering fees for Non-Binding Interpretations and Declaratory Statements and review the issue during 2011, and to initiate rule development regarding establishing fees for requests for Accessibility Code waivers. When Governor Scott took office he directed Governor's agencies to halt rulemaking until the new Office of Fiscal Responsibility and Regulatory Reform reviewed proposed rules. The Commission subsequently suspended

initiation of rule development.

COMMISSION 2010 INTERAGENCY COLLABORATION INITIATIVES

Investigate A Consistent Definition of “Bedroom” for Department of Health On-site Septic System Sizing Regulations

The Commission convened a facilitated joint workgroup process with the Florida Department of Health (DOH) to develop recommendations regarding requirements for the sizing of septic systems. The purpose of the Workgroup is to develop recommendations regarding an acceptable definition of “Bedrooms” used for the sizing of septic systems. The definition should work from the Florida Building Code (FBC) and Department of Health (DOH) perspectives. This initiative is a cooperative effort with the Florida Department of Health directed to improving the definition used by the DOH rule for septic system sizing. The Workgroup developed consensus recommendation that were adopted by the Commission. However, the proposal was not approved by the Department of Health's Technical Review and Advisory Panel (TRAP).

As a result, at the December 2009 meeting the Commission voted unanimously that the Commission supports the consensus recommendation for sizing residential septic systems developed by the Septic System Sizing Workgroup (Interagency Workgroup: FBC and DOH), and further requests that the Florida Legislature grant jurisdictional authority to the Florida Building Commission to implement the recommendation by integration into Chapter 26-Section P2602.1 of the most current edition of the Residential Florida Building Code.

Subsequently, the Department of Health's (DOH) Technical Review and Advisory Panel (TRAP) met to consider the DOH's new proposal replacing the "room" sizing methodology with a bedroom definition methodology, and to address system sizing of large homes by flattening out the curve of gallons per day (GPD) for larger homes by reducing the gallons per day for each additional bedroom after 4 bedrooms or each additional 750 square feet of building area or fraction thereof, from 100 to 60 per dwelling unit. The panel motioned to adopt the lower flow rates for larger homes, provided comments and tabled the bedroom definition proposal for further review.

The lower flow rates for larger homes issue has been reviewed by the Variance Review and Advisory Committee (VRAC) and returned to the TRAP with comments. The issue will be re-heard at the next TRAP meeting scheduled for July 15, 2010. The lower flow rates for larger homes issue will be ready for rule making if approved by TRAP at their next meeting.

As a result of the TRAP's actions the Commission voted to send a letter to the Department of Health's (DOH) Technical Review and Advisory Panel (TRAP) expressing the Commission's concern that the proposed rule language does not adequately address the concerns and recommendations developed by the Commission's and Department of Health's joint committee (Septic System Sizing Workgroup) and urging them to revise the rule consistent with the Workgroup's recommendation. Additional detail is included as “Appendix H” of this Report.

(Appendix H—Septic System Sizing Workgroup Project)

Evaluate Rainwater Collection and Reuse for Process Water and Other “Green” Technologies in Coordination with DOH, Health Officials, DEP and Other Water Management Agencies

The Plumbing TAC identified rainwater collection as a growing “Green Building” practice that should be evaluated by building and health regulators. It is expected that appropriate requirements would facilitate implementation of the practice, and the Commission will decide whether to convene a workgroup to address this issue during 2011 based on availability of project funding.

Evaluate In-Home Waste Water Recycling in Coordination with Department of Health and Department of Environmental Protection

This task was originated at the request of the Florida Department of Health and Florida Department of Environmental Protection. It was first addressed for the 2007 Code and resulted in the inclusion of the Florida Department of Health requirements for home grey water capture and reuse for irrigation outside homes. This task will be further evaluated as interest and commitment to green building standards mature.

Flood Plain Management Standards Integration into the 2010 FBC

At the request of the Florida Division of Emergency Management (DEM) and the Federal Emergency Management Agency (FEMA), during 2009 the Florida Building Commission convened a Flood Resistant Standards Workgroup charged with developing recommendations for integrating the International Code Series (I-Codes: IBC, IRC, etc.) flood damage-resistant provisions (for buildings and structures) in the Florida Building Code. FEMA worked with ICC for the past 10 years on flood standards for buildings that are consistent with the requirements of the National Flood Insurance Program (NFIP), and the current I-Codes reflect these standards. When the 2001 Florida Building Code (First Edition) was developed a policy decision was made, primarily for administrative reasons, to eliminate flood standards from the foundation model code and continue the practice of relying on Floodplain Management Ordinances adopted by communities participating in the National Flood Insurance Program. In addition, the DEM has requested that the policy be reviewed, that identified administrative issues be resolved, and that the I-Code flood standards be retained in the 2010 FBC. The Commission conducted this facilitated stakeholder process from March to May of 2009. The Workgroup developed a package of consensus recommendations, and the Commission adopted the policy recommendations during 2010. Specific code amendment recommendations were submitted as code amendments for the 2010 Florida Building Code Update process.

At the October 2009 meeting the Commission voted unanimously to adopt the Flood Resistant Standards integration recommendations as recommended by the Flood Resistant Standards Workgroup. At the December 2009 meeting the Commission was requested to seek authority to allow local variances to flood provisions if adopted in accordance with the provisions of 44 CFR 60, and referred the issue to the Flood Resistant Standards Workgroup to develop recommendations for submittal to the Commission for their consideration at the February 2010 meeting. The Commission approved the recommendations and the 2010 Legislature approved the variance procedures. The Commission is in the process of adopting the Flood Resistant Standards through the 2010 Florida Building Code Update process.

Evaluate Resolution of CCCL and V Zone Requirement Inconsistencies

The Commission and the Commission’s Flood Resistant Standards Workgroup voted unanimously that inconsistencies between the CCCL and V Zone requirements shall continue to be resolved at the local level, and on a case-by-case basis. The Workgroup also voted that this issue should be addressed by a separate workgroup for resolution and the Commission has added the task to their Workplan pending availability of funds.

Evaluate Standards to Address Corrosive Gypsum Board Outgassing

The Commission staff met with DOH staff during 2010 to develop a strategy. The DOH's preliminary determination is there was no health concern and as a result no amendments to their rules were implemented. The Commission is deferring action on this task pending further Legislative direction.

Development of Recommendations that Increase Recycling and Composting and the Use of Recyclable Construction Materials and Construction and Demolition Debris

The Commission will appoint a stakeholder workgroup to work in a facilitated consensus-building process to develop recommendations for the Commission. The Commission will report their recommendations to the 2012 Florida Legislature.

