

# FLORIDA BUILDING COMMISSION

Report and Recommendations to the 2017 Legislature for the Reporting Period July 1, 2015 – June 30, 2016

# TABLE OF CONTENTS

TABLE OF CONTENTS1TABLE OF APPENDICES1		
I. EXECUTIVE SUMMARY AND RECOMMENDATIONS	. 2	
II. INTRODUCTION	. 7	
III. COMMISSION REPRESENTATION AND PROCESS	. 8	
IV. LEGISLATIVE ASSIGNMENTS	. 9	
V. FLORIDA BUILDING CODE	14	
VI. ENERGY EFFICIENCY INITIATIVES	17	
VII. RESEARCH INITIATIVES AND CODE CHANGES	18	
VIII. PRODUCT APPROVAL	20	
IX. Building Code Training Program	23	
X. FLORIDA BUILDING CODE SYSTEM UPDATES AND COMMISSION ACTIONS	25	

TAI	TABLE OF APPENDICES 28		
XI.	Appendices	40	
A.	Key to Common Acronyms	.29	
В.	COMMISSION MILESTONES FOR FY 2015 - 2016	.30	
C.	COMMISSION MEETING SUMMARY REPORTS FOR FY 2015 - 2016	.32	
D.	CODE COORDINATION AND IMPLEMENTATION PROJECT	.35	
Е.	POOL ELECTRICAL SAFETY PROJECT	.38	

# Florida Building Commission Report and Recommendations to the 2017 Legislature



## I. EXECUTIVE SUMMARY AND RECOMMENDATIONS

**OVERVIEW.** The primary focus of the Florida Building Commission during the reporting period of July 1, 2015 – June 30, 2016 (fiscal year 2015 – 2016) was initiating the development of the *Florida Building Code Sixth Edition (2017)*. The Commission's Technical Advisory Committees (TACs) met in April of 2016 and reviewed and developed recommendations on 532 proposed Code modifications to the adopted Code. The TACs will review public comments on the TAC's recommendations on July 18-21, 2016, and the Commission is scheduled to conduct a rule development workshop on the TAC's recommendations regarding proposed code amendments December 13, 2016, and to conduct a final rule adoption hearing on June 8, 2017. The Florida Building Code 6<sup>th</sup> Edition's adopted effective date is December 31, 2017.

During the reporting period the Commission completed the development and adoption of the  $5^{th}$  *Edition of the Florida Building Code (2014)* with an effective date of Midnight, June 30, 2015. The  $5^{th}$  Edition maintained the efficiency of the Florida Energy Code and merged with the format of the national model energy code, major components of the  $5^{th}$  *Edition of the Florida Building Code (2014)* include enhancements to the wind, water intrusion and hurricane protection provisions of the Florida Building Code.

In addition, the Commission is in the process of initiating rulemaking for the Building Code and Product Approval rules to implement the legislative assignments from the 2016 Florida Legislature contained in HB 535 and SB 1602.

Entering its eighteenth year, the Commission is focused primarily on the maintenance of existing processes and programs, while continuing to work with stakeholders to enhance the effectiveness of the Florida Building Code System by continuously monitoring, evaluating and refining the System.

**PROCESS.** During the reporting period the Commission continued their focus on consensusbuilding efforts regarding the implementation of Commission policy, with extensive input from building construction industry stakeholders and interests affected by Commission policy. Chairman Richard Browdy encouraged and led the Commission's consensus-building efforts supported by DBPR.

**RESEARCH—SCIENCE BASED HURRICANE AND CODE PROTECTIONS.** The Florida Building Commission has continuously assessed building systems and component failures identified after major storms since its inception in 1998, and in response has funded research to strengthen the Code's effectiveness against wind and water intrusion based on these assessments. Assessments subsequent to the implementation of the Florida Building Code indicate that the research based design wind speeds required by the Code's enhancements were adequate, and buildings built to the new Florida Building Code did not experience nearly as severe damage as older buildings.

The Code establishes minimum requirements to protect newly constructed buildings 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. 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 be up-to-date with current national engineering and product standards within the Code. As with each subsequent version, the 5<sup>th</sup> Edition Florida Building Code (2014) maintains this commitment, and the Florida Building Code Sixth Edition (2017) will maintain the commitment.

The Commission has been funding hurricane resistance research based on legislatively approved spending authority since the formation of the Commission's Hurricane Research Advisory Committee in January of 2005. The Commission currently funds research projects pertaining to hurricane resistance and other Code related topical areas to ensure the development of code amendments that make Florida's structures, and the products that comprise them, more resistant.

During the reporting period—based on recommendations from the Commission's technical advisory committees (TACs)—the Commission approved the funding of research projects for fiscal year 2015-2016 as recommended by the TAC chairs on the basis that the approved projects met the three criteria for funding: 1.) definition of research and/or technical enrichment, 2.) urgency/immediacy, and needed for the 2017 FBC and/or legislative directive, and 3.) funding available (full or partial); and are approved for funding based on the TAC chairs' recommendations, and staff administering and overseeing the research, and negotiating scoping and contracting as appropriate.

As a result of evaluating proposed research projects in the context of the key evaluation criteria, the Commission sponsored important research projects on the following topics: evaluating the economic impact of the delayed code provisions; estimating the cost impact of the 2015 International Building Codes changes; evaluating an approved method for achieving 1 hr. fire resistance rating under side of projections; continuation of the investigation of corrosion of fasteners for both roofing and screen enclosures; documenting field cases of attics sealed with spray foam insulation; and, a swimming pool electrocution study.

**CODE UPDATE.** Florida law requires the Commission to update the Florida Building Code every three years, and the *Florida Building Code Sixth Edition (2017)* represents the fifth update 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. At the April 2015 meeting the Commission initiated the 2017 Code Update process by voting to adopt the 2015 International

Codes and 2014 NEC as foundation codes for the *Florida Building Code, 6<sup>th</sup> Edition (2017)*. In response to stakeholder requests to provide at least six months between the effective date of the 5<sup>th</sup> Edition of the Code (2014) and the closing date of when modifications must be proposed for the 6<sup>th</sup> Edition of the Code (2017), the Commission voted to extend the period of time for the public to propose modifications to the 2015 I Codes and the Preliminary Supplement to six months. At the August 2015 meeting the Commission voted to approve the updated workplan for development of the *Florida Building Code, 6<sup>th</sup> Edition (2017)* opting for rulemaking via an integrated Code, and conducting the Glitch amendment process, if needed, after the 2017 Code becomes effective. The adopted effective date for the 6<sup>th</sup> Edition of the Code is December 31, 2017.

In response to 2016 legislation the Commission has initiated rulemaking to amend Rule 61G20-1.001 (Florida Building Code) to implement the Code changes prescribed in HB 535 and SB 1602.

The Code update process includes integration of the Florida Energy and Conservation Code (FECC) and the International Energy Conservation Code (IECC) maintaining the efficiencies of the FECC. The Commission is in the process of conducting rule development to maintain the requirement for local governments to submit forms submitted to certify compliance with the Energy Code through adoption of a separate rule from the Building Code Rule, ensuring that important energy data continues to be available for research purposes.

In addition, the Commission conducted a public hearing in conjunction with the December 2015 Commission meeting for the purpose of receiving public input regarding the recommendations from the report titled: *Florida Accessibility Code for Building Construction Review and Recommendations*. During the December meeting the Commission voted to accept the report and the report from the public meeting.

Finally, using its authority granted in 2014 to interpret the Florida Accessibility Code for Building Construction (FACBC), the Commission to date has issued two interpretations regarding petitions for declaratory statements on the Accessibility Code.

**PRODUCT APPROVAL.** The product approval system is an internet-based system operated and administered by the Department of Business and Professional Regulation. During the reporting period the Commission voted to move the Product Approval application submittal completion deadline back by one week to the current preliminary review deadline date for the product approval application cycle, providing additional time for applicants to resolve any issues with their product approval applications. Since January 1, 2014 DBPR staff has been administering the Product Approval System, and stakeholders report a high level of satisfaction with DBPR staff's administration of the System.

The Product Approval system efficiently processes hundreds of applications monthly. The Commission's Product Approval Program Oversight Committee (POC) convenes prior to 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 24,482 product applications and 109,313 products for statewide use within limitations established by the approvals. In addition, the Commission has approved 121 entities, 4,199 product applications and 17,611 products for statewide use to the 2014 Code.

The Commission is in the process of amending Rule 61G20-3.008 (Product Approval Entities), to conform with an amendment to Section 553.842, F.S., by adding Underwriters Laboratories, LLC, and Intertek Testing Services NA, Inc. to the approved list of evaluation entities.

**EDUCATION.** 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 and stakeholders, the Commission is working to ensure the accountability and efficacy of the Education System. During the reporting period the Commission continued to efficiently review and approve course and accreditor applications.

CODE COORDINATION AND IMPLEMENTATION WORKGROUP PROJECT. At the October 2014 meeting the Commission voted unanimously to convene a Code Coordination and Implementation Workgroup to review and evaluate all of the regulatory requirements currently impacting the code development process (code update process), and to propose a legislative path to a more efficacious timetable for the implementation of the Florida Building Code update process. The goal of the project was to ensure that any recommendations for statutory changes, once approved by the full Commission, would be delivered to the 2016 Florida Legislature. The Workgroup met four times starting in January of 2015 and concluding in August of 2015. The Workgroup identified, evaluated and consensus ranked a full range of options for each of the topical issues under consideration, and enjoyed extensive public participation throughout the process. The seven overarching key topics evaluated by the Workgroup were as follows: code printing and publication; errata; the Code amendment process; Florida specific amendments; statutory timeline requirements; adoption of standards and codes by reference; and, Commission participation with the ICC code development process. The Workgroup concluded their work at the August 18 – 19, 2015 meeting and developed a package of consensus recommendations for submittal to the Commission that were adopted unanimously by the Workgroup and approved unanimously by the Commission at their October 15, 2015 meeting. The Workgroup's recommendations for legislative changes were supported by industry stakeholders who agreed to take the lead on any needed legislation.

