

**FLORIDA BUILDING COMMISSION**  
**FACILITATOR'S SUMMARY OF ISSUES FOR**  
**INCLUSION IN THE 2007 REPORT TO THE**  
**FLORIDA LEGISLATURE**

**DECEMBER 2006**

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# FLORIDA BUILDING COMMISSION

## SUMMARY OF ISSUES FOR INCLUSION IN THE 2007 REPORT TO THE FLORIDA LEGISLATURE

### SUMMARY OF RECOMMENDATIONS

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

- 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 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.*
- 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, the Commission recommends that the sizing of private sewage systems be governed by the definitions contained in the Florida Building Code.*
- 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.*

- ❑ *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).*
- ❑ *In instances where validation is defined as a technical review, then the evaluation engineer does not need to be an 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.*
- ❑ *Provide statutory authority for the Commission to develop criteria and penalties for validators that incorrectly validate applications.*
- ❑ *Recommend the relocation 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 Statute.*

## **BUILDING CODE ISSUES**

### **Hurricane Damage Investigations—Hurricane Research Advisory Committee**

As a result of hurricanes affecting Florida during the 2004 and 2005 seasons, the Florida Building Commission's Hurricane Research Advisory Committee (HRAC) continues to meet at 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 Glitch Code amendments and others will be considered during the 2007 Update cycle.

The Committee has 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 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.

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 WBD criteria.

The Committee is continually monitoring current research and recommending 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/ or development prior to the HRAC evaluation of options and making additional recommendations for proposed hurricane related Code amendments. In addition, the HRAC heard monthly updates on preliminary results from the Panhandle Windborne Debris Region Study, prior to their submittal in July of 2006.

At the July 2006 meeting, members reviewed the final results of ARA's Panhandle Windborne Debris Region Study, and 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 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 WBD criteria.

The implementation plan is for DCA 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 DCA 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.

The Commission voted unanimously at the July 22, 2006 meeting 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 WBD criteria.

At the August 2006 meeting, members heard an update on FMA/AAMA and AAMA/FMA 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 meet next to receive an update on related projects, and to develop consensus on the assumptions to be used in the cost-benefit analysis regarding Phase II of the windborne debris study.

### **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 cut-off date was December 1, 2005 and the Commission's Technical Advisory Committee's met in January of 2006 to review the proposed amendments and make recommendations to the Commission, who reviewed the amendments and initiated rule-making in February of 2006. The Commission completed rule making in August of 2006 and the effective date for glitch amendments is anticipated to be 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 as well as amendments to the FBC Residential Volume prescriptive design criteria. 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 FRC.

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, and the focus was on harmonizing the Florida Building Code with the 2006 International Building Code (IBC). The Commission also resolved conflicts with ASCE7-02 and revised Chapter 16, the Structural Design, chapter of the Code, to be consistent with the IBC 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 (IBC) was published in March of 2006, and the Commission's process—which by law could not begin until six months after the printing and availability of the IBC—commences in October of 2006 with the selection of the 2006 I Codes as foundation for 2007 FBC. The 2007 Edition of the Code is schedule to be implemented in October of 2008.

## **Energy Code Workgroup Recommendations**

Chairman Rodriguez appointed an IECC Transition Study Workgroup as a result of discussions on amendments proposed to the Energy TAC and their 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 was conducted as a facilitated stakeholder consensus-building process, and 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 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. 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 IECC code provisions and developing 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 IECC as the foundation code, 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, Florida.