COMMISSION ANNUAL ASSESSMENT AND PLANNING EXERCISES

Effectiveness Assessment Survey

Each year the Commission conducts an Effectiveness Assessment Survey to gauge the Commission's perspective on a variety of key topical issue areas. Over the years the survey input has been the basis for many enhancements to the Commission's procedures. The exercise is conducted annually as an on-line activity, and the Commission reviews the results each January. Following are the compiled annual Effectiveness Assessment Survey results from 2000 – 2010:

FBC EFFECTIVENESS ASSESSMENT SURVEY RESULTS									
ANNUAL COMPILATION 2000 - 2010									
<i>Annually, Commission members are asked to pick the number that best describes how the Commission functions in seven (7) key topical areas: Scale Range 10 - 1 (10 highest rating to 1 lowest rating)</i>									
TOPIC	2010	2009	2008	2007	2006	2005	2004	2001	2000
Decision Making Process	9.8	9.7	9.4	9.2	9.3	9.3	8.8	9.1	8.8
Participation and Communication	9.3	9.4	9.0	8.9	9.2	9.1	8.4	7.5	8.2
Commission Relationship to Agency (DCA)	8.8	9.0	8.6	7.9	8.7	8.7	7.8	—	—
Commission Relationship to Staff	9.5	9.6	9.1	8.7	8.9	9.1	8.8	—	—
Time for Consideration	8.6	8.9	8.0	7.7	8.2	7.5	6.5	7.7	8.3
Information and Analysis	8.7	9.1	8.1	8.1	8.7	8.1	7.5	7.8	7.6
Process/Meeting Facilitation	9.5	9.8	9.7	9.7	9.5	9.5	—	—	—
Controversy or Planning Orientation	—	—	—	—	—	—	—	7.8	7.8
Overall Average	9.2	9.4	8.8	8.6	8.9	8.8	7.8	7.8	8.1

Workplan Prioritization Exercise

Each year the Commission conducts a Workplan Prioritization Exercise to determine priorities for the coming year. Commissioners are asked to rank each of the Workplan Tasks on a five point continuum/scale where a 5 equals the highest level of priority and a 1 equals the lowest level of priority. Members are asked to rank the priority of each task independently and not in relation to the other tasks. Each of the Workplan Task's rankings are tallied and arranged in order of highest priority to lowest priority. The exercise is conducted annually as an on-line activity, and the Commission reviews the results each January. Following are the results of the Commission's Workplan Prioritization Exercise for 2010:

WORKPLAN PRIORITIZATION EXERCISE RESULTS {Conducted February 2, 2010}	
WORKPLAN TASK (Task Number)	OVERALL RANKING
2010 Update to FBC (5)	1
Report to 2011 Legislature (1)	2
2010 FBC development process (4)	3
Glitch amendments to 2010 FBC (6)	4
Integration of Accessibility Law {DOJ SAD} into FBC (8)	4
Entrapment standards for existing pools (11)	6
Research for hurricane resistance Code enhancements (14, 15) <ul style="list-style-type: none"> • window/water leakage • window/wall interface • soffit performance 	6
Develop list of evaluation entities for law, or develop criteria for approving evaluation entities by rule (10)	8
Develop plan to implement legislated energy efficiency increases (7)	9
Bedroom definition for septic tank sizing {DOH} (9)	9
Flood Resistant Standards in Code {DEM, FEMA} (18)	9
Corrosive gypsum board {DOH} (13)	12
Energy Code subtasks (7 a.-h.)	13
Soffit system labeling requirements and criteria (16)	13
Accessible restroom requirements for public pools {DOH} (12)	15
Resolution of CCCL & V Zone inconsistencies {DEM} (19)	15
Storefront & curtain wall glazing labeling (20)	17
Develop criteria for use of gravel roof systems (17)	18
In-home water recycling {DOH/DEP} (22)	19
Evaluate rainwater collection and use {DOH/DEP} (21)	20

**FLORIDA BUILDING COMMISSION REPORT AND
RECOMMENDATIONS TO THE 2011 FLORIDA LEGISLATURE**

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APPENDIX A

COMMISSION MILESTONES FOR 2010

http://consensus.fsu.edu/FBC/fbc_documents.html

- January 2010** Commission's Building/Fire TAC meets with State Fire Marshal's Fire Code Advisory Council to review and develop recommendations regarding conflicts between the proposed 2010 Florida Building Code and the Florida Fire Prevention Code. The Fire/Building TAC met to review and develop recommendations regarding overlaps of current Florida Specific Code Amendments with International Codes changes from 2006 to 2009 Editions.
- February 2010** Commission adopts additional recommendations for submittal to the 2010 Legislature including additional flood resistant standards. Commission votes support for relevant provisions of building code legislation (SB468). Commission votes to initiate rule making for Rule 9B-70, Education (self-affirmation), and Rule 9B-72, Product Approval (evaluation entities).
- April 2010** Commission conducts rule development workshop on Rule 9B-70, Education (self-affirmation), and votes to proceed with rule adoption. Commission receives updates from special issue workgroups convened in part to develop proposed code amendments for the 2010 Code Update process. Opportunity for submitting proposed amendments to the 2010 Code Update process was provided from March 1 to April 2, 2010 and there were 832 amendments proposed.
- June 2010** Commission adopts 2010 code amendment review procedure: TAC rule development process for considering proposed amendments to the Florida Building Code (August 2010), and Commission rule adoptions process for considering TAC recommendations on proposed amendments to the Florida Building Code (December 2010). Commission approves conducting second triennial assessment of the Florida Building Code System. Commission votes to conduct rule development workshop on Rule 9B-72, Product Approval, to implement requirements of HB 663. Commission approves continuation of funding for hurricane research initiatives including roof systems. Commission honors retiring Senator Constantine for his years of leadership and support of the Commission. Commission conveys letter of appreciation to Senator Bennett and Representative Aubuchon for their leadership in support of Commission's legislative recommendations. Commission convenes triennial assessment of the Florida Building Code System and will develop a package of recommendations for enhancements to the Florida Building Code System for submittal to the 2011 Florida Legislature.

August 2010

Commission conducts rule development workshop on Rule 9N-3, Product Approval (f.k.a. Rule 9B-72), to implement requirements of HB 663, and votes to proceed with rule adoption. Commission discusses options regarding publishing formats for the 2010 Florida Building Code. Commission's TACs conduct rule development workshops for the purpose of developing recommendations to the Commission regarding proposed modifications to the Florida Building Code (2010 Code Update process). On-line survey conducted to solicit stakeholder feedback for Commission evaluation as part of the triennial assessment of the Florida Building Code System.

October 2010

Commission convenes a workshop to solicit public comment regarding charging fees for Non-Binding Interpretations, Declaratory Statements and Accessibility Code Waivers. The Commission convenes an Accessibility Code and Law Workshop to solicit public comments regarding integrating the Florida Accessibility Code for Building Construction's Florida Specific Requirements with the New DOJ Standards for Accessible Design (ADA Standards). The Commission voted unanimously to initiate a comprehensive assessment process to evaluate the Florida Building Code System with recommendations for enhancements to the System delivered to the 2012 Florida Legislature.