**SWIMMING POOL ELECTRICAL SAFETY PROJECT.** The 2015 Florida Legislature identified the need to evaluate the electrical aspects of swimming pool safety focusing on minimizing electrocution risks linked to swimming pools. In response, the Florida Building Commission approved a research project (technical enrichment) for a *Swimming Pool Electrocution Prevention Study*. In order to implement the project the Commission convened a process to develop recommendations for pool safety focused on the prevention of electrocution in swimming pools. The Commission determined that the project would be evaluated and recommendations developed by convening concurrent meetings of the Commission's Swimming Pool Technical Advisory Committee and Electrical Technical Advisory Committee (TAC). The objective of the project was to evaluate key topical issues, and as appropriate develop code amendment proposals designed to minimize electrocution risks linked to swimming pools.

In response to the Commission's direction the Swimming Pool TAC and Electrical TAC agreed that the initial Phase I scope of the project was to determine whether to recommend a proposed code amendment that would require low voltage lighting in residential swimming pools for new construction. Once the Swimming Pool TAC and the Electrical TAC concluded their evaluation of low voltage lighting they would then evaluate additional project relevant topics in Phase II of the project: specifically bonding, grounding, retrofitting of existing pools, and education. The TACs met for the second time on October 14, 2015 and developed a consensus package of recommendations for both phases of the project (Phase I and Phase II). At their October 15, 2015 meeting the Commission voted unanimously to adopt the Swimming Pool TAC's and Electrical TAC'c swimming pool safety consensus package of recommendations focused on the prevention of electrocution in swimming pools. The Code amendments were proposed for inclusion in the *Florida Building Code, 6<sup>th</sup> Edition (2017)* and currently under evaluation by the relevant TACs.

Subsequent to the first two phases of the project, in a concurrent meeting conducted during the TACs' review of proposed Code amendments for the 2017 Code Update Process the Swimming Pool and the Electrical TACs discussed the Calder Sloan Swimming Pool Electrical-Safety Task Force that was established within the Florida Building Commission by the 2016 Florida Legislature and decided that the two TACs should meet concurrently to further evaluate the issue. The TACs expressed the desire to consider any potential Code modifications based on the best available science and data, and will make recommendations to the Commission accordingly.

As the next step in the process the Commission convened a concurrent meeting of the Swimming Pool TAC and Electrical TAC on May 24, 2016 to discuss recommendations to the Commission regarding how best to proceed with the evaluation of pool electrical safety. In response, the TACs' voted unanimously to recommend the Commission convene the Calder Sloan Swimming Pool Electrical Safety Task Force after July 1, 2017, and to charge the Task Force with reviewing the issues identified during public comment provided during the May 24, 2016 teleconference meeting.

**BINDING INTERPRETATION PROCESS.** In order to maintain the Binding Interpretation process as it must be lawfully implemented, the Commission appointed a panel of eight experienced building code administrators from geographically diverse regions of Florida to serve as an Interim Binding Interpretations Panel. The Panel has heard one binding interpretation to date.

**RECOMMENDATIONS.** 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 2017 legislative actions designed to improve the system's effectiveness are summarized below:

# THE FLORIDA BUILDING COMMISSION'S RECOMMENDATIONS FOR LEGISLATIVE ACTIONS DESIGNED TO IMPROVE THE SYSTEM'S EFFECTIVENESS ARE SUMMARIZED AS FOLLOWS:

The Commission's recommendations for statutory changes resulting from the Code Coordination and Implementation Workgroup were supported by industry stakeholders, who will take the lead on initiating specific legislative proposals.

# **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, which was the local code universally acknowledged to set 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 Hurricane 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 (the 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 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 to 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 same legislation created the Florida Building Commission to develop and maintain the Florida Building Code and related programs and processes. The 2000 Legislature authorized implementation of the Florida Building Code, and the first edition replaced all local codes on March 1, 2002. There have been five editions to date, and the Commission initiated the development of the Florida Building Code, 6<sup>th</sup> Edition (2017) in April of 2015.

### III. COMMISSION REPRESENTATION AND PROCESS

**COMMISSION REPRESENTATION.** The Florida Building Commission is a 27 member representative stakeholder group who successfully created, implemented, and maintains the new statewide Florida Building Code. The Commission is comprised of the Chair, and 26 members appointed to represent specific stakeholder groups. They are as follows: four code officials, two state government representatives, a local government representative, a representative of persons with disability, a structural engineer, a mechanical engineer, representatives of fire protection technology, the building management industry, and the insurance industry, a general contractor, residential contractor, mechanical contractor, plumbing contractor, electrical contractor, roofing/sheet metal/air conditioning contractor, a representative of the green building industry, a natural gas system distribution representative, and a member representing the Department of Agriculture and Consumer Services' Office of Energy.

**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 percent acceptance or support is not achievable, final decisions require at least 75 percent 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 to these opportunities for public input, most complex substantive issues before the Commission go through a consensus process where recommendations are developed by appointed representative stakeholder groups.

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. Since 1999 the Commission has convened 61 special issue stakeholder workgroups to develop broad based consensus recommendations on issues of concern to stakeholders. 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.

## **IV. LEGISLATIVE ASSIGNMENTS**

The Florida Legislature through the passage of HB 535 and SB 1602 charged the Commission with a range of assignments impacting the Commission and the Florida Building Code System. In response, the Commission will work 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.

#### 2016 LEGISLATIVE ASSIGNMENTS STATUS UPDATE

The 2016 Florida Legislature through the passage of HB 535 and SB 1602 charged the Commission with a number of assignments impacting the Florida Building Code System. The Commission is in the process of implementing the assignment through appropriate actions. Following is an implementation summary regarding 2016 Legislative assignments:

Action Required: An amendment to Section 553.721, F.S. (Surcharge), provides up to \$30,000 in funding for the Building Code System Uniform Implementation Evaluation Workgroup's recommendations during fiscal year 2016 – 2017.

Status: The Commission will consult with stakeholders to evaluate the implementation of this provision.

Action Required: An amendment to Section 553.775, F.S. (Interpretations), requires the Commission to coordinate with the Building Officials of Florida (BOAF) regarding appointments to the panel charged with hearing requests to review decisions of local building officials.

Status: The Commission will coordinate with BOAF as needed to make the panel appointments.

Action Required: The 2016 Legislature created the Calder Sloan Swimming Pool Electrical-Safety Task Force within the Florida Building Commission to study standards for grounding, bonding, lighting, wiring, and all electrical aspects for safety in and around public and private swimming pools, especially with regard to minimizing risks of electrocutions linked to swimming pools.

*Status:* The Commission will convene concurrent meetings with the Swimming Pool TAC and the Electrical TAC as needed to further evaluate this issue as required.

#### 2016 LEGISLATIVE PRODUCT APPROVAL SYSTEM ASSIGNMENT STATUS UPDATE

Action Required: An amendment to Section 553.842, F.S., requires the Commission to add Underwriters Laboratories, LLC, and Intertek Testing Services NA, Inc. to the approved list of evaluation entities.

*Status:* The Commission initiated rulemaking to amend Rule 61G20-3.008 (Product Approval Entities) to conform the Product Approval Rule to this provision.

#### 2016 LEGISLATIVE CODE ASSIGNMENTS STATUS UPDATE

Action Required: An amendment to Section 514.011 (definitions), F.S. and Section 514.0115, F.S., requires the Commission to amend the Code to incorporate a definition and related Code provisions for temporary pools.

*Status:* The Commission has initiated rulemaking to amend Rule 61G20-1.001 (Florida Building Code) to implement this provision.

Action Required: An amendment to Section 515.27, F.S., requires the Commission to amend the Code to provide an exception as prescribed regarding swimming pool alarms for private swimming pools.

*Status:* The Commission has initiated rulemaking to amend Rule 61G20-1.001 (Florida Building Code) to implement this provision.

Action Required: An amendment to Section 553.73 (15), F.S., requires the Commission to amend the Code to clarify, consistent with the amended statute, under which circumstances local jurisdictions can require existing mechanical equipment mounted on the roof to be installed in compliance with the Florida Building Code.

*Status:* The Commission has initiated rulemaking to amend Rule 61G20-1.001 (Florida Building Code) to implement this provision.

Action Required: An amendment to Section 553.73 (19), F.S., requires the Commission to amend the Code to require two fire service access elevators in all buildings with a height greater than 120 feet according to the provisions in statute.

*Status:* The Commission has initiated rulemaking to amend Rule 61G20-1.001 (Florida Building Code) to implement this provision.

Action Required: An amendment to Section 553.79, F.S., requires the Commission to amend the Code to authorize building officials to issue permits for foundations or any other part of a building or structure before the construction documents for the entire building or structure have been submitted.

*Status:* The Commission has initiated rulemaking to amend Rule 61G20-1.001 (Florida Building Code) to implement this provision.

Action Required: An amendment to Section 553.844, F.S., requires the Commission to amend the Code regarding windstorm mitigation for roofs and openings protection requirements to not require a permit for roof covering replacement or repair work associated with the prevention of degradation of the residence.

*Status:* The Commission has initiated rulemaking to amend Rule 61G20-1.001 (Florida Building Code) to implement this provision.