### **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 appointment a termite workgroup to consider proposals for enhancing the Code's termite provisions. The Workgroup was conducted as a facilitated stakeholder consensus-building process, and 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 code amendments regarding 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 (DACS) 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, 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.*

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

#### **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.**

### **Window Labeling Workgroup Recommendations**

Chairman Rodriguez appointment a Window Labeling Workgroup whose purpose is 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. 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 (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.*

### **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. 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 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.*

## **BUILDING CODE SYSTEM**

### **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 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 Code Amendment Process Review Workgroup 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 adopt the Code Amendment Process Review Workgroups' package of recommendations regarding the annual interim amendment, expedited, and triennial code update processes. Those requiring statutory changes are as follows:

*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.*

*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 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.*

*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.)*

*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.*

## **FBC and FFPC Duplicate Provisions and Overlapping Responsibilities Assessment Summary**

In order to consider how to address conflicts between the Florida Building Code and the Florida Fire Prevention Code, the Commission conducted an assessment of stakeholder views, and 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) comprised of the Commission's Fire TAC 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. The TAC reached consensus on the threshold issue of defining what constitutes a conflict. The Joint Fire TAC 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 resolving the conflict in favor of the provision that offers the greatest lifesafety, or alternatives that would provide an equivalent degree of lifesafety and an equivalent method of construction. The Joint Fire TAC identified the specific Code amendments which could not be resolved by this definition, and submitted proposed amendments for consideration by the Commission during the glitch cycle. The Joint Building Fire TAC 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, this 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, involve building and fire officials at the local, and in the case of fire, sometimes at the State level.

The Joint Fire TAC and Fire Code Advisory Council met in October 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 TAC 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 addition, the Joint TAC decided to meet in December to identify conflicts between the Codes. The Joint TAC debated whether to re-consider the narrow definition of "conflict" that was recommended to the Commission in 2005, where the TAC, but not the Commission, reached

consensus on the threshold issue of defining what constitutes a conflict, where the Joint Fire TAC 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 TAC decided to identify actual code conflicts at the December 2006 meeting and work to resolve any specific conflicts between the respective codes. The Joint TAC decided to resolve “real world” conflicts, and in that context determine whether to revise their recommendations to the Commission regarding the definition of conflicts.

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.

## **PRODUCT APPROVAL SYSTEM**

### **Product Approval Rule Amendments**

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

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 provides formatting with screens that are more specific to the product model(s), and providing more detailed summary screens.

Since inception, the Commission has approved 2,394 product applications under the 2001 Florida Building Code, and 2,987 product applications under the 2004 Florida Building Code. In addition, the Commission approved 46 testing laboratories, 22 quality assurance entities, 7 accreditation bodies, 12 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 to what extent the validators should review the technical documentation substantiating compliance with the Florida Building Code. The Commission delivered these recommendations in their 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 review 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. Subsequently the Commission reviewed the Workgroup's consensus recommendations, and today the Commission will be asked to accept the recommendations and refer the voted unanimously to accept the Product Approval Validation Workgroup's recommendations regarding changes to the validation provisions of the Product Approval System, and refer the recommendations to the Product Approval POC to begin work on amending Rule 9B-72, the Product Approval Rule.

The following recommendations require statutory changes:

*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).*

*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.*

*Penalties for validators that incorrectly validate applications shall be developed.*

## **EDUCATION SYSTEM**

The state building code system, first established in 1974, was overhauled in 1998 to improve its effectiveness. The Legislature recognized 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 division of responsibilities and authority among several competing entities 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, 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 negatively impacted 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 in Section \_\_\_ of the Report.

### **Department of Business and Professional Regulation/Licensing Boards**

The licensing boards were authorized 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 contrary to the Legislature’s intent, the boards then adopted rules to require “one” hour 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 (3) 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 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) 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 outrage 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 impacted 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 an additional 4-6 weeks, depending on the Commission and Board meeting schedules, for original applications.

### **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.*

### **Manufactured Buildings Program**

The Commission conducted rulemaking changes to Rule 9B-1, the Manufactured Buildings Rule. The changes were intended to clarify the programmatic procedures of the Manufactured Buildings Program. These changes include refinements to the following sections of the Rule: Procedures; Definitions; Fees; Inspections & Insignias.

In addition, the Manufactured Buildings Program module on the Building Code Information System (BCIS) 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 Building Program**

The Florida Prototype Building Program (FPBP) 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](http://www.floridabuilding.org).

