

**Gold Coast School of Construction**  
**DBPR Sponsor # 0000983**  
**Professional Compliance Package – Part A Advanced Modules**

**Advanced Training- Administration - Internet ( *With Nov. 21, 2005 Revisions. Revisions are Integrated topically, see attached handout* )**

**Part A : Advanced Modules – 4 hours of Continuing Education approved as an “Advanced Module” by the Florida Building Commission and as Continuing Education Credits from the Following Boards: CILB applied for; ECLB applied for; Dade County applied for; Architectural Board applied for; Building Inspector’s Board applied for**

**This course was purchased from the Building Code Commission as part of their mandate to provide advanced training to construction professionals. This application is a submission of the course for 4 hours of Continuing Education for all division I and II contractors(t), building inspectors, architects and interior designers and recognition as meeting the requirements of the advanced module as defined by the Building Code commission for all construction industry professionals under our provider number.**

**Course Description :This 4 hour presentation is designed to help the practicing construction professional apply the new Florida Uniform Building Code in her or her day to day practice with an emphasis on chapter one. It amplifies and clarifies the previous core requirement which was initially required of all construction professionals and continues to be required within 2 years of initial licensure of these same individuals.**

**Course Objectives :**

**The objective of the course is assist the construction professional apply the administrative section of the Florida Uniform Building Code. Specifically, at the end of the course students will be able to:**

- 1. Identify and Describe key Practices and Standards as they relate to activities under the Florida Uniform Building Code, specifically chapter one which covers the powers and duties of the Building Official, the application and issuing of permits, required inspections, and issuing of final certificates.**

**Course Format : Distance Learning Internet Format**

**The above referenced course is designed to accommodate a Distance Learning**

**( Internet ) format. The Gold Coast School of Construction, Inc., uses a sophisticated Learning Management System, which is currently used by several well known Universities. The system provides for a secure access, log in and registration process; and key student progress control features explained below. Users need a windows environment and standard internet connection. The proposed Internet format will comply with 61G4-18.007 by virtue of the following**

- 1. We as maintain records of student registrations including each student's password and mother's maiden name.**
- 2. We maintain a course access log, with a listing of log in and out times as well as a cumulative total time tracking sheet and date and time of completion.**
- 3. We verify that course hours are consistent with the actual hours it takes to complete the course and do not issue a certificate of completion until the hours are consistent**
- 4. The certificate of completion lists all of the information as required by 61G4-18.007(7) and electronic reporting to the Department is accomplished as required.**
- 5. Records are kept for a minimum of 5 years**

**( See attached exhibits)**

- a. Student log in page**
- b. Course Access Log**
- c. Course time in course summary**
- d. Sample Examination List**
- d. Sample Certificate of Completion**

### **Educational Objectives- Distance Learning**

**In addition to compliance with 61G4-18.007, the above referenced course verifies student participation and progress in the following ways:**

- 1. The sponsor's learning management system is a sophisticated university level online training system which affords students the opportunity to receive high quality courses and maximizes interactivity.**
- 2. A student on the course must periodically operate the keyboard or mouse to keep the program active. In the absence of a student's manually operating the computer, the course will default and the student will have to re-enter. A student can voluntarily end the study session and log out, the session will be bookmarked, allowing the student to log back in and continue. Students can complete the course at the time and place of their choosing.**

**3. The educational design is based on the “Mastery” concept, that is the educational process of the course presents information and then asks questions about the information. To move through the course the student must correctly answer a series of questions at each topic, thereby demonstrating “mastery” over the subject. A student can retake the tests as often as necessary, but cannot proceed to the next course topic until preceding one is completed and questions are answered correctly**

**4. In the event that a student requires assistance, the director of the School is available to respond to student e-mails. Every effort is made to respond within 24 hours of receipt. Technical questions ( relating to computer or log in procedural issues ) can be addressed via a 24 hour a day, 7 day a week help desk, the link to which is available to the student while online.**

**4. Licensees confirm their attendance on each course by affidavit, recorded as an exam response and kept on file in the learning management system.**

**5. Key exhibits such as website links and pdf files will be available for student download.**

**Internet Format: Presentation style, internet based. Specific methods are selected to maximize student participation and involvement with the course material. Note: materials & methods may be updated as new rules are promulgated. These interactive methods include answering questions true/false, multiple choice and data entry questions, downloading of PDF files. The Documents attached to the course shows the material covered in the roofing chapter for the course**

**Verification of Course Objectives :**

**The course will use interactive exercises and exams to confirm that the course objectives have been obtained by students.**

**Instructors**

**N/A, however, students may contact the school during normal business hours to answer any questions that they have. Questions will be answered by qualified instructor(s) which are already on file.**