Action Required: An amendment to Section 553.844, F.S., requires the Commission to amend the Code to add rated <u>walls</u> as an approved method deemed to comply with the Code's wind resistance requirements for mechanical equipment or appliances fastened to a roof or installed on the ground.

*Status:* The Commission has initiated rulemaking to amend Rule 61G20-1.001 (Florida Building Code) to implement this provision.

Action Required: An amendment to Section 553.883, F.S., requires the Commission to amend the Code to not require battery-powered fire alarm, smoke alarm, or smoke detectors for centrally monitored systems that uses a low-power radio frequency wireless communication signal, or that contain multiple sensors, approved and listed by a nationally recognized testing laboratory.

*Status:* The Commission has initiated rulemaking to amend Rule 61G20-1.001 (Florida Building Code) to implement this provision.

Action Required: An amendment to Section 553.908, F.S., requires the Commission to amend Section R402.4.1.2 of the Florida Building Code, 5th Edition 1283 (2014) Energy Conservation to increase the building's or dwelling unit's maximum tested air leakage measure from "not exceeding 5 air changes per hour" to "not exceeding 7 air changes per hour" in Climate Zones 1 and 2. In addition, the mandatory blower door testing for residential buildings or dwelling units as contained in section R402.4.1.2 1289 of the Florida Building Code, 5th Edition (2014) Energy Conservation, shall not take effect until July 1, 2017, and shall not apply to construction permitted before July 1, 2017. Additionally, section M401.2 of the Florida Building Code, 5th Edition (2014) Mechanical, and section R303.4 of the Florida Building Code, 5th Edition (2014) Mechanical, and section R303.4 of the Florida Building Code, 5th Edition (2014) air changes per hour mechanical ventilation unless the air infiltration rate in a dwelling is less than 3 air changes per hour when tested with a blower door at a pressure of 0.2-inch water column (50 Pascals).

*Status:* The Commission has initiated rulemaking to amend Rule 61G20-1.001 (Florida Building Code) to implement these provisions.

Action Required: An amendment to Section 553.908, F.S., requires the Commission to amend the Code to clarify that local enforcement agencies shall accept duct and air infiltration tests conducted by those listed in statute.

*Status:* The Commission has initiated rulemaking to amend Rule 61G20-1.001 (Florida Building Code) to implement these provisions.

Action Required: The 2016 Legislature through passage of HB 535 requires the Commission to amend the Residential Building Code to create a definition in Chapter 2 for "fire separation distance" in conformance with the provisions described in statute.

*Status:* The Commission has initiated rulemaking to amend Rule 61G20-1.001 (Florida Building Code) to implement these provisions.

Action Required: The 2016 Legislature through passage of HB 535 requires the Commission to amend the Florida Building Code, Residential, to incorporate requirements to allow openings and roof overhang projections on the exterior wall of a building located on a zero lot line in conformance with the provisions described in statute.

*Status:* The Commission has initiated rulemaking to amend Rule 61G20-1.001 (Florida Building Code) to implement these provisions.

*Action Required:* The 2016 Legislature through passage of HB 535 requires the Commission to amend the Florida Building Code, Energy Conservation, to adopt into the Code Section 406 Alternative Performance Path, Energy Rating Index, in conformance with the provisions described in statute.

*Status:* The Commission has initiated rulemaking to amend Rule 61G20-1.001 (Florida Building Code) to implement these provisions.

Action Required: The 2016 Legislature through passage of HB 535 requires the Commission to amend the Florida Building Code, Residential, to incorporate shower lining requirements exceptions in conformance with the provisions described in statute.

*Status:* The Commission has initiated rulemaking to amend Rule 61G20-1.001 (Florida Building Code) to implement these provisions.

Action Required: The 2016 Legislature through passage of HB 535 requires the Commission to amend the Florida Building Code, Residential, to incorporate minimum fire separation distance requirements for non-fire resistant rated exterior walls in conformance with the provisions described in statute.

*Status:* The Commission has initiated rulemaking to amend Rule 61G20-1.001 (Florida Building Code) to implement these provisions.

Action Required: The 2016 Legislature through passage of HB 535 requires the Commission to amend the Florida Building Code, Building, to incorporate into Chapter 9 the following provision: Notwithstanding any law, rule, or regulation to the contrary, a restaurant, cafeteria, or similar dining facility, including an associated commercial kitchen, is required to have sprinklers only if it has a fire area occupancy load of 200 patrons or more.

*Status:* The Commission has initiated rulemaking to amend Rule 61G20-1.001 (Florida Building Code) to implement these provisions.

Action Required: The 2016 Legislature through passage of HB 535 requires the Commission to amend the Florida Building Code, Building, to incorporate into Chapter 1 the following provision: <u>A local</u> enforcement agency shall post each type of building permit application on its website. Completed applications must be able to be submitted electronically to the appropriate building department. Accepted methods of electronic submission include, but are not limited to, e-mail submission of applications in portable document format or submission of applications through an electronic fill-in form available on the building department's website or through a third-party submission management software. Payments, attachments, or drawings required as part of the permit application may be submitted in person in a nonelectronic format, at the discretion of the building official.

*Status:* The Commission has initiated rulemaking to amend Rule 61G20-1.001 (Florida Building Code) to implement these provisions.

Action Required: The 2016 Legislature through passage of SB 1602 created Section 399.031, F.S., requiring the Commission to amend the Code to provide clearance requirements between doors for elevators inside a private residence as prescribed in the statute.

*Status:* The Commission has initiated rulemaking to amend Rule 61G20-1.001 (Florida Building Code) to implement these provisions.

# V. The FLORIDA BUILDING CODE

Florida law requires the Commission to update the Florida Building Code every three years, and the *Florida Building Code Sixth Edition (2017)* represents the fifth update of the Code. Initiating and conducting the triennial code update process for the *Florida Building Code Sixth Edition (2017)* was a major focus of the Commission during the reporting period. The code 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 2015 represented the third time the Commission adopted the International Energy Conservation Code (IECC) as the foundation for the 2017 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.

As an update, the Commission conducted the 2014 Code Update process during 2012 and 2013, and completed rule adoption in January of 2015. The *Florida Building Code Fifth Edition (2014)* is now adopted with an effective date of June 30, 2015.

The 2017 Update process, development of the *Florida Building Code Sixth Edition (2017)*, was initiated with selection of the 2015 I Codes and the 2014 NEC as foundations for the 2017 Florida Building Code. The 2017 Code Update marked the second time that modifications to the foundation code remain effective only until the effective date of a new edition of the Florida Building Code every third year per Section 553.73(7)(g), F.S. With the exception that modifications related to state agency regulations, and wind-resistance design of buildings and structures within the high-velocity hurricane zone of Miami-Dade and Broward Counties which are adopted to an edition of the Florida Building, provisions of the foundation codes, including those contained in referenced standards and criteria, relating to wind resistance or the prevention of water intrusion may not be modified to diminish those construction requirements. Based on technical staff's recommendations the Commission's technical advisory committees conducted the preliminary review and developed recommendations for which to retain based on statutory requirements. 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.

For the 2017 Code Update process proposed Code modifications to the Florida Building Code were reviewed by the Commission's TACs in meetings conducted in April 2016. The TACs' recommendations regarding proposed Code modifications are currently posted to the Commission's website for a minimum of 45 days and the public will be provided an opportunity to comment on the TACs' recommendations during this time-frame (second 45-day review period). The TACs will meet in during the week of July, 18 2016 to review the public comments, and provide TAC comments to the Commission regarding whether the submitted public comments address TAC concerns relative to their original recommendations on proposed Code modifications (TAC feedback on public comments to the Commission). On December 13, 2016 the Commission will consider the TACs' recommendations and comments on public comments regarding proposed modifications for the *Florida Building Code Sixth Edition (2017)* during a rule development workshop. Once the Commission makes decisions on all of the proposed Code modifications and local

technical amendments submitted for statewide approval, the Commission will vote to adopt the Commission's package of recommendations of approved Code modifications for the 2017 Code Update, and to proceed with rule making. The Commission will conduct a final rule adoption hearing on the 2017 Code during their June 8, 2017 meeting, and will subsequently file the Rule with the Department of State for certification, with an effective date of December 31, 2017.

For the *Florida Building Code Sixth Edition (2017)* Code Update process the Commission voted to conduct a Building Code "*Glitch*" fixes amendment process after the effective date of the Code, and only if needed. If a "*Glitch*" amendment process is initiated the Commission will conduct a rule development workshop pertaining to Rule 61G20-1.001(1), Florida Building Code to consider changes to the *Florida Building Code Sixth Edition (2017)* regarding 2014 Building Code "*Glitch*" fixes proposed pursuant to the statutory criteria allowing adoption without Code development processes, using Chapter 120 rulemaking procedures only. The proposed changes can only be approved if they meet the statutory requirements for "*Glitch*" Amendments pursuant to Section 553.73 (8), Florida Building Code.

During the 2017 Code Update process the Commission's technical advisory committees focused on reviewing Florida specific requirements to the Code, achieving the goal of minimum variation from the foundation codes. For the 2017 Code Update process construction industry stakeholders proposed a variety of code amendments designed to ensure that code changes are cost effective and that new buildings constructed in Florida remain affordable while ensuring they are structural sound, wind and water intrusion resistant, and energy efficient. Many of these changes were recommended for approval by the Commission's technical advisory committees and will be considered by the Commission during their August 2016 rule development workshop on the Code.