The Prototype Building Program is administered by the IntraRisk Division of Applied Research Associates, Inc., (ARA) from its Orlando, Florida office. ARA was selected in 2003 and again in 2005 by the Florida Building Commission to be the FPBP Program Administrator. Since the



introduction of the Program a number of challenges have been successfully handled and others remain to be resolved.

The Program's first challenge was to inform the designers and developers/builders of the availability and potential benefits of the Prototype Building Program. Because it was a revolutionary new program, 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.

The Program has invested substantial resources to develop and promote the Prototype Building Program, and to date there has been 109 prototype plan use requests.

## **2006 LEGISLATIVE ASSIGNMENTS**

### **Rules for Appeal of Building Official Decisions/Binding Interpretations**

At the request of the Commission, the 2006 Florida 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 panel consisting of five members 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 F.S., the Florida Building Commission adopted an administrative rule which clarifies the interpretation/appeal process and adopts by reference the electronic/website components of the process. The electronic/website allows users to submit their application electronically and also search for binding interpretations electronically. Further, as directed by F.S., the Florida Department of Community Affairs has contracted with the Building Official Association of Florida to administer the process. To date, there have been few binding interpretations 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 flow charts which delineate the steps of the binding interpretation process including flowcharts for other interpretations processes authorized by statute.

In addition, the legislation 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.

### **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 further study was warranted. It directed the Florida Building Commission to review the effects of Hurricane Ivan on damage caused by windborne debris and other data, and in conjunction with building officials from the impacted areas, to develop a recommendation for consideration by the 2006 Legislature.

On September 13, 2005 the Commission conducted the first workshop which was held at the Okaloosa County Airport, for the purpose of soliciting input from local building officials and other stakeholders in the Panhandle region of the State. At the conclusion of the workshop, there was consensus for the strategy of conducting a study on the treed environment effects and historical wind data effects, in order to provide additional data for consideration in developing recommendations to the Legislature.

It should be noted, that although the building officials from the Florida Panhandle expressed strong support for the study, most agreed that changes were not warranted at that time to the definition of the windborne debris region of the Florida Panhandle region. The local building officials' comments ranged from most damage was related to surge and not windborne debris, to 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 consider 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 wind borne debris protection effects for representative Panhandle houses. The consultant subsequently updated the wind-borne 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, where 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 a diverse State 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 (HVHZ) 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 Code should be developed by the Commission in a consensus process and not written into law.

At the conclusion of the 2006 Legislative session, SB 1774 passed and the Panhandle Windborne Debris Region exemption was removed from law, and 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 must 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. Larry 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. Larry Twisdale and Dr. Kurt Gurley presented their final report and recommendations, responded to clarifying questions, and then public comment was taken by the Commission. At the conclusion of public comment, the Commission participated in a facilitated discussion and made a decision on the Panhandle Windborne Debris Region definition.

At the July 2006 meeting, the Commission conducted a second supplemental rule development workshop, where we considered public comments, approved some 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 1500 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 WBD criteria.

### **Exposure Category C Definition**

The 2005 legislative 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 that was adopted through the glitch code cycle process. 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.)

## **2006 COMMISSION PROJECTS OVERVIEW**

### **Commission Legislative Liaison Process**

As a result of the recommendations the Commission approved from the Building Code System Assessment project was to consider a method/process for enhancing the Commission's ability to represent their legislative interests. The Chair informed the Commission that he have 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 Monday's, 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 TAC's to amend the Florida Building Code to be consistent with statutory requirements of Chapter 399 governing elevators. The goal is to implement updates through the 2007 Code Update cycle currently in process.

## **Implementation of Electrical Requirements of the Energy Efficiency Code**

The Commission convened a Forum on Energy Code Electrical Requirements Enforcement that was convened to review concerns and discuss issues related to implementation of Energy Code electrical requirements from an enforcement perspective. The issue is 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 it appears that some regions of the State have not been enforcing the provisions.

