

THE FLORIDA BUILDING COMMISSION REPORT TO THE 2007 LEGISLATURE

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*Prepared by the
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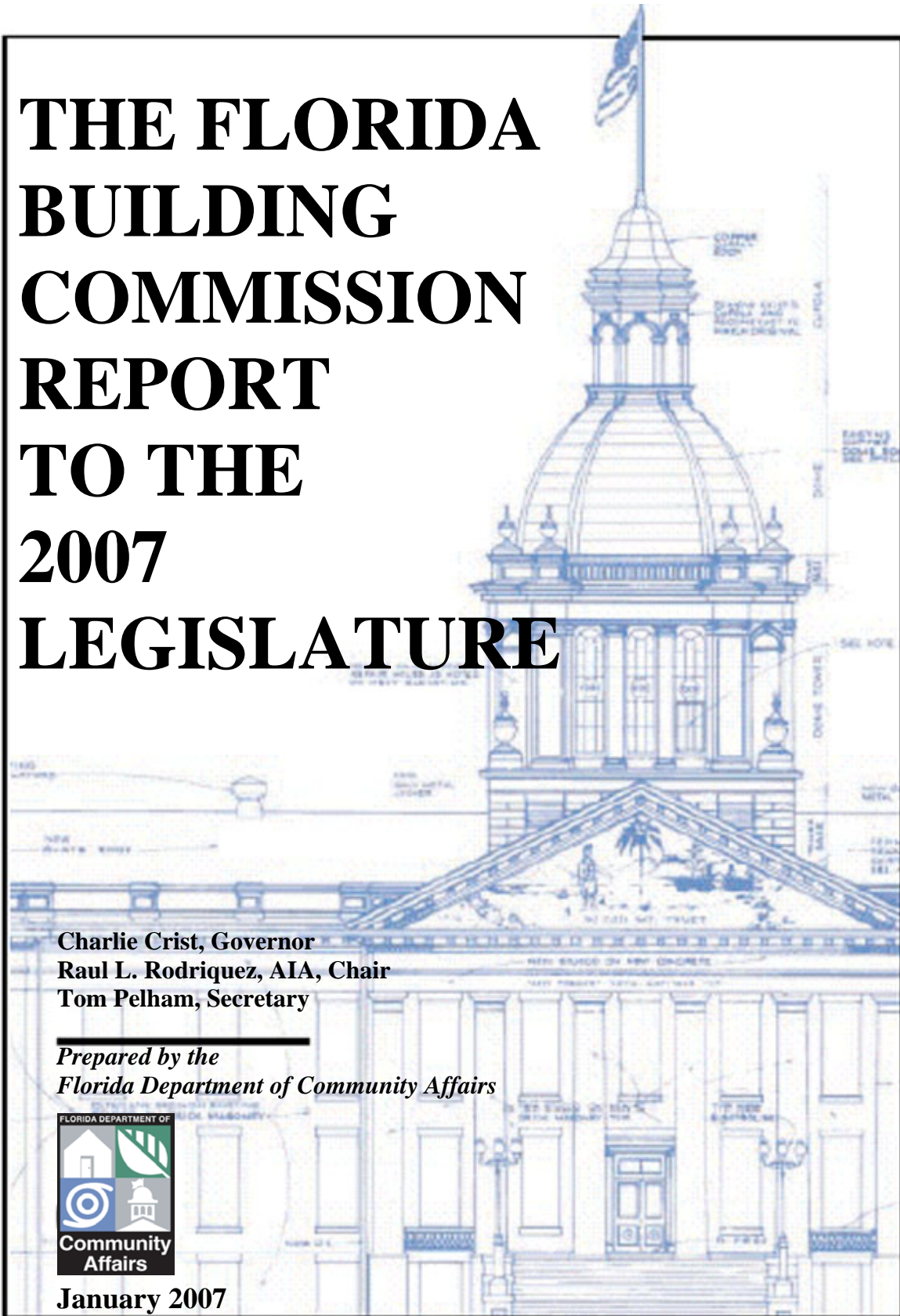


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1. Executive Summary

The primary focus of the Florida Building Commission during 2006 was implementation of phase two hurricane protection standards through the 2006 Amendments to the Florida Building Code; completion of the Panhandle windborne debris study directed by the 2005 Legislature; and the commencement of the 2007 update to the Florida Building Code (Code) with selection of the 2006 I Codes as foundation for the 2007 Florida Building Code. In addition, the Commission convened six workgroups with interested parties to develop recommendations on product approval validation, window labeling, garage door and shutter labeling, termite code provisions, Energy Code recommendations, and recommendations regarding the Commission's code amendment processes.

During 2006 the Commission once again focused on consensus-building efforts regarding the implementation of Commission policy, with extensive input from stakeholders and interests affected by Commission policy. Chairman Raul L. Rodriguez, AIA, encouraged and led the Commission's consensus-building initiatives. In addition, as authorized by the 2006 Legislature, the Commission established a science-based Panhandle Windborne Debris Region definition and a new hurricane wind Exposure Category C definition. Finally, the Commission continued with its focus of developing storm damage investigations and research and adopting code amendments related to making Florida's structures, and the products that comprise them, more storm resistant.

The Florida Building Code System was developed after Hurricane Andrew to streamline statewide adoption and enforcement of improved hurricane protection standards. Hurricanes Charley, Frances, Ivan and Jeanne in 2004 and Dennis, Katrina and Wilma in 2005 demonstrated the overall effectiveness of the Code, and identified areas that need additional refinements. Analyses of these storms were conducted throughout 2005 and 2006 and will continue during the coming year. Assessments indicate the design wind speeds required by the Code were adequate and buildings built to the new code did not experience nearly as severe damage as older buildings. While some new building technologies did have weaknesses, the major structural systems failures seen in older buildings were avoided in buildings complying with the Florida Building Code. The Commission addressed many of the weaknesses through implementation of the expedited code amendments authorized by the 2005 Legislature, as well as additional code enhancements adopted during the 2006 annual interim amendment process, which became effective on December 8, 2006. With the continuing work of the Hurricane Research Advisory Committee and various product-specific workgroups, during 2006 the Commission remained committed to addressing building and product weaknesses by working with industry to identify and fund research as well as identifying and implementing additional code amendments designed to strengthen the Code's building envelope protection requirements. This process continues with the commencement of the 2007 Code Update process.

The Code establishes minimum requirements to protect buildings and their occupants from wind, rain, flood and storm surge based on well-researched and continually-evolving engineering standards for buildings and the products that go into their construction. It is important that the Commission be

able to quickly integrate these standards into the Code to keep pace with changes in building technology and advances in the sciences of storm dynamics and building performance.

The Commission is required by Florida law to update the Florida Building Code every three years, and the 2007 Edition will represent the second update and third edition of the Code. The update process is based on the code development cycle of the national model building codes, which serve as the “foundation” codes for the Florida Building Code. With the implementation of the 2004 Edition of the Code, Florida developed a new code specific to existing buildings based on the International Existing Buildings Code, the Existing Building Code, and the addition of a new code specific to one and two family homes and townhouses based on the International Residential Code, the Residential Code. During 2006 the Commission implemented code amendments to enhance the high wind provisions of the Residential Code, and initiated the 2007 Update process by selecting the 2006 I Codes as foundation for the 2007 Florida Building Code.

Florida Statute, Chapter 553.77(1)(b), requires the Commission to make a continual study of the Florida Building Code and related laws and every three years report findings and recommendations to the Legislature for provisions of law that should be changed. This task was completed for the first time in 2005 and reported to the 2006 Legislature, which subsequently provided authority for the Commission to implement expedited code amendments pursuant only to the rule adoption procedures contained in chapter 120. With the expedited process the Commission is authorized to address: 1. Conflicts within the updated code; 2. Conflicts between the updated code and the Florida Fire Prevention Code adopted pursuant to Ch. 633; 3. The omission of previously adopted Florida-specific amendments to the updated code if such omission is not supported by a specific recommendation of a technical advisory committee or particular action by the commission; or 4. Unintended results from the integration of previously adopted Florida-specific amendments with the model code.

The Code is a complex interrelated document consisting of thousands of pages and containing myriad related standards and references that must be evaluated and updated on an ongoing basis. In the case of editorial and unintended glitches, it is important for the Commission to correct these non-controversial glitch and correlation issues as quickly as possible in order to prevent unintended consequences and unnecessary delays and complications for all of the building code system participants. With the new expedited code amendment authority, the Commission is now capable of updating standards as needed. In 2007, the Commission use administrative rules to develop criteria for what the Commission will consider during annual interim amendment processes, as well as allowing the Commission’s Technical Advisory Council to review proposed code amendments and provide the Commission with a technical review of the public’s comments on the TAC’s code amendment recommendations.

The product approval system is an internet based system administered by a contracted Product Approval Administrator. With major consensus-based revisions to the system implemented through rule development in 2006, the system is processing hundreds of applications monthly with efficiency and satisfaction by the product manufacturers who use the system. The Commission’s Product Approval Program Oversight Committee convenes at every Commission meeting to review product and entity applications, address petitions for declaratory statements, and consider enhancements to the product approval system. Since the system went into effect in October 2003, the Commission has

approved 5,615 product applications and 46,508 products for statewide use within limitations established by the approvals, as well as approved 103 product approval entities.

With the hiring of an Education System Administrator in 2006, the Commission's Education Product Oversight Committee now receives technical assistance in establishing course development guidelines and conducting the oversight function of the Building Code Education Accreditation System.

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 order to ensure the accountability and efficacy of the Education System, one of the cornerstones of the Building Code System, the Commission is recommending that the Legislature place the sole authority and responsibility for training in the Florida Building Code under one entity.

The Commission's commitment to consensus-building on substantive issues was spotlighted during 2006, with Chairman Rodriguez appointing facilitated workgroups of Commission members and representative stakeholders to reach agreement on packages of recommendations in their respective subject areas. The workgroups convened during 2006 include: the Hurricane Research Advisory Committee, Product Approval Validation Workgroup, Code Amendment Process Review Workgroup, Window Labeling Workgroup, Garage Door and Shutter Labeling Workgroup, Termite Workgroup, and the Energy Code Transition Study Workgroup. Each of these groups worked with stakeholders to identify issues, evaluate a full range of options, and submit consensus recommendations to the Florida Building Commission on their respective topics. In addition, the Chair appointed a Committee Organization and Process Ad Hoc Committee to consider enhancements to the Commission's code adoption processes, the TAC's review of code amendments, and alternate members for Commission TACs and workgroups through revisions to Rule 9B-3.004.

The 2006 Legislature assigned the Commission a variety of projects, including establishing in rule the Panhandle Windborne Debris Region designation and a revised definition of wind Exposure Category C. In addition, the Product Approval Validation Workgroup developed consensus recommendations that the Commission will implement through the Product Approval Product Oversight Committee and revisions to Rule 9B-72 during early 2007. The Commission, working with affected interests, has developed recommendations and/or implemented all of their legislative assignments, and the Commission's recommendations and resulting actions are detailed in this report.

Monitoring the building code system and determining refinements that will make it more effective is a primary responsibility of the Commission, and it continually makes refinements by administrative rules where statutes allow. However, the system is established in law so some refinements require statutory amendments. The Commission's recommendations for legislative actions that will improve the system's effectiveness are summarized as follows:

- Clarify statutory authority for adoption of equivalent product evaluation standards via rule 9B-72, FAC.*
- In order to maintain consistent construction standards for residential construction, govern the sizing of private sewage systems by the definitions contained in the Florida Building Code.*
- Provide statutory authority for the Commission to develop criteria and penalties for validators who incorrectly validate applications for product approval.*
- Relocate the Chapter 553.509 requirements for backup power of elevators greater than seventy-five feet in length, established by the 2006 Legislature, to a more appropriate section of Florida Statutes.*
- Place sole authority and responsibility for training in the Florida Building Code under one entity.*

Other recommendations may be implemented within existing authority, and statutory authority should be requested only if needed to.

- Provide statutory authority allowing, but not requiring, the Commission to adopt the IECC as the foundation code for the Energy provisions of the Florida Building Code, if the Commission determines it is in the best interest of the State to do so.*
- Require that the certification method of compliance for state product approval can only be used with products that have been tested to standards referenced in the Code, denying the certification method for products that have no test standard(s) referenced in the Code.*
- Implement a process where, if validation is defined as a technical review, the evaluation engineer does not need to be an independent third-party from the manufacturer; instead, the evaluation can be performed by the manufacturer's engineer, provided the engineer is a Florida PE or RA who has taken the core building code course.*

2. Introduction

In 1974, Florida adopted a state minimum building code law in 1974 that required 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, in light of the fact that a local code that was 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 Andrew, Miami-Dade County conducted an exhaustive review of its building code and made significant changes to both the code and support systems for code enforcement. In other areas of the state the Florida Board of Building Codes and Standards (predecessor to the Florida Building Commission) adopted significant upgrades to the wind resistance standards of the model state minimum code that was used by the majority of other local governments. The state also began licensing local governments' building code enforcement personnel. These steps proved critical in leading to the building codes that produced improved building performance in the 2004 hurricane season.

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

In order to implement the new Florida Building Code, the Florida Building Commission was established in law. The Florida Building Commission is a 23-member Governor-appointed group that successfully created, implemented, and maintains the new statewide Florida Building Code. The Commission is composed of the Governor's Chair and 22 members appointed according to criteria established by the American National Standards Institute (ANSI) for representation. They are, in the general interest category: four code officials, two state government representatives, a local government representative, a representative of persons with disability; in the consumer category: an architect, a structural engineer, a mechanical engineer, representatives of fire protection technology, the building management industry, and the insurance industry; and in the producer category: a general contractor, a residential contractor, a mechanical contractor, a

plumbing contractor, an electrical contractor, a roofing/sheet metal/air conditioning contractor, a manufactured building representative, and a building product manufacturer.

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

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

Engineering standards progress as new real-world tests like hurricanes provide the laboratory for expanding knowledge. It is essential that Florida maintain pace with the evolving standards because its coastal exposure and rapidly expanding population create a major risk and limit options for ensuring the safety of its citizens. The Commission keeps pace by amending the Code annually to adopt updated reference standards and by major updates every three years to incorporate new editions of the national model codes. A major focus of the Commission's efforts in 2005 was the consideration and adoption of enhanced storm protection provisions, resulting from a comprehensive review of investigations resulting from the hurricanes of 2004 and 2005.

The Florida Building Commission's Hurricane Research Advisory Committee continues to meet to review research and make recommendations to the Commission regarding proposed code enhancements. Some of the Committee's recommendations were implemented in a specially authorized "expedited" code amendment process conducted in 2005. Other recommendations that required additional development effort were adopted with the Glitch Code amendments in 2006, and additional code amendments will be considered during the 2007 Update cycle.

In an effort to address building and product weaknesses in the Code, the Committee in 2006 developed and ranked a list of issues that require research and development in order to make Florida's structures, and the products that comprise them, more storm resistant. Of particular note, water managed window and door installation requirements are under development, and the Commission is working with industry to ensure that windows, garage doors and shutters are labeled in a way to provide building officials with the information they need, in a field-useable format, to ensure that the correct products are installed according to the appropriate conditions of their use.

The Florida Building Commission seeks to develop consensus decisions on its recommendations and policy decisions. Consensus is a participatory process whereby, on matters of substance, the members strive for agreements they all can accept, support, live with or agree not to oppose. In instances where unanimity is not possible, final decision on substantive decisions, and the Commission finds that 100% acceptance or support is not achievable, final decisions require at least 75% favorable vote of all members present and voting. This super-majority decision rule underscores the importance of actively developing consensus throughout the process on substantive issues. The Commission's consensus process is conducted as an open public process with multiple opportunities for the public to provide input to the Commission on substantive issues. At each Commission meeting, the public is welcome to speak during the public comment period provided for each substantive issue under consideration, as well as during general public comment periods provided at the end of each day's meeting. In addition, most substantive issues before the Commission go through a workgroup process where consensus recommendations are developed by appointed representative stakeholder groups, providing additional opportunities for public input. Workgroup recommendations approved by the Commission usually require rule development to implement, affording at least two additional entry points for public comment. Since its formation in July 1998, the Commission has demonstrated a commitment to working with affected interests to build consensus on complex issues. The adoption of the first edition of the Florida Building Code (2001 Edition), developed from September 1998 through January 2001, involved 27 Commission meetings, dozens of facilitated public workshops, and hundreds of Technical Advisory Council meetings. The Commission 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 of experts, the Commission has always developed its decisions on the results of the best engineering-based science available. Although the Code is by law a minimum building code, the Florida Building Code is the strongest consensus and science-based building code in the country.

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

3. Legislative Assignments

The 2006 Florida Legislature-through the passage of Senate Bill 1774 and House Bill 1187, signed into law by the Governor in June 2006 authorized the implementation of recommendations developed in response to the 2005 Legislature's assignment to study the Panhandle Windborne Debris Region designation. The bills removed the Panhandle Windborne Debris Region and wind "Exposure C" designations from law and assigned the Commission responsibility for re-designating them in the 2006 Amendments to the Florida Building Code.

In response, the Commission worked with stakeholders and affected interests to address each of the legislative assignments through consensus-based decisions. The Commission's actions are detailed in the following section of this report.

Rules for Appeal of Building Official Decisions/Binding Interpretations

At the request of the Commission, the 2005 Legislature created Section 9, Section 553.775 to provide the Commission with the authority to issue binding interpretations.

The system requires the Commission in coordination with the Building Officials Association of Florida (BOAF) to designate a five-member panel to hear requests to review decisions of local building officials. The newly implemented web-based process is in place and administered by BOAF.

As mandated by Florida Statutes, the Florida Building Commission adopted an administrative rule that clarifies the interpretation/appeal process and adopts by reference the electronic/website components of the process. The electronic/website process allows users to submit applications electronically and also search for binding interpretations electronically. Further, as directed by law, the Florida Department of Community Affairs has contracted with the Building Official Association of Florida to administer the process. To date, few binding interpretations have been completed through the new process. However, as users get more familiar with the process, it is expected that the number of binding interpretations will increase. Attached are flowcharts that delineate the steps of the binding interpretation process, including flowcharts for other interpretation processes authorized by statute.

In addition, legislation passed in 2003 mandated that the Commission establish an informal process for rendering nonbinding interpretations of the Florida Building Code. The Commission has adopted a process for nonbinding interpretations, which is also detailed in the flowchart attached to this Report as "Appendix A".

Panhandle Windborne Debris Region Designation

The 2005 Florida Legislature debated whether to revise the definition of the windborne debris region along the Panhandle coast from Franklin County to the Alabama border, and determined that further study was warranted. The Legislature directed the Florida Building Commission to review damage caused by windborne debris during Hurricane Ivan and other data, and to work with building officials from the impacted areas to develop a recommendation for consideration by the 2006 Legislature.

On September 13, 2005, the Commission conducted its first workshop at the Okaloosa County Airport, to solicit input from local building officials and other stakeholders in the Panhandle region. At the workshop, wind engineering scientists advised that Hurricane Ivan was not a “design level storm,” so experience with windborne debris from this storm was not indicative of the risk to buildings in the Panhandle. Building officials in the region expressed the uniform view that the primary risk in the Panhandle is storm surge and not windborne debris. The workshop produced a consensus for a study on the treed environment effects and historical wind data, in order to provide additional data for consideration in developing recommendations to the Legislature.

It should be noted that although building officials from the Florida Panhandle expressed strong support for the study, most agreed that changes were not then warranted in the definition of the windborne debris region of the Florida Panhandle. The local building officials’ comments ranged from the belief that most damage was related to surge and not windborne debris, to the view that the Panhandle is a unique environment that ASCE 7 does not adequately reflect, to extra windborne debris protection should be voluntary and not mandatory, to mandatory protection will increase the cost of already unaffordable housing in the region.