Highlights of *Florida Building Code Sixth Edition (2017)* include carrying forward Code enhancements from the 5<sup>th</sup> Edition of the Code: adopting the IRC Florida high wind area requirements; Florida specific wind resistance water infiltration requirements for Building and Residential codes; Flood requirements integration; swimming pool energy standards inclusion; roofing provisions; wind load provisions; provisions related to state agency regulations; provisions related to the wind resistance design of building and structures within the High-Velocity Hurricane Zone; Florida energy efficiencies; Florida specific changes mandated by law; and, integration of windows and doors testing and labeling requirements into the Code. In addition, the 6<sup>th</sup> Edition incorporates enhancements including: updating materials and construction standards for consistency with the latest industry standards and construction designs; providing product manufacturers and builders with more efficient and cost-effective design solutions, options, standards and technologies as established by the national model codes; and providing for provisions to further improve the Code's electrical and safety requirements for swimming pools.

Of interest regarding the code development process, are several factors impacting the time that is required to adopt an updated Florida Building Code edition even after the development of the specific code amendments and rule development. An evaluation of the delays experienced in adopting the *Florida Building Code Fifth Edition (2014)* revealed that there are regulatory requirements that constrain the Commission in being able to complete a code update in the most efficacious manner possible. Some of the statutory constraints include the requirement to coordinate with the adoption of the updated version of the Florida Fire Prevention Code, and the requirement to have the Florida Building Code published for 6 months after publication before it becomes effective. Other constraints include duplicative procedural requirements between the rulemaking requirements

of Chapter 120, F.S and the code development requirements mandated by Section 553.73, F.S. Additional considerations are the schedule for the IBC code updates, the NEC code schedule, and the schedule for other important reference documents that must be finalized before incorporation by reference into the Florida Building Code Rule. There are also other built-in time constraints that serve to delay the implementation of a code update cycle. At the recommendation of Chairman Browdy the Commission decided to review all of the critical path milestones in the code development process and determine what should be done to make the process as efficient as possible. In order to address this issue the Commission convened a Code Coordination and Implementation Workgroup to review and evaluate all of the regulatory requirements currently impacting the code development process (code update process), and to propose a legislative path for a more efficacious process and timetable for the implementation of the Florida Building Code update process. The Workgroup met four times during 2015 and developed a consensus package of recommendations for the Commission to consider. The Commission unanimously adopted the Workgroup's consensus package of recommendations in October 2015.

It is anticipated that the Commission's proposed statutory recommendations will be submitted to the Legislature for consideration by construction industry stakeholders.

(Attachment 5—Code Coordination and Implementation Workgroup Process)

# INTEGRATION OF FLORIDA ACCESSIBILITY LAW INTO THE NEW ADAAG ADOPTED BY THE U.S. DEPARTMENT OF JUSTICE

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 U.S. Department of Justice published its Notice of Proposed Rule, "*Proposed ADA Standards for Accessible Design, June 2008*." 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. In anticipation of the revised ADA Standards for Accessible Design the Commission convened an Accessibility Code Workgroup of stakeholders that developed recommendations to the Commission for changes to the Code as well as for statutory changes needed to conform Florida Law to the Federal Law. The Commission amended the Accessibility Code, and made recommendations for changes to law essential to conforming to the 2010 ADA Standards that were implemented by the Florida Legislature. As a result of the Commission's proactive initiative Florida's 2012 Accessibility Code for Building Construction fully integrates Florida Specific Requirements with the final 2010 ADA Standards for Accessible Design issued September 15, 2010.

As previously reported, Florida's Accessibility Code was ready for certification concurrent with the effective date of the new ADA Standards for Accessible Design (SAD), and it is currently under review for certification by the DOJ. The last report from the DOJ indicated that the FACBC is in the final stages of review and only has to be reviewed by the Access Board before certification from DOJ. During the reporting period there were no updates from the DOJ regarding the FACBC's certification status. It should be noted that Florida's Accessibility Code is the first code in the Nation submitted for certification to the new SAD.

## VI. ENERGY EFFICIENCY INITIATIVES AND CODE CHANGES

During the development of the *Florida Building Code Sixth Edition (2017)* the Commission incorporated the International Energy Conservation Code (IECC) as the foundation code for the *Florida Energy Efficiency Code for Building Construction* while maintaining existing Florida efficiencies. Also consistent with 2013 statutory changes to Section 553.901, F.S., the Commission adopted the Florida Building Code–Energy Conservation as a volume of the Code consistent with other the Code sections and based on the International Building Code. Previously the Commission adopted the Florida Energy Efficiency Code for Building Construction within the Florida Building Code.

As with previous editions the *Florida Building Code Sixth Edition (2017)* once adopted will meet or exceed all Federal energy efficiency requirements. Following adoption the Commission will certify to the Department of Energy (DOE) that the residential building provisions of the *Florida Building Code Sixth Edition (2017), Energy Conservation,* will meet or exceed the 2015 edition of the *International Energy Conservation Code for* low-rise residential buildings, and the adopted *Florida Building Code Sixth Edition (2017), Energy Conservation,* will meet or exceed the 2013 edition of the *Energy Standard for Buildings, Except Low-Rise Residential Buildings, American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)/ Illuminating Engineering Society of North America (IESNA) Standard 90.1-2013 for commercial, and the 2015 <i>International Energy Conservation Code,* for buildings other than low-rise residential buildings.

Highlights of proposed code amendments to the Energy Code for inclusion in the *Florida Building Code Sixth Edition (2017), Energy Conservation,* include: the addition of a new Energy Rating Index "ERI" compliance method; adding a new chapter titled "Existing Structures" which consolidates all of the energy provisions for existing buildings under one chapter; updating the commercial provisions of the Code for consistency with ASHRAE 90.1 – 2013; and, maintaining the efficiencies of the Florida Energy Code as mandated by law.

As previously reported, the Commission voted to maintain the requirement for local governments to submit forms submitted to certify compliance with the Energy Code through the adoption of a separate rule from the Building Code Rule. This action ensured that important energy data continues to be available for research purposes. The Commission is currently in the process of finalizing the rule and will report the results of rule development during the next reporting period once the rule is finalized.

# VII. RESEARCH INITIATIVES—HURRICANE RESPONSE AND CODE CHANGES

**OVERVIEW.** The Florida Building 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. 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. As with each subsequent version, the *Florida Building Code Sixth Edition (2017)* when adopted will maintain this commitment.

**HURRICANE RESEARCH.** The Commission has determined that research is a key to effectively and efficiently preventing or minimizing hurricane damage to buildings. The Commission convened the Hurricane Research Advisory Committee in response to Florida's 2004 and 2005 hurricane seasons to support code development and identification of studies to address wind-borne debris risks, water intrusion, wind resistance of roof systems, and other construction systems and practices that effect the hurricane resistance of buildings. The Florida Building Commission's Hurricane Research Advisory Committee (HRAC) continues to meet on an as needed basis to review research and make recommendations to the Commission regarding proposed code enhancements and research needs regarding proposed code amendments relevant to hurricane and storm protection enhancements. The Commission has been funding hurricane resistance research based on legislatively approved spending authority since the formation of the Commission's Hurricane Research Advisory Committee in January of 2005. In August of 2013, based on a consensus recommendation from the Commission's eleven technical advisory committee chairs and two program oversight committee chairs, the Commission voted to expand the funding of research initiatives beyond hurricane resistance research to include additional building code system related topical areas.

**BUILDING CODE SYSTEM RESEARCH.** The Commission currently funds research projects pertaining to hurricane resistance and other Building Code System related topical areas to ensure the development of code amendments that make Florida's structures, and the products that comprise them, more resistant. The Commission's technical advisory committees (TACs) meet annually to make recommendations on research projects for the next fiscal year, and they meet periodically to review the status and approve interim and annual reports submitted by the research projects' principal investigators (PIs).

During the reporting period—based on recommendations from the Commission's technical advisory committees (TACs) chairs—the Commission approved funding research projects for fiscal year 2015-2016 as recommended by the TAC chairs on the basis that the approved projects meet the three criteria for funding: 1.) definition of research and/or technical enrichment, 2.) urgency/immediacy, and needed for the 2017 FBC and/or legislative directive, and 3.) funding available (full or partial); and were approved for funding based on the TAC chairs' recommendations, and staff administering and overseeing the research, and negotiating scoping and contracting as appropriate.

As a result of evaluating proposed research projects in the context of the key evaluation criteria, the Commission sponsored important research projects on the following topics: evaluating the economic impact of the delayed code provisions; estimating the cost impact of the 2015 International Building Codes changes; evaluating an approved method for achieving 1 hr. fire resistance rating under side of projections; continuation of the investigation of corrosion of fasteners for both roofing and screen enclosures; documenting field cases of attics sealed with spray foam insulation; and, a swimming pool electrocution study.

The TAC chairs will meet during the Summer of 2016 to evaluate, rank and develop recommendations to the Commission regarding which research projects to fund for fiscal year 2016 - 2017.

**FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION RESEARCH PROJECT.** During fiscal year 2014-2015 the Commission funded a project conducted by the University of Florida (UF) to evaluate the Florida-specific provisions of the Florida Accessibility Code for Building Construction (FACBC). The ADA Standards for Accessible Design establishes design requirements for the construction and alteration of facilities so as to not discriminate against individuals with disabilities. In 2011, the Florida Building Commission (FBC) updated the Florida Accessibility Code for Building Construction to incorporate the 2010 ADA Standards and Florida law, Part II, Chapter 553, Florida Statutes. The FBC has maintained provisions of the Florida law that were thought to be more stringent than the ADA guidelines.

The purpose of the research project was to determine whether these Florida-specific provisions are necessary and to develop a technical basis for these items. The most recent version of the design standards was adopted in 2010 and this was the version used for comparison to the Florida design standards during the research project.