Attendees identified the following issues and options:

### *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.

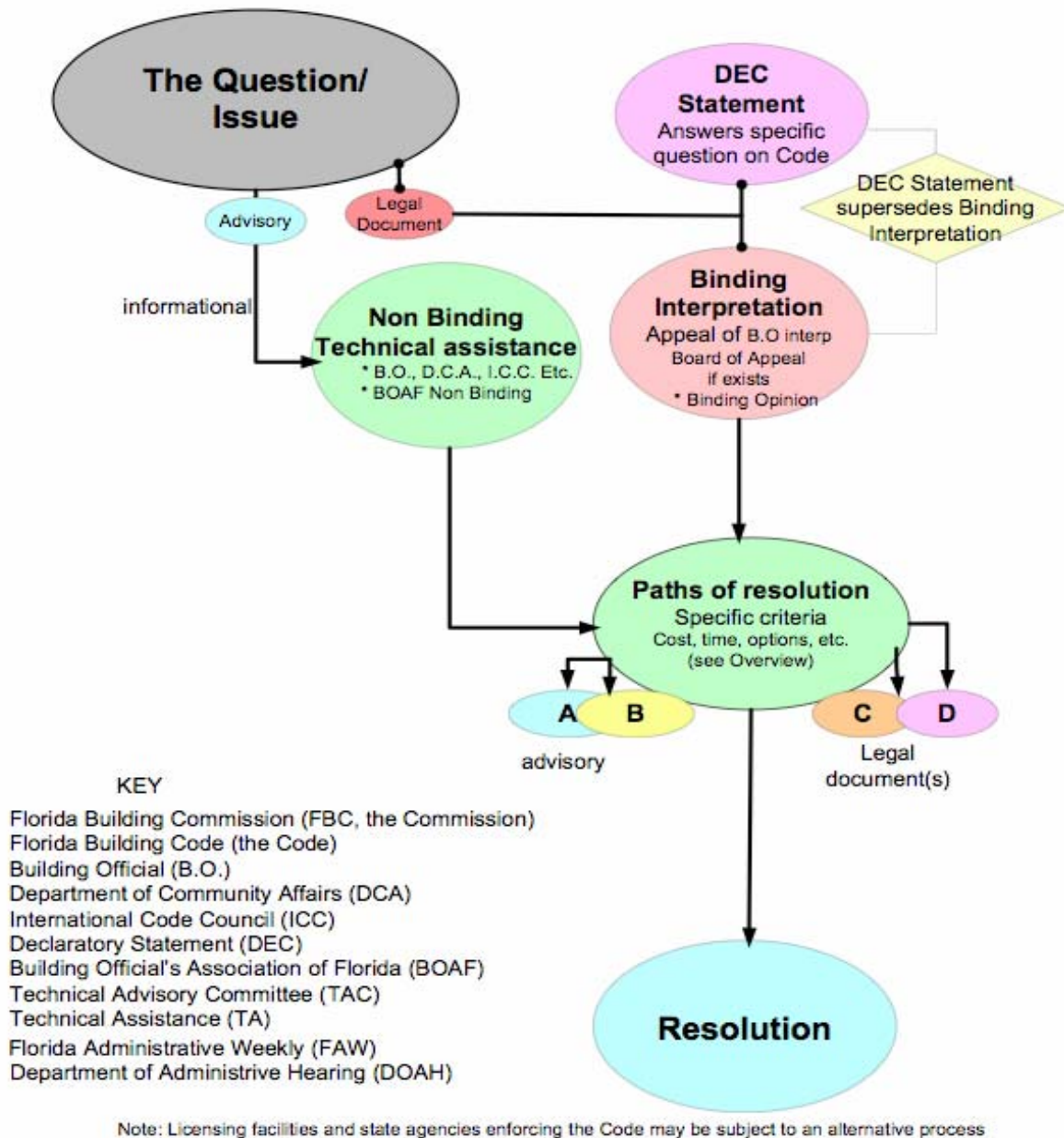
The participants recommended that the Commission charge DCA staff with developing a workplan to implement the education and outreach recommendations for enforcing the Energy Code's electrical provisions.