December 2010

Commission conducts rule adoption hearing for the purpose of deciding on proposed amendments to the Florida Building Code, with results comprising the 2010 Edition of the Florida Building Code. The Commission votes to proceed with rule development on Rule 9B-70.001 for the purpose of repealing the Building Code Core education requirement by conducting a rule development workshop at the February 2011 meeting. Commission approves summary of issues and recommendations for inclusion in the Commission's 2011 Report to the Legislature.

APPENDIX B

HURRICANE RESEARCH ADVISORY COMMITTEE



At the January 26, 2005 Commission meeting, Chairman Rodriguez appointed a small coordinating group consisting of Commissioners and other stakeholder representatives, charged with identifying what research is being conducted related to building failure issues resulting from the 2004 hurricanes, identifying any research gaps on key issues identified but not being researched, and finally, to ensure that the Commission is provided with all relevant research findings on each of the major issues, prior to the Commission considering code enhancements resulting from lessons learned. The Committee has been instrumental in evaluating and making recommendations to the Commission on a broad suite of proposals regarding Building Code enhancements and research projects.

As a result of hurricanes affecting Florida during the 2004 and 2005 seasons, the Florida Building Commission's Hurricane Research Advisory Committee (HRAC) continues to meet at most Commission meetings to review research and make recommendations to the Commission regarding proposed code enhancements and research needs. Some of the Committee's recommendations were adopted with the 2006 Glitch Code amendments to the 2004 Code and others were adopted during the 2007 Code Update cycle, others were implemented during the 2008 "Glitch" code annual interim amendment process, and still others will be implemented during the 2010 Code Update process. The Committee continues to consider enhancements to the Florida Building Code based on sound science. In addition, the Committee has recommended research to advance the science and allow the Commission to continually study and update the storm protection provisions of the Florida Building Code. The Committee is continuously monitoring current research and recommending the development of standards and installation practices related to protecting against wind damage and water infiltration, and the development of hurricane resistant construction standards.

During 2010 the Committee focused on evaluating Code enhancements regarding the window-wall interface, soffit labeling and performance standards, flood resistant standards, and roof mounted mechanical equipment.

Status of 2010 FBC Amendments Initiatives of Respective Workgroups

Window/Wall Workgroup

Following are options that achieved a consensus level of support as proposed code amendments for the 2010 Florida Building Code:

1. Reorganize the code sections to split curtain wall from garage door requirements.
2. Add requirement to Chapter One, plan review requirements, detail through wall penetrations for fenestrations for both commercial and residential plans.
3. Include a standard detail for each type of installation and place in the code commentary.
4. 106.3.5 Minimum plan review criteria for buildings. The examination of the documents by the building official shall include the following minimum criteria and documents: a floor plan; site plan; foundation plan; floor/roof framing plan or truss layout; all fenestration penetrations; flashing; and rough opening dimensions and all exterior elevations.
5. Additional Code amendments to recognize the AAMA/FMA 200 and 300 as reference standards for window installation.

Soffit Systems Workgroup

Following are options that achieved a consensus level of support as proposed code amendments for the 2010 Florida Building Code:

Individual soffit piece labeling requirements for manufactured products in the Florida Building Code, as follows:

1. Individual soffit pieces shall be marked at not more than four foot on center with a number/marking that ties the product back to the manufacturer.

Soffit system packaging label requirements for manufactured products in the Florida Building Code, as follows:

- 1714.8.2 The following information shall be included on the labels on impact-resistant coverings:
1. Product approval holder/manufacturer name and city and state of manufacturing plant.
 2. Product model number or name.
 3. Method of approval and approval numbers as applicable. Methods of approval include, but are not limited to: Miami-Dade NOA, Florida Building Commission FL #, TDI Product Evaluation, and/or ICC-ES.
 4. The test standard or standards specified in Chapter 14 used to demonstrate Code compliance.
 5. The net free area (note: also to be indicated in product approval)

Manufactured soffit system installation:

Soffits must be installed in accordance with the manufacturer's instructions.

Flood Resistant Standards Workgroup

Following are options that achieved a consensus level of support as proposed code amendments for the 2010 Florida Building Code:

1. The I-Code provisions should be used as the basis for inclusion of flood provisions relevant to buildings and structures into each of the respective codes (FBC). Members agreed that on balance, ICC provisions should be retained unless there is a specific need for a Florida Specific Requirement.
2. Adopt ASCE 24 (Flood Resistant Design and Construction Standards) by reference as the flood provisions in each of the codes (FBC).
3. Allow local jurisdictions to adopt higher standards for flood resistance provision to address local concerns within the Code (~~based on local flood studies~~), to ensure local's ability to be eligible for the NFIP's Community Rating System.
4. Seek a legislative exception so that local CRS (higher flood resistant standards) would not be subject to the local technical amendment requirements of the Code, subject to a consistency review with updated editions of the code. (Established by HB 663)
5. Retain ICC format, modify as appropriate for Florida and develop cross-reference list, similar to Chapter 27 for the Electrical Code.
6. Seek statutory change to section 553.80 F.S. to clarify that this provision not be used to deviate from flood resistant requirements.
7. Seek statutory authority to allow local jurisdictions to issue variances/waivers, via the locally adopted companion flood plain ordinance, regarding flood provisions adopted in accordance with the provisions of 44 CFR 60. (Established by HB 663)

Following are options that achieved a consensus level of support as 2010 Florida Building Code related issues not to be proposed as code amendments:

Adoption of flood maps and administrative procedures shall be at the local level.

Develop a model "companion" ordinance that includes NFIP-consistent administrative provisions and includes NFIP requirements for development other than buildings and structures that are not within the scope of the Code. Also, include a list of more stringent requirements that local jurisdictions could consider for possible adoption.

Inconsistencies between the CCCL and V Zone requirements shall continue to be resolved at the local level, and on a case-by-case basis.

A interagency group should be formed to develop a strategy for determining whether any inconsistencies between the CCCL and V Zone requirements can be resolved by code changes in the next code cycle (i.e., coordination between FBC, DEP, DEM, FEMA).

Green and Energy Efficient Roofs Subcommittee to Energy Code Workgroup

Following are options that achieved a consensus level of support as proposed code amendments for the 2010 Florida Building Code:

Amend the Florida Building Code, Energy, to provide minimum energy code credits (points) for the use of vegetated roofs.

Additional energy credits may be achieved if documentation is provided to support the additional energy efficiency credits.

Structural, fire, etc. standards should be included in the Code to address building performance issues in addition to energy.

Hurricane Research Advisory Committee—Air Conditioning Equipment and Appliance Wind Resistance
2010 Florida Building Code amendment clarifications:

State explicitly that AC equipment and appliances must themselves be capable of resisting design wind loads without coming apart.