**Gold Coast School of Construction**

**DBPR Provider # 000983**

**Advanced Administration Module - Internet ( With Nov. 21, 2005**

***Revisions. Revisions are Integrated topically, see  
attached handout )***

**Course Outline :**

<b>Segment :</b>	<b>Title and Objective, Description</b>	<b>Time</b>
<b>I. Introduction</b>		
	A. Pretest	00:00 - 00:10
	B. Review Pre test	00:10 - 00:20
	C. Review of Objectives Q & A	00:20 - 00:30
<b>II The Administration of the Florida Building Code</b>		
	A. Chapter 1 Scope	00:30 - 00:35
	B. Residential and Existing Buildings	00:35 - 00:40
	C. Exemptions & Moved Building	00:40 - 00:45
	D. Recent Amendments	00:45 - 00:50
	Break	00:50 - 01:00
	E. Appendices & Standards	01:00 - 01:05
	F. Accessibility & Energy	01:05 - 01:15
<b>III. Powers and Duties of Building Official</b>		
	A. Alternate Materials and Methods	01:15 - 01:20
	B. Accessibility & Equivalent Facilitation	01:20 - 01:25
<b>IV. Permits</b>		
	A. When Required	01:25 - 01:30
	B. Exceptions	01:30 - 01:35
	C. Work Authorized	01:35 - 1:50
	Break	01:50 - 02:00
<b>V. Permit Application</b>		
	A. Information Required	02:00 - 02:10
	B. Time Limitations	02:10 - 02:20
	C. Annual Permit Records	02:20 - 02:30
	D. Special Permits & other agencies	02:30 - 02:35
	E. Notice of Commencement	02:35 - 02:40
	C. Asbestos	02:40 - 02:45
	D. Drawings and Specifications	02:45 - 02:50
	Break	02:50 - 03:00
	E. Other Specific Information Required	03:00 - 03:10
	F. Plan Review Process	03:10 - 03:15
	G. Exemptions	03:15 - 03:20
	H. Issuing Permits & additional documentation	03:20 - 03:25
	I. Electrical, plumbing, mechanical, roofing	03:25 - 03:30
	J. Required Inspections	03:30 - 03:40

**III. Activities/Summary**

**A. Post test and review**

**03:40 - 3:50**

**B. Checkout/Q & A**

**03:50 - 04:00**

# Format of the Residential Code

• Building	Chapters 1–10
• Energy	Chapter 11 (Chapter 13 of FBC)
• Mechanical	Chapters 12–23 Mechanical
• Fuel Gas	Chapter 24
• Plumbing	Chapter 25–32
• Electrical	Chapter 33 (Reference NFPA 70A)
• Swimming Pool	Chapter 41
• Referenced Standards	Chapter 43
• High Velocity Hurricane Zone	Chapter 44
• Appendices	

# Residential Code - Administration

- **R101.1 Title.** These provisions shall be known as the *Florida Building Code, Residential*.
- **R101.2 Scope.** The provisions shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one and two-family dwellings and townhouses not more than three stories in height with a separate means of egress and their accessory structures. Construction standards or practices which are not covered by this code shall be in accordance with the provisions of the *Florida Building Code, Building*.
  - **Exception:** Existing buildings undergoing repair, alteration or additions, and change of occupancy shall comply with the *Florida Existing Building Code*.

# Residential: Building planning

- No more construction types
- No area limitations - Table 500 is gone
- Height is limited to 3 stories
  - Buildings taller than 3 stories must use the *Florida Building Code, Building*



# Section R301: Design Criteria

- **R301.1 Design**
  - **Exception:** Buildings and structures located within the High Velocity Hurricane Zone shall comply only with Sections R302 to R324, inclusive and the provisions of Chapter R44.

# Section R301: Design Criteria

- **R301.1.2 Construction systems.** The requirements of this code are based on platform and balloon-frame construction for light-frame buildings. The requirements for concrete and masonry buildings are based on a balloon framing system. Other framing systems must have equivalent detailing to ensure force transfer, continuity and compatible deformations.

# Section R301: Design Criteria

- **R301.1.3 Engineered design.**
  - Structural elements exceeding the limits of Section R301 or otherwise, not conforming to this code, shall be designed in accordance with accepted engineering practice.
  - The extent of such design need only demonstrate compliance of non-conventional elements with other applicable provisions and shall be compatible with the performance of the conventional framed system.
  - Engineered design in accordance with the Florida Building Code is permitted for all buildings and structures, and parts thereof.