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

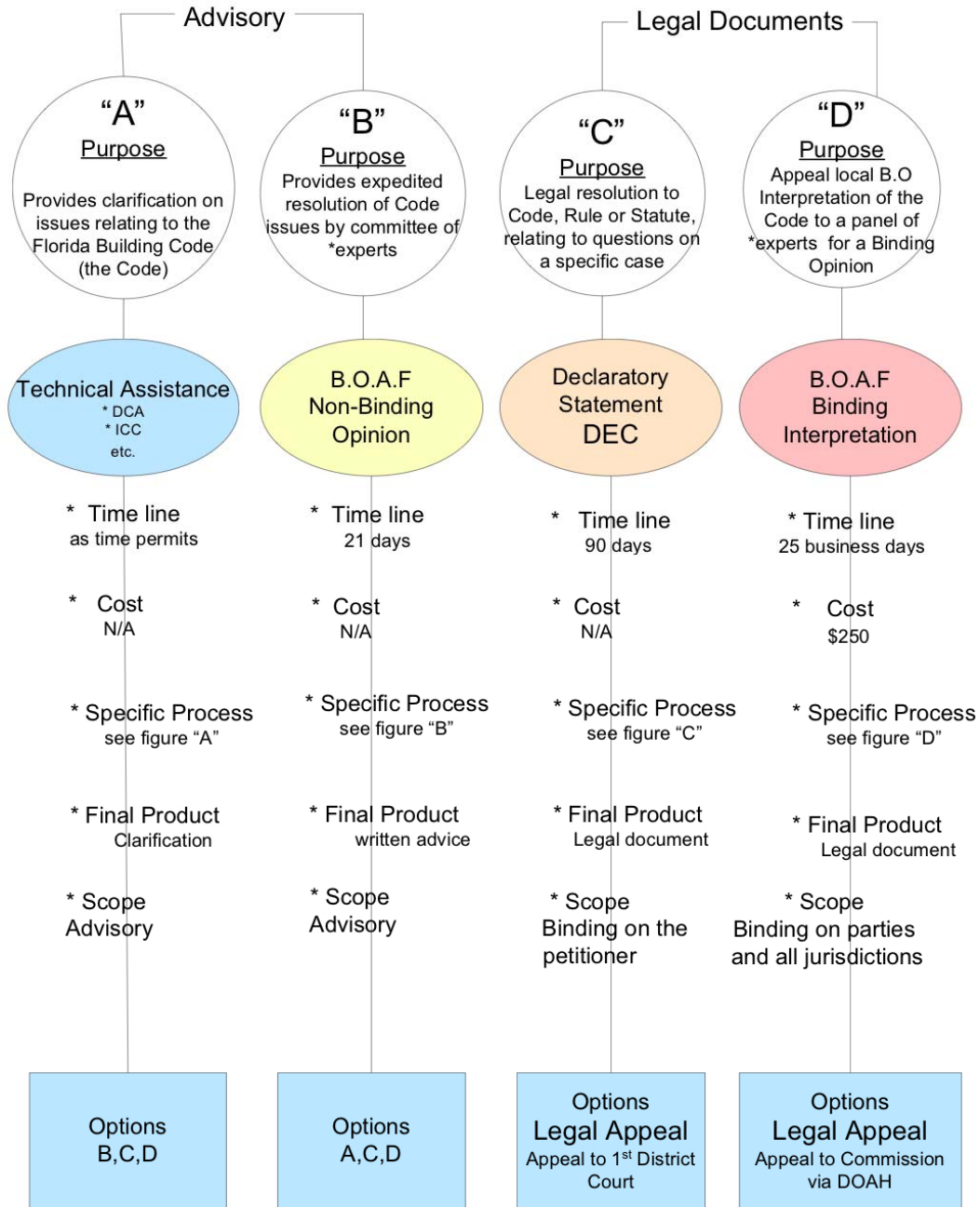
# ATTACHMENT

## CODE RESOLUTION