Subsequent to the Panhandle workshop, at the October 2005 meeting the Commission voted unanimously to request budgetary authority to contract with a consultant to conduct an engineering based risk assessment of hurricane windborne debris protection options for the Panhandle in order to analyze the risks, costs, and benefits of windborne debris protection for the region. The research focused on factors unique to the Panhandle region, including treed areas inland of the coast, and considered historical wind data effects. The requested funding authorization was approved, and the consultant (ARA) updated the Commission at the February 2006 meeting.

At the February 2006 Commission meeting, the consultant reported that the goal of the study was to perform wind tunnel tests for houses located in treed environments characteristic of the Florida Panhandle, and to develop computer models for analysis of windborne debris protection effects for representative Panhandle houses. The consultant subsequently updated the windborne debris model and conducted wind tunnel tests designed to perform hurricane simulations of the representative houses located at various positions in the Panhandle, designed to evaluate building damage and loss with and without windborne debris protection. The consultant conducted wind tunnel tests, analyzed hurricane data, and modified computer models.

At the conclusion of the Panhandle study update provided at the February 2006 meeting, the Commission voted unanimously to recommend that the Legislature remove the Panhandle

Windborne Debris Region definition from law, thereby authorizing the Commission to adopt a new definition within the Code by rule.

The Commission expressed a commitment to work with stakeholders to develop consensus on a new definition to be developed and adopted by rule into the Code, and to that end the Commission conducted a second Panhandle region workshop on February 16, 2006. At the workshop, stakeholders were presented with an update on the research project's status and the Commission's recommendation to the Legislature.

It should be noted that the Commission's decision to proceed with a regional strategy is consistent with state policy of recognizing that Florida is diverse geographically and climatically, and risks are not uniform throughout the state. On this basis, the Florida Building Code and National Engineering Standards consider requirements specific to different regions of the state when and where appropriate, such as the High Velocity Hurricane Zone provisions of the Code specific to Miami-Dade and Broward counties in Southeast Florida, and variations of design wind speeds relative to proximity to Florida's coasts. In addition, the Commission has always advised that the Code should be developed by the Commission in a consensus process and not written into law.

The 2006 Legislature adopted SB 1774 and the Panhandle Windborne Debris Region exemption was removed from law. The Commission, as requested, was authorized to designate the Panhandle Windborne Debris Region based on the ARA modeling. The Commission was also authorized to use only Chapter 120 requirements for rule adoption, and the rule was to take effect no later than May 31, 2007.

At the March 2006 meeting, Dr. Larry Twisdale and Dr. Peter Vickery provided the Commission with an overview of results from Phase I of the study, the Wind Tunnel Test. At the May meeting Dr. Twisdale and Dr. Kurt Gurley updated the Commission on additional results regarding the study and answered member's questions.

At the June 19, 2006, meeting, Dr. Twisdale and Dr. Gurley presented their final report and recommendations and responded to clarifying questions, and then public comment was taken by the Commission. The study concluded that treed terrain has a greater effect on windborne debris risk than expected. The national engineering design standard currently adopted by the Florida and national building codes recognizes the wind shielding effect of trees, allowing for the reduction of required design pressures by 30 percent and more as determined from wind tunnel testing. However, the standard does not currently provide credit for shielding from wind by trees for windborne debris protection requirements even though the shielding principle is recognized, because data was not available prior to the Commission's study. The researchers also advised that additional wind tunnel testing and computer modeling should be conducted to establish a tree shielding credit for windborne debris requirements in the Code. However, due to the level of the effect identified in the study to date, it should be recognized in the Commission's re-designation of the Panhandle Wind Borne Debris Region. The researchers proposed that for an interim period while the effect is being quantified for a broader range of housing development configurations, the one mile of the coast exemption be eliminated and replaced by the designation of all areas where the design wind speeds are 130 mph or greater. This interim designation includes all areas bounding the coast and dramatically increases the covered areas in

the western Panhandle, where the region's demarcation would move to a point mid-way between the coast and the southern boundary of Alabama. The new region would encompass 85 % of the new construction in the Panhandle and omit areas designated predominantly agricultural and recreational. At the conclusion of public comment, the Commission participated in a facilitated discussion and made a decision on the Panhandle Windborne Debris Region definition consistent with the researcher's recommendations.

At the July 2006 meeting, the Commission conducted a second supplemental rule development workshop, at which it considered public comments, approved primarily editorial revisions to approved amendments, and voted unanimously to proceed with rule adoption for Rule 9B-3.047, the Florida Building Code Rule, integrating and noticing the approved changes.

At the August 2006 meeting the Commission conducted a rule adoption hearing and, after public comment, voted to proceed with rule adoption integrating the 130 mph contour as the Windborne Debris Region designation in the Panhandle, including all areas within 1,500 feet of the inland bays that are not within the 130 mph contour.

In addition, the Commission voted unanimously to adopt the Hurricane Research Advisory Committee's recommendation to continue with Phase II of the windborne debris study, as recommended by ARA, including post-hurricane assessments of windborne debris damages resulting from any 2006 storms. The recommendation is to conduct a research study, with the results serving as the basis for a 2008 statewide implementation of windspeed/terrain-dependent windborne debris criteria.

Exposure Category C Definition

The 2005 legislature removed the definition of "exposure category C" as defined in section 553.71(10), Florida Statutes, and authorized the Commission to make recommendations for a new definition that more accurately depicts Florida-specific conditions by rule. The Commission worked with stakeholders to develop consensus on a definition which was adopted through the glitch code cycle process, that dramatically increases the wind resistance of buildings built around inland water bodies and bays and in open terrain characteristic of the exploding growth areas of South Florida. The new definition is as follows:

Exposure C. Open terrain with scattered obstructions, including surface undulations or other irregularities, having heights generally less than 30 feet (9144 mm) extending more than 1,500 feet (457.2 m) from the building site in any quadrant. This exposure shall also apply to any building located within Exposure B-type terrain where the building is directly adjacent to open areas of Exposure C-type terrain in any quadrant for a distance of more than 600 feet (182.9 m). Short term (less than two year) changes in the pre-existing terrain exposure, for the purposes of development, shall not be considered open fields. Where development build out will occur within 3 years and the resultant condition will meet the definition of Exposure B, Exposure B shall be regulating for the purpose of permitting. This category includes flat open country, grasslands and ocean or gulf shorelines. This category does not include inland bodies of water that present a fetch of 1 mile (1.61 km) or more or inland waterways or rivers with a width of 1 mile (1.61 km) or more. (See Exposure D.)

4. The Florida Building Code

The Commission is required by law to update the Florida Building Code every three years, and the 2004 Edition represents the first update and second edition of the Code.

The update process is based on the code development cycle of the national model building codes, which serve as the “foundation” codes for the Florida Building Code. National model building codes and most engineering standards are updated every three years and the intent is to keep the Code up-to-date with evolving national standards of health, safety and welfare of the public.

The model building codes on which the Florida Building Code is based have undergone a major transformation since work began on the Florida Building Code in 1998. In 1998 there were three model code organizations, each with a separate model code that included a “building” code for structural, fire safety and general building design requirements and separate plumbing, mechanical (heating, cooling and ventilation) and fuel gas sub-codes. The code for electrical systems is a reference standard and is developed by a separate organization. During the late 1990s the three regional model code organizations transitioned into a single organization, the International Code Council, which was to develop a single national model code. When that code was completed and the organizations merged, the three prior model codes were abandoned. In late 1998 when the Commission selected a model code to provide the base requirements for the Florida Building Code, the International Plumbing, Mechanical and Fuel Gas sub-codes were in place but the “Building” Code was still under development. The first edition of the Florida Building Code was based on the International sub-codes and the Standard Building Code, which had been used by Florida counties, municipalities and state agencies since the mid-1970s, for the “building” volume. The last edition of the Standard code was published in 1999. The first edition of the new International Building Code was in place by 2000 and has since been updated with a second edition, the 2003 International Building Code. With the adoption of the Second Edition of the Florida Building Code, the Code is now based on the International Family of Codes, modified with Florida-specific amendments. Florida-specific amendments go through a rigorous review process including posting to the BCIS for 45 days prior to a review by the Commission’s Technical Advisory Committees, posting the councils recommendations for 45 days prior to Commission consideration, and then the Chapter 120 rule development process. The Commission provides multiple input opportunities for public comment, and once the code is published six months must pass before the Code’s effective date.

Implementation of the 2004 FBC Glitch/2006 Annual Interim Amendment Process

The Commission began its annual interim amendment process for 2006 with a focus on identifying and correcting code glitches and correlation issues related to implementation of the 2004 Edition of the Florida Building Code. The amendment submittal cutoff date was December 1, 2005 and the Commission’s Technical Advisory Committees met in January 2006 to review the proposed amendments and make recommendations to the Commission. The Commission then reviewed the amendments and initiated rule-making in February 2006. The Commission completed rule-making in August 2006 and the effective date for glitch amendments was December 8, 2006.

The Commission voted unanimously that only amendments related to hurricane provisions, glitch, and standards updates and correlation issues would be considered during the 2006 Annual Interim Amendment “Glitch” process.

Adopted Glitch Code amendments include additional hurricane provision enhancements proposed by the Hurricane Research Advisory Committee and amendments to the Code’s Residential Volume prescriptive design criteria regarding resistance to hurricane winds. Specifically, the Commission adopted enhancements to the Residential Code for high wind related to the masonry, foundations, wall coverings, wood, roofing, and windows provisions of the Florida Building Code.

Of particular note, during the glitch process the Commission adopted the windborne debris designation for the Panhandle region of the state (from Escambia to Franklin counties), and adopted a new Exposure Category C definition to account for the effects of open terrain and large subdivisions.

It should be noted that there were no major glitches, and with the exception of hurricane provisions, the residential prescriptive design criteria, the Exposure C definition, and the Panhandle Windborne Debris Region designation, glitches were minor in nature. The focus was on harmonizing the Florida Building Code with the 2006 International Building Code. The Commission also resolved conflicts with ASCE7-02 and revised Chapter 16, the Structural Design chapter of the Code, to be consistent with the International Building Code provisions.

2007 Florida Building Code Update Process

The adoption of the 2007 Florida Building Code will represent the second update and third edition of the Code. This will be a major focus of the Commission in 2007 and represents initiation of the triennial code update process for the 2007 Edition of the FBC. The 2006 Edition of the International Building Code was published in March 2006, and the Commission’s process—which by law could not begin until six months after the printing and availability of the International Code—commenced in October 2006 with selection of the 2006 I Codes as foundation for the 2007 Florida Building Code. The process will culminate in the completion of the Third Edition of the Florida Building Code in 2007, and implementation in early 2008.

Florida Statute, Chapter 553.73(6), requires the Commission to update the Florida Building Code every three years by selecting the most current version of the International Family of Codes. The commission may modify any portion of the foundation codes only as needed to accommodate the specific needs of this state, maintaining Florida-specific amendments previously adopted by the commission and not addressed by the updated foundation code. The Commission complied with this statutory requirement by selecting certain of the 2006 Editions of the I-Codes as the foundation for the 2007 Code (Building, Residential, Mechanical, Plumbing, Fuel Gas, and Existing Building Codes). The Florida Electrical Code has already been updated with the Commission’s adoption of the 2005 NFPA 70: National Electrical Code. The 2007 Edition of the Florida Building Code is scheduled to be implemented in October 2008.

5. Hurricane Damage Investigations—Hurricane Research Advisory Committee

As a result of hurricanes affecting Florida during the 2004 season, the Florida Building Commission requested and was granted legislative authority to adopt code amendments in an expedited process. The legislation enacted in 2005 (SB 442 Section 34) authorized the Commission to adopt consensus-based code provisions addressing water intrusion and roof-covering attachment weaknesses, subject only to the rule adoption procedures in Chapter 120—the Expedited Code Amendment process. In addition, the Legislation identified other hurricane resistance and fire safety provisions for the Commission the review and/or implement.

In response to the 2004 Hurricane Season, Chairman Rodriguez appointed a small coordinating group, the Hurricane Research Advisory Committee, consisting of Commissioners and other stakeholder representatives, charged with identifying research being conducted related to building failure issues resulting from the 2004 hurricanes, identifying any research gaps on key issues identified but not being researched, reviewing the research findings, making recommendations on whether to recommend code amendments or further studies, and finally, to ensure that the Commission is provided with all relevant research findings on each of the major issues, prior to the Commission considering code enhancements resulting from lessons learned.

The Commission began the formal hurricane review process with a workshop conducted in December 2004. The workshop assembled all of the entities conducting studies on building damage and hurricane characterizations to assess what studies were already being conducted and what additional research was needed. At the conclusion of the workshop and a review of the preliminary observations, the Commission voted to fund a project starting in early 2005 to collect statistical data on the 2004 hurricanes. Two months after the Commission’s workshop, a preliminary findings of the ongoing studies were presented at a Hurricane Symposium held in February 2005.

The Hurricane Research Advisory Committee met at each subsequent Commission meeting during 2005 to consider presentations on the findings and recommendations from each of the studies. The committee delivered its package of recommendations for code enhancements resulting from lessons learned from hurricane storm damage at the August 2005 Commission meeting.

As a result of hurricanes affecting Florida during the 2004 and 2005 seasons, the Florida Building Commission’s Hurricane Research Advisory Committee continues to meet at each Commission meeting to review research and make recommendations to the Commission regarding proposed code enhancements. Some of the Committee’s recommendations were adopted with the 2006 Glitch Code amendments and others will be considered during the 2007 Code Update cycle.

During 2006 the Committee developed and ranked a list of issues that require research and development in order to make Florida’s structures, and the products that comprise them, more storm resistant. Of particular note, water managed window and door installation requirements are

under development, and the Commission is working with industry to make sure windows, garage doors and shutters are labeled to provide building officials with the information they need, in a field useable format, to ensure that the correct products are installed according to the appropriate conditions of their use.

In addition, the Committee received regular updates from the consultants conducting the Panhandle Windborne Debris Region designation and provided the Commission with recommendations to support the study's results as well as support for Phase II of the study, to conduct a research study, with the results serving as the basis for a 2008 statewide implementation of windspeed/terrain-dependent windborne debris criteria.

The Committee continuously monitors current research and recommends the development of standards and installation practices related to protecting against wind damage and water infiltration.

During 2006, Committee members identified and prioritized a list of issues that require additional research and development additional recommendations for proposed hurricane related Code amendments. In addition, the advisory committee received monthly updates on preliminary results from the Panhandle Windborne Debris Region Study, prior to their submittal in July 2006.

At the July 2006 meeting, members reviewed the final results of the consultants Panhandle Windborne Debris Region Study. The committee voted to recommend that the Commission continue with Phase II of the windborne debris study, as recommended by ARA, including post-hurricane assessments of windborne debris damage resulting from any 2006 storms. The recommendation is to conduct a research study, with the results serving as the basis for a 2008 statewide implementation of windspeed/terrain-dependent windborne debris criteria.

The implementation plan calls for the Department of Community Affairs to amend the ARA contract for Phase II of the windborne debris study project. The study will include assessing results from any 2006 hurricanes, with a current project completion date of late 2007. In addition, ARA and Department staff are seeking additional funding sources to expand the study to include additional issues such as tree blow-down analysis. The amount of funding secured will determine the scope of the study/project.

At the August 2006 meeting, members heard an update on Fenestration Manufacturer's Association / American Architectural Manufacturer's Association window installation and window water leakage projects, respectively. In addition members were asked to consider what assumptions should be considered for analyzing the cost-benefit data regarding Phase II of the windborne debris study project.

The Committee will next receive an update on related projects and will work to develop consensus on the assumptions to be used in the cost-benefit analysis regarding Phase II of the windborne debris study.

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

6. Product Approval

The Florida Building Code establishes standards for products integrated into buildings in addition to standards for the design of buildings themselves. Where compliance with prescriptive standards such as location of fire exits can be determined by reviewing building plans and onsite inspections during construction, how well products such as windows 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.

The administrative rule implementing Section 553.842, Florida Statutes, establishes uniform procedures for both local and optional state approval of products. While implementation of the system has progressed relatively smoothly for state approvals and most local governments have integrated approval procedures into their business processes, other building departments report difficulties. In response the Commission appointed a Product Approval Workgroup to review the procedures in the rule and develop consensus recommendations for refinements.

The Commission conducted an extensive stakeholder review process to develop consensus recommendations for refinements to the Product Approval System. The Product Approval Workgroup met for over a year and delivered its recommendations to the Commission in March 2005. Subsequently, the Commission convened an extensive rule development process to adopt and implement the Workgroup's recommendations, as well as the legislative provisions for local product approval (SB 442 Section 19). Following public input during rule development, the Commission voted unanimously to adopt a package of refinements to the rule that became effective on January 1, 2006. The A Department of Community Affairs worked with stakeholders and the Program Oversight Committee to identify and implement enhancements to the web-based system to ensure that relevant information needed by Building Departments is easily accessible and the application process is more user-friendly for product manufacturers.

The current rules implementing the product approval system were finalized in 2003 and the system went into effect October 1, 2003. While the system relies on nationally or internationally accredited entities and state licensed engineers and architects to evaluate the performance of

products and monitor their production, the Commission was not staffed to review applications for completeness and verifiability. The initial approach of relying on parties who were contracted by manufacturers to validate applications proved unreliable and staff had to be borrowed from other programs to conduct the minimum application sufficiency reviews. A contractor was hired in November 2004 to take over the review of the applications for approval of products. With the transition to contractor reviews now complete, program staff are available to conduct the training for manufacturers as originally planned. As expected, program efficiency has greatly improved, and the addition of a System Administrator has increased understanding of and satisfaction with the product approval system.

Legislation enacted in 2005, based on the work of the Commission's Product Approval Workgroup, made major changes to the local approval of products, clarifying how local approval is to be accomplished by local jurisdictions. The changes to the local system enjoyed the support of system stakeholders and the Building Officials Association of Florida.

With the significant enhancements to the Product Approval system implemented through revisions through Rule 9B-72, State Product Approval—and described in the 2006 Report to the Legislature, and with the hiring of a Product Approval administrator to process applications, the Product Approval System is functioning more efficiently and surveys indicate user satisfaction is very high.

The new revisions included clarifications to the rule's various provisions and enhancements to the application review process, including requiring additional supporting documentation. The rule revisions include implementing the statutory requirement to remove provisions related to local approval from the state system. In addition, the rule revisions clarify the technical documentation required for compliance using testing and evaluation reports. Enhancements to the rule also included items such as requiring installation documents to be submitted for all compliance methods, including the verification of the installation requirements by qualified entities.

Another major enhancement to the Product Approval system is the complete revamping of the website/database, using state-of-the-art computer software and web design. The new website is more user friendly and features screens that are more specific to the product model(s) and provide more detailed summaries.

Since its inception, the Commission has approved 2,393 product applications under the 2001 Florida Building Code and 3,222 product applications under the 2004 Florida Building Code. In addition, the Commission has approved 46,508 products under both codes, and 46 testing laboratories, 24 quality assurance entities, 7 accreditation bodies, 5 evaluation entities, 13 certification agencies, and 8 evaluation entities.

Product Approval Validation Workgroup Recommendations

In 2005 the Florida Building Commission convened the Product Approval Validation Workgroup to review the role of the third party validators in the product approval process, and to make recommendations back to the Commission regarding the extent to which the validators should review the technical documentation substantiating compliance with the Florida Building Code. The Commission delivered these recommendations in its Report to the 2006 Legislature.

For 2006, the revised scope of the Workgroup was to work with stakeholders to review and develop consensus recommendations regarding the validation requirements/details for each of the four compliance methods, the degree of technical review required for the compliance options, and the validation requirements for the certification agency compliance method. The Workgroup developed consensus recommendations on the validation provisions of the Product Approval System (Rule 9B-72 and relevant laws), and delivered them to the Commission. The Commission later reviewed the Workgroup's consensus recommendations, and at the December 2006 meeting the Commission voted unanimously to accept the Product Approval Validation Workgroup's recommendations regarding changes to the validation provisions of the Product Approval System. The Commission also agreed to refer the recommendations to the Product Approval Product Oversight Committee to begin work on amending Rule 9B-72, the Product Approval Rule.