# Section R301: Design Criteria

- **R301.2.1 Wind limitations.**
  - Buildings and portions thereof shall be limited by wind speed, as defined in Table R301.2(1).
  - Basic wind speeds shall be determined from Figure R301.2(4).
  - Where loads for windows, skylights and exterior doors are not otherwise specified, the loads listed in Table R301.2(2) adjusted for height and exposure per Table R301.2(3)

# 101.4.2.3 Moved Residential Structures

- Residential structures moved into/within a county or municipality are not required to comply with the FBC regulations in force at the time, provided they are:
  - Structurally sound
  - No change in occupancy
  - Not substantially remodeled
  - Meet current fire code requirements for entrances and exits

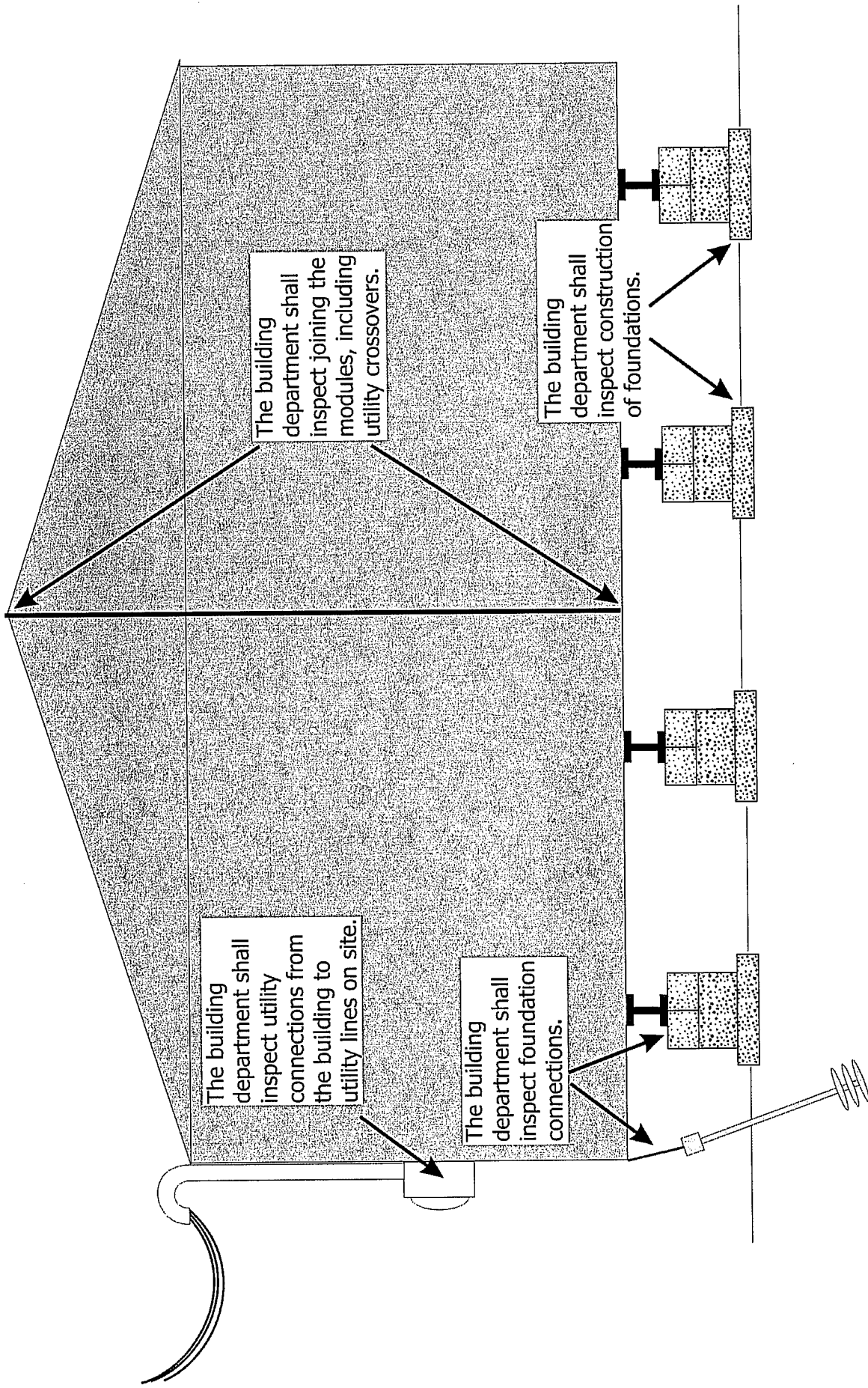
# Moved residential structures...

- Their electrical, gas, and plumbing systems:
  - Met the code in force at the time of construction
  - Are operational and safe for reconnection

Their foundation plans are sealed by an engineer or architect licensed to practice in Florida, if required

## 101.4.2.3.1 Moved Buildings

- Building Official will apply same standard used for remodeling of other residential structures
- Exempts cost of foundations from calculation



The building department shall inspect joining the modules, including utility crossovers.

The building department shall inspect construction of foundations.

The building department shall inspect utility connections from the building to utility lines on site.

The building department shall inspect foundation connections.