APPEAL PROCESSES FLOWCHART

### Code Resolution Process

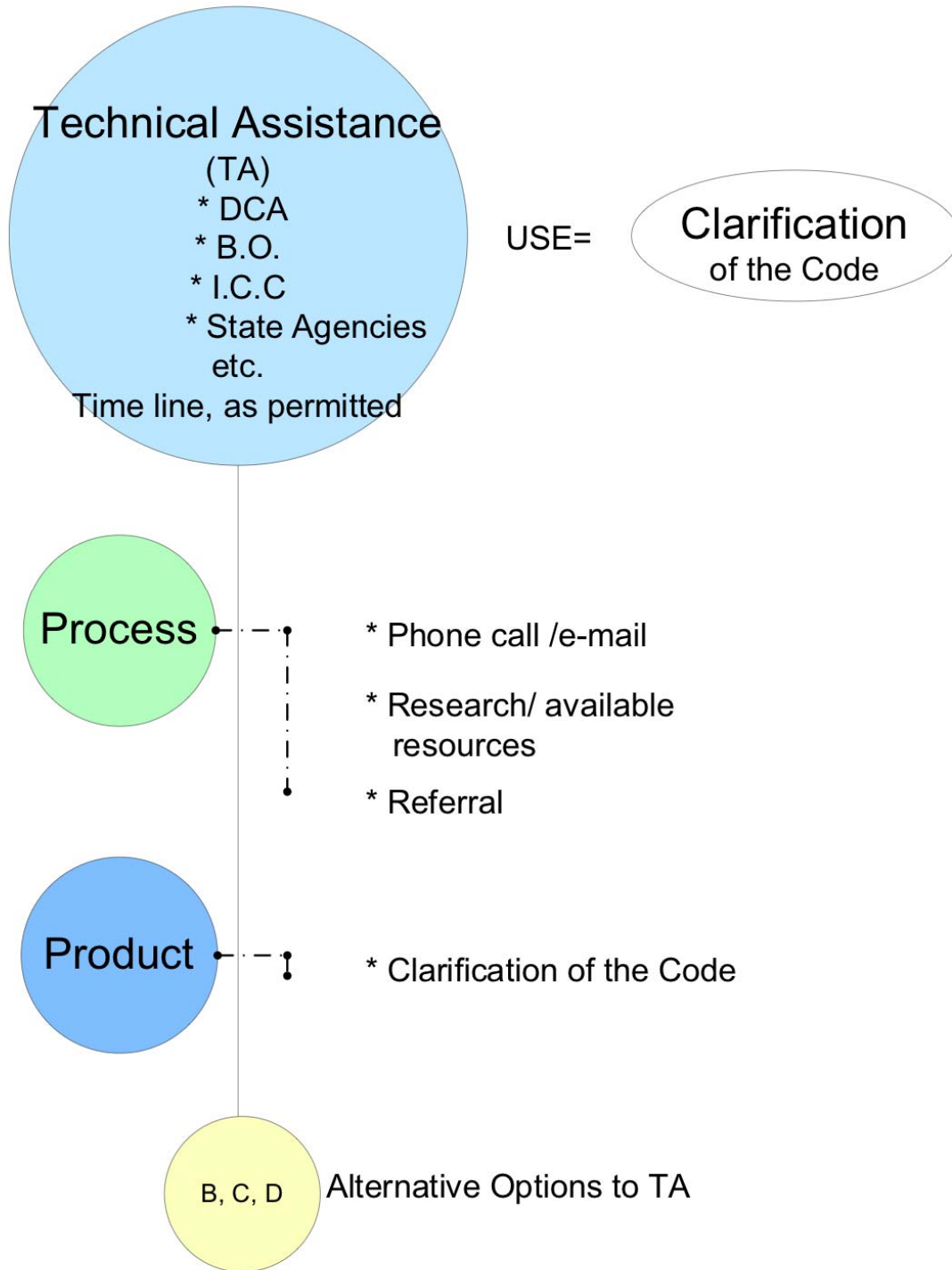


# Overview of Code