The following recommendation requires statutory changes:

Penalties for validators that incorrectly validate applications for product approvals shall be developed.

The following recommendations will be implemented within existing Commission rule-making authority:

Require that the certification method of compliance for state product approval may be used only with products that have been tested to standards referenced in the Code and prohibit the certification method for products that have no test standard(s) referenced in the Code.

If validation is defined as a technical review, then the evaluation engineer does not need to be a third party independent from the manufacturer. Manufacturer's engineer may perform an evaluation, provided the engineer is a Florida PE or RA who has taken the core building code course.

7. Building Code Training Program

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.

Historically, the way responsibilities and authority have been divided among statutorily independent agencies has limited the implementation of a successful training program on the Florida Building Code. Currently, the statutes parcel training on the Florida Building Code among the Building Code Education and Outreach Council, Department of Community Affairs, Department of Business and Professional Regulation, Florida Building Commission, and professional licensing boards. While the intent was to bring all parties together for consensus decisions, the parceling of responsibilities has created an extremely divisive, inefficient and nonproductive process.

Florida Building Commission/Department of Community Affairs

The Commission developed the Code "core curricula" courses, which all licensees must take once, with additional courses to be developed by educational institutions and private sector training providers. The licensing boards approve these "advanced" topics courses through their general continuing education approval programs. To assist the boards, and to comply with the Commission's oversight responsibilities for code education, the Commission created an electronic Course Accreditation Program to review advanced building code courses developed by private providers for compliance with the Florida Building Code and its processes. The Commission approves "course accreditors," individuals with expertise in the Florida Building Code, to review the courses and ensure 100% compliance with the most current edition of the Florida Building Code. After the course has been reviewed by the accreditor and approved by the Commission, the provider receives an electronic approval, which is then submitted to the Department of Business and Professional Regulation as part of the continuing education course application process.

Since its original implementation in March 2002, the Florida Building Code has undergone extensive revisions each year to address hurricane, glitch, and legislative issues. The revisions, coupled with course approval administrative processes, have limited the ability of course providers to deliver training courses on the most current code in a timely manner. See the Commission proposal to eliminate the annual amendment process, maintaining only the triennial and expedited processes.

Department of Business and Professional Regulation/Licensing Boards

The licensing boards are mandated to adopt the specific number of hours in specialized or advanced courses their licensees are required to take on the Florida Building Code. The majority of the boards initially adopted “zero” as the number of required hours. After the Joint Administrative Procedures Committee challenged “zero” as a number, and consistent with the Legislature’s intent, the boards then adopted rules to require “one” or “two” hour(s) of training on the Florida Building Code each license renewal cycle.

Continuing education courses, including advance courses on the Florida Building Code, are approved for three years by the licensing boards. The Commission requires all advance courses be updated and accredited to comply with the latest version of the Code, including all updates and revisions that address glitches or legislative mandates. The licensing boards rely on the continuing education providers to update other code-related courses, but do not actively ensure that the Code-related courses are updated until the three-year expiration date. Since the advance Code courses approved by the Commission represent only a small portion (1/14, 1/10, etc.) of the number of continuing education hours, there is reason to be concerned about how courses, other than those approved by the Commission, impact the construction industry on a day-to-day basis. Do the providers update the outdated course material? Based on the unwillingness exhibited by providers when informed they would be required to update the advance courses, the answer is “no.” If these courses are not being updated to the current adopted code, how and when are licensees trained on the new requirements? Are implementation and enforcement of new codes delayed in some jurisdictions until the outdated continuing education courses expire?

Building Code Education and Outreach Council

The Building Code Education and Outreach Council, composed of representatives of the licensing boards, Florida Building Commission, Office of the State Fire Marshal, and K-12 public school construction, was created to break the five-year impasse that existed on code training. The intent was to discuss substantive issues that affected all parties at the Council and forward Council recommendations to the individual boards and Commission for action. Unfortunately, the same turf issues that had restricted the Commission from developing an effective program were brought forth to the Council.

The statutory requirement to submit advance courses through both the Florida Building Commission and individual licensing boards for review and action has extended the course approval time frame a minimum of 4-6 weeks, depending on the Commission and Board meeting schedules, for original applications.

Building Code Education Recommendation

Place the sole authority and responsibility for training on the Florida Building Code under one entity. The current parceling of authority and responsibility makes everyone, and no one, accountable for an effective training program.

8. Florida Building Code System—Update on 2006 Commission Action(s)

Code Process Policy Implementation

The following are policy decisions by the Commission, and will be implemented within existing Commission authority through administrative rule development:

The Commission will develop by policy criteria for the annual interim amendment process, and focus on code amendments through the triennial and expedited processes.

Require the Technical Advisory Councils to review code change proposals two times (two Council reviews prior to Commission consideration, beginning with rule development) during the Code development phase of the update process, prior to the Commission conducting Chapter 120 rule development, with a rule development workshop and rule adoption hearing, in the adoption phase of the update process. The Councils would review proposed code amendments, and after the 45 public comment period on the Council recommendations, the Council would review and make recommendations regarding comments, and then its revised recommendations would be submitted to the Commission for their consideration in a rule development workshop and subsequently through a rule adoption hearing.

The Commission recommends to the 2007 Florida Legislature that there is a need for additional education on the Florida Accessibility Code (Chapter 11), and the Commission will work with the relevant agencies and entities, including DBPR, to implement recommendations regarding enhancements to education the Florida Accessibility Code.

Code Amendment Process Review Workgroup Recommendations (Phase I and Phase II)

Raul L. Rodriguez, AIA, Chair of the Florida Building Commission, appointed a Code Amendment Process Review Workgroup charged with representing the interest of its stakeholders and working with other interest groups to develop a consensus package of recommendations for submission to the Florida Building Commission.

The Code Amendment Process Review Workgroup was tasked with a short-term (Phase I) scope and a long-term (Phase II) scope. The scope of the Workgroup in the short term was to make a recommendation regarding the 2007 Code Update schedule. The long-term focus of the Workgroup was to deliver recommendations to the Commission regarding proposed enhancements to the annual interim amendment and triennial code update processes.

The Commission voted unanimously to accept the Code Amendment Process Review Workgroup's package of recommendations regarding the annual interim amendment, expedited, and triennial code update processes. The Workgroup's recommendations were revised by the Commission at the December 2006 meeting and are reflected in this report. Following are

highlights of the Workgroup's recommendations. The full recommendations may be found in Appendix B.

Eliminate the annual interim process, maintaining only the triennial and expedited processes. The expedited process can be implemented whenever needed. The criteria for the process would be amended to include updates and changes to federal/state laws.

Require the Technical Advisory Councils to review code change proposals two times (two Council reviews prior to Commission consideration, beginning with rule development) during the Code development phase of the update process, prior to the Commission conducting Chapter 120 rule development, with a rule development workshop and rule adoption hearing, in the adoption phase of the update process.

The Councils would review proposed code amendments, and after the 45 public comment period on the Council recommendations, it would review and make recommendations regarding comments, and then the TAC's revised recommendations would be submitted to the Commission for consideration in a rule development workshop and subsequently through a rule adoption hearing.

Maintain updates to Commission within 2 years (not more than 2 years) of new editions of the foundation codes and provide for adoption of equivalent product evaluation standards via rule 9B-72. (Establish a policy that would ensure the updated Florida Building Code would go into effect a minimum of one year before the next edition of the foundation codes on which it is based.)

Recommend that the Florida Building Commission seek legislative authority requiring that the sizing of private sewage systems be governed by definitions provided in the Florida Building Code.

Florida Building Code (FBC) and Florida Fire Prevention Code (FFPC) Duplicate Provisions and Overlapping Responsibilities

In order to consider how to address conflicts between the Florida Building Code and the Florida Fire Prevention Code, in 2005 the Commission conducted an assessment of stakeholder views. This assessment determined there is consensus that as a first step, the technical code provisions should be reviewed and any conflicts resolved between the FBC and the FFPC.

The Joint Building Fire Technical Advisory Committee (TAC) composed of the Commission's Fire Committee and the State Fire Marshal's Florida Fire Code Advisory Council, convened a process to review the technical provisions and make recommendations for any code changes. In 2005 the Committee reached consensus on the threshold issue of defining what constitutes a conflict. The Joint Fire Committee agreed to narrowly define "conflicts" to mean requirements that are mutually exclusive, that is, if by satisfying the requirements of one code it would preclude the ability to satisfy the other. It was decided that in most instances, provisions were not conflicts since it was possible to comply with the requirements of both codes when complying with the requirements of either code. It should be noted that conflicts are generally resolved as a result of complying with statute, requiring resolution the conflict in favor of the provision that offers the greatest life safety, or alternatives that would provide an equivalent degree of life safety and an equivalent method of construction. The Joint Fire Committee identified the specific Code amendments that could not be resolved by this definition, and submitted proposed amendments for consideration by the Commission during the glitch cycle. The Joint Building Fire Technical Advisory Committee continues to review issues related to any further partitioning of the codes and the overlapping jurisdictional and enforcement issues during 2006.

The Florida Building Code and the Florida Fire Prevention Code, by design, contain overlapping technical provisions in order to ensure that buildings are designed and constructed with life-safety considerations as an integral part of both. In order to design buildings of certain size and occupancies both codes must be used together, and one code may trigger the use of the other. In some instances the same provisions are in both codes, which is referred to as duplicate provisions. In other instances one code may reference the other, and in a few cases the two codes have conflicting requirements. In addition, the enforcement of the two codes, from plans review through final inspection, involves building and fire officials at the local level, and in the case of fire, sometimes at the state level.

As part of an ongoing effort between the two agencies, the Joint Fire Technical Advisory Committee and Fire Code Advisory Council met in October 2006 to consider how to clarify/resolve issues regarding the duplicate provisions and overlapping responsibilities between the Florida Building Code and the Florida Fire Prevention Code.

The Joint Committee debated whether to reconsider the narrow definition of "conflict" that was recommended to the Commission in 2005, when the Committee, but not the Commission, reached consensus on the threshold issue of defining what constitutes a conflict and the Joint Fire Committee agreed to narrowly define "conflicts" to mean requirements that are mutually exclusive, that is, if by satisfying the requirements of one code it would preclude the ability to satisfy the other. However, in light of the Commission's policy decision that conflicts between the codes should be identified and resolved on an ongoing basis, the Joint Committee decided at

the December 2006 meeting identify actual code conflicts and work to resolve any specific conflicts between the respective codes. The Joint Committee decided to resolve “real world” conflicts and in that context determine whether to revise its recommendations to the Commission regarding the definition of conflicts.

The Joint Committee achieved consensus on the following policy in regards to overlapping responsibilities and code provisions between the FBC and FFPC.

Continue to utilize Florida statutory provisions as the tool to resolve conflicts. Continue to review both codes to correct conflicts. There would continue to be consistent review of both codes, in sync with Florida Building Commission policy.

In addition, members were requested to review the two codes and the various documents that currently identify potential conflicts, and send their comments to DCA staff in advance of the December meeting. At the December 2006 meeting the Joint Committee reviewed specific code issues and agreed to address issues related to: (1) common path of travel, (2) dead-end corridors, (3) Travel distance, and (4) remoteness of exits. The Joint Committee will propose code amendments to ensure that both codes are consistent on these issues and will use the statutory requirements to resolve conflicts, that is, selecting the provision that offers the greatest life safety or alternatives that would provide an equivalent degree of life safety and an equivalent method of construction. The Joint Fire Technical Advisory Committee will convene on February 7, 2007, to resolve any conflicts in these topical areas.

FLORIDA BUILDING CODE SYSTEM

Florida Statute, Chapter 553.77(1)(b), requires the Commission to make a continual study of the Florida Building Code and related laws and on a triennial basis report findings and recommendations to the Legislature for provisions of law that should be changed. In 2005 the Commission conducted, and reported to the 2006 Legislature, the results of the Building Code System assessment, which resulted in the 2006 Legislature granting the Commission authority to conduct expedited code amendments. Following are 2006 Commission initiatives and actions related to the Florida Building Code System:

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

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 six 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. The Commission is in the process of amending its rules of procedure to address concerns regarding alternate members for Committee and workgroups.

Local Administration of the Code. Florida Law requires that the Code be administered and enforced by local government building and fire officials. The Commission has certain authorities in this respect such as the number and type of required inspections. In 2007, the Commission will conduct an assessment to review and address the code administration needs of local governments with consideration of measures to improve uniform and effective enforcement of the Code. The Commission has identified a need to address the code administration needs of local governments with an emphasis on identifying measures to improve uniform and effective enforcement of the Code. During 2007 the Commission will conduct an assessment of needs as identified by various local jurisdictions, and then convene the Commission's Code Administration Technical Advisory Committee to develop recommendations to enhance the functioning of this important component of the Building Code System.

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. During 2006 the Commission remained focused on the approval of course accreditors and the courses developed/recommended by approved accreditors. The Commission is reporting to the 2007 Legislature that there is a need for additional education on the Florida Accessibility Code (Chapter 11), and the Commission will work with the relevant agencies and entities, including DBPR, to implement recommendations regarding enhancements related to education on the Florida Accessibility Code. In addition, the Commission is recommending that the Legislature place the sole authority and responsibility for training on the Florida Building Code under one entity.

Product Evaluation and Approval. In order to promote innovation and new technologies, a product and evaluation system was determined to be the fifth cornerstone of an effective Building Code System. The product approval process should have specific criteria and strong steps to determine that a product or system is appropriately tested and complies with the Code. Quality control should be performed by independent agencies and testing laboratories that meet stated criteria and are periodically inspected. A quality assurance program was also deemed essential. The Commission adopted a Product Approval System by rule and currently approves products for state approval and product approval entities. Local product approval remains under the purview of local building officials a part of the building permit approval process. In 2006, the Commission implemented enhancements to the system developed by working with stakeholders.

In addition, the Commission is in the process of amending the Product Approval Rule, Rule 9B-72, to address the validation aspects of the system.

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

Certification of manufacturers' facilities, quality assurance manuals, plan reviews, product approval and in-plant inspections of modular buildings are performed by state approved Third Party Agencies, licensed under the Department of Business and Professional Regulation and acting as agents for the State.

The sale of modular buildings in Florida is a multi-hundred million dollar industry, largely due to state growth and hurricanes, exemplified by the FY06-07 sales of DCA insignias as follows:

Storage Sheds	47,604
Portable Classrooms.	3,138
Residential	1,488
Commercial	2,900
*Recertifications	175

* Note: Recertifications refers to manufactured buildings that are modified in a manner that requires plan review and inspection for Code compliance.

In 2006, the Commission conducted rulemaking changes to the Manufactured Buildings Rule 9B-1, FAC. The changes were intended to clarify the programmatic procedures of the Manufactured (Modular) Buildings Program. These changes include refinements to the following sections of the rule: Procedures; Definitions; Fees; Inspections and Insignias.

In addition, the Manufactured Buildings Program module on the Building Code Information System will undergo a major update in early 2007 to reflect rule and programmatic changes in a new, more user-friendly format. A collaborative initiative between DCA and the Building Code Administrators and Inspectors Board will result in rule change(s) in 2007 to allow more licensees to conduct plan reviews and inspections of modular buildings.

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

The Florida Prototype Buildings Program is a plan review and approval system that allows businesses to simplify the permitting process across the state. Buildings and structures to be constructed multiple times in different locations can undergo plan review once, saving time, money and effort. Authorized by Florida Statute 553.77 in 2000, the program came on-line May 12, 2003, as part of the Department of Community Affairs' Building Code Information System website: www.floridabuilding.org.

The Prototype Building Program is administered by the IntraRisk Division of Applied Research Associates, Inc., (ARA) from its Orlando office. ARA was selected in 2003 and again in 2005 by the Florida Building Commission to be the program administrator. Since the introduction of the program a number of challenges have been successfully handled and others remain to be resolved.

One of the first goals of the program was to inform designers and developers/builders of the availability and potential benefits of the Prototype Buildings Program. Because it was revolutionary new, the program met with resistance from some building departments and skepticism from potential users. Several concerns identified by the building departments stemmed from their experiences with "Master Plans" filed at the local level. Building departments were also concerned with having the prototype plans properly reviewed. Some building departments questioned an "outside" organization's capability of doing the job correctly. Designers of commercial buildings were among the first to express interest in the prototype program. To date, the program has had 109 prototype plan use requests, and five plan reviews have been conducted.

9. 2006 COMMISSION PROJECTS OVERVIEW

Ad Hoc Committee to Consider Organization and Process Issues

Chairman Rodriguez noted that the Commission has been using workgroups quite successfully to work with stakeholders to build consensus recommendations to the Commission on various issues (i.e., product approval, alternative plans review and inspection, attic ventilation, ICC participation, energy code transition study, termite, product approval validation, window labeling, garage door and shutter labeling, and code amendment process review). As a result of the many workgroups and the overlap of participants and staff, as well as the potential for competing time slots, it has been suggested that the Commission consider allowing Technical Advisory Committee and workgroup members to identify alternates to attend and participate in their place.

In order to ensure that Committees and workgroups have a quorum, and that all views are represented during meetings, the Chair convened an ad hoc committee to consider alternate member provisions. The ad hoc committee met and developed consensus recommendations for an alternate members policy, which were adopted unanimously by the Commission at the December 2006 meeting. It should be noted that Commission members sitting on Technical Advisory Committees and workgroups are excluded from this policy, and will not have alternate members.

Assessing the Transition to the International Energy Conservation Code as Base Code for the Florida Energy Code Energy Code Transition Study Workgroup Recommendations

Chairman Rodriguez appointed an International Energy Conservation Code Transition Study Workgroup as a result of discussions on amendments proposed to the Energy Technical Advisory Committee and its subsequent recommendation that the proposed transition to the International Energy Conservation Code be evaluated and recommendations developed during the next code update process. The workgroup voted unanimously to recommend to the Florida Building Commission that the Commission maintain the Florida Energy Code and charge the workgroup with reviewing the International Energy Conservation Code provisions and developing recommendations on which, if any, provisions should be adopted into the Code. In addition, the workgroup recommended that the Commission seek legislative authority, but only if necessary, to allow the Commission to adopt the as the foundation code, if the Commission determines it is in the best interest of the state.

Following are the Workgroup's consensus recommendations:

Phase I Recommendations:

The workgroup voted unanimously to recommend to the Florida Building Commission that the Commission maintain the Florida Energy Code and charge the workgroup with reviewing the International Energy Conservation Code provisions to develop recommendations on which, if any, provisions should be adopted into the Code. In addition, the Commission should seek legislative authority allowing the Commission to adopt the International Energy Conservation

Code as the foundation code (only if the authority is needed), if the Commission determines it is in the best interest of the state.

The Commission unanimously adopted the Phase I recommendations at the July 11, 2006, meeting in Hollywood.

Phase II Recommendations:

Proposal EWG 3—13-601.1.A Prescriptive requirements specific to Method A. Windows shall meet the air infiltration requirements in Section 606.1 The area weighted average maximum SHGC for all glazed fenestration products (windows, doors and skylights) shall be 0.50.

The Commission will consider this, and all specific code amendments, during the 2007 Code Update cycle.

Termite Workgroup Recommendations

Chairman Rodriguez appointed a termite workgroup to consider proposals for enhancing the Code's termite provisions. The workgroup developed recommendations on proposed code amendments and enhancements to the existing termite provisions in the Florida Building Code. In addition, the workgroup voted to recommend against the approval of two proposed code amendments requiring that: "In areas where Formosan termites have been identified, all structural members shall be composed of termite resistant material," with a corresponding definition of termite resistant material.