In order to determine a technical basis for the Florida-specific items it was deemed important to understand what technical basis was used to develop the 2010 ADA Standards, as well as Chapter 11 of the International Building Code and the ANSI Standards. Through research conducted by the University of Florida and the experience and knowledge of the ADA specialist hired by UF, an explanation and recommendation was made for each of the Florida specific items. In the Report UF concluded that a majority of these items did not need to be changed, however a few provisions either should be expanded or reduced. It was recommended that the provisions for the removal of architectural barriers and parking space widths be reduced. The provisions for curbs adjacent to onstreet parking spaces and the removal of parking barriers should be expanded. It was also recommended that the language be changed for clarification of requirements in the following provisions: door opening force, additional hotel and motel features, and vertical accessibility.

The University of Florida research team clarified that they provided recommendations based on data available online and from the knowledge and resources of the ADA contractor. They noted that they conducted a technical study of a politically driven issue so the views of specific contractors and disability organizations were not taken into consideration. It was recommended "the Florida Building Commission meet with contractors and disability organizations in the state of Florida to get their perspectives on the recommendations."

The Commission's Accessibility TAC reviewed the recommendations and provided their comments and recommendations regarding possible changes to the FACBC and these were incorporated into the Final Report.

At the June 2015 meeting the Commission voted to proceed with the next steps for consideration of the recommendations and incorporated TAC comments from the report titled: *Florida Accessibility Code for Building Construction Review and Recommendations*. At the October 15, 2015 meeting the Commission voted to conduct a public meeting in conjunction with the December 2015 Commission meeting for the purpose of receiving public input regarding the recommendations. The public meeting was conducted on December 14, 2015, and at the December 15, 2015 meeting the Commission voted to accept the Report titled: *Florida Accessibility Code for Building Construction Review and Recommendations*. The public meeting was conducted on December 14, 2015, and at the December 15, 2015 meeting the Commission voted to accept the Report titled: *Florida Accessibility Code for Building Construction Review and Recommendations*, and the report from the public meeting. It is expected that construction industry stakeholders will evaluate and decide whether to pursue any statutory changes pursuant to the Report's recommendations.

# VIII. PRODUCT APPROVAL

The Florida Building Code establishes standards for products integrated into buildings in addition to standards for the design of buildings themselves. Unlike prescriptive standards in the Code that can be easily verified by building officials, 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.

Working in collaboration with stakeholders the Commission continues to monitor and fine tune the Product Approval System ensuring that the System is functioning more efficiently and user friendly, and user satisfaction, as determined by System user surveys, is very high.

During the reporting period the Commission voted to initiate rulemaking to amend Rule 61G20-3.008 (Product Approval Entities) to conform the Product Approval Rule to an amendment to Section 553.842, F.S., requiring the Commission to add Underwriters Laboratories, LLC, and Intertek Testing Services NA, Inc. to the approved list of evaluation entities.

During the reporting period the Commission reviewed and approved products and product approval entities, and considered complaints filed against products. Through product revocation, the Commission is authorized to revoke product approvals for products that no longer comply with the requirements of their product approvals, providing a key tool for maintaining the efficacy of the Product Approval System and providing protection for Florida consumers.

The Product Approval system is processing hundreds of applications monthly with efficiency and the to satisfaction of the product manufacturers who use the system. The Commission's Product Approval Program Oversight Committee (POC) convenes prior to every Commission meeting, and met six times during the reporting period 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 24,482 product applications and 109,313 products for statewide use within limitations established by the approvals.

To date, under the 2014 Code the Commission approved 17,611 products and 4,199 product applications to the 2014 Florida Building Code. In addition the Commission approved or revised 286 product approval entities under the 2014 Code including 13 accreditation bodies, 51 certification agencies, 6 evaluation entities, 86 quality assurance entities, 173 testing laboratories, and 60 validation entities (new, renewed/revised, and expired).

Following are relevant product approval system statistics on product approvals:

CODE VERSION	20	004	2007		2010		2014	
	Apps	Products	Apps	Products	Apps	Products	Apps	Products
Approved	5,542	22,394	6,129	29,014	6,264	29,096	4,199	17,611
Applied For	4	13	7	8	42	131	103	601
Denied	156	487	17	37	5	16	0	0
Validated	0	0	0	0	10	22	72	191
Suspended	0	0	0	0	0	0	0	0
Re-Apply	0	0	0	0	7	18	6	45
Pending FBC Approval	0	0	0	0	0	0	141	632
Revoked	6	17	1	1	0	0	0	0
Archived	622	2,082	840	3,334	568	2,264	243	1,1516
Over 180 Days Old and Not Approved, Denied, Validated, or Pending Status	4	13	7	8	47	147	37	178
T chung Status	4	15	1	0				
TOTALS	6,334	25,006	7,001	32,402	6,943	31,694	4,801	20,774

#### **PRODUCT APPROVAL STATISTICS UPDATE**

# 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. As specified in law, the Commission's role is limited to the approval of code related courses, which are developed and submitted by private sector education and training providers to the Commission for approval. The Commission has no authority to determine the number of hours or courses for code related education and training. The licensing board for the respective category of affected licensee makes this determination.

For fiscal year 2014-2015, DBPR and the Florida Building Commission made the decision to contractually separate the activities of the Education Administrator from the current Florida Building Compliance and Mitigation Program. As a result, this report relates to the staffing/administrative activities of the Education Administrator with the Education Program Oversight Committee (ED POC) as well as assisting with the maintenance of the online Building Code Information System (BCIS).

During the reporting period, 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.

During the reporting period, the Commission found no reason to amend or change the previously adopted Education Rule, 61G20-6.002, Florida Administrative Code.

During the reporting period the Education Administrator continued to work with both training providers and accreditors to assist them with transitioning from using the 2010 Florida Building Code as the source code for developing and accrediting training courses, to using the new 5<sup>th</sup> Edition of the Florida Building Code (2014).

During the reporting period the Commission's Education Program Oversight Committee conducted six meetings in which it managed the review and approval of course and accreditor applications; handled inquiries from licensees, providers, accreditors, and the public; and developed and refined guidelines and information on course development and processing (including BCIS enhancements).

The Commission continues to enhance access to committee meetings through the use of webinar technology, in addition to providing the option to attend by telephone conference call or in-person.

Working with the Education Administrator, the Commission addressed specific education needs as follows:

- Maintained the modifications and subsequent efficiency to the online Building Code Information System (BCIS).
- Administered six meetings and tasks of the Commission's Education and Outreach Program Oversight Committee, including:
  - Conducting meetings; managing, review and approval of 68 total course applications, which breaks down to 45 new courses, 14 administratively approved course, and 9 self affirmed courses (from July 1, 2015 to May 9, 2016).
  - Handling 194 inquiries (from July 1, 2015 to May 9, 2016) from licensees, training providers, accreditors, and the public (via phone, email, or both); and developing, refining, and modifying guidelines and information on course development and processing.
  - Approving Mr. David Aihe as an accreditor of advanced courses for the Florida Building Commission.
- Giving specific technical assistance to both accreditors and training providers. This assistance was in the form of how to adhere to the current rule language when creating training courses, how to create a training course using a specific methodology, and how accreditors should evaluate an advanced course, again based on the current rule language. The Education Administrator continues to work with both providers and accreditors to improve all of the processes involved with advanced course accreditation practices.

# X. FLORIDA BUILDING CODE SYSTEM UPDATES AND COMMISSION ACTIONS

#### FLORIDA BUILDING CODE SYSTEM

Florida Statute, Section 553.77(1)(b), requires the Commission to make a continual study of the Florida Building Code System 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 the second in 2012 for the purpose of evaluating the Florida Building Code System for its successes and deficiencies, and identifying and selecting options for improvement. The Commission is scheduled to conduct the next assessment concurrent with the development of the 6<sup>th</sup> Edition of the Florida Building Code and will report to the Legislature at the appropriate time in conformance with these provisions.

The Florida Building Code System as envisioned by the Building Codes Study Commission and implemented by the Florida Legislature in 1998 is comprised of five key foundations. Known as the *Five Foundations for a Better Built Environment*, they are: the Code (Florida Building Code), the Commission (Florida Building Commission), Local Administration of the Code, Strengthening Compliance and Enforcement (Education), and Product Approval.

**FOUNDATION I—THE FLORIDA BUILDING CODE AND THE CODE DEVELOPMENT PROCESS.** The Florida Building Code is a statewide code implemented in 2001 and updated every three years. The Florida Building Commission developed the first edition of 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.

During the reporting period the *Florida Building Code Fifth Edition (2014)* was in effect and the Commission worked to ensure a smooth transition to the updated Code that became effective on June 30, 2015. In addition, the Commission initiated the development of the *Florida Building Code, 6<sup>th</sup> Edition (2017)*. The 2017 Update process (development of the *Florida Building Code Sixth Edition (2017)*) was initiated with selection of the 2015 I Codes and the 2014 NEC as foundations for the 2017 Florida Building Code. The adopted effective date for the 2017 Code is December 31, 2017.

In response to 2016 legislation the Commission has initiated rulemaking to amend Rule 61G20-1.001 (Florida Building Code) to implement the Code changes prescribed in HB 535 and SB 1602.

As with all previous code update processes the development of the 2017 Code will involve special issue stakeholder workgroups, rule development workshops and rule adoption hearings, all providing extensive opportunity for public participation.