Hurricane Resistance Research Update

The Commission voted unanimously that current year funding (FY 2009/2010) be directed to supporting studies to characterize the wind field on roofs and to leveraging funding for roof systems related research provided by federal organizations including FEMA/DHS, NOAA/Sea Grant and RCMP/DEM, and to continue funding post-hurricane buildings investigation research on a contingency basis.

The Commission previously voted to support DCA funding research projects that leverage the funding of other agencies for projects that support resolution of Florida hurricane related building failures.

Summary of Hurricane Resistance Research:

Research was begun on roof coverings and components during 2008-2009 in response in part to the Legislature's Hurricane Mitigation (Roofing) Initiative and in part as extension of the Wind-Borne Debris Studies begun in prior years. The studies included construction and testing of large-scale model roof samples at the UF hurricane simulator test facility and testing of soffit components of the roof system. Experimental work also was conducted in wind tunnel test facilities via contract with UF that evaluated wind pressures on roof systems and roof component failure. Results of these tests verified the under-prediction of wind forces at roof edges by the ASCE 7 design standard and demonstrated the acceleration nature of roof cladding failures.

In 2009-2010 the Commission sponsored roof systems research that leveraged larger sources of funding at UF. Commission resources provided wind tunnel tests to determine large scale wind simulator design characteristics and begin test equipment construction. This project leverages larger resources from Florida State University and Oak Ridge National Laboratory to begin roof system evaluations with shingle systems. A small source of funds also went to supplement research and testing of closed cell foam adhesive systems for increasing roof diaphragm resistance to wind forces that is funded primarily by a NOAA Sea Grant.

Each project investigates questions identified during the Commission and its committees and workgroups deliberations of systems for improving hurricane performance of roofing systems. It is proposed that this funding track of leveraging outside funded roof research projects that answer fundamental building construction questions be continued in 2010-2011. Roof research would continue to look at shingle system evaluation and improvement, innovative roof deck strength enhancement systems and innovative roof covering system wind performance. The goal to be ensuring technologies being introduced into the Florida market are appropriately evaluated for their application to this high wind region and ultimately establishing standards for uniform evaluation of different manufacturers' systems.

The study of roof component and cladding and roof attached structures and equipment must be conducted by various hurricane wind effects simulation methods. The beginning point of any such simulation studies is accurate characterization of the wind field and its effects. Then simulation models can be constructed to test various components and attachments. Research conducted in response to the 2004 and 2005 hurricanes has been directed primarily to window and wall components and cladding. Work was begun last year on roof systems. Current year funding will be directed to supporting studies to characterize the wind field on roofs and to leveraging funding for roof systems related research provided by federal organizations including FEMA/DHS, NOAA/Sea Grant and RCMP/DEM.

The DCA has spending authority identified in the legislature approved budget for hurricane related research in FY 2009-2010 that comes from fees collected by DBPR that are transferred to DCA for research and from building permit surcharge fees. However, it anticipates encumbering just half the spending authority this year dependent upon the status of fee collections by next spring.

The Commission previously voted to support DCA funding research projects that leverage the funding of other agencies for projects that support resolution of Florida hurricane related building failures.

Project Facilitation

The project is being facilitated by Jeff Blair from the FCRC Consensus Center at Florida State University. Information at: <http://consensus.fsu.edu/>



Project Web Page

Information on the project, including recommendations, agenda packets, meeting reports, and related documents may be found in downloadable formats at the project web page below:

<http://consensus.fsu.edu/FBC/hrac.html>

APPENDIX C

FLORIDA ENERGY CODE WORKGROUP

A graphic with a blue background and a sunburst effect on the left side. The text "2010 Florida Energy Code Workgroup" is written in large, bold, black font.

2010 Florida Energy Code Workgroup

Governor Crist directed the Commission to increase building energy efficiency requirements by 15% in his July 2007 Executive Order 127. In addition, the 2008 Legislature through passage of The Energy Act of 2008 created a suite of energy related assignments for the Building Commission. The Energy Code provisions were a major focus of the Commission during 2008, and the Commission increased the thermal efficiency requirements for the Florida Energy Code by 15% and integrated the enhanced requirements into the 2007 Florida Building Code. The Commission reviewed energy related code amendments adopted in the 2007 Florida Building Code Update to determine their cumulative level of increased efficiency, and adopted additional amendments required to achieve Governor Crist's directive of 15% increased efficiency. During 2008 the Energy Code was amended by administrative rule and then the revised Energy Code was adopted into the 2007 Florida Building Code during the 2008 "glitch" cycle concurrently with the March 1, 2009 effective date for the 2007 Florida Building Code. Working with stakeholders using consensus-building workgroups, the Commission was able to achieve the 15% increase in efficiency in buildings and implement code amendments that are efficient, consistent, understandable and enforceable for the full spectrum of Energy Code users. The Commission's Energy Code Workgroup will develop recommendations regarding energy conservation measures for increasing efficiency requirements in the 2010 FBC by 20% as required by law.

Florida Energy Code Workgroup Consensus Recommendations

The Florida Energy Code Workgroup developed a energy efficiency cost-effectiveness tests for residential code consensus recommendations {adopted by Commission}; energy efficiency cost-effectiveness tests for commercial code consensus recommendations {adopted by Commission}; a definition of "consumer" (applies to both residential and commercial") {adopted by Commission}; energy conservation measures for replacement of air conditioning equipment recommendations [proposed code amendment(s) for 2010 Update]; a strategic plan for increased efficiency requirements required by law for future FBC editions {adopted by Commission}; specific building options to achieve energy efficiency improvements recommendations [proposed code amendment(s) for 2010 Update]; design criteria for energy efficient pools recommendations (Pool Efficiency Subcommittee) [proposed code amendment(s) for 2010 Update]; and, proposed requirements for green roofs recognition in the Florida Building Code (Green and Energy Efficient Roofs Subcommittee) [proposed code amendment(s) for 2010 Update].

Recommendations Not Included in Commission's Report to 2010 Legislature

Specific Building Options To Achieve Energy Efficiency Improvements

Section 553.9061 (2) The Florida Building Commission shall identify within code support and compliance documentation the specific building options and elements available to meet the energy performance goals established in subsection (1). Energy-efficiency performance options and elements include, but are not limited to: (a) Solar water heating. (b) Energy-efficient appliances. (c) Energy-efficient windows, doors, and skylights. (d) Low solar-absorption roofs, also known as "cool roofs." (e) Enhanced ceiling and wall insulation. (f) Reduced-leak duct systems. (g) Programmable thermostats. (h) Energy-efficient lighting systems.