Of particular note is the collaboration between the Commission and the Department of Agriculture and Consumer Services to review and propose revisions to the Code's termite provisions.

Following are the workgroup's consensus recommendations:

Recommendations to Approve:

1. *The workgroup voted unanimously 7 – 0 in favor of the following proposal in concept, with details to be worked out with the Structural Technical Advisory Committee:
If wood treatment (pesticides applied to wood) is used for subterranean termite protection in new construction, wood areas disturbed or added after initial treatment shall be retreated with a wood treatment (pesticides applied to wood).*
2. The workgroup agreed in concept that pipe sleeves should not be used for CPVC plastic pipe, and the issue should be reviewed by the Plumbing Technical Advisory Committee. Pipe sleeving in general should also be reviewed for issues of corrosion, insulation, and termite damage, and the Code amended as needed.
Pipe sleeves shall not be used with CPVC plastic pipe, and require non-cellulose-containing material for pipe sleeves.
3. *The workgroup agreed that the Structural Technical Advisory Committee should review all non-cellulosic materials used in construction (i.e., rigid foam insulation, insulated concrete forms (ICF), for use above and below grade), and develop recommendations to ensure termite protection is provided in the Code.*

The Commission will consider these and all specific code amendments, during the 2007 Code Update cycle.

Recommendations Against Approval:

4. The workgroup voted 6-1 against a motion recommending that the Commission approve the proposed modification to Section 1816.1 and R320.1 of the Code and related definitions, requiring that: “In areas where Formosan termites have been identified, all structural members shall be composed of termite resistant material,” and the corresponding definition of “Termite Resistant Material: Pressure preservatively treated wood, heartwood of redwood, eastern red cedar, concrete, masonry, steel, or other approved material.”
As a result of the negative vote (only one member supporting the proposal), the workgroup recommends that the Commission not approve this proposed amendment.
5. The workgroup voted 6-1 against a motion proposed by American Forest and Paper Association to adopt the International Building Code termite provisions, with Florida specific amendments.
As a result of the negative vote (only one member supporting the proposal), the workgroup recommends that the Commission not approve this proposed amendment, in favor of the existing Code termite provisions.

Window Labeling Workgroup Recommendations

Chairman Rodriguez appointed a Window Labeling Workgroup to develop recommendations on how to provide building officials with needed information for conducting field inspections to ensure that windows comply with the relevant wind pressure Code requirements. In addition, the workgroup was charged with considering issues related to window installation and water intrusion. The workgroup developed recommendations to the Florida Building Commission regarding the window labeling provisions of the Florida Building Code. Following are the workgroup’s consensus recommendations:

Require a supplemental label, to be printed and applied by the manufacturer. The manufacturer’s process for accurately applying supplemental labels shall be consistent with the certification program or quality assurance requirements. The supplemental label shall be consistent with any other labeling required by the appropriate Chapters (i.e., 17, R308, R613) of the Florida Building Code(s). All of the Commission-approved product approval compliance options require supplemental labels.

There may be only one rating per reference standard per label for windows.

The Design Pressure (per 101/I.S.2 or Technical Application Standard 202) is required on the supplemental label.

The Design Pressure must include positive and negative pressures on the supplemental label.

Provide a prescriptive section (by design pressure) in the Code. The manufacturer may chose to indicate on the supplemental label that there are manufacturer's instructions that prevail, and that the prescriptive section does not apply. The Code's prescriptive installation section will indicate that the prescriptive requirements are not required when the manufacturer indicates that its instructions prevail. Prescriptive requirements will prevail if the manufacturer does not indicate on the supplemental label that detailed installation instructions are available. The glazing thickness shall be required on the supplemental label.

If a window unit is impact rated, the impact rating shall be required on the supplemental label.

The product model/series number shall be provided on the permanent and supplemental labels.

The Florida number or notice of approval shall be required on the supplemental label.

The maximum size shall be required on the supplemental label.

Garage Door and Shutter Workgroup Recommendations

Based on the window workgroup's recommendations, the Commission created a Garage Door and Shutter Labeling Workgroup, charged with developing recommendations regarding the labeling of garage doors and shutters. As with the Window Labeling Workgroup, the focus for the Garage Door and Shutter Labeling Workgroup will be to provide building officials, in a field-useable format, with the information they need to ensure that garage doors and shutters comply with the Florida Building Code. As with all Commission workgroups, the Garage Door and Shutter Labeling Workgroup was conducted as a facilitated stakeholder participation process with consensus recommendations delivered to the Commission. It should be noted that the issue of garage door and shutter labeling was first discussed and recommended by the Commission's Hurricane Research Advisory Committee. Following are the workgroup's consensus recommendations:

Garage Doors

Garage doors should be labeled with a permanent label.

The label shall be provided by the manufacturer.

The design pressure, positive and negative, shall be on the label.

The manufacturer's product model/series number shall be provided on the label.

If the garage door is impact rated, the rating should be indicated on the label.

The installation drawings reference number shall be on the label.

The Florida number or notice of approval number shall be on the label, if the product has such a number.

The manufacturer's name shall be on the label.

The test standard(s) that the door was tested to shall be on the label.

The required components of the label may be listed using a checklist format on the label; the correct boxes on the checklist can be marked by the installer.

The installation instructions must be provided and available on the job site.

Definition of garage door manufacturer: The party responsible for the completed assembly of the garage door components.

A definition should be provided in the Code for permanent label. The definition proposed is a label that is not easily defeatable.

Shutters—Impact Resistant Coverings

The workgroup proposed to changing the term shutters to “**impact resistant coverings,**” to conform with the Code.

A permanent label shall be required on impact resistant coverings.

The label shall be provided by the product approval holder.

The following is required to be included on the Label.

- **Product Approval Holders Name and Location**
- **All Applicable Methods of Approval** (possible methods could be)
Miami-Dade NOA; FBC 2004; TDI Product Evaluation; ICC-ES
- **Qualifying Test Standard used for compliance** (possible test standards could be)
*TAS 201, 202, 203; SSTD 12-99 \geq 110 mph Wind zones;
ASTM E 1886/E 1996 Type D Wind zone I, II, II and/or IV;
ASTM E 330 (required for SSTD 12 and ASTM E 1996)*

Installation instructions shall be provided and available on the job site.

The Florida or notice of approval number shall be on the label if the product has such a number.

The location of the label shall be as follows:

- *Accordions: Bottom of the locking bar or center mate facing outside*
- *Rollup: On the bottom of the hood facing outside or on the bottom slat facing outside*
- *Bahama: Awning or Colonial Hinged- on the bottom, placed on the back of the shutter.*
- *Panels: For metal and plastic hurricane panels the label or embossed or printed shall be spaced not more than every three (3) lineal feet on each panel applied by the product approval holder and facing the outside.*
- *Framed products: On the side or bottom facing outside.*
- *All other products: Facing outside.*

Commission Legislative Liaison Process

As a result of the recommendations the Commission approved, the Building Code System Assessment project was to consider a method/process for enhancing the Commission's ability to represent its legislative interests. The Chair informed the Commission that he had discussed the issue with DCA staff and legal, and has decided to initiate a bi-weekly conference call during session. The conference calls will be noticed as a meeting of the Commission and members will get an update from staff on the status of the Commission's legislative agenda as well as other issues of interest to the Commission. In addition, the Commission will be able to discuss and develop recommendations and provide ongoing guidance to staff as appropriate, throughout the session. The Chair noted that the Commission may also decide to invite legislators and others to participate. The conference calls will be scheduled on Mondays, thereby allowing for legislators to participate and the Commission to weigh in on issues coming up for consideration in the following weeks.

Coordination of the Elevator Code and 2007 Florida Building Code updates with the Department of Business and Professional Regulation and the Elevator Advisory Council

DCA and the Commission are working through the Fire and Special Occupancy Technical Advisory Councils to amend the Florida Building Code to be consistent with statutory requirements of Chapter 399, Florida Statutes, governing elevators. The goal is to implement updates through the 2007 Code Update cycle currently in process.

Coordination of Building Code Requirements Among State Agencies

Chairman Rodriguez reported that staff met with representatives of the Department of Health, Division of Environmental Health to discuss the overlap of various program regulations with the Florida Building Code. One of the specific issues discussed involved an emerging technology for recycling water within homes. However, the larger issue is the need to coordinate building code issues among the DCA, DOH and the Department of Environmental Protection. This is an opportunity to establish a collaborative working relationship with these agencies and could pave the way for future efforts. The Chair recommended that the Commission charge staff with discussing with DOH and DEP the possibility of establishing a joint project to determine what can be done to enhance coordination and consistency among the agencies' program regulations and the Florida Building Code, such as Code amendments proposed during the 2007 Code Update and recommendations to the Legislature. The Commission voted unanimously to charge DCA staff with contacting DOH and DEP regarding establishing a joint project to enhance coordination and consistency among their various program regulations and the Florida Building Code.

Creation of a New Commission Roofing Technical Advisory Committee

At the request of industry representatives including the Florida Roofing and Sheetmetal Association, Chairman Rodriguez reviewed a list of recommendations from industry and a large list of volunteers, as well as considered the ANSI representation requirements in Commission rule requiring appointment of 11 members, three (3) of whom must be producers, three (3) consumers, and five (5) general interest. As a result, the Chairman decided to create a Roofing Technical Advisory Committee. In the past, issues related to roofing were considered by a roofing subcommittee to the Structural Technical Advisory Committee.

Implementation of Electrical Requirements of the Energy Efficiency Code

The Commission convened a Forum on Energy Code Electrical Requirements Enforcement to review concerns and discuss issues related to the implementation of Energy Code electrical requirements from an enforcement perspective. The concern is how to enhance education and awareness of the Florida Energy Efficiency Code for Building Construction and electrical load management. These requirements were adopted over 15 years ago, and reports indicate that some regions of the state have not been enforcing the provisions. In order to address this issue, the Commission convened a facilitated forum on July 10, 2006, where participants identified issues and proposed options to ensure that the Energy Code's electrical requirements are being uniformly enforced across the state. The Commission reviewed the forum's recommendations and charged DCA staff with developing a workplan to implement the education and outreach recommendations for enforcing the Energy Code's electrical provisions. The forum report is included as "Appendix I."

Codes Quarterly Publication

With the publication of the premier issue of "Codes Quarterly" in the fall of 2006, the Commission initiated another communication vehicle designed to provide Building Code System interested stakeholders with updates on the actions of the Florida Building Commission and revisions to the Florida Building Code. The quarterly publication contains a letter from the Commission's Chair, updates on Commission actions, questions and answers with the Commission's Executive Director, communications from Commission members, technical information and fact sheets, installation techniques for building envelope protection(s), and legislative issues updates. The Commission's policy is "stronger codes through science and consensus."

10. Summary of Recommendations

Monitoring the Florida Building Code system and determining refinements that will make it more effective is a primary responsibility of the Commission, which continually makes refinements by administrative rule amendment where statute delegates authority. However, the system is established in law so some refinements require statutory amendments. The Commission's recommendations for legislative actions that will improve the system's effectiveness are summarized as follows:

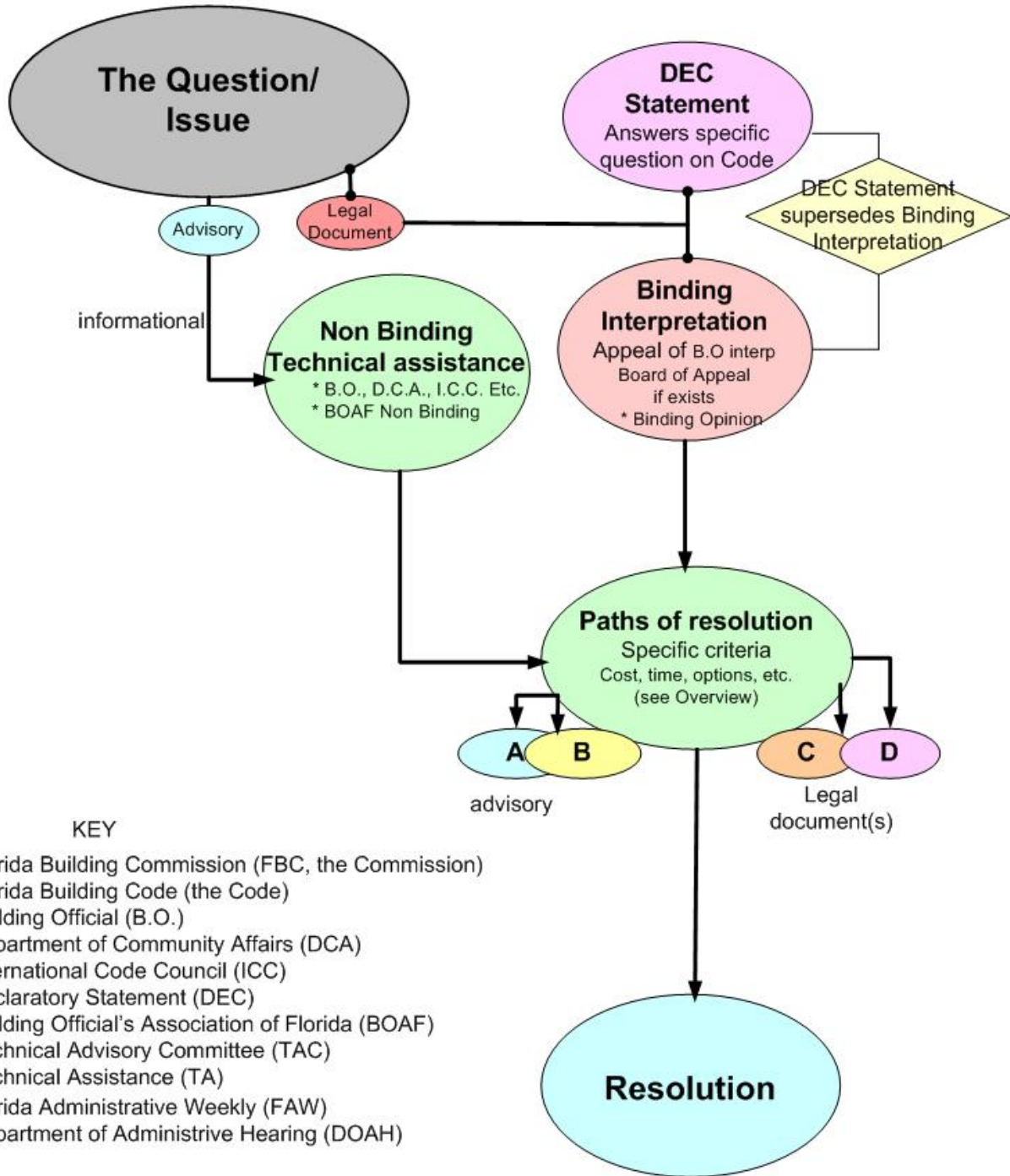
- Clarify statutory authority for adoption of equivalent product evaluation standards via rule 9B-72, FAC.*
- In order to maintain consistent construction standards for residential construction, govern the sizing of private sewage systems by the definitions contained in the Florida Building Code.*
- Provide statutory authority for the Commission to develop criteria and penalties for validators who incorrectly validate applications for product approval.*
- Relocate of the Chapter 553.509 requirements for backup power of elevators greater than seventy-five feet in length, established by the 2006 Legislature, to a more appropriate section of Florida Statutes.*
- Place the sole authority and responsibility for training on the Florida Building Code under one entity.*

Other recommendations should be implemented within existing authority if possible, and statutory authority should be requested only if needed. These recommendations include:

- Provide statutory authority allowing, but not requiring, the Commission to adopt the International Energy Conservation Code as the foundation code for the energy provisions of the Florida Building Code, if the Commission determines it is in the best interest of the state to do so.*
- Require that the certification method of compliance for state product approval can only be used with products that have been tested to standards referenced in the Code, and prohibit the certification method for products that have no test standard(s) referenced in the Code.*
- In instances where validation is defined as a technical review, establish that the evaluation engineer does not need to be an independent third-party from the manufacturer. Allow the manufacturer's engineer to do the evaluation, provided the engineer is a Florida Professional Engineer or Registered Architect who has taken the core building code course.*