Of special interest, during the reporting period, the Commission in collaboration with Building Code System stakeholders, concluded the *Code Coordination and Implementation Workgroup* process. The process focused on reviewing and evaluating all of the regulatory requirements currently impacting the code development process (code update process), and proposing a legislative path to a more efficacious timetable for the implementation of the Florida Building Code update process going forward. The Workgroup developed consensus recommendations that were approved by the Commission regarding the following key issues: code printing and publication; Commission authority to issue errata; the Code amendment process (triennial, annual and glitch); Florida Specific amendments; statutory timeline requirements; adoption of standards and codes by reference; and, Commission participation with the ICC code development process. It is expected that the Commission's recommendations for statutory changes will be delivered to the Florida Legislature by construction industry stakeholders.

FOUNDATION II—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.

During the next fiscal year, the Commission will maintain their focus on increasing the capacity of its new members, and working with building construction industry stakeholders to build consensus on relevant aspects of the Florida Building Code System.

**FOUNDATION III—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.

During the reporting period the Commission continued to work with local building officials to provide support as requested and as appropriate.

During the next fiscal year the Commission remains committed to enhancing communication and collaboration with local building and fire officials for the efficient and seamless functioning of the Florida Building Code System. In addition, the Commission is committed to working with stakeholders to identify and resolve any issues related to the administration and enforcement of the Florida Building Code System.

**FOUNDATION IV—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.

During the reporting period, the Commission reviewed and approved education courses and course accreditors. For the next fiscal year, the Commission will continue to work with stakeholders to identify any issues, and implement any recommended enhancements to the Education System.

**FOUNDATION V—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 as part of the building permit approval process.

During the reporting period the Commission voted to initiate rulemaking to amend Rule 61G20-3.008 (Product Approval Entities) to conform the Product Approval Rule to an amendment to Section 553.842, F.S., requiring the Commission to add Underwriters Laboratories, LLC, and Intertek Testing Services NA, Inc. to the approved list of evaluation entities.

During the next fiscal year the Commission will continue to work with stakeholders to enhance the Product Approval System including evaluating possible revisions to the Rule requested by industry stakeholders.

# FLORIDA BUILDING COMMISSION

Report and Recommendations to the 2017 Legislature

# XI. APPENDICES

TABLE OF APPENDICES 28		
XI. APPENDICES	- 40	
A. KEY TO COMMON ACRONYMS	29	
B. COMMISSION MILESTONES FOR FY 2015 - 2016	30	
C. COMMISSION MEETING SUMMARY REPORTS FOR FY 2015 - 2016	32	
D. CODE COORDINATION AND IMPLEMENTATION PROJECT	35	
E. POOL ELECTRICAL SAFETY PROJECT	38	

# APPENDIX A

# KEY TO COMMON ACRONYMS

ACRONYM DEFINITION		
ADA	Americans With Disabilities Act	
ADAAG	ADA Accessibility Guidelines for Buildings and Facilities	
BCSA	Florida Building Code System Assessment	
BOAF	Building Officials Association of Florida	
DACS or FDACS	Florida Department of Agriculture and Consumer Services	
DBPR	Department of Business and Professional Regulations	
DCA	Department of Community Affairs (Abolished 2011)	
DEP or FDEP	Florida Department of Environmental Protection	
DOH or FDOH	Florida Department of Health	
ЕРА	U.S. Environmental Protection Agency	
FACBC	Florida Accessibility Code for Building Construction	
FAR	Florida Administrative Register (previously FAW)	
FBC	Florida Building Code	
FBC	Florida Building Commission	
FECC	Florida Energy and Conservation Code	
IBC	International Building Code	
ICC	International Code Council	
POC	Program Oversight Committee (Education and Product Approval)	
SAD	ADA Standards for Accessibility Design	
ТАС	Technical Advisory Committee	

### APPENDIX B

#### COMMISSION MILESTONES FOR JULY 2015 – JUNE 2016

AUGUST 2015 The Commission meets in Daytona Beach and votes to approve the updated workplan for development of the Florida Building Code, 6<sup>th</sup> Edition (2017) opting for rulemaking via an integrated Code, and conducting the Glitch amendment process, if needed, after the 2017 Code becomes effective. The Commission votes to adopt the Energy TAC's recommendation, approving that no further action is required regarding rule development for Rule 61G20-1.004, F.A.C., Effective Date for Blower Door and Mechanical Ventilation Requirements; and, to adopt the Fire TAC's recommendation, approving that no further action is required regarding rule development for Rule 61G20-1.003, F.A.C., Effective Date for Second Emergency Elevator Requirements. The Commission votes to authorize DBPR staff to initiate the process to repeal Rule 61G20-1.002, F.A.C., Alternative Design Method for Screen Enclosures; and, to authorize DBPR staff to initiate the process to repeal Rule 61G20-2.004, F.A.C., Notice of Rights. The Commission votes to approve Energy Code Compliance Software for the 5<sup>th</sup> Edition (2014) Florida Building Code, Energy Conservation, specifically REScheck for demonstrating compliance with residential building energy requirements. In addition, the Commission votes to approve funding research projects for fiscal year 2015-2016 as recommended by the TAC chairs on the basis that the approved projects meet the three criteria for funding: 1.) definition of research and/or technical enrichment, 2.) urgency/immediacy, and needed for the 2017 FBC and/or legislative directive, and 3.) funding available (full or partial); and are approved for funding based on the TAC chairs' recommendations, and staff administering and overseeing the research, and charging staff with negotiating scoping and contracting as appropriate.

**OCTOBER 2015** The Commission meets in Daytona Beach and votes unanimously to adopt the updated Workplan for the 2017 Code Update Process pursuant to the process adopted by the Commission for the development of the Florida Building Code, 6<sup>th</sup> Edition (2017)—specifically, conducting a Glitch amendment process after the Code's effective date (rulemaking via an Integrated Code). The Commission votes unanimously to approve conducting a public hearing in conjunction with the December 2015 Commission meeting for the purpose of receiving public input regarding the recommendations from the report titled: Florida Accessibility Code for Building Construction Review and Recommendations. The Commission votes unanimously to adopt the Code Coordination and Implementation Workgroup's consensus package of recommendations. The Commission votes unanimously to adopt the Swimming Pool TAC's and Electrical TAC'c swimming pool safety consensus package of recommendations focused on the prevention of electrocution in swimming pools.

- **DECEMBER 2015** The Commission meets in Gainesville and votes unanimously to accept the report titled: *Florida Accessibility Code for Building Construction Review and Recommendations*, and the report on the public meeting regarding the same. The Commission votes unanimously to approve the schedule for the 2016 Legislative Session Commission teleconference meetings. The Commission votes unanimously to approve Energy Code Compliance Software for the 5<sup>th</sup> Edition (2014) Florida Building Code, Energy Conservation, specifically COM*check* for demonstrating compliance with commercial building energy requirements. The Commission votes unanimously to accept the October 14, 2015 Joint Report of the Swimming Pool TAC and Electrical TAC.
- The Commission meets in Jacksonville and votes unanimously to approve FEBRUARY 2016 the Energy Code Compliance Software update for the 5<sup>th</sup> Edition (2014) Florida Building Code, Energy Conservation, specifically EnergyGauge USA 5.0.03 for demonstrating compliance with residential building energy requirements. The Commission votes unanimously to approve the Energy Code Compliance Software update for the 5<sup>th</sup> Edition (2014) Florida Building Code, Energy Conservation, specifically EnergyGauge Summit 5.20 for demonstrating compliance with commercial building energy requirements. The Commission votes to approve the TAC Code modification review meeting schedule for the 2017 Code Update Process-6th Edition Florida Building Code (2017). The Commission votes unanimously to approve the revised Workplan for the 2017 Code Update Process-6th Edition Florida Building Code (2017). The Commission votes unanimously to approve the Commission's Code modification review process for the 2017 Code Update Process-6<sup>th</sup> Edition Florida Building Code (2017). The Commission votes unanimously to approve the TACs' Code modification review process for the 2017 Code Update Process-6<sup>th</sup> Edition Florida Building Code (2017). The Commission votes unanimously to approve the TAC review process for reviewing public comments on TACs' recommendations regarding proposed Code modifications for the 2017 Code Update Process-6<sup>th</sup> Edition Florida Building Code (2017).
- APRIL 2016 The Commission meets in Gainesville and votes unanimously to authorize the Department of Business and Professional Regulation to open Rules 61G20-1.001 and 61G20-3.008 for development of rulemaking and to delegate authority to Jim Richmond to sign rulemaking documents on behalf of the Chairman of the Florida Building Commission. The Commission votes unanimously to adopt the Summary of Issues for inclusion in the Commission's Fiscal Year 2015 - 2016 Annual Report.