Resolution process

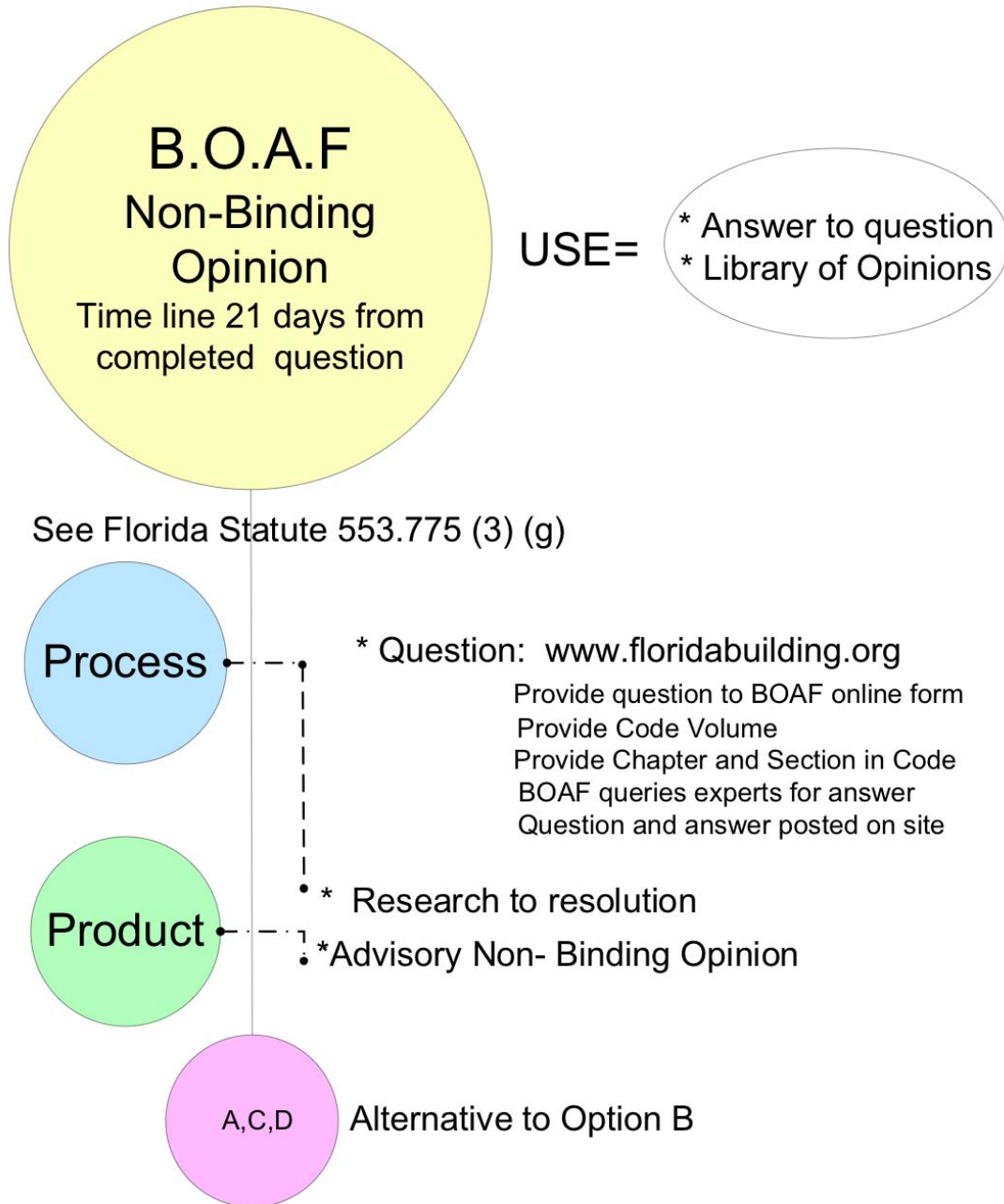




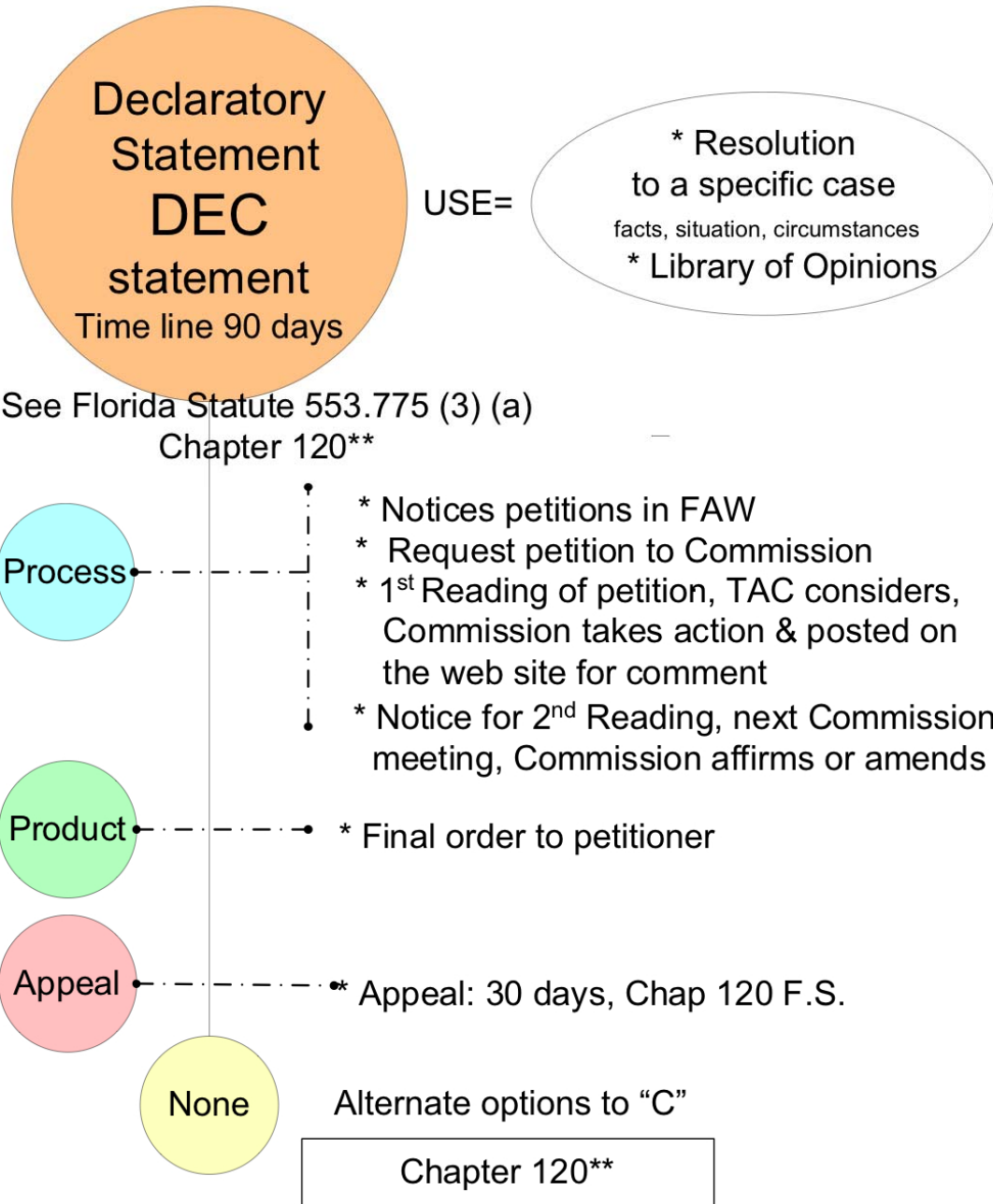
# Path to Resolution “A”



# Advisory Path to Resolution “B”



# Appeal process Path to Resolution “C”



# Appeal process Path to Resolution “D”