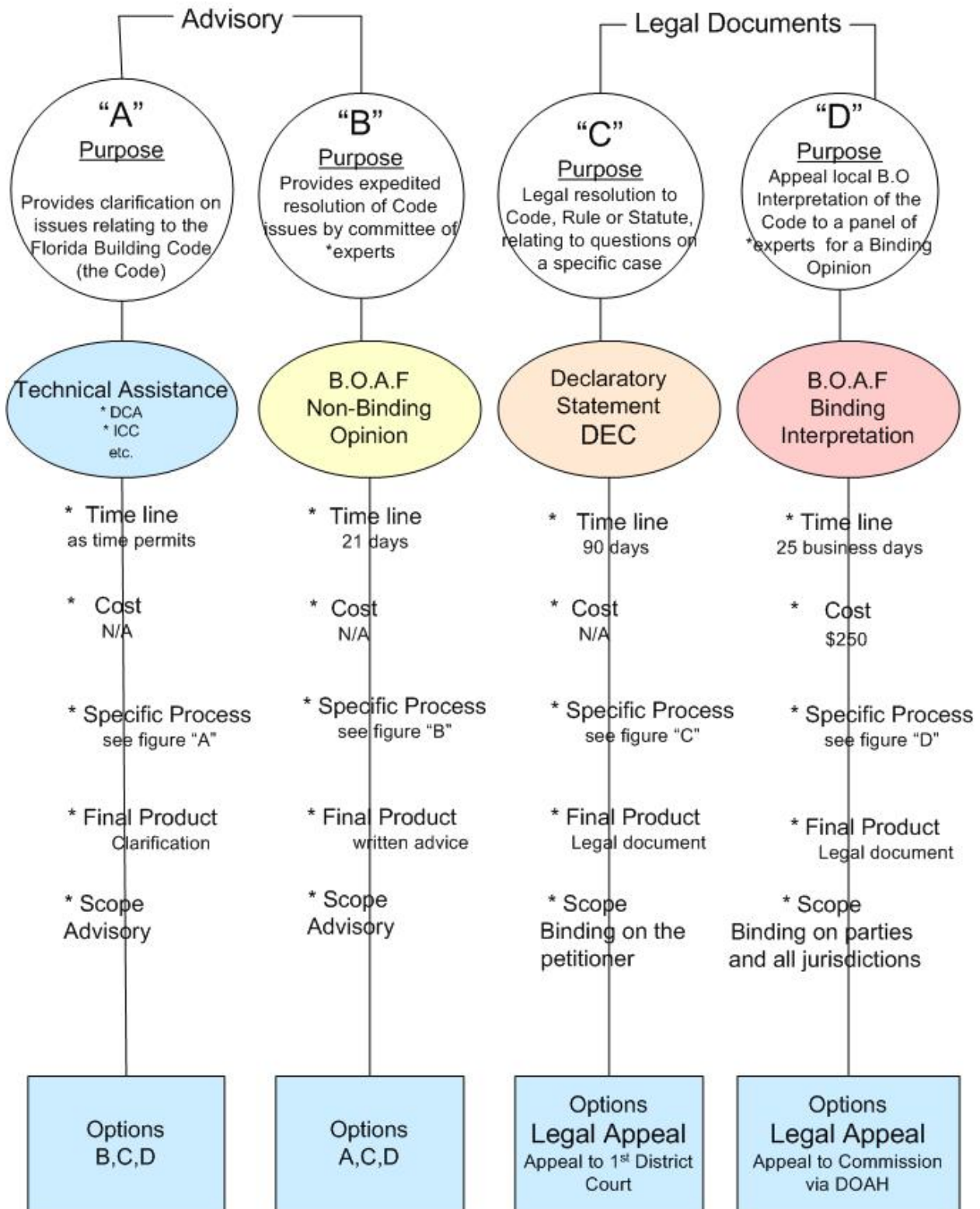
APPENDIX A

Code Resolution Process

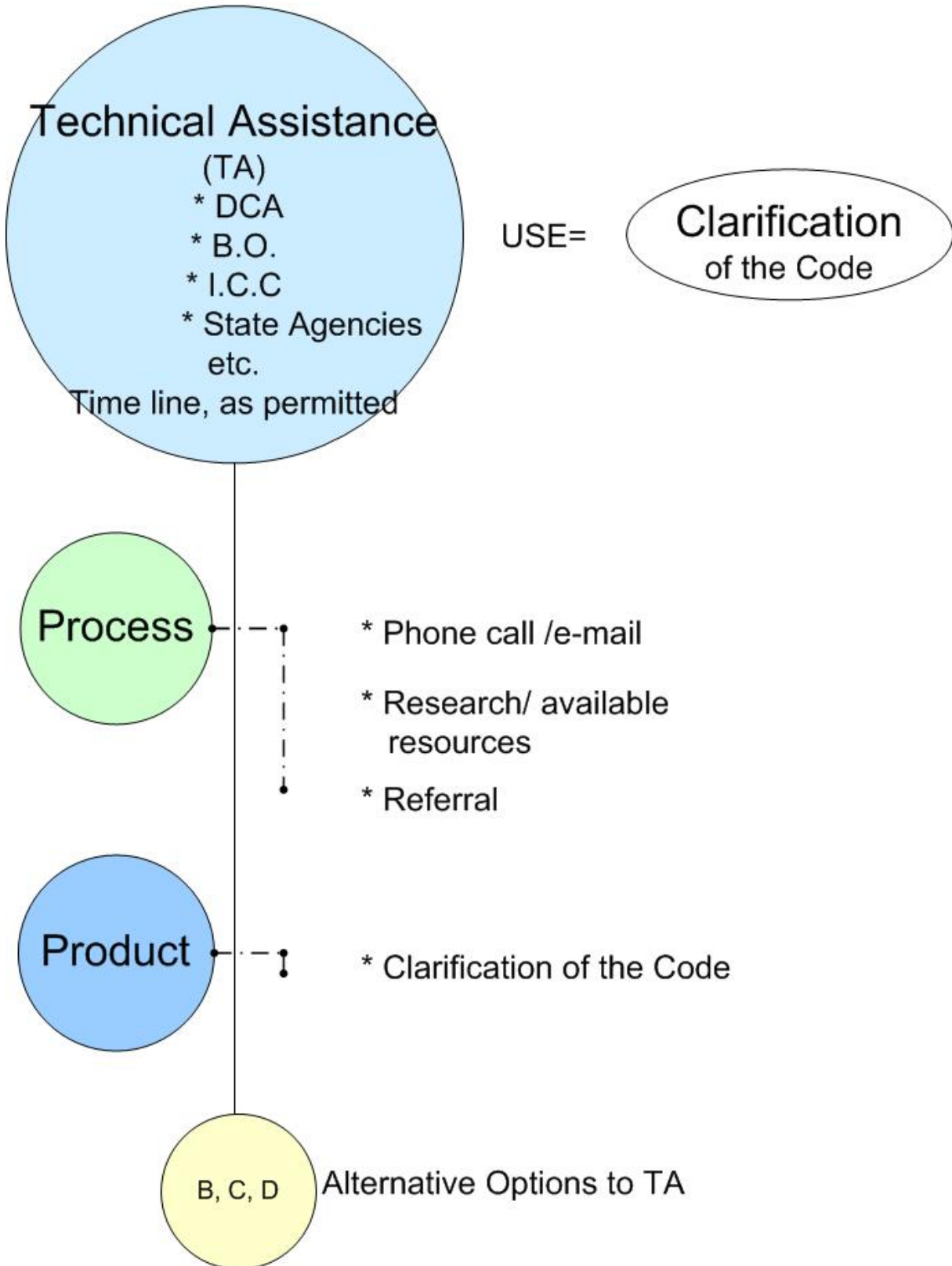


Note: Licensing facilities and state agencies enforcing the Code may be subject to an alternative process

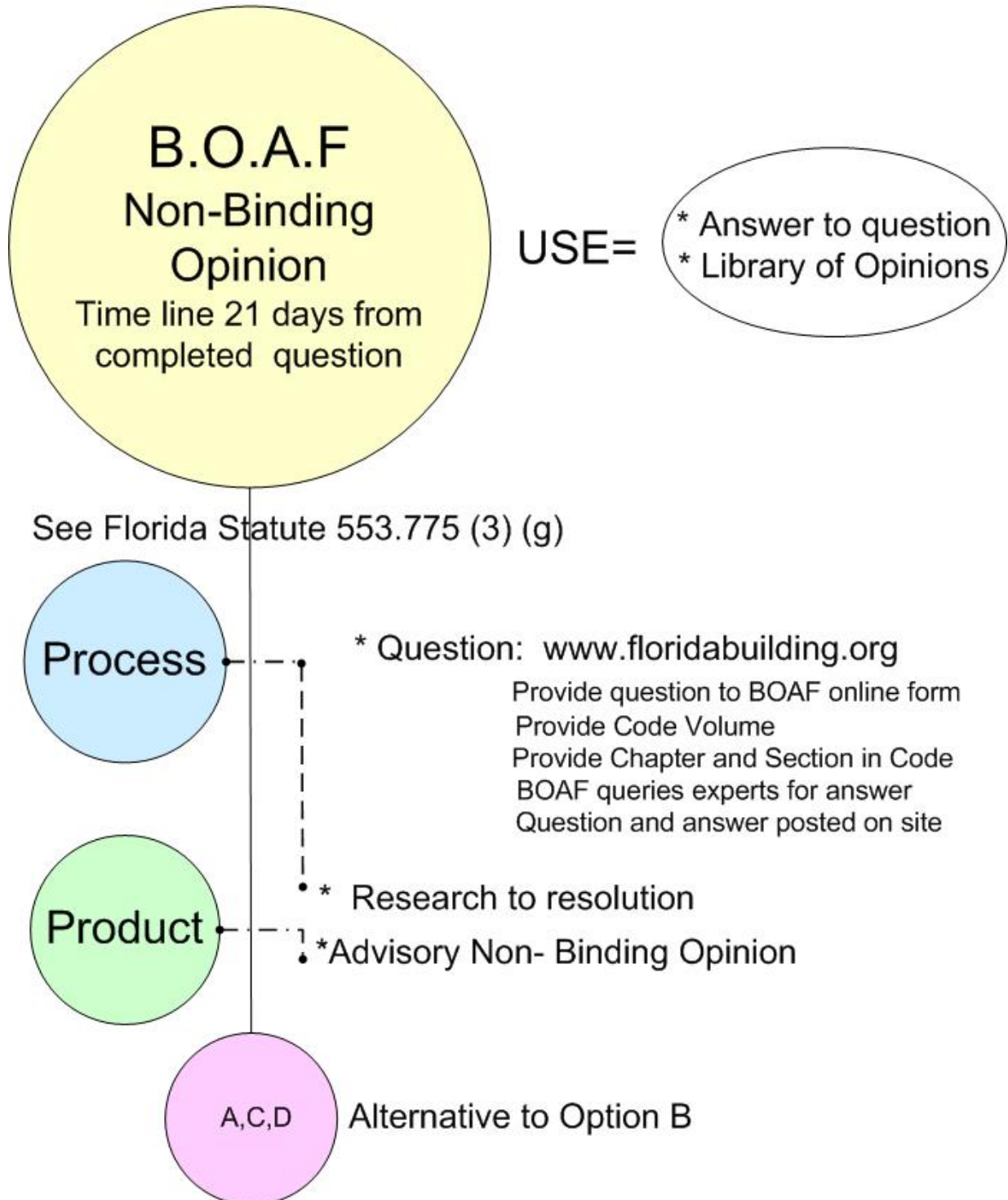
Overview of Code Resolution process



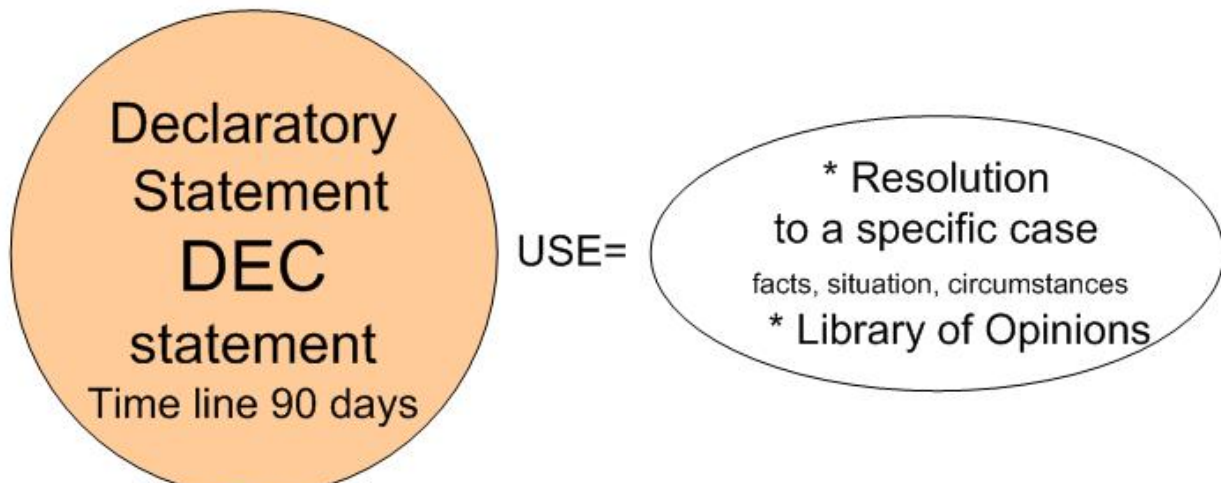
Path to Resolution "A"



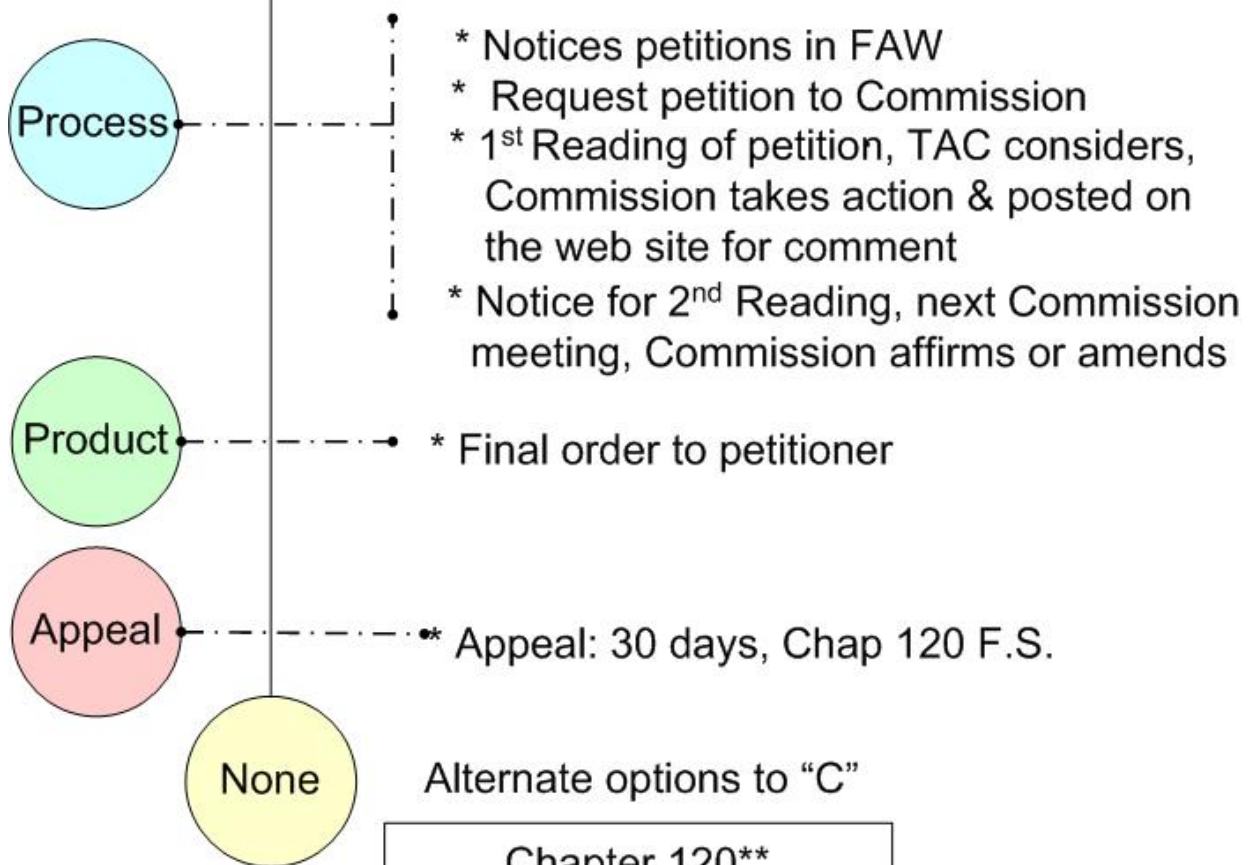
Advisory Path to Resolution "B"



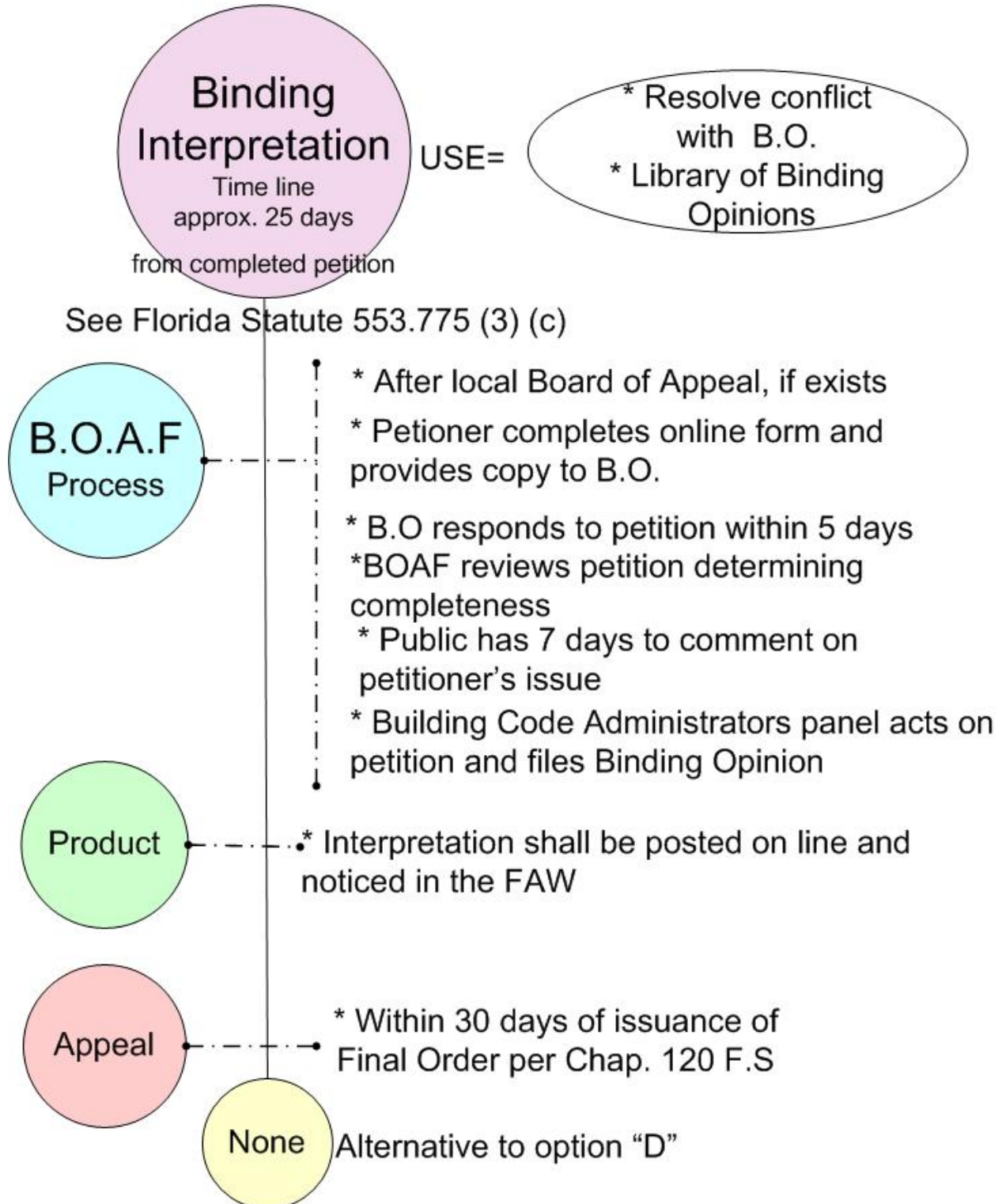
Appeal process Path to Resolution "C"



See Florida Statute 553.775 (3) (a)
Chapter 120**



Appeal process Path to Resolution "D"



APPENDIX B
CODE AMENDMENT PROCESS REVIEW WORKGROUP

**PHASE II RECOMMENDATIONS AND
PHASE III REPORT**
TO THE FLORIDA BUILDING COMMISSION

DECEMBER 6, 2006

Tampa, Florida

Meeting Design & Facilitation By

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Report By Jeff A. Blair
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Florida State University



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**FLORIDA BUILDING COMMISSION
CODE AMENDMENT PROCESS REVIEW WORKGROUP—PHASE III
REPORT TO THE COMMISSION**

COMMISSION CONSENSUS PHASE II RECOMMENDATIONS

(Adopted Unanimously August 22, 2006)

Motion—The Commission voted unanimously, 19 – 0 in favor, to accept the Code Amendment Process Review Workgroups’ package of recommendations regarding the annual interim amendment, expedited, and triennial code update processes.

Eliminate the annual interim process, maintain only the triennial and expedited processes. The expedited process can be implemented whenever needed. The criteria for the process would be amended to include updates and changes to federal/state laws.

A triennial code update that coincides with the fire triennial update.

Justification for Florida-specific amendments to the base code should be strictly adhered to. Define specific needs of the State.

Issue quarterly notices of binding interpretations and declaratory statements. This would be in the form of a technical bulletin section of the Commission’s quarterly newsletter.

Require the TAC’s to review the code change proposals both times (two TAC reviews prior to Commission consideration during rule development) during the Code development phase of the update process then have the Commission conduct Chapter 120 rule development, with a rule development workshop and rule adoption hearing, in the adoption phase of the update process. The TAC’s would review proposed code amendments, and after the 45 public comment period on the TAC’s recommendations, the TAC would review and make recommendations regarding comments, and then the TAC’s revised recommendations would be submitted to the Commission for their consideration in a rule development workshop.

Maintain updates to FBC within 2 years (not more than 2 years) of new editions of the foundation codes and provide for adoption of equivalent product evaluation standards via rule 9B-72. (Establish a policy that the would ensure the updated Florida Building Code would go into effect a minimum of one year before the next edition of the foundation codes on which it is based.)