#### **JUNE 2016** The Commission meets in Gainesville and votes...

#### APPENDIX C

#### COMMISSION MEETING SUMMARY REPORTS FY 2015 - 2016

August 18, 2015 Meeting. At the August 18, 2015 meeting conducted in Daytona Beach the Commission considered and decided on Chair's issues and recommendations, product and entity approvals, applications for accreditor and course approvals, petitions for declaratory statements, accessibility waivers, and recommendations from the Commission's various committees. The Commission received an update that the FY 2014 - 2015 Annual Report was finalized; an update on the Workplan for the Florida Building Code, 6th Edition (2017); and, an update regarding the progress of the Code Coordination and Implementation Workgroup. Specific actions included voting to: approve the updated workplan for development of the Florida Building Code, 6th Edition (2017) opting for rulemaking via an integrated Code, and conducting the Glitch amendment process, if needed, after the 2017 Code becomes effective; adopt the Energy TAC's recommendation, approving that no further action is required regarding rule development for Rule 61G20-1.004, F.A.C., Effective Date for Blower Door and Mechanical Ventilation Requirements; adopt the Fire TAC's recommendation, approving that no further action is required regarding rule development for Rule 61G20-1.003, F.A.C., Effective Date for Second Emergency Elevator Requirements; authorize DBPR staff to initiate the process to repeal Rule 61G20-1.002, F.A.C., Alternative Design Method for Screen Enclosures; authorize DBPR staff to initiate the process to repeal Rule 61G20-2.004, F.A.C., Notice of Rights; approve Energy Code Compliance Software for the 5<sup>th</sup> Edition (2014) Florida Building Code, Energy Conservation, specifically REScheck for demonstrating compliance with residential building energy requirements; and, to approve funding the research projects for fiscal year 2015-2016 as recommended by the TAC chairs on the basis that the approved projects meet the three criteria for funding: 1.) definition of research and/or technical enrichment, 2.) urgency/immediacy, and needed for the 2017 FBC and/or legislative directive, and 3.) funding available (full or partial); and are approved for funding based on the TAC chairs' recommendations, and staff administering and overseeing the research, and charging staff with negotiating scoping and contracting as appropriate. Finally, the Commission voted to take no further action regarding Dan Arguelles' request for the Commission to initiate another investigation against Zion Tile Corporation of Miami on the basis that: the issue was resolved by the POC's June 5, 2015 recommendation to dismiss the complaint, and by the Commission's subsequent vote to dismiss the complaint at the June 19, 2015 meeting; there was no new information presented by Dan Arguelles at the August 10, 2015 POC meeting; Zion Tile Corporation of Miami's product FL 16057-R1 was not revised to demonstrate compliance with the 2014 Code, and as a result Zion Tile does not have a product approved for use complying with the requirements of the 2014 Code; and, therefore the Commission has no jurisdiction on the matter.

The full report is available on the BCIS (select meeting month Facilitator's Report) at the following URL: <a href="http://www.floridabuilding.org/fbc/commission/2014\_Archive\_Commission\_Meetings.html">http://www.floridabuilding.org/fbc/commission/2014\_Archive\_Commission\_Meetings.html</a>

**October 15, 2015 Meeting.** At the October 15, 2015 meeting conducted in Daytona Beach the Commission considered and decided on Chair's issues and recommendations, product and entity approvals, applications for accreditor and course approvals, petitions for declaratory statements, accessibility waivers, and recommendations from the Commission's various committees. Specific actions included voting unanimously: to approve the updated Workplan for the 2017 Code Update

Process pursuant to the process adopted by the Commission for the development of the Florida Building Code, 6<sup>th</sup> Edition (2017)—specifically, conducting a Glitch amendment process after the Code's effective date (rulemaking via an Integrated Code); to approve conducting a public hearing in conjunction with the December 2015 Commission meeting for the purpose of receiving public input regarding the recommendations from the report titled: *Florida Accessibility Code for Building Construction Review and Recommendations*; to adopt the Code Coordination and Implementation Workgroup's consensus package of recommendations; and, to adopt the Swimming Pool TAC's and Electrical TAC'c swimming pools.

The full report is available on the BCIS (select meeting month Facilitator's Report) at the following URL: <u>http://www.myfloridalicense.com/dbpr/bcs/buildingcomm.html</u>

**December 15, 2015 Meeting.** At the December 15, 2015 meeting conducted in Gainesville the Commission considered and decided on Chair's issues and recommendations, product and entity approvals, applications for accreditor and course approvals, petitions for declaratory statements, accessibility waivers, and recommendations from the Commission's various committees. Specific actions included voting unanimously: to accept the report titled: *Florida Accessibility Code for Building Construction Review and Recommendations*, and the report on the public meeting regarding the same; to approve the schedule for the 2016 Legislative Session Commission teleconference meetings; to approve Energy Code Compliance Software for the 5<sup>th</sup> Edition (2014) Florida Building Code, Energy Conservation, specifically COM*check* for demonstrating compliance with commercial building energy requirements; and, to accept the October 14, 2015 Joint Report of the Swimming Pool TAC and Electrical TAC.

The full report is available on the BCIS (select meeting month Facilitator's Report) at the following URL: <u>http://www.myfloridalicense.com/dbpr/bcs/buildingcomm.html</u>

February 10, 2016 Meeting. At the February 10, 2016 meeting conducted in Jacksonville the Commission considered and decided on Chair's issues and recommendations, product and entity approvals, applications for accreditor and course approvals, petitions for declaratory statements, accessibility waivers, and recommendations from the Commission's various committees. Specific actions included voting unanimously: to approve the Energy Code Compliance Software update for the 5<sup>th</sup> Edition (2014) Florida Building Code, Energy Conservation, specifically EnergyGauge USA 5.0.03 for demonstrating compliance with residential building energy requirements; to approve the Energy Code Compliance Software update for the 5<sup>th</sup> Edition (2014) Florida Building Code, Energy Conservation, specifically EnergyGauge Summit 5.20 for demonstrating compliance with commercial building energy requirements; to approve the TAC Code modification review meeting schedule for the 2017 Code Update Process—6<sup>th</sup> Edition Florida Building Code (2017); to approve the revised Workplan for the 2017 Code Update Process—6<sup>th</sup> Edition Florida Building Code (2017); to approve the Commission's Code modification review process for the 2017 Code Update Process—6<sup>th</sup> Edition Florida Building Code (2017); to approve the TACs' Code modification review process for the 2017 Code Update Process—6<sup>th</sup> Edition Florida Building Code (2017); and, to approve the TAC review process for reviewing public comments on TACs' recommendations regarding proposed Code modifications for the 2017 Code Update Process-6<sup>th</sup> Edition Florida Building Code (2017).

The full report is available on the BCIS (select meeting month Facilitator's Report) at the following URL: <u>http://www.myfloridalicense.com/dbpr/bcs/buildingcomm.html</u>

**April 12, 2016 Meeting.** At the April 12, 2016 meeting conducted in Gainesville the Commission considered and decided on Chair's issues and recommendations, product and entity approvals, applications for accreditor and course approvals, petitions for declaratory statements, accessibility waivers, recommendations from the Commission's various committees. In addition, the Commission received a briefing on relevant issues from the 2016 Legislative Session. Specific actions included voting unanimously: to authorize the Department of Business and Professional Regulation to open Rules 61G20-1.001 and 61G20-3.008 for development of rulemaking and to delegate authority to Jim Richmond to sign rulemaking documents on behalf of the Chairman of the Florida Building Commission; and, to adopt the Summary of Issues for inclusion in the Commission's Fiscal Year 2015 - 2016 Annual Report.

The full report is available on the BCIS (select meeting month Facilitator's Report) at the following URL: <u>http://www.myfloridalicense.com/dbpr/bcs/buildingcomm.html</u>

June 8, 2016 Meeting. At the June 8, 2016 meeting conducted in Gainesville the Commission considered and decided on...

The full report is available on the BCIS (select meeting month Facilitator's Report) at the following URL: <u>http://www.myfloridalicense.com/dbpr/bcs/buildingcomm.html</u>

## APPENDIX D

#### **CODE COORDINATION AND IMPLEMENTATION PROJECT**

#### **PROJECT OVERVIEW**

Under the leadership of Chairman Browdy the Commission determined that with the delays experienced in adopting the Florida Building Code Fifth Edition (2014) it was apparent that there are regulatory requirements that constrain the Commission in being able to complete a code update in the most efficacious manner possible. Some of the statutory constraints include the requirement to coordinate with the adoption of the updated version of the Florida Fire Prevention Code, and the requirement to have the Florida Building Code published for 6 months after publication before it becomes effective. Other constraints include duplicative procedural requirements between the rulemaking requirements of Chapter 120, F.S and the code development requirements mandated by Section 553.73, F.S. Additional considerations are the schedule for the IBC code updates, the NEC code schedule, and the schedule for other important reference documents that must be finalized before incorporation by reference into the Florida Building Code Rule. There are also other built-in time constraints that serve to delay the implementation of a code update cycle. The Commission decided to review all of the critical path milestones in the code development process and determine what should be done to make the process as efficient as possible.

At the October 2014 meeting the Commission voted unanimously to convene a Code Coordination and Implementation Workgroup to review and evaluate all of the regulatory requirements currently impacting the code development process (code update process), and to propose a legislative path to a more efficacious timetable for the implementation of the Florida Building Code update process. The goal of the project was to ensure that any recommendations for statutory changes, once approved by the full Commission, would be delivered to the 2016 Florida Legislature. The Workgroup met four times starting in January of 2015 and concluding in August of 2015. The Workgroup identified, evaluated and consensus ranked a full range of options for each of the topical issues under consideration, and enjoyed extensive public participation throughout the process. The seven overarching key topics evaluated by the Workgroup were as follows: code printing and publication; errata; the Code amendment process; Florida specific amendments; statutory timeline requirements; adoption of standards and codes by reference; and, Commission participation with the ICC code development process. The Workgroup concluded their work at the August 18 - 19, 2015 meeting and developed a package of consensus recommendations for submittal to the Commission that were adopted unanimously by the Workgroup and approved unanimously by the Commission at their October 15, 2015 meeting. The Workgroup's recommendations for legislative changes were supported by industry stakeholders who agreed to take the lead on any needed legislation.

#### PROJECT SCOPE AND TIMETABLE FOR DELIVERY

The scope of the *Code Coordination and Implementation Workgroup* was to review and evaluate all of the regulatory requirements currently impacting the code development process (code update process), and to propose a legislative path to a more efficacious timetable for the implementation of the Florida Building Code update process going forward. It is expected that the Commission's adopted recommendations for statutory changes, will be delivered to the Florida Legislature by construction industry stakeholders.