The Commission evaluated the following energy efficiency performance options and elements and determined as follows:

The following software is capable of simulating the performance of the technology, and energy allowances for the technology should be included in the Code:
• Energy-efficient appliances
• Energy-efficient lighting systems
• Solar photovoltaic systems
The following technology is already accounted for in the Code:
• Solar water heating
• Energy-efficient windows, doors, and skylights
• Low solar-absorption roofs, also known as "cool roofs"
• Enhanced ceiling and wall insulation
• Reduced-leak duct systems
• Programmable thermostats
• Water source, geo-thermal HVAC systems
• Induction lighting and new lighting technologies
• Passive energy efficient design and day-lighting
• Building envelop efficiencies
The following technology and/or software is not ready for use in the Code:
• Variable refrigerant flow mechanical systems
• Data center efficiencies
• Under-floor duct systems
• HVAC System Zoning

The Florida Building Commission is implementing these provisions through adoption of the 2010 edition of the Florida Building Code.

Options For Design Criteria For Energy Efficient Pools

The Energy Act of 2008 (HB 7135) directs adoption of pool pump efficiencies in the 2010 FBC. During discussions with the Florida Spa and Pool Association regarding energy efficiency requirements for pool pumps members suggested improved efficiency could be achieved through criteria for pool hydronic system design.

This task was evaluated by the Pool Efficiency Subcommittee to the Energy Code Workgroup. The following issues were evaluated by the Subcommittee:

Pool pump standards; Pool plumbing system design; Performance and prescriptive compliance paths for pools; Credits for alternative energy sources for pool heating, lighting and pumping.

The Florida Energy Code Workgroup voted to adopt the Pool Efficiency Subcommittee to the Energy Code Workgroup's recommendation that APSP-15 (Standard for Energy Efficiency for Residential In-ground Swimming Pools) as revised by the Subcommittee should serve as the draft Code language for inclusion in the Florida Building Code, Energy Volume.

The Florida Energy Code Workgroup voted to adopt the Pool Efficiency Subcommittee to the Energy Code Workgroup's recommendation that the Florida Building Code, Energy, shall provide energy code credits (points) for PV and alternative/renewable technologies that reduce energy consumption for pool pump motors.

The Florida Energy Code Workgroup voted to adopt the Pool Efficiency Subcommittee to the Energy Code Workgroup's recommendation that APSP-14 (Portable Spa Energy Efficiency Standard) is an appliance standard and therefore not within the scope of the Florida Building Code. The Florida Building Commission is implementing these provisions through adoption of the 2010 edition of the Florida Building Code.

Evaluate Requirements For Green Roofs Recognition In Florida Building Code

This task was evaluated by the Green and Energy Efficient Roofs Subcommittee to the Florida Energy Code Workgroup. The following issues were evaluated by the Subcommittee:

Green roof energy performance, structural and water protection characteristics in Florida environment; Cool roof options and energy performance in Florida environment; Alternative roof systems and components effect on roof/ ceiling heating cooling loads and calculations for Florida environment (solar pool heater and DHW thermal arrays, pv arrays, pv roof tiles, mass and metal roof covering, evaporatively cooled, radiant barrier systems).

The Florida Energy Code Workgroup voted to adopt the Green and Energy Efficient Roofs Subcommittee to the Florida Energy Code Workgroup's recommendation that the Florida Building Code, Energy, shall be amended to provide minimum energy code credits (points) for the use of vegetative roofs. Additional energy credits may be achieved if documentation is provided to support the additional energy efficiency credits. The Florida Building Commission is implementing these provisions through adoption of the 2010 edition of the Florida Building Code.

553.9061 Scheduled increases in thermal efficiency standards.--

(1) The purpose of this section is to establish a schedule of increases in the energy performance of buildings subject to the Florida Energy Efficiency Code for Building Construction. The Florida Building Commission shall:

- (a) Include the necessary provisions by the 2010 edition of the Florida Energy Efficiency Code for Building Construction to increase the energy performance of new buildings by at least 20 percent as compared to the energy efficiency provisions of the 2007 Florida Building Code adopted October 31, 2007.
- (b) Increase energy efficiency requirements by the 2013 edition of the Florida Energy Efficiency Code for Building Construction by at least 30 percent as compared to the energy efficiency provisions of the 2007 Florida Building Code adopted October 31, 2007.
- (c) Increase energy efficiency requirements by the 2016 edition of the Florida Energy Efficiency Code for Building Construction by at least 40 percent as compared to the energy efficiency provisions of the 2007 Florida Building Code adopted October 31, 2007.
- (d) Increase energy efficiency requirements by the 2019 edition of the Florida Energy Efficiency Code for Building Construction by at least 50 percent as compared to the energy efficiency provisions of the 2007 Florida Building Code adopted October 31, 2007.

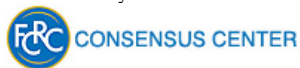
(2) The Florida Building Commission shall identify within code support and compliance documentation the specific building options and elements available to meet the energy performance goals established in subsection (1). Energy efficiency performance options and elements include, but are not limited to:

- (a) Solar water heating.
- (b) Energy-efficient appliances.
- (c) Energy-efficient windows, doors, and skylights.
- (d) Low solar-absorption roofs, also known as "cool roofs."
- (e) Enhanced ceiling and wall insulation.
- (f) Reduced-leak duct systems.
- (g) Programmable thermostats.
- (h) Energy-efficient lighting systems.

(3) The Florida Building Commission shall, prior to implementing the goals established in subsection (1), adopt by rule and implement a cost-effectiveness test for proposed increases in energy efficiency. The cost-effectiveness test shall measure cost-effectiveness and shall ensure that energy efficiency increases result in a positive net financial impact.

Project Facilitation

The project was facilitated by Jeff Blair from the FCRC Consensus Center at Florida State University. Information at: <http://consensus.fsu.edu/>



Project Web Page

Information on the project, including recommendations, agenda packets, meeting reports, and related documents may be found in downloadable formats at the project web page below:

<http://consensus.fsu.edu/FBC/2010-Florida-Energy-Code.html>

APPENDIX D

GREEN AND ENERGY EFFICIENT ROOFS SUBCOMMITTEE

Evaluate Requirements For Green Roofs Recognition In the Florida Building Code

The Energy Act of 2008 (HB 7135) directs the Commission to include, as a minimum, certain technologies for achieving enhanced building efficiency targets established by the Act in the Florida Energy Code. Energy efficient roofs are one category. The Building Code act of 2008 (HB 697) directs the Commission to facilitate and promote the use of certain renewable energy technologies. This task will be evaluated by the Commission's Green and Energy Efficient Roofs Subcommittee to the Florida Energy Code Workgroup. The Subcommittee is charged with evaluating the inclusion of energy efficient roofs in the Code, by evaluating what is currently in the Code, and other technologies that are developed and code ready but not yet in the Florida Building Code, Energy Conservation.

Adding energy code credits for vegetative roofs will be proposed as draft code language for the Florida Building Code, Energy Conservation. FSEC will provide research and recommendations as needed to implement this recommendation.