OPTIONS FOR INTEGRATING THE CODE WITH FLORIDA SPECIFIC AMENDMENTS AND ICC FOUNDATION CODE UPDATES

Option A— *Maintain status quo, purchase copyright from ICC. Use another source to print the code, use with above (other) options. This is not a standalone option.*

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial Ranking 10/9/06	6	2	0	1

Option B—*Retain the current Florida Building Code as the base documents for future updates and revisions. Under this option, the Commission will utilize the current FBC as the base code and revise as needed based on updates to the I-codes and Florida Specific changes and publishing a complete and integrated FBC.*

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial Ranking 10/9/06	3	4	1	1

Option C— *Continue the current approach which consists of revising the base model code documents to integrate Florida Specific changes and publishing a complete and integrated Florida Building Code. Also, continue the production of replacement pages for interim code changes.*

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial Ranking 10/9/06	3	1	5	0

Option D— *Substitute page approach to the code.*

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial Ranking 10/9/06	2	2	5	0

Option E— *Maintain base code for 6 years. Integrate on 3 year cycle.*

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial Ranking 10/9/06	1	2	5	1

Option F— Adopt latest version of ICC, eliminate Florida specific amendments, rely on interest groups make amendments to base code. Preferential treatment for carrying forward Florida specific amendments. Propose Florida specific amendments.

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial Ranking 10/9/06</i>	1	0	2	6

Option G— Adopt the model code base documents and the Florida Specific changes as two separate documents. This option would consist of adopting the base model code documents by reference and a code supplement which delineates Florida Specific changes.

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial Ranking 10/9/06</i>	1	0	1	7

TRAINING AND EDUCATION OPTIONS

Option A— Single point approval for building code courses.

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial Ranking 10/9/06</i>	6	3	0	0

Option B— In the law require that providers keep courses updated.

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial Ranking 10/9/06</i>	2	4	2	1

Option C— Make a law to require that the various licensing Boards keep courses updated to meet the current requirements of the FBC.

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial Ranking 10/9/06</i>	0	1	5	3

MEETING EVALUATION RESULTS

Average rank using a 0 to 10 scale, where 0 means totally disagree and 10 means totally agree.

1. Please assess the overall meeting.

8.44 The background information was very useful.

8.44 The agenda packet was very useful.

9.77 The objectives for the meeting were stated at the outset.

8.44 Overall, the objectives of the meeting were fully achieved.

9.22 Overview of Phase III Scope.

9.66 Identification of Issues for Phase III.

9.00 Identification, Evaluation, Ranking, and Refinement of Workgroup Proposed Option(s).

8.55 Identification of Needed Next Steps and Agenda Items For Next Meeting.

2. Please tell us how well the Facilitator helped the participants engage in the meeting.

8.88 The members followed the direction of the Facilitator.

9.77 The Facilitator made sure the concerns of all members were heard.

9.33 The Facilitator helped us arrange our time well.

8.88 Participant input was documented accurately.

3. What is your level of satisfaction with the meeting?

9.00 Overall, I am very satisfied with the meeting.

9.44 I was very satisfied with the services provided by the Facilitator.

8.88 I am satisfied with the outcome of the meeting.

4. What progress did you make?

9.11 I know what the next steps following this meeting will be.

9.11 I know who is responsible for the next steps.

5. Member's Written Evaluation Comments.

None provided.

APPENDIX C
COMMITTEE ORGANIZATION AND PROCESS AD HOC

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

DECEMBER 5, 2006

Tampa, Florida

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**Report By Jeff A. Blair
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Florida State University**



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This document is available in alternate formats upon request to Dept. of Community Affairs,
Codes & Standards, 2555 Shumard Oak Blvd., Tallahassee, FL 32399, (850) 487-1824.

COMMITTEE ORGANIZATION AND PROCESS AD HOC REPORT AND RECOMMENDATIONS

DECEMBER 5, 2006

Overview

At the October 2006 Commission meeting, Raul L. Rodriguez, AIA, Chair of the Florida Building Commission, reported to the Commission that as a result of there being a large number of committees and workgroups—there is an overlap of participants and staff, as well as a limited quantity of time slots—stakeholders have recommended that the Commission consider allowing members appointed to TAC's and workgroup's to identify an alternate member to attend and participate in his/her place.

Chapter 553.77(1)(g) authorizes the Commission to appoint advisory committees and the Commission has done this through the use of workgroups. Rule 9B-3.004 (Commission Organization and Operations) addresses rules for Ad Hoc Committees, TAC's, and POC's. The Chair announced he was convening an ad hoc committee to consider alternate member provisions for both TAC's and workgroups. The Chair noted that the ad hoc would consider options to ensure that TAC's and workgroups' have a quorum, and that all views are represented during TAC and workgroup meetings.

Committee Organization And Process Ad Hoc Membership

The Chair appointed the following Commissioners to sit on the Ad Hoc:
Raul Rodriguez (Chair), Dick Browdy, Nick D'Andrea, Do Kim, Dale Greiner, and George Wiggins.

SUMMARY OF AD HOC'S KEY DECISIONS

Opening and Meeting Attendance

The meeting started at 1:00 PM, and the following Ad Hoc members were present:
Raul Rodriguez (Chair), Dick Browdy, Nick D'Andrea, Do Kim, Dale Greiner, and George Wiggins.

DCA Staff Present

Rick Dixon, Mo Madani, and Betty Stevens.

Meeting Facilitation

The meeting was facilitated by Jeff Blair from the Florida Conflict Resolution Consortium at Florida State University. Information at: <http://consensus.fsu.edu/>

Project Webpage

Information on the project, including agenda packets, meeting reports, and related documents may be found in downloadable formats at the project webpage below:
<http://consensus.fsu.edu/>

Meeting Objectives

The Ad Hoc voted unanimously, 5 - 0 in favor, to approve the agenda as presented including the following objectives:

- ✓ To Review and Adopt Meeting Agenda and Procedures and Guidelines
- ✓ To Review Meeting Scope
- ✓ To Review the Code Amendment Process Review Workgroup's Recommendations
- ✓ To Evaluate, Rank, and Refine Proposed Options for TAC/Workgroup Alternate Members
- ✓ To Consider Public Comment
- ✓ To Adopt Recommendations for Submittal to the Commission
- ✓ To Identify Any Needed Next Steps

Work Group's Decision-Making Procedures and Meeting Guidelines

Jeff Blair reviewed the Workgroup's decision-making procedures.

Review of Code Amendment Process Review Workgroup's Rec's.

The Ad Hoc Committee voted unanimously, 5 – 0 in favor, to recommend that the Commission implement the Code Amendment Process Review Workgroup's recommendations regarding annual interim amendments and TAC review processes, through administrative rule and not via statutory change(s). The following recommendations should be implemented by Commission policy and administrative rule, and not through a statutory change(s):

- Eliminate the annual interim amendment process, maintaining only the triennial and expedited processes. Provide statutory authorization for the expedited process to be implemented whenever deemed necessary by the Commission, and amend the criteria for the expedited process to include updates and changes to federal and state laws.*
- Require the TAC's to review code change proposals two times (two TAC reviews prior to Commission consideration, beginning with rule development) during the Code development phase of the update process, prior to the Commission conducting Chapter 120 rule development, with a rule development workshop and rule adoption hearing, in the adoption phase of the update process.
The TAC's would review proposed code amendments, and after the 45 public comment period on the TAC's recommendations, the TAC would review and make recommendations regarding substantive comments, and then the TAC's revised recommendations would be submitted to the Commission for their consideration in a rule development workshop and subsequently through a rule adoption hearing.*

Florida specific amendments to the base code should be narrowly defined and adhered to. This should be limited to only what is specifically needed in Florida beyond the provisions of the base code.

A set of criteria and a filtering process will be designed, and a process will be implemented to review and ensure that only Florida specific amendments are considered.
A screening process will be designed to ensure Florida specificity.
This process will be implemented so that no additional time is added to the overall code review process.
Only Florida specific amendments will be considered during the code update process (new and existing Florida specific amendments).
6 – 0 in favor.

COMMISSION TAC AND WORKGROUP ALTERNATE MEMBER PARTICIPATION POLICY

An individual TAC and/or workgroup member may nominate another individual to participate in a meeting in his/her absence.

Selection of Alternate

The TAC and/or workgroup member must select his/her nominee, and in writing notify the Commission Chair, through the Department of Community Affairs.
Alternate members must be of the same stakeholder/constituent group as the appointed member. The nominee must attend at least one meeting of the TAC and/or workgroup prior to serving as an alternate.
DCA staff will notify the member if his/her alternate selection is approved.
Other TAC and/or workgroup members may notify the Commission Executive Director of any concerns they have regarding the nominee.

Participation of Approved Alternate Member(s)

The appointed member must notify the staff member (for TAC's) and Facilitator (for workgroups) in advance of the meeting that they will miss the next meeting and his/her alternate will attend in his/her place.
The appointed member must provide the alternate member with a copy of the upcoming meeting's agenda and other relevant documents, and consult with alternate on the substantive discussion issues before the TAC and/or workgroup.
The appointed member should provide his/her alternate with a summary of his/her views on each of the substantive issues under consideration at the upcoming TAC and/or workgroup meeting.
The Alternate shall sit at the table and participate and vote on all substantive discussions. The alternate should represent the appointed member's views on substantive discussion issues.
The alternate shall agree to follow all procedures as stipulated in the TAC and/or workgroup's adopted "Procedural Guidelines".

Removal of Alternate

All TAC and workgroup appointed members and alternates serve at the pleasure of the Commission Chair.

Commission Members on TAC's and Workgroups

Commission members may not appoint an alternate member.

The Alternate Member Participation policy does not apply to POC's and Ad Hoc committees, since they are constituted entirely of Commission members.

Adoption of Package of Recommendations for Submittal to the Commission

The Ad Hoc voted unanimously, 6 – 0 in favor, to adopt the package of recommendations regarding the code amendment process and the alternate workgroup and TAC member proposal, and to submit to the Commission for their consideration.

Adjournment

The Workgroup voted to adjourn unanimously at 2:20 PM.

MEETING EVALUATION RESULTS

December 5, 2006—Tampa, Florida

Average rank using a 0 to 10 scale, where 0 means totally disagree and 10 means totally agree.

1. Please assess the overall meeting.

9.7 ___ The background information was very useful.

9.7 ___ The agenda packet was very useful.

9.7 ___ The objectives for the meeting were stated at the outset.

9.7 ___ Overall, the objectives of the meeting were fully achieved.

9.7 ___ Review of the Code Amendment Process Review Workgroup's Recommendations.

9.7 ___ Identification, Evaluation, Ranking, and Refinement of Ad Hoc Proposed Option(s).

9.7 ___ Adoption of Recommendations for Submittal to the Commission.

2. Please tell us how well the Facilitator helped the participants engage in the meeting.

9.7 ___ The members followed the direction of the Facilitator.

9.7 ___ The Facilitator made sure the concerns of all members were heard.

9.7 ___ The Facilitator helped us arrange our time well.

9.7 ___ Participant input was documented accurately.

3. What is your level of satisfaction with the meeting?

9.7 ___ Overall, I am very satisfied with the meeting.

9.7 ___ I was very satisfied with the services provided by the Facilitator.

9.7 ___ I am satisfied with the outcome of the meeting.

5. What progress did you make?

9.7 ___ I know what the next steps following this meeting will be.

9.7 ___ I know who is responsible for the next steps.

5. Member's Written Evaluation Comments.

None Offered.

APPENDIX D
WINDOW LABELING WORKGROUP

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

NOVEMBER 1 - 2, 2006

Tampa, Florida

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Report By Jeff A. Blair
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Codes & Standards, 2555 Shumard Oak Blvd., Tallahassee, FL 32399, (850) 487-1824.

WINDOW WORKGROUP REPORT AND RECOMMENDATIONS

NOVEMBER 1 - 2, 2006

Overview

Raul L. Rodriguez, AIA, Chair of the Florida Building Commission, has made appointments to the Window Workgroup, and they are found below. Members are charged with representing their stakeholder group's interests, and working with other interest groups to develop a consensus package of recommendations for submittal to the Florida Building Commission.

Workgroup Membership

The following members were appointed to serve on the Window Workgroup: Robert Amoruso, Chuck Anderson, Rusty Carrol, Jaime Gascon, Dale Griener, Jon Hill, C.W. Macomber, John McFee, Dave Olmstead, Craig Parrino, Roger Sanders, Jim Schock, Steve Strawn, Sigi Valentine, and Dwight Wilkes.

SUMMARY OF WORKGROUP'S KEY DECISIONS

Day One Opening and Meeting Attendance

The meeting started at 1:05 PM, and the following Workgroup members were present: Robert Amoruso, Chuck Anderson, Rusty Carrol, Jaime Gascon, Jon Hill, C.W. Macomber, John McFee, Dave Olmstead, Craig Parrino, Jim Schock, Steve Strawn, Sigi Valentine, and Dwight Wilkes.

The Following members were absent: Dale Greiner and Roger Sanders.

Day Two Opening and Meeting Attendance

The meeting started at 9:10 AM, and the following Workgroup members were present: Robert Amoruso, Chuck Anderson, Rusty Carrol, Jaime Gascon, Jon Hill, C.W. Macomber, John McFee, Dave Olmstead, Craig Parrino, Jim Schock, Steve Strawn, Sigi Valentine, and Dwight Wilkes.

Note: Jon Hill had to leave early, and was not able to vote on the package of recommendations.

The Following members were absent: Dale Greiner and Roger Sanders.

DCA Staff Present

Rick Dixon, Mo Madani, and Betty Stevens.

Meeting Facilitation

The meeting was facilitated by Jeff Blair from the Florida Conflict Resolution Consortium at Florida State University. Information at: <http://consensus.fsu.edu/>

Project Webpage

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

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

Meeting Objectives

The Workgroup voted unanimously, 12 - 0 in favor, to approve the agenda as presented including the following objectives:

- ✓ To Review Issues and Options Worksheet
- ✓ To Review Consensus Recommendations from Worksheet
- ✓ To Identify Any Additional Options for Evaluation
- ✓ To Evaluate Options for Acceptability
- ✓ To Consider Public Comment
- ✓ To Adopt Package of Recommendations for Submittal to the Commission
- ✓ To Discuss Next Steps and Recommendations Delivery Schedule and Phase III Scope

Work Group's Decision-Making Procedures and Meeting Guidelines

Jeff Blair reviewed the Workgroup's decision-making procedures found on page 3 of the agenda packet.

Approval of May 31, 2006 Facilitator's Summary Report

The Workgroup voted unanimously, 12 - 0 in favor, to approve the May 31, 2006 Facilitator's Summary Report as presented.

Overview of Workgroup's Scope and Charge

Jeff Blair explained that the original scope and purpose of the Workgroup was to provide recommendations on how to provide building officials with needed information for conducting field inspections to ensure windows complies with the relevant wind pressure Code requirements. In addition, the workgroup was charged with considering issues related to window installation and water intrusion. Jeff explained that the Workgroup has developed consensus on a package of recommendations primarily related to the components and format for a supplemental label, to function as an inspection label, at the May 2006 meeting, and subsequent to the May meeting, window industry stakeholders requested an additional meeting and opportunity to reconsider the package of recommendations. The Chair agreed to reconvene the Workgroup and charge them with reviewing and deciding on the consensus recommendations.

It was explained that the Workgroup's recommendations would be submitted to the Code Administration TAC at their December meeting, and the TAC's comments along with the Workgroup's recommendations, would be submitted to the Commission during the December 6, 2006 plenary session. It is anticipated that the Commission will vote on a package of recommendations related to Window Labeling, and Code amendments will be submitted for the 2007 Code Update cycle.

Jeff explained that Workgroup members are charged with representing their constituent interest groups, and should consider this in the context of the deliberations. Jeff explained that the format and process for the meeting was as follows:

For each option:

- * Overview of proposed option
- * General discussion with Workgroup and staff on the option
- * Identification of any new option(s),
- * Public comment on the option,
- * Initial ranking of option,
- * Identification of member's reservations (if any),
- * Second ranking if any member(s) wishes to change their ranking based on the discussion(s),

Recess—Wednesday, November 1, 2006

The Workgroup voted unanimously, 13 - 0 in favor, to recess at 4:55 PM.

General Public Comment

Prior to the Workgroup voting on the package of recommendations, Jeff Blair offered members of the public an additional opportunity to provide feedback to the Workgroup. Several members of the public provided comments to the Workgroup. (A summary of all comments is located in the options evaluation section of the full report).

Consensus Testing and Agreement on Recommendations for Commission Submittal

The Workgroup voted 10 – 2 in favor of the package of consensus recommendations to the Code Administration TAC, and to the Commission.

Note: those voting against the package felt that a supplemental label should be optional, and not required.

Next Steps

The Code Administration TAC will review Window Workgroup's recommendations, and make recommendations to the Commission.

The Commission will decide on Workgroup's recommendations at the December 2006 meeting. All Code changes will be reviewed by TAC's per the Commission's adopted Code review process.

Adjournment—Thursday, November 2, 2006

The Workgroup voted unanimously, 12 – 0 in favor, to adjourn at 12:00 PM

CONSENSUS RECOMMENDATIONS

(November 2006)

Consensus recommendations are defined as those options that achieved a 75% threshold of 4's and 3's in relation to 2's and 1's.

Require the Supplemental Label to be printed and applied by the manufacturer. The manufacturer's process for accurately applying supplemental labels shall be consistent with the certification program or quality assurance requirements. The supplemental label shall be consistent with any other labeling required by the appropriate Chapters (i.e., 17, R308, R613) of the Florida Building Code(s). All of the Commission approved product approval compliance options require supplemental labels.

There may be only one rating per reference standard per label for windows.

The Design Pressure (DP) (per 101/I.S.2 or TAS) is required on the supplemental label.

The DP must include positive and negative pressures on the supplemental label.

Provide a prescriptive section (by design pressure) in the Code, the manufacturer may chose to indicate on the supplemental label that there are manufacturer's instructions that prevail, and that the prescriptive section does not apply. The Code's prescriptive installation section will indicate that the prescriptive requirements are not required when the manufacturer indicates that their instructions prevail. Prescriptive requirements will prevail if manufacturer does not indicate on the supplemental label that detailed installation instructions are available.

The glazing thickness shall be required on the supplemental label.

If a window unit is impact rated, the impact rating shall be required on the supplemental label.

The product model/series number shall be provided on the permanent and supplemental labels.

The FL number or NOA shall be required on the supplemental label.

The maximum size shall be required on the supplemental label.

APPENDIX E
GARAGE DOOR AND SHUTTER LABELING WORKGROUP

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

NOVEMBER 13 - 14, 2006

Tampa, Florida

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are needed to see this picture.

**Report By Jeff A. Blair
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GARAGE DOOR SHUTTER WORKGROUP REPORT AND RECOMMENDATIONS

NOVEMBER 13 - 14, 2006

Overview

Raul L. Rodriguez, AIA, Chair of the Florida Building Commission, has made appointments to the Garage Door and Shutter Labeling Workgroup, and they are found below. At the July 2006 Commission meeting, based on the Window Workgroup's recommendations, the Commission created a Garage Door and Shutter Labeling Workgroup, charged with developing recommendations regarding the labeling of garage doors and shutters. As with the Window Labeling Workgroup, the focus for the Garage Door and Shutter Labeling Workgroup was to provide building officials, in a field useable format, with the information they need to ensure that garage doors and shutters comply with the Florida Building Code.

The focus for the Garage Door and Shutter Labeling Workgroup was to develop recommendations on how to provide building officials, in a field useable format, with the information they need to ensure that garage doors and shutters comply with the Florida Building Code.

Workgroup Membership

The following members were appointed to serve on the Window Workgroup:
Joe Belcher, Bob Boyer, Jack Glenn, Herminio Gonzalez, Darius Grimes, Jeffery Gross, Joe Hetzel, Do Kim, C.W. Macomber, Frank O'Neil, Mike Salmon, Sigi Valentine, and Dwight Wilkes.

SUMMARY OF WORKGROUP'S KEY DECISIONS

Day One Opening and Meeting Attendance

The meeting started at 1:15 PM, and the following Workgroup members were present:
Joe Belcher, Bob Boyer, Jack Glenn, Darius Grimes, Jeffery Gross, Joe Hetzel, Do Kim, C.W. Macomber, Mike Salmon, Sigi Valentine, and Dwight Wilkes.