CODE COORDINATION AND IMPLEMENTATION WORKGROUP						
CONSENSUS RECOMMENDATIONS TO THE FLORIDA BUILDING COMMISSION						
Adopted Unanimously by Workgroup August 19, 2015						
Adopted b	Adopted by the Florida Building Commission October 15, 2015					
Торіс	I. Code Printing and Publication					
Recommendation						
	quo).					
Торіс	II. Errata					
Recommendation	Allow the Commission to issue errata only to correct scrivener's errors or simple typographical errors without additional rulemaking to implement the adopted errata. The proposed errata will be reviewed by the TACs prior to Commission consideration. The Commission will require a 75% or greater voting threshold for approving errata.					
Торіс	III. Code Amendment Process					
Recommendation(s)						
Triennial Code Update	Maintain the 3-year code update cycle (maintain status quo).					
Annual Amendments	Maintain status quo for annual amendments.					
Glitch Amendments	Expand the definition of Glitch cycle amendments to include healthy, safety, welfare specifically technically infeasible, adverse economic impact, products and services not readily available at the time, and/or sufficient time to provide needed training, make the process as expeditious as possible.					
	Conduct the Glitch amendment process after the effective date of newly adopted Code Editions. This recommendation is consistent with the Commission's decision regarding the 2017 Code Update process.					
Торіс	IV. Florida Specific Amendments					
Recommendations	All Florida specific amendments are brought forward for evaluation and a recommendation by the relevant TAC(s).					
	Provide statutory authority for the Commission to consider a cost/benefit analysis for ICC code amendments that are brought into the FBC by the adoption of the new base code through triennial updates for the Commission's evaluation regarding whether to accept or reject the amendments.					
	Provide additional scrutiny to proposed Florida Specific Amendments via the Commission adopting a "test" or "definition" as to what constitutes a Florida specific need.					
Торіс	V. Statutory Timelines					
Recommendation						
Code Adoption Requirements	Require a minimum of 6 months between the effective date of a new Code and the starting date for submittal of proposed code changes for a new triennial Code update cycle.					
Florida Fire Prevention Code	Provide for statutory authority that automatically incorporates subsequent amendments to the FFPC into the FBC without necessity for additional rulemaking.					
National Electrical Code	Electrical Code adoption should be consistent with the Base Code					

	document date (status quo).
Торіс	VI. Adoption of Standards and Code by Reference
Recommendation	Adopt latest standards by reference in conjunction with the latest code
	update with review by technical committees (Status Quo).
Торіс	VII. FBC Participation With ICC Code Development
Recommendation	Maintain the status quo. ICC develops the base code, and the Commission
	amends as needed through development of the FBC.
Торіс	<b>RECOMMENDATIONS FOR INTERAGENCY COOPERATION AND</b>
	Collaboration
Recommendations	Work with the DSFM to sync an accelerated code adoption cycle.
	Closer coordination between FBC and Florida Fire Code development.
	Ensure the SFMO and Florida Building Commission jointly adopt and
	publish an agreed to schedule for the adoption process of future FBC and
	FFPC editions.
	Ensure the Florida Fire Code Advisory Council meets jointly with the Fire
	TAC at least once every six months to review DEC statements issued by
	the other agency and potential issues of improved
	coordination/cooperation between the FFPC/SFMO and
	FBC/Commission.
	To assist with cooperation and coordination, have the FFPC rule adoption
	hearings occur at the same locations and date as the Florida Building
	Commission meetings.
	Utilize the Florida Building Commission web based system to submit, track
	and publish proposed/adopted amendments to the FFPC. (SFMO would
	still administer the FFPC, but the system would be shared.)
	Ensure both the SFMO FFPC and DBPR FBC web pages that display the
	codes, have direct links to the partner codes, DEC statements and informal
	interpretations.
	Ensure the SFMO FFPC informal interpretations web page has the same
	quality as the BOAF Informal Interpretation page with a search friendly index.
	Ensure both the SFMO FFPC informal interpretation web page links to the
	SFMO informal interpretation web page and vice versa.

## APPENDIX E Pool Electrical Safety Project

#### **PROJECT OVERVIEW**

The 2015 Florida Legislature identified the need to evaluate the electrical aspects of swimming pool safety focusing on minimizing electrocution risks linked to swimming pools. In response, the Florida Building Commission approved a research project (technical enrichment) for a *Swimming Pool Electrocution Prevention Study*. In order to implement the project the Commission convened a process to develop recommendations for pool safety focused on the prevention of electrocution in swimming pools. The Commission determined that the project would be evaluated and recommendations developed by convening concurrent meetings of the Commission's Swimming Pool Technical Advisory Committee and Electrical Technical Advisory Committee (TAC). The objective of the project was to evaluate key topical issues, and as appropriate develop code amendment proposals designed to minimize electrocution risks linked to swimming pools.

In response to the Commission's direction the Swimming Pool TAC and Electrical TAC agreed that the initial Phase I scope of the project was to determine whether to recommend a proposed code amendment that would require low voltage lighting in residential swimming pools for new construction. Once the Swimming Pool TAC and the Electrical TAC concluded their evaluation of low voltage lighting they would then evaluate additional project relevant topics in Phase II of the project: specifically bonding, grounding, retrofitting of existing pools, and education. The TACs met for the second time on October 14, 2015 and developed a consensus package of recommendations for both phases of the project (Phase I and Phase II). At their October 15, 2015 meeting the Commission voted unanimously to adopt the Swimming Pool TAC's and Electrical TAC'c swimming pool safety consensus package of recommendations focused on the prevention of electrocution in swimming pools. The recommendations will be evaluated during the 2017 Code update process.

The recommendations adopted by the Florida Building Commission December 15, 2016 are as follows:

**Grounding.** The Electrical TAC and the Swimming Pool TAC voted unanimously to recommend that the Commission charge staff to work with the TAC chairs and in consultation with stakeholders to formulate a code amendment requiring that all electrical circuits feeding equipment that could potentially energize a pool have GFCI protection for new residential and commercial swimming pools (the goal is to fill in any gaps in the current Code).

**Education.** The Electrical TAC and the Swimming Pool TAC voted unanimously to recommend that the Commission support a comprehensive educational effort to ensure there is a consistent message to enhance pool electrical safety issues for existing and new pools by working with existing resources including educational providers and associations. The effort should include defining the problems, identifying solutions and communicating a consistent message to stakeholders (contractors, consumers, home inspectors, pool maintenance providers, etc.) through training courses, flyers, brochures, websites, etc. Key issues for education messaging include lighting, bonding, grounding, GFCI, maintenance of existing pools, and monitoring devices to detect stray currents in the pool water, etc.

**Existing Swimming Pools.** The Electrical TAC voted 6-2 in favor (75%), to recommend the Commission charge staff to work with the TAC chair and in consultation with stakeholders to formulate a code amendment requiring existing commercial and residential swimming pools to have GFCI protection for replacement pool pump motors, if not already in place; to provide GFCI protection for the replacement of 120 volt pool lights when they are replaced; and, as part of the close out inspection ensuring that the existing bonding system is complete and terminated properly.

The Code amendments are proposed for inclusion in the *Florida Building Code, 6<sup>th</sup> Edition (2017)* code update process.

Subsequent to the first two phases of the project, in a concurrent meeting conducted during the TACs' review of proposed Code amendments for the 2017 Code Update Process the Swimming Pool and the Electrical TACs discussed the Calder Sloan Swimming Pool Electrical-Safety Task Force that was established within the Florida Building Commission by the 2016 Florida Legislature and decided that the two TACs should meet concurrently to further evaluate the issue. The TACs expressed the desire to consider any potential Code modifications based on the best available science and data.

As the next step in the process the Commission convened a concurrent meeting of the Swimming Pool TAC and Electrical TAC on May 24, 2016 to discuss recommendations to the Commission regarding how best to proceed with the evaluation of pool electrical safety. In response, the TAC's voted unanimously to recommend the Commission convene the Calder Sloan Swimming Pool Electrical Safety Task Force after July 1, 2017 and charge the Task Force with reviewing the issues identified during public comment provided during the May 24, 2016 teleconference meeting.

At the May 24, 2016 meeting the Swimming Pool and Electrical TACs voted unanimously to recommend the Commission convene the Calder Sloan Swimming Pool Electrical Safety Task Force after July 1, 2017, and to charge the Task Force with reviewing the issues identified from the public comment provided during the May 24, 2016 teleconference meeting.

#### SUMMARY OF ISSUES FOR EVALUATION BY THE TASK FORCE

- 1. Review and develop recommendations regarding new technologies designed to prevent electrocution in swimming pools.
- 2. Require an electrical inspection on the entire property, including testing of proper grounding and bonding, at time of sale of the house.
- 3. Require ongoing electrical inspections of the property to meet insurance renewal requirements every X amount of years (working with the insurance industry to hash out the specifics).
- 4. Request increased funding for combating unlicensed activity and increased funding for educational outreach similar to the educational materials currently being worked on (to ensure consumers are aware of the pitfalls and dangers of not hiring licensed contractors and not following code requirements).
- 5. Encourage adoption of the 2017 NEC to ensure Florida has the latest/greatest electrical code requirements, skipping over the 2014 edition (the 2017 NEC has pool lift requirements that are not in the 2014 or 2011 NEC, for example).
- 6. Request the Legislature to fund a study to determine the extent of pool electrical problems and how best to address the 1.3 million existing residential pools in Florida (this would provide

actual data on the depth of the problem and how best to address in future code editions or glitch cycles).

7. Suggest 1 hour of a Chapter 489, F.S., pool contractor's 14 hours of CE requirements include an electrical education class (which many are already taking voluntarily thru education courses provided by FSPA, IAEI and others).