At the February 2010 meeting the Subcommittee voted unanimously to recommend that the Florida Building Code, Energy, be amended to provide minimum energy code credits (points) for the use of vegetated roofs. Additional energy credits may be achieved if documentation is provided to support the additional energy efficiency credits.

Following is the proposed code amendment to implement the Subcommittee's recommendations:

506.3.3 Requirements specific to credit options. Credit may be claimed in the compliance calculation for technologies that meet the criteria for various options specified below.

506.3.3.1 Vegetative roofs. Credit may be claimed in whole building performance method calculations for the area of a proposed building's roof that is covered with a vegetative roof with a minimum growth media depth of 4 inches. The credit shall provide a 45% reduction in the heating and cooling roof heat flux rates for the roof area covered with the vegetative roof.

The Florida Building Commission is implementing these provisions through adoption of the 2010 edition of the Florida Building Code.

Project Facilitation

The project was facilitated by Jeff Blair from the FCRC Consensus Center at Florida State University. Information at: <http://consensus.fsu.edu/>



Project Webpage

Information on the project, including agenda packets, meeting reports, and related documents may be found in downloadable formats at the project webpage below:

<http://consensus.fsu.edu/FBC/Green-Roofs-Subcommittee.html>

APPENDIX E

POOL ENERGY EFFICIENCY SUBCOMMITTEE

Pool Efficiency Subcommittee to Florida Energy Code Workgroup

The Energy act of 2008 (HB 7135) directs adoption of pool pump efficiencies in the 2010 Code. During discussions with the Florida Spa and Pool Association regarding energy efficiency requirements for pool pumps members suggested improved efficiency could be achieved through criteria for pool hydronic system design. This initiative is being conducted in coordination with the national industry and other state's initiatives currently underway.

The Commission convened a Pool Efficiency Subcommittee to the Florida Energy Code Workgroup to provide recommendations to the Florida Energy Code Workgroup regarding the pool equipment efficiencies subtask for pool pumps and heaters efficiencies and hydronic systems standards.

The Subcommittee evaluated options regarding proposed code amendments for key topical issue areas as follows: pool pump standards; pool plumbing system design; performance and prescriptive compliance paths for pools; and, credits for alternative energy sources for pool heating, lighting and pumping.

Following are the highlights of provisions adopted by Energy Code Workgroup and recommended to the Florida Building Commission:

- Electric resistance heating is prohibited.
- Adoption of APSP-15 (Standard for Energy Efficiency for Residential In-ground Swimming Pools) as revised by the Subcommittee to serve as the draft Code language for inclusion in the Florida Building Code, Energy Volume.
- The Florida Building Code, Energy, shall provide energy code credits (points) for PV and alternative/renewable technologies that reduce energy consumption for pool pump motors.
- APSP-14 (Portable Spa Energy Efficiency Standard) is an appliance standard and therefore not within the scope of the Florida Building Code.

The Florida Building Commission is implementing these provisions through adoption of the 2010 edition of **the** Florida Building Code.

Next Steps

Once additional information is available from the APSP Energy Standard writing committees and the California Title 24 process, members will evaluate the results for possible inclusion in the Florida Building Code. The APSP Energy Standard writing committees (one for pools, one for spas) have set out their objectives into three phases with the timeline as follows:

- Phase One: complete a model code, APSP Energy Standard committees noted that this is being done in cooperation with the FBC Pool Efficiency Subcommittee, and they will continue to provide all their language/documentation.
- Phase two: complete the APSP 14 and 15 pool and spa energy standards, goal is to have

- language ready for canvas by the end of 2010.
- Phase Three: an equipment scoring system (a rating system based on the national Energy Star Program that would score equipment categories such as pumps), probably completed by 2011.

Project Facilitation

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Project Web Page

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<http://consensus.fsu.edu/FBC/Pool-Efficiency.html>

APPENDIX F

FLORIDA ACCESSIBILITY CODE WORKGROUP

The federal agency responsible for updating the ADA Accessibility Guidelines (ADAAG) completed the current update in 2004. Since that time the Department of Justice, which is responsible for adopting standards for compliance of buildings with Title II (state and local government facilities) and Title III (privately owned facilities), has been in the process of adopting the 2004 ADAAG and modifying additional standards, which together constitute the ADA Standards for Accessible Design (SAD). The DOJ has just completed the final step in the rule update process, publishing of its updated rules (Rules 28 CFR 35 and 28 CFR 36) in the September 15, 2010 Federal Register.

The new federal standards become mandatory March 15, 2012 and the Florida Accessibility Code must be updated to the new federal standards by that date in order to keep building owners from having to comply with two different standards. The Florida Legislature directed by law that the Florida Accessibility Code and laws must be updated by the Commission to maintain its federal certification as substantially equivalent to the Federal Standards for Accessible Design so designers and owners would have non-conflicting requirements and owners would have liability protection for violations of the architectural standards for their buildings.

It should be noted that if Florida was starting from ground zero, the State would be under great pressure to conform the Florida Accessibility Code with the newly published SAD in the required timelines. However, recognizing that the DOJ was in the process of finalizing its rules updating the Standards for Accessible Design, Commissioner Gross, Accessibility TAC chair, asked the Chairman in 2008 to establish a workgroup to begin modifying the Florida Accessibility Code so the draft would be ready in advance of the deadline for the updated SAD. The Accessibility Code Workgroup starting meeting in February of 2009 and at the June 2010 Commission meeting completed work on a Draft of the Integration of Florida Specific Requirements with the New DOJ Standards. They are in the process now of conforming the Draft Integration document with the final published DOJ rule.

Florida law adopts the federal ADA Standards for Accessible Design as the basis for the Accessibility Code and establishes some additional requirements. It references specific sections of the federal Standards so at minimum, the section references in the law should be changed to correspond to section numbers in the new version of the federal Standards. It may also be necessary to modify some requirements in Florida law that were more stringent or at least as stringent as the first version of the federal Standards but need to be evaluated based on the new federal Standards.

In addition, the draft code based on the new federal Standards and any potential changes to current legislated policy in Florida law need to be vetted with groups representing persons with disabilities and with building owners and designers. The Commission conducted its first workshop Monday to explain the new draft code to the public and to solicit comments on the draft and current policies in Florida law. This moves us closer to our end goal of having the Florida Code certified to the new Federal standards, but there is still much to be done to ensure the Florida code is updated before the new federal Standards become mandatory in March 2012.

The Commission is requesting statutory changes necessary to update the Accessibility Code to maintain its federal certification as follows:

The Commission recommends amendments to Part II, Chapter 553, Florida Statutes, essential to conforming the law to the references in the 2010 ADA Standards for Accessible Design and to ensuring the equivalency of requirements necessary to maintain federal certification of the Florida Accessibility Code as required by current law.

Project Phases Overview

The process for developing the new Florida Accessibility Code for Building Construction is comprised of three phases.