The Following members were absent: Herminio Gonzalez and Frank O'Neil.

Day Two Opening and Meeting Attendance

The meeting started at 9:10 AM, and the following Workgroup members were present:
Joe Belcher, Bob Boyer, Jack Glenn, Darius Grimes, Jeffery Gross, Joe Hetzel, Do Kim, C.W. Macomber, Mike Salmon, Sigi Valentine, and Dwight Wilkes.

The Following members were absent: Herminio Gonzalez, Do Kim, and Frank O'Neil.

DCA Staff Present

Rick Dixon, Mo Madani, and Betty Stevens.

Meeting Facilitation

The meeting was facilitated by Jeff Blair from the Florida Conflict Resolution Consortium at Florida State University. Information at: <http://consensus.fsu.edu/>

Project Webpage

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

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

Meeting Objectives

The Workgroup voted unanimously, 11 - 0 in favor, to approve the agenda as presented including the following objectives:

- ✓ To Review Issues and Options Worksheet
- ✓ To Identify Issues and Options for Evaluation
- ✓ To Evaluate Options for Acceptability
- ✓ To Consider Public Comment
- ✓ To Adopt Package of Recommendations for Submittal to the Commission
- ✓ To Discuss Next Steps and Recommendations Delivery Schedule

Work Group's Decision-Making Procedures and Meeting Guidelines

Jeff Blair reviewed the Workgroup's decision-making procedures found on page 3 of the agenda packet.

Approval of September 14, 2006 Facilitator's Summary Report

The Workgroup voted unanimously, 11 - 0 in favor, to approve the September 14, 2006 Facilitator's Summary Report as presented.

Overview of Workgroup's Scope and Charge

Jeff Blair explained that the scope and purpose of the Workgroup was to provide recommendations on how to provide building officials with needed information for conducting field inspections to ensure garage doors and shutters complies with the relevant wind pressure Code requirements. The Workgroup met on September 14, 2006 and identified a list of issues and preliminary options. Members were encouraged to send in proposed options to address the identified issues prior to Meeting II, where consensus recommendations were developed.

It was explained that the Workgroup's recommendations would be submitted to the Code Administration TAC at their December meeting, and the TAC's comments along with the Workgroup's recommendations, would be submitted to the Commission during the December 6, 2006 plenary session. It is anticipated that the Commission will vote on a package of recommendations related to Garage Door and Shutter Labeling, and Code amendments will be submitted for the 2007 Code Update cycle.

Jeff explained that Workgroup members are charged with representing their constituent interest groups, and should consider this in the context of the deliberations. Jeff explained that the format and process for the meeting was as follows:

For each option:

- * Overview of proposed option
- * General discussion with Workgroup and staff on the option
- * Identification of new option(s),
- * Public comment on the option,
- * Initial ranking of option,
- * Identification of member's reservations (if any),
- * Second ranking, if any member(s) wishes to change their ranking based on the discussion(s),

Recess—Monday, November 13, 2006

The Workgroup voted unanimously, 11 - 0 in favor, to recess at 4:55 PM.

General Public Comment

Prior to the Workgroup voting on the package of recommendations, Jeff Blair offered members of the public an additional opportunity to provide feedback to the Workgroup. Several members of the public provided comments to the Workgroup. (A summary of all comments is located in the options evaluation section of this report).

Consensus Testing and Agreement on Recommendations for Commission Submittal

The Workgroup voted unanimously 9 - 0 in favor of the package of consensus recommendations to the Code Administration TAC, and to the Commission.

Next Steps

The Code Administration TAC will review the Garage Door and Shutter labeling Workgroup's recommendations, and make recommendations to the Commission.

The Commission will decide on the Workgroup's recommendations at the December 2006 meeting. Proponents will be required to submit their approved recommendations as Code amendments. All Code changes will be reviewed by TAC's per the Commission's adopted Code review process.

Adjournment—Tuesday, November 14, 2006

The Workgroup voted unanimously, 9 - 0 in favor, to adjourn at 11:15 AM

CONSENSUS RECOMMENDATIONS

(November 2006)

Consensus recommendations are defined as those options that achieved a 75% or greater threshold of 4's and 3's in proportion to 2's and 1's.

GARAGE DOORS

Garage Doors should be labeled with a permanent label.

The label shall be provided by the manufacturer.

The design pressure, positive and negative shall be on the label.

The manufacturer's product model/series number shall be provided on the label.

If the garage door is impact rated, the rating should be indicated on the label.

The installation drawings reference number shall be on the label.

The FL or NOA number shall be on the label, if the product has an FL or NOA.

The manufacturer's name shall be on the label.

The test standard(s) that the door was tested to shall be on the label.

The required components of the label may be listed using a check list format on the label, the correct boxes on the checklist can be marked by the installer.

The installation instructions must be provided and available on the job site.

Definition of garage door manufacturer: The party responsible for the completed assembly of the garage door components.

A definition should be provided in the Code for permanent label. The definition proposed is a label that is not easily defeatable.

Shutters—Impact Resistant Coverings

The Workgroup proposed to change the term shutters to “**impact resistant coverings**”, to conform with the Code.

A permanent label shall be required on impact resistant coverings.

The label shall be provided by the product approval holder.

The following is required to be included on the Label.

- **PA Holder Name and Location**
- **All Applicable Methods of Approval** (possible methods could be)
Miami-Dade NOA; FBC 2004; TDI Product Evaluation; ICC-ES
- **Qualifying Test Standard used for compliance** (possible test standards could be)
*TAS 201, 202, 203; SSTD 12-99 \geq 110 mph Wind zones;
ASTM E 1886/E 1996 Type D Wind zone I, II, II and/or IV;
ASTM E 330 (required for SSTD 12 and ASTM E 1996)*

Installation instructions shall be provided and available on the job site.

The FL or NOA number shall be on the label if the product has an FL or NOA.

The Location of the Label shall be as follows:

- *Accordions: Bottom of the locking bar or center mate facing outside*
- *Rollup: On the bottom of the hood facing outside or on the bottom slat facing outside*
- *Bahama Awning or Colonial Hinged: On the bottom, placed on the back of the shutter.*
- *Panels: For metal and plastic hurricane panels the label or embossed or printed spaced not more than every three (3) lineal feet on each panel applied by the PA holder and facing the outside.*
- *Framed products on the side or bottom facing outside.*
- *All other products facing outside.*

MEETING EVALUATION RESULTS

November 13 - 14, 2006—Tampa, Florida

Average rank using a 0 to 10 scale, where 0 means totally disagree and 10 means totally agree.

1. Please assess the overall meeting.

9.4 ___ The background information was very useful.

9.8 ___ The agenda packet was very useful.

10.0 ___ The objectives for the meeting were stated at the outset.

9.8 ___ Overall, the objectives of the meeting were fully achieved.

9.7 ___ Overview of Issues and Options Worksheet.

9.7 ___ Identification of Any Additional Options for Evaluation.

9.7 ___ Identification, Evaluation, Ranking, and Refinement of Workgroup Proposed Option(s).

9.9 ___ Adoption of Workgroup's Garage Door/Shutter Labeling Recommendations.

2. Please tell us how well the Facilitator helped the participants engage in the meeting.

9.7 ___ The members followed the direction of the Facilitator.

9.9 ___ The Facilitator made sure the concerns of all members were heard.

9.9 ___ The Facilitator helped us arrange our time well.

9.8 ___ Participant input was documented accurately.

3. What is your level of satisfaction with the meeting?

9.7 ___ Overall, I am very satisfied with the meeting.

9.7 ___ I was very satisfied with the services provided by the Facilitator.

9.2 ___ I am satisfied with the outcome of the meeting.

6. What progress did you make?

9.7 ___ I know what the next steps following this meeting will be.

9.7 ___ I know who is responsible for the next steps.

5. Member's Meeting Evaluation Comments.

- Thanks Jeff, great job again. We could not do it without you.
- Job well done!
- I have successfully used the methods learned from observing Jeff Blair at the FBC to work with client groups addressing contentious issues.
- Everything was fine. Our garage door industry members still need to review the recommendations. I anticipate minor tweaking, but acceptance of all of the concepts agreed upon.
- If possible, in the future provide a little additional time.
- There should be a handbook for new participants in the process.

APPENDIX F
ENERGY CODE TRANSITION STUDY WORKGROUP

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

NOVEMBER 14, 2006

Tampa, Florida

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ENERGY CODE TRANSITION STUDY WORKGROUP REPORT AND RECOMMENDATIONS

NOVEMBER 14, 2006

Overview

Chairman Rodriguez announced that as a result of discussions on amendments proposed to the Energy TAC, the TAC recommended that the proposed transition to the International Energy Conservation Code be evaluated and recommendations developed during the next code update process. In order to accomplish this, the Chair appointed an IECC Transition Study Workgroup. The Workgroup will be conducted as a facilitated stakeholder consensus-building process.

The Workgroup's Phase I charge was to make a recommendation to the Commission on whether to keep the Florida Energy Code as the template, or to adopt the IERC as the template for Florida's energy code provisions. The Workgroup met on June 22, 2006 and developed consensus recommendations to the Commission.

At the July 11, 2006 Commission meeting, the Commission voted unanimously to adopt the Energy Code Transition Study Workgroup's recommendation that the Commission maintain the Florida Energy Code, and charge the Workgroup with reviewing the IECC code provisions and developing recommendations on which, if any, provisions should be adopted into the Code. In addition, the Commission will seek legislative authority to allow the Commission to adopt the IECC as the foundation code, if the Commission determines it is in the best interest of the State.

For Phase II, the Workgroup's scope was expanded to review the IECC code provisions and recommending which, if any, provisions should be adopted into the Florida Building Code. The Workgroup met on Tampa on November 14, 2006 and developed Phase II recommendations.

Energy Code Transition Study Workgroup Members

Bob Andrews, Steve Bassett, Bob Cochell, Joe Crum, Philip Fairey, Jack Glenn, Steve Gooch, Dale Greiner, Gary Griffin, Jeff Householder, Patty Krauss, Larry Nelson, Pete Quintella, Roger Sanders, and Ivan Zuniga.

SUMMARY OF WORKGROUP'S KEY DECISIONS

Day One Opening and Meeting Attendance

The meeting started at 1:05 PM, and the following Workgroup members were present: Bob Andrews, Bob Cochell, Philip Fairey, Jack Glenn, Steve Gooch, Dale Greiner, Gary Griffin, Jeff Householder, Larry Nelson, Pete Quintella, Roger Sanders, and Ivan Zuniga.

The Following members were absent: Steve Bassett, Joe Crum, and Patty Krauss.

DCA Staff Present

Rick Dixon, Mo Madani, and Ann Stanton.

Meeting Facilitation

The meeting was facilitated by Jeff Blair from the Florida Conflict Resolution Consortium at Florida State University. Information at: <http://consensus.fsu.edu/>

Project Webpage

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

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

Meeting Objectives

The Workgroup voted unanimously, 11 - 0 in favor, to approve the agenda as presented including the following objectives:

- ✓ To Approve Regular Procedural Topics (Agenda and Report)
- ✓ To Hear an Overview of Workgroup's Phase II Scope
- ✓ To Review Workgroup and Staff Proposed Amendments to the Florida Energy Code
- ✓ To Identify any Additional IECC Amendments to the Florida Energy Code
- ✓ To Evaluate, Rank, and Refine Proposed Amendments to the Florida Energy Code
- ✓ To Consider Public Comment
- ✓ To Adopt Recommendations for Submittal to the Commission
- ✓ To Identify Needed Next Steps and Agenda Items For Next Meeting

Work Group's Decision-Making Procedures and Meeting Guidelines

Jeff Blair reviewed the Workgroup's decision-making procedures found in the agenda packet.

Approval of June 22, 2006 Facilitator's Summary Report

The Workgroup voted unanimously, 11 - 0 in favor, to approve the June 22, 2006 Facilitator's Summary Report as presented.

Overview of Workgroup's Scope and Charge

Jeff Blair explained that the scope and purpose of the Workgroup was to review the IECC code provisions and recommend which, if any, provisions the Commission should be adopted into the Florida Building Code. The Workgroup met on September 14, 2006 and identified a list of issues and preliminary options. Members were encouraged to send in proposed options to address the identified issues prior to Meeting II, where consensus recommendations were developed.

It was explained that the Workgroup's recommendations would be submitted to the Energy TAC at their December meeting, and the TAC's comments along with the Workgroup's recommendations, would be submitted to the Commission during the December 6, 2006 plenary

session. It is anticipated that the Commission will vote on a package of recommendations related to Energy Code provisions, and Code amendments will be submitted by proponents for the 2007 Code Update cycle.

Jeff explained that Workgroup members are charged with representing their constituent interest groups, and should consider this in the context of the deliberations. Jeff explained that the format and process for the meeting was as follows:

For each option:

- * Overview of proposed option.
- * General discussion with Workgroup and staff on the option.
- * Identification of new option(s),
- * Public comment on the option,
- * Initial ranking of option,
- * Identification of member's reservations (if any),
- * Second ranking, if any member(s) wishes to change their ranking based on the discussion(s),

Energy Code Work Group's Phase I Recommendations as Adopted July 11, 2006 by the Florida Building Commission (From the July 11, 2006 Commission Report)

Chairman Rodriguez reported to the Commission that the Energy Code Transition Study Workgroup met in Cocoa on June 22, 2006. The purpose of the Workgroup was to evaluate the Florida Solar Energy Centers FSEC's comparison and recommendations regarding the Florida Energy Code and the International Energy Conservation Code (IECC). The Workgroup's charge was to make a recommendation to the Commission on whether to keep the Florida Energy Code as the template, or to adopt the IERC as the template for Florida's energy code provisions. The Workgroup has developed a consensus recommendation regarding the Florida Energy Code.

Jeff Blair reported that the Workgroup voted unanimously, 12 – 0 in favor, to recommend to the Florida Building Commission, that the Commission maintain the Florida Energy Code, and charge the Workgroup with reviewing the IECC code provisions and developing recommendations on which, if any, provisions should be adopted into the Code. In addition, the Commission seek legislative authority to allow the Commission to adopt the IECC as the foundation code, if the Commission determines it is in the best interest of the State.

Commission Actions:

Motion—The Commission voted unanimously, 18 – 0 in favor, to accept the Workgroup's report.

Motion—The Commission voted unanimously, 18 – 0 in favor, to adopt the Energy Code Transition Study Workgroup's recommendation that the Commission maintain the Florida Energy Code, and charge the Workgroup with reviewing the IECC code provisions and developing recommendations on which, if any, provisions should be adopted into the Code. In addition, the Commission will seek legislative authority to allow the Commission to adopt the IECC as the foundation code, if the Commission determines it is in the best interest of the State.

General Public Comment

Prior to the Workgroup voting on the package of recommendations, Jeff Blair offered members of the public an additional opportunity to provide feedback to the Workgroup. Several members of the public provided comments to the Workgroup. (A summary of all comments is located in the options evaluation section of this report).

Consensus Testing and Agreement on Recommendations for Commission Submittal

The Workgroup voted 11 - 1 in favor of the package of consensus recommendations to the Energy TAC, and to the Commission.

Next Steps

The Energy TAC will review Energy Code Transition Study Workgroup's recommendations, and make recommendations to the Commission.

The Commission will review the Workgroup's recommendations at the December 2006 meeting. Proponents will be required to submit their recommendations as Code amendments. All Code changes will be reviewed by TAC's per the Commission's adopted Code review process.

Adjournment—Wednesday, November 15, 2006

The Workgroup voted unanimously, 12 – 0 in favor, to adjourn at 4:45 PM

CONSENSUS RECOMMENDATIONS (November 2006)

Consensus recommendations are defined as those options that achieved a 75% or greater threshold of 4's and 3's in proportion to 2's and 1's.

Proposal EWG 3—13-601.1.A Prescriptive requirements specific to Method A. Windows shall meet the air infiltration requirements in Section 606.1 The area weighted average maximum SHGC for all glazed fenestration products (windows, doors and skylights) shall be 0.50.

MEETING EVALUATION RESULTS

November 15, 2006—Tampa, Florida

Average rank using a 0 to 10 scale, where 0 means totally disagree and 10 means totally agree.

1. Please assess the overall meeting.

- 9.0 The background information was very useful.
- 8.9 The agenda packet was very useful.
- 8.8 The objectives for the meeting were stated at the outset.
- 6.3 Overall, the objectives of the meeting were fully achieved.
- 6.6 Overview of Proposed Florida Energy Code Amendments.
- 7.9 Identification and Evaluation of Proposed Amendments.
- 7.3 Adoption of Workgroup's Energy Code Amendment Recommendations.

2. Please tell us how well the Facilitator helped the participants engage in the meeting.

- 7.8 The members followed the direction of the Facilitator.
- 8.8 The Facilitator made sure the concerns of all members were heard.
- 9.0 The Facilitator helped us arrange our time well.
- 8.8 Participant input was documented accurately.

3. What is your level of satisfaction with the meeting?

- 6.5 Overall, I am very satisfied with the meeting.
- 7.5 I was very satisfied with the services provided by the Facilitator.
- 7.0 I am satisfied with the outcome of the meeting.

7. What progress did you make?

- 8.5 I know what the next steps following this meeting will be.
- 8.5 I know who is responsible for the next steps.

5. Member's Meeting Evaluation Comments.

- Good facilitator performance in a tough debate.
- When several members “struck” on “out of the scope” the meeting was over. They were voting against everything so all input beyond this determination was moot.

APPENDIX G
TERMITE WORKGROUP

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

MAY 18, 2006

Tampa, Florida

Meeting Design & Facilitation By

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Codes & Standards, 2555 Shumard Oak Blvd., Tallahassee, FL 32399, (850) 487-1824.

TERMITE WORKGROUP REPORT

MAY 18, 2006

Overview

Chairman Rodriguez announced the appointment of a termite workgroup to consider proposals for enhancing the Code's termite provisions. The Workgroup will be conducted as a facilitated stakeholder consensus-building process.

Workgroup Membership

The following members were appointed to serve on the Termite Workgroup: Steve Dwinell, Jack Glenn, Roland Holt, Phil Koehler, David Lewis, Mike Moore, Doug Murdock, D.R. Sapp, Jim Schock, and George Wiggins.

Summary of Workgroup's Key Decisions

Opening and Meeting Attendance

The meeting started at 9:15 AM, and the following Workgroup members were present: Steve Dwinell, Jack Glenn, Phil Koehler, Mike Moore, D.R. Sapp, Jim Schock, and Jeff Stone.

DCA Staff Present

Rick Dixon, Mo Madani, and Betty Stevens.

Meeting Facilitation

The meeting was facilitated by Jeff Blair from the Florida Conflict Resolution Consortium at Florida State University. Information at: <http://consensus.fsu.edu/>

Project Webpage

Information on the project, including agenda packets, meeting reports, and related documents may be found in downloadable formats at the project webpage below:
<http://consensus.fsu.edu/FBC/tw.html>

Meeting Objectives

The Workgroup voted unanimously, 7 - 0 in favor, to approve the agenda as presented including the following objectives:

- To Review and Adopt Work Group Procedures and Guidelines
- To Hear an Overview of Workgroup Charge and Scope
- To Hear a Presentation on Formosan Termites in Florida
- To Hear a Presentation on Existing Control Efforts in Florida and Nationally
- To Review Proposed Modifications to Section 1816.1 and R320.1 and Related Definitions
- To Propose Options for Evaluation
- To Evaluate, Rank, and Refine Proposed Options
- To Consider Public Comment
- To Identify Needed Next Steps and Agenda Items For Next Meeting

Work Group’s Decision-Making Procedures and Meeting Guidelines

Jeff Blair reviewed the Workgroup’s decision-making procedures found on page 3 of the agenda packet.