Phase I of the project focused on the integration of Florida Specific Requirements into the Proposed DOJ ADA Standards, June 2008, and was divided into major tasks as follows:

Task 1: Integration of Florida standards established in s.553.501-s.553.513, F.S. into sections of the 2004 ADAAG that have a one for one parallel section in the 1994 ADA Standards.

Task 2: Deciding what to do with Florida standards that are in sections/subsections of the Florida Accessibility Code for Building Construction (1994 ADA Standards with Florida amendments) that do not have a one for one parallel section in the 2004 ADAAG.

Task 3: Integration of Florida standards into new sections in the 2004 ADAAG that have no parallel in the current Florida Accessibility Code (e.g., recreational facilities).

Task 4: Revising the draft Florida Accessibility Code developed from completion of Tasks 1 – 3 (above) for changes made by DOJ in its final rule.

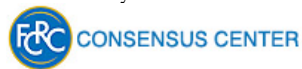
Phase II of the project focused on identifying changes to Florida law necessary to update references to section numbers in the 2010 ADA Standards and to adopt and clarify Florida requirements to maintain current policies and prepare for code certification by DOJ.

Phase III A of the project focused on identifying changes to Florida law necessary to conform the FACBC with the DOJ Rules 28 CFR 35 and 28 CFR 36 as Revised September 15, 2010.

Phase III B of the project will focus on reviewing all of the current Florida Specific Requirements and recommending whether there should be any revisions or clarifications.

Project Facilitation

The project is being facilitated by Jeff Blair from the FCRC Consensus Center at Florida State University. Information at: <http://consensus.fsu.edu/>



Project Web Page

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<http://consensus.fsu.edu/FBC/accessibility-code.html>

APPENDIX G

BUILDING CODE SYSTEM ASSESSMENT PROJECT

Triennial Report to the Legislature. Chapter 553.77(1)(b), requires the Commission to make a continual study of the Florida Building Code and related laws and on a triennial basis report findings and recommendations to the Legislature for provisions of law that should be changed. The Commission conducted the first assessment in 2005 and effected changes to the System as a result of the assessment process. 2011 will mark the ten-year anniversary since the Florida Building Code became effective, and the Commission will initiate a comprehensive assessment of the Building Code System with recommendations being developed by the Commission's Building Code System Assessment Ad Hoc Committee. Public input will be a major component of the assessment process and this Survey in addition to multiple public comment opportunities will be an important part of the Commission's analysis of the Building Code System. The Commission's recommendations will be a major component of their Report to the 2012 Legislature.

Chairman Rodriguez appointed an ad hoc committee of Commission members (Building Code System Assessment Ad Hoc Committee) to review the results of the Building Code System assessment survey and develop recommendations for the Commission regarding any proposed changes to the Building Code System. This will be a facilitated consensus-building process and will conclude with recommendations for enhancements to the System submitted to the 2012 Legislature.

Overview of the Building Code System

In 1997, the Governor's Building Codes Study Commission recommended that a single state-wide building code be developed to produce a more effective system for a better Built Environment in Florida. It was determined that in order to be effective, The Building Code System must protect the health, safety and welfare of the citizens of Florida, and in doing so:

1. Be simple to use and clearly understood;
2. Be uniform and consistent in its administration and application;
3. Be affordable; and
5. Promote innovation and new technology.

The Study Commission determined that an effective system must address five key components: the Code, the Commission, code administration, compliance and enforcement, and product evaluation and approval.

The Florida Building Code System is comprised of five essential components. A summary of each follows:

I. The Florida Building Code and the Code Development Process. Historically the promulgation of codes and standards was the responsibility of local jurisdictions. It was determined that Florida's system is "a patchwork of codes and regulations developed, amended, administered and enforced differently by more than 400 local jurisdictions and state agencies with building code responsibilities". A critical component for an effective building code system was to develop and implement a single state-wide code.

The purpose of developing a single state-wide building code was to:

1. Serve as a comprehensive regulatory document to guide decisions aimed at protecting the health, safety and welfare of all of Florida's citizens.
2. Provide uniform standards and requirements through the adoption by reference of applicable national codes and providing exceptions when necessary.
3. Establish the standards and requirements through performance-based and prescriptive based criteria where applicable.
4. Permit and promote innovation and new technology.
5. Require adequate maintenance of buildings and structures, specifically related to code compliance, throughout the State.
6. Eliminate restrictive, obsolete, conflicting and unnecessary construction regulations that tend to increase construction costs unnecessarily or that restrict the use of innovation and new technology.

The new Florida Building Code is a state-wide code implemented in 2001 and updated every three years. The Florida Building Commission developed the Florida Building Code from 1999 through 2001, and is responsible for maintaining the Code through annual interim amendments and a triennial foundation code update.

II. The Commission. The Commission is an appointed representative stakeholder body that develops, amends and updates the Code. The Commission is comprised of members representing each of the key interests in the building code system. The Commission meets every six weeks and in addition to their code development responsibilities, regularly consider petitions for declaratory statements, accessibility waiver requests, the approval of products and entities, and the approval of education courses and course accreditors. The Commission also monitors the building code system and reports to the Legislature annually with their recommendations for changes to statute and law.

III. Local Administration of the Code. The Study Commission recommended, and subsequent legislation maintained, that the Code shall be administered and enforced by local government building and fire officials. The Commission has certain authorities in this respect such as the number and type of required inspections. However, the Commission's main responsibility remains amending the Code, hearing appeals of local building officials decisions, and issuing binding interpretations of any provisions of the Florida Building Code.

IV. Strengthening Compliance and Enforcement. Compliance and enforcement of the Code is a critical component of the system with the Commission's emphasis in this regard is on education and training. The Study Commission determined that in order to have an effective system a clear delineation of each participant's role and accountability for performance must be effected. There should be a formal process to obtain credentials for design, construction, and enforcement professionals with accountability for performance. Opportunities for education and training were seen as necessary for each participant to fulfill their role competently. Although many of the Commission's functions related to education were recently assigned to a legislatively created Education Council, education remains a cornerstone of the building code system. The Commission remains focused on the approval of course accreditors and the courses developed/recommended by approved accreditors.

V. Product Evaluation and Approval. In order to promote innovation and new technologies a product and evaluation system was determined to be the fifth cornerstone of an effective Building Code System. The product approval process should have specific criteria and strong steps to

determine that a product or system is appropriately tested and complies with the Code. Quality control should be performed by independent agencies and testing laboratories which meet stated criteria and are periodically inspected. A quality assurance program was also deemed essential. The Commission adopted a Product Approval System by rule and currently approves products for state approval and product approval entities. Local product approval remains under the purview of the local building official as a part of the building permit approval process.