Issue Identification and Meeting Scope

Jeff Blair explained that the scope and purpose of the Workgroup is to review a proposed modifications to Section 1816.1 and R320.1 of the Code and related definitions, requiring that: “In areas where Formosan termites have been identified, all structural members shall be composed of termite resistant material”, with a corresponding definition of termite resistant material.

In addition, the Workgroup would consider any additional termite related provisions proposed by Workgroup members.

Presentation and Q&A on Formosan Termites in Florida

Dr. Phil Koehler from the University of Florida, provided members with an overview of Formosan Termites in Florida, and answered member’s questions. In addition members of the public were offered an opportunity to ask questions on the presentation.

Phil reported that treatment for Formosan termites was the same as for native subterranean species, and there is no accurate data base maintained to track where Formosan are found in Florida.

Presentation and Q&A on Existing Control Efforts

Steve Dwinell, Assistant Division Director of the Division of Agriculture and Environmental Services at DACS, provided members with an overview existing termite control methods in Florida, and answered member’s questions. In addition members of the public were offered an opportunity to ask questions on the presentation.

Steve reported that wood treatment with Borates has is becoming a predominant method for termite control in new construction.

Review and Discussion of Proposed Modifications to Section 1816.1 & R320.1

Mike Moore as proponent for proposed modifications to Section 1816.1 & R320.1 and relevant definitions, provided members with an overview of the proposed amendment requiring that: “In areas where Formosan termites have been identified, all structural members shall be composed of termite resistant material”, with a corresponding definition of termite resistant material, and answered member’s questions. In addition members of the public were offered an opportunity to ask questions on the presentation.

Options Identification and Initial Evaluation of Options

Results are found on pages 4 – 7 of this Report.

Evaluation of Options—Ranking and Refinement of Options

Results are found on pages 4 – 7 of this Report.

Recommendations Regarding Termite Provisions of the Code to the Florida Building Commission

The members voted to make the following recommendations regarding the Termite provisions of the Florida Building Code:

Recommendations to Approve:

1. The Workgroup voted unanimously, 7 – 0 in favor, to the following proposal in concept, with details to be worked out with the Structural TAC:
If wood treatment (pesticides applied to wood) is used for subterranean termite protection in new construction, wood areas disturbed or added after initial treatment shall be retreated with a wood treatment (pesticides applied to wood).
2. The Workgroup agreed in concept that pipe sleeves should not be used for CPVC, and the issue should be reviewed by the Plumbing TAC. Pipe sleeving in general should also be reviewed for issues of corrosion, insulation, and termite damage, and the Code amended as needed.
Pipe sleeves shall not be used with CPVC, and require non-cellulose-containing material for pipe sleeves.
3. *The Workgroup agreed that the Structural TAC should review all noncellulosic materials used in construction (i.e., rigid foam insulation, insulated concrete forms (ICF), for use above and below grade), and develop recommendations to ensure termite protection is provided in the Code.*

Recommendations Against Approval:

4. The Workgroup voted 1 – 6 in favor of recommending that the Commission approve the proposed modification to Section 1816.1 and R320.1 of the Code and related definitions, requiring that: “In areas where Formosan termites have been identified, all structural members shall be composed of termite resistant material”, and the corresponding definition of “Termite Resistant Material: Pressure preservatively treated wood, heartwood of redwood, eastern red cedar, concrete, masonry, steel, or other approved material.”
By a vote of 6 – 1, the Workgroup recommends that the Commission not approve this proposed amendment.
5. The Workgroup voted 1 – 6 in favor of AF&PA’s proposal to adopt the IBC termite provisions, with Florida specific amendments.
By a vote of 6 – 1, The Workgroup recommends that the Commission not approve this proposed amendment, in favor of the existing FBC termite provisions.

May 18, 2006—Tampa, Florida
Meeting Evaluation Results

Average rank using a 0 to 10 scale, where 0 means totally disagree and 10 means totally agree.

1. Please assess the overall meeting.

- 9.71 The background information was very useful.
- 9.00 The agenda packet was very useful.
- 9.57 The objectives for the meeting were stated at the outset.
- 9.42 Overall, the objectives of the meeting were fully achieved.
- 9.28 Overview of Workgroup Charge and Scope.
- 9.57 Presentation on Formosan Termites in Florida.
- 9.42 Presentation on Existing Control Efforts in Florida and Nationally.
- 9.14 Review of Proposed Modifications to Section 1816.1 and R320.1 and Related Definitions.
- 9.14 Identification, Evaluation, Refinement, and Acceptability Ranking of Options.
- 9.00 Adoption of Package of Recommendations to the Commission.

2. Please tell us how well the Facilitator helped the participants engage in the meeting.

- 9.50 The members followed the direction of the Facilitator.
- 9.50 The Facilitator made sure the concerns of all members were heard.
- 9.50 The Facilitator helped us arrange our time well.
- 9.50 Participant input was documented accurately.

3. What is your level of satisfaction with the meeting?

- 9.50 Overall, I am very satisfied with the meeting.
- 9.83 I was very satisfied with the services provided by the Facilitator.
- 9.50 I am satisfied with the outcome of the meeting.

8. What progress did you make?

- 8.83 I know what the next steps following this meeting will be.
- 8.83 I know who is responsible for the next steps.

5. Member's Written Evaluation Comments.

- Good meeting.

APPENDIX H
PRODUCT APPROVAL VALIDATION WORKGROUP

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

JUNE 1, 2006

Tampa, Florida

Meeting Design & Facilitation By

QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.

**Report By Jeff A. Blair
Florida Conflict Resolution Consortium
Florida State University**



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FLORIDA BUILDING COMMISSION

PRODUCT APPROVAL VALIDATION WORKGROUP REPORT JUNE 1, 2006

Overview

Raul L. Rodriguez, AIA, Chair of the Florida Building Commission, made appointments to the Product Approval Validation Work Group and they are listed below. Members are charged with representing their stakeholder group's interests, and working with other interest groups to develop a consensus package of recommendations for submittal to the Florida Building Commission.

The revised scope for the Workgroup, based on the Commission's December 2005 vote that the State is not served by a single validation entity for state approval, is to work with stakeholders to review and develop consensus recommendations regarding the validation requirements/details for each of the four compliance methods, the degree of technical review required for the compliance options, and review the validation requirements for the certification agency compliance method.

Members and Representation

Architects

Larry Schneider

Contractors

Ed Carson

Evaluators

Jon Hill and Sigi Valentine

Building Officials

Bill Dumbaugh and Herminio Gonzalez

Engineers

Jimmie Buckner

Product Manufacturers

Craig Parrino and
Randy Shackleford

Insurance

Do Kim

REPORT OF THE JUNE 1, 2006 MEETING

Opening and Meeting Attendance

Jeff Blair, Commission Facilitator, opened the meeting at 9:25 AM, and the following Workgroup members were present:

Jimmy Buckner, Ed Carson, Herminio Gonzalez, Jon Hill, Do Kim, Randy Shakleford, and Sig Valentine.

DCA Staff Present

Joe Bigelow, Rick Dixon, Mo Madani, and Betty Stevens.

Meeting Facilitation

The meeting was facilitated by Jeff Blair from the Florida Conflict Resolution Consortium at Florida State University. Information at: <http://consensus.fsu.edu/>

Project Webpage

Information on the project, including agenda packets, meeting reports, and related documents may be found at the project webpage: <http://consensus.fsu.edu/FBC/pavwg.html>

Agenda Review

Jeff Blair reviewed the agenda with members and the public. The Workgroup voted unanimously, 6 - 0 in favor, to approve the agenda as presented. Following are the key agenda items approved for consideration:

- To Approve Regular Procedural Topics (Agenda and Report)
- To Review Product Approval Validation Options Worksheet
- To Identify Any Additional Options for Evaluation
- To Evaluate Options for Acceptability
- To Consider Public Comment
- To Adopt Package of Consensus Recommendation to the Commission
- To Discuss Next Steps and Recommendations Schedule

Approval of the May 3, 2006 Facilitator's Summary Report

Jeff Blair reviewed the Report with members and the public. The Workgroup voted unanimously, 6 - 0 in favor, to approve the May 3, 2006 Report as presented.

Work Group's Decision-Making Procedures and Meeting Guidelines

Jeff Blair reviewed the Workgroup's decision-making procedures found on page 3 of the agenda packet.

Evaluation of Options—Ranking and Refinement of Options

Full results are found starting on page 8 of this Report.

General Public Comment

Members of the public were invited to address the Board. In addition, the public was encouraged to provide written comments on the form provided in the agenda packets. The Facilitator noted that all written comments would be included in the Facilitator's Summary Reports.

Consensus Testing and Agreement on Product Approval Validation Recommendations

The Workgroup voted unanimously, 7 – 0 in favor, to recommend that the Florida Building Commission adopt the following package of recommendations:

Recommendations Regarding the Validation Provisions of the Product Approval System to the Florida Building Commission

The members voted to make the following recommendations to the Florida Building Commission regarding the validation provisions of the Product Approval System (Rule 9B-72 and/or relevant laws):

1. CERTIFICATION METHOD

Validation Checklist

- Verify Product Manufacturer's name on the state application matches that in the Certification program
- Verify all products identified on the state application are listed in the certification program
- Verify Testing Standards on the application and the uploaded Certification Certificate match, and are as certified.
- Verify compliance documentation is current, not expired, suspended or revoked
- Verify Limitations of Use noted on the application are in accordance with the Certification
- Verify Installation Instructions, including anchorage requirements are for the same product performance documented in the uploaded Certification Certificate or that the manufacturer's licensed design professional has performed this verification.
- Status of certification agency.
- Application lists proper category and subcategory of product.
- The testing standards are as adopted and required by the Florida Building Code.
- The product is properly described.
- The limits of use are included as certified.
- If the documentation indicates that rational analysis was used verify that a Professional Engineer validated the analysis.

Products approved by certification method should have the online form reviewed to insure that the information presented is supported by the certification documents. The review can be done by the certification agency or any approved validation entity (operating within their scope of accreditation, if a test lab). The technical accuracy of the certification is the responsibility of the certification agency.

To the best of my/our knowledge, this application is complete, the items in the checklist above have been verified, and the Certification documentation submitted with this application indicates that the

product, method, or system described in this application meets or exceeds the Florida Building Code requirements and reference standards listed in the application.

Allow multiple certification agencies per application provided there is a third party validation of the application.

Only allow certifications for products that have been tested to standards referenced in the Code, do not allow certifications of products that have no test standard(s).

2. EVALUATION REPORT FROM AN ARCHITECT OR ENGINEER

Validation Checklist for Evaluation Report by A&E

- Verify the evaluator is a Florida Registered Architect or Florida Professional Engineer who has taken the core building code course.
 - Verify submission of the evaluator's certification of independence.
 - Verify the evaluation report is for the products listed on the application as described on the application and that the products are within the scope of Rule 9B-72.
 - Verify that tests reports demonstrating compliance were performed at an accredited, by an approved accreditation body, test lab location.
 - Verify that the test reports or rational analysis are required by the Building Code as a component of a product approval for the product category and subcategory.
 - Verify that rational analysis demonstrating performance were executed utilizing current code requirements and was not used in lieu of a standardized test required by the Code or that rational analysis was not required.
 - Verify that all data, test reports and calculations, are substantiated on the report.
 - Verify that the application has the Code sections and reference standards for which the evaluation demonstrates compliance.
 - Verify the method of demonstrating compliance indicate any limitations on the use of the product, as intended.
 - Verify the manufacturer installation instructions, including attachment, are provided.
- Verify that a quality assurance program audited by a Florida Building Commission approved third party quality assurance agency is in place.

To the best of my/our knowledge, this application is complete, the items in the checklist above have been verified and reviewed, and the evaluation report submitted with this application indicates that the product, method, or system described in this application meets or exceeds the Florida Building Code requirements and reference standards listed in the application.

Architects and Engineers validating shall sign and seal hardcopy of validation checklist.

Reference should be provided to the relevant Engineer's Rule(s).

The VALIDATOR must perform a TECHNICAL REVIEW sufficient to determine that the evaluator has complied with acceptable standards of engineering principals”.

And, “the VALIDATOR must provide an engineering verification that the evaluation complies with the code.” Additionally, “a hardcopy of the application, complying with all aspects of the RULE (Florida Board of Professional Engineers adopted Rule 61G15-36, FAC), must be filed with the Florida Building Commission to supplement the online filing”. Evaluations must be signed and sealed.

This applies to Registered Architects as well.

If validation is defined as a technical review, then the evaluation engineer does not need to be and independent third-party from the manufacturer. Manufacturer’s engineer can do the evaluation, provided the engineer is a Florida PE or RA who has taken the core building code course.

3. TEST REPORT

Test Report Validation Checklist

- Verify the test facility is accredited and approved by the Florida Building Commission.
- Verify testing laboratory’s certification of independence.
- Verify the test reports are for the products listed on the application and that the products are within the scope of Rule 9B-72.
- Verify that the test reports for the products are required by the Building Code as a component of a product approval with the proper category and subcategory.
- Verify that all data on the test reports are substantiated.
- Verify the Code sections and reference standards for which the test report demonstrates compliance.
- Verify the method of demonstrating compliance indicate any limitations on the use of the product, as intended.
- Verify the manufacturer installation instructions, including attachment, are provided and as tested.
- Verify that a quality assurance program audited by a Florida Building Commission approved third party quality assurance agency is in place.
- Verify that no rational analysis is conducted under this method. Otherwise must use another compliance method to seek product approval

To the best of my/our knowledge, this application is complete, the items in the checklist above have been verified, and the test report submitted with this application indicates that the product, method, or system described in this application meets or exceeds the Florida Building Code requirements and reference standards listed in the application.

Establish a rule that if the test standard requires rational analysis, the method for demonstrating compliance must be by an evaluation report.

Testing laboratories shall not validate their own test report applications.

Test labs shall not be allowed to conduct validations.

Validation for the test report method should be a technical review to verify that the reported data demonstrates compliance with the Code, and that the correct test was done.

4. EVALUATION REPORT FROM AN EVALUATION ENTITY

Evaluation Entity Checklist

- Verify the Evaluation Entity is an approved entity.
- Verify submission of the evaluator's certification of independence.
- Verify the evaluation report is for the products listed on the application as described on the application and that the products are within the scope of Rule 9B-72.
- Verify that the test reports referenced for the products are required by the Building Code as a component of a product approval for the product category and subcategory.
- Verify that rational analysis referenced demonstrating performance were executed utilizing current code requirements and was not used in lieu of a standardized test required by the Code or that rational analysis was not required.
- Verify that all data, test reports and calculations, are substantiated on the report.
- Verify the Code sections and reference standards for which the evaluation demonstrates compliance.
- Verify the method of demonstrating compliance indicate any limitations on the use of the product, as intended.
- Verify the manufacturer installation instructions, including attachment, are provided.
- Verify that a quality assurance program audited by a Florida Building Commission approved third party quality assurance agency is in place.

To the best of my/our knowledge, this application is complete, the items in the checklist above have been verified, and the evaluation report submitted with this application indicates that the product, method, or system described in this application meets or exceeds the Florida Building Code requirements and reference standards listed in the application.

For evaluation reports issued by an approved evaluation entity, the certificate of independence is not required for each application.

5. OPTIONS FOR ALL (4) COMPLIANCE METHODS

Validator shall retain all documentation on application (test reports, calculations, samples, etc.) for the time required by Florida law for documents retention of public documents, or for as long as a product is approved based on their validation, whichever is longer.

POC shall be proactive and discuss the referral to licensing boards and accreditation entities complaints on improper evaluations and validations.

A mandatory training program for validator(s), and require validator(s) to be accountable for their mistakes when not complying with the requirements in Rule 9B-72, shall be established. Providing a system of accountability regarding the validator (i.e., certification or a contract with the validator).

Penalties for validators that incorrectly validate applications shall be developed.

Time limits for State approval of products shall be established.

Adjournment

The Workgroup voted unanimously, 7 – 0 in favor, to adjourn at 2:30 PM.

PRODUCT APPROVAL VALIDATION WORKGROUP

June 1, 2006—Tampa, Florida Meeting Evaluation Results

Average rank using a 0 to 10 scale, where 0 means totally disagree and 10 means totally agree.

1. Please assess the overall meeting.

- 9.0 The background information was very useful.
- 9.3 The agenda packet was very useful.
- 9.2 The objectives for the meeting were stated at the outset.
- 9.5 Overall, the objectives of the meeting were fully achieved.
- 9.2 Identification and Evaluation of Validation Options.
- 10.0 Adoption of Workgroup's Product Approval Validation Recommendations.

2. Please tell us how well the Facilitator helped the participants engage in the meeting.

- 9.3 The members followed the direction of the Facilitator.
- 9.8 The Facilitator made sure the concerns of all members were heard.
- 9.5 The Facilitator helped us arrange our time well.
- 9.0 Participant input was documented accurately.

3. What is your level of satisfaction with the meeting?

- 9.5 Overall, I am very satisfied with the meeting.
- 9.5 I was very satisfied with the services provided by the Facilitator.
- 9.7 I am satisfied with the outcome of the meeting.

9. What progress did you make?

- 9.3 I know what the next steps following this meeting will be.
- 9.2 I know who is responsible for the next steps.

5. Member's Written Evaluation Comments.

- Facilitation is much needed in the process.
- We accomplished a lot thanks to Jeff Blair, who handled all the meetings in a professional manner.
- Nice job of covering all the items in less than the allotted time.
- Good pizza!
- It seems we are rushing discussions in order to leave early.

APPENDIX I
ENERGY CODE FORUM REPORT

**FACILITATOR'S SUMMARY REPORT OF THE FORUM ON
ENFORCEMENT OF ENERGY CODE LOAD MANAGEMENT
REQUIREMENTS REPORT**

JULY 10, 2006

HOLLYWOOD, FLORIDA

Meeting Design & Facilitation By

QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.

Report By Jeff A. Blair
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Codes & Standards, 2555 Shumard Oak Blvd., Tallahassee, FL 32399, (850) 487-1824.

**FLORIDA BUILDING COMMISSION
FORUM ON ENFORCEMENT OF ENERGY CODE LOAD MANAGEMENT
REQUIREMENTS REPORT**

**July 10, 2006
Hollywood, Florida**

Overview of Existing Provisions

FBC Section 13-413 Electric Power

Load management for peak and off-peak demand (usage and cost).

FBC Section 13-414 Motors

Fans regarding cfm's for HVAC systems.

Other motors regarding rpm's and electrical consumption (i.e., elevators).

FBC Section 13-415 Lighting (including several glitch amendments)

Two methods: building area method (by building type), or space-by-space method (code prescribes lighting based on space types).

Federal Requirements: Section 101 Building Energy Efficiency Standards

States shall certify that the state code is equal to or greater than ASHRAE Standard 90.1-1999.

Florida's Energy Code has been certified and accepted by DOE.

The ASHRAE 90.1 Standard is under continual maintenance. States must comply with updates.

Overview of Issues

Education and training.

Enforcement and inspections including reviewing their authorities.

Design professionals involvement.

Ideas to Implement

Building Code Education and Outreach Council needs to be involved and address.

FES and BOAF needs to be contacted.

Include in the UF needs study regarding education issues.

FBC/DCA letter to building departments reminding them they are required to enforce the Energy Code and the electrical provisions of the Energy Code.

Website notifications regarding requirements to enforce Energy Code and electrical provisions of the Energy Code.

Develop training materials/classes on the subject(s).

Education and training initiatives should be designed and implemented.

Inspectors qualifications and authorities to enforce should be reviewed and addressed.

Design professionals need to be educated and include provisions in their designs.

Requested Action of the Commission:

Motion to charge DCA staff with developing a workplan to implement the education and outreach recommendations for enforcing the Energy Code's electrical provisions.