Additional Key Building Code System Programs are as follows:

A. Building Code Information System. The Building Code Information System (BCIS) was developed in early 2000 to implement the new responsibilities, business practices, and automated systems required by the Florida Building Code. The BCIS is a multi-functional database that provides building professionals, the general public, local governments, and manufacturers with single-point access to the Florida Building Code, Manufactured Building Program, Product Approval System, Prototype Program, local code amendments, declaratory statements, nonbinding opinions, and the interested party list.

Since its initial deployment, significant new functionality has been added to the BCIS in response to new legislation and to accommodate the changing needs of the Commission and DCA. The amount of information now available via the BCIS has more than doubled in the last four years; the number and type of users has correspondingly increased as new needs are addressed. The web site has become more complex and more difficult to locate needed information. As a result, the Department is in the process of updating the BCIS to address the overall accessibility of information contained within the BCIS.

B. Manufactured Buildings Program. Chapter 553, Part I, FS, known as the Manufactured Buildings Act of 1979, governs the design, plans review, construction and inspection of all buildings (excluding mobile homes) manufactured in a facility to ensure compliance with the Florida Building Code. Rule Chapter 9B-1 FAC was subsequently adopted by the Commission to adequately govern the program and to ensure that manufacturers and independent Third Party Inspection Agencies maintain performance standards. Inspections agencies qualified under this program and serving as agents for the State, provide construction plan reviews and in-plant inspections. All manufacturers and Third Party Agencies are monitored at least once per year to ensure quality assurance and adequate code enforcement. Manufactured Buildings approved under this program are exempted from local code enforcement agency plan review except for provisions of the code relating to erection, assembly or construction at the site.

C. Prototype Buildings Program. Chapter 553.77(5) F.S., Rule 9B-74 Prototype Plan Review and Approval program. The plans review program was developed by the Florida Building Commission to address public and private entities such as buildings and structures that could be replicated throughout the state. This program was conducted by an Administrator delegated by the Commission, this Administrator had qualifications to review plan compliance with the Florida Building Code and certified per the requirements of Chapter 468, F.S. The program Administrator contracted with qualified plans examiners to review Prototype plans for Code compliance with the Florida Building Code and Florida Fire Prevention Code, these plans examiners were certified in Chapter 468 or 633 F.S., or both Chapters 468 and 633, F.S. The prototype plans were reviewed for completeness in a timely manner compliant with Chapter 120 F.S.. Each approved Prototype plan was issued an identification tracking number, this number was used to track replicated plans to local governments. The Administrator regularly attended the Florida Building Commission and reported

on the progress of the Prototype Buildings Program. The Program was suspended due to the lack of use by industry, and the administrator's inability to generate sufficient revenue. The Commission was unable to find another entity willing to administer the Program under a no-cost contract (no cost to the State) and decided to suspend the Program until the situation improves.

D. Alternative Plans Review and Inspections—Private Provider System for Plans Review and Inspection Functions. §553.791, Florida Statutes, was created in 2002 to allow property owners to utilize the services of a private interest to perform plan review and/or inspection services in lieu of, but subject to review by the local permitting authority. The legislation creating the process also directed the Commission to review the system and report the results to the legislature which was accomplished in the Commission's 03-04 report. In addition, the Commission as a result of a consensus stakeholder process convened in 2004, proposed, additional refinements to the system in the Commission's 04-05 report. In 2005 the Florida Legislature adopted a package of refinement to the system which were signed into law in the summer of 2005.

E. Interaction and Coordination Between the Florida Building Code and Other State Based Building Construction Regulations. The Florida Building Commission is committed to coordinating with other State agencies charged with implementing and enforcing their respective State based building construction regulations. The Commission only has authority to amend the Florida Building Code and respective rules, and other state agencies have similar authority for their respective rules and regulations. The Commission has worked closely with other state agencies to ensure consistency and coordination between the various codes and rules.

F. Enforcement of Other State Based Building Construction Regulations at the Local Level. Enforcement of state agency regulations occurs primarily at the local level under the jurisdiction of the respective agency's local officials. Regulations should be clear and consistent across the State, and coordination is required between the Florida Building Code's and other agency's requirements.

Project Facilitation

The project is being facilitated by Jeff Blair from the FCRC Consensus Center at Florida State University. Information at: <http://consensus.fsu.edu/>



Project Webpage

Information on the project, including agenda packets, meeting reports, and related documents may be found in downloadable formats at the project webpage below:

<http://consensus.fsu.edu/FBC/bcsa.html>

APPENDIX H

SEPTIC SYSTEM SIZING WORKGROUP

Overview

The Commission convened a facilitated joint workgroup process with the Florida Department of Health (DOH) to develop recommendations regarding requirements for the sizing of septic systems. The purpose of the Workgroup is to develop recommendations regarding an acceptable definition of "Bedrooms" used for the sizing of septic systems. The definition should work from the Florida Building Code (FBC) and Department of Health (DOH) perspectives. This initiative is a cooperative effort with the Florida Department of Health directed to improving the definition used by the DOH rule for septic system sizing. The Workgroup developed consensus recommendation that were adopted by the Commission. However, the proposal was not approved by the Department of Health's Technical Review and Advisory Panel (TRAP).

As a result, at the December 2009 meeting the Commission voted unanimously that the Commission supports the consensus recommendation for sizing residential septic systems developed by the Septic System Sizing Workgroup (Interagency Workgroup: FBC and DOH), and further requests that the Florida Legislature grant jurisdictional authority to the Florida Building Commission to implement the recommendation by integration into Chapter 26-Section P2602.1 of the most current edition of the Residential Florida Building Code.

Subsequently, the Department of Health's (DOH) Technical Review and Advisory Panel (TRAP) met to consider the DOH's new proposal replacing the "room" sizing methodology with a bedroom definition methodology, and to address system sizing of large homes by flattening out the curve of gallons per day (GPD) for larger homes by reducing the gallons per day for each additional bedroom after 4 bedrooms or each additional 750 square feet of building area or fraction thereof, from 100 to 60 per dwelling unit. The panel motioned to adopt the lower flow rates for larger homes, provided comments and tabled the bedroom definition proposal for further review.

The lower flow rates for larger homes issue has been reviewed by the Variance Review and Advisory Committee (VRAC) and returned to the TRAP with comments. The issue will be re-heard at the next TRAP meeting scheduled for July 15, 2010. The lower flow rates for larger homes issue will be ready for rule making if approved by TRAP at their next meeting.

As a result of the TRAP's actions the Commission voted to send a letter to the Department of Health's (DOH) Technical Review and Advisory Panel (TRAP) expressing the Commission's concern that the proposed rule language does not adequately address the concerns and recommendations developed by the Commission's and Department of Health's joint committee (Septic System Sizing Workgroup) and urging them to revise the rule consistent with the Workgroup's recommendation.

Project Facilitation

The project was facilitated by Jeff Blair from the FCRC Consensus Center at Florida State University. Information at: <http://consensus.fsu.edu/>

**Project Web Page**

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