The building inspector shall inspect installation of items identified on plans as site-installed items, eg. Water coolers/drinking fountains, accessibility ramps, aesthetics/trim boards, fire alarms, fire sprinkler systems, etc.



# Existing Buildings Table of Contents

- Table of Contents
- Chapter 12 Compliance Alternatives
- Chapter 13 Safeguards During Construction.
- Chapter 14 Referenced Standards
- Appendix A Reserved
- Appendix B Guidelines for Rehabilitating Historic Buildings
- Appendix C – NFPA 914 Fire Protection for Historic Structures
- Appendix C – Survey criteria for a Historic Structures
- Appendix I – Guideline on Fire Ratings of Archaic Materials and Assemblies.
- Appendix D Type of Construction
- Chapter 1 Administration
- Chapter 2 Definitions
- Chapter 3 Classification of work
- Chapter 4 Repairs
- Chapter 5 Alteration Level 1
- Chapter 6 Alteration Level 2
- Chapter 7 Alteration Level 3
- Chapter 8 Change of Occupancy
- Chapter 9 Addition
- Chapter 10 Historic Buildings
- Chapter 11 Relocated or Moved Buildings

# Existing Buildings, Administration

- **Scope:** repair, alteration, change of occupancy, addition, and relocation of existing buildings.
- **Exception - Public educational facilities and state licensed facilities** must comply with Chapter 4, Special Occupancy.
- **Chapter 1, Florida Building Code, Building** must govern the administration and enforcement of this Code.

# Important Definition

- **Substantial Structural Damage:**

In any story, the vertical elements of the lateral force-resisting system has suffered damage such that the lateral load-carrying capacity has been reduced by more than 20%.

- The vertical load-carrying components supporting more than 30 percent of the structure's roof or roof area have suffered a reduction in vertical load-carrying capacity to below 75%.

# How work is classified

- **Repair**
- **Alteration - Level 1, Level 2, Level 3**
- **Change of Occupancy**
- **Addition**
- **Relocated Buildings**
- **Historic Building**

# Repairs

- **General (s.407.1):**
  - Non structural repairs the cost of which is less than or equal 25% of the replacement value of
  - existing building may be made of the same materials.
  - Wind design as per codes in effect when the building was permitted.
  - Reduction in the structural strength is allowed, provided the capacity is not reduced below FBC, Buildings levels.

# Repairs

- Categories of Work
- **Repair (sec. 302.1):**
- Patching or restoration of materials, elements, equipment or fixtures for the purpose of maintaining such materials, elements, equipment, or fixtures in good or sound condition.
- **Note:** Repair does not include reconfiguration of space

# Repairs Continued

- **Permitted materials, s. 401.2:**  
like materials are allowed as long as no hazard to life and health.
- **Conformance, s. 401.3:**  
repair must not reduce level of safety existed before the repair was undertaken.
- **Flood hazard areas, s. 401.4:**
  - Structure seaward of a coastal construction line (see 3109 of the FBC, Building).
  - Flood plain construction. Defers to the local as per Title 44 CFR, Section 59 and 60.

# Level 1 Alteration

- **Non structural alteration (s. 507.2):**
  - Non-structural alteration the cost of which is less than or equal 25% of the replacement value of existing building may be made of the same materials.
- **Replacement of roofing or equipment (507.2.1):**
  - when results in additional dead load must comply with the vertical load of the FBC, Building.



# Level One Alteration

- **Alteration - Level 1 (s. 303.1):**
  - Removal and replacement, or covering of existing materials, equipment, fixtures using new materials that serve the same purpose.
- - Alteration –Level 1 does not include  
`reconfiguration of space.

# Level 2 Alterations

- ***Apply where the work area exceeds 50% of the floor area on any floor. Ch. 6 provisions apply to the entire floor for the following:***
- - Shafts and floor openings.
- - Interior finish.
- - Fire suppression and detection.
- - Corridor openings.
- - Means of egress lighting and exit signs.

# Level 3 Alterations

- Chapter 7 Alterations-Level 3
- General
- Level 3 Alteration is level 2 alterations where the work area exceeds 50% of the aggregate area of the building (total floors area).
- Work area is defined as that portion or portions of a building consisting of all reconfigured spaces, as indicated in the construction documents.

## 101.4.8 Appendices

- Appendices – Must be adopted for use by the local jurisdiction

A – Weights of Building Materials

B – Passive radon resistant new construction

C – Mitigation of radon in existing buildings

## 101.4.8 Appendices

- Appendices – Must be adopted for use by the local jurisdiction

D – Standards for Rehabilitation

E – Radon – Resistant New Commercial Building construction

## 101.4.8 Radon

Radon is a naturally occurring radioactive particle. It is an “alpha” ( weak ) particle and can be found in soil gas and building materials

Exposure to radon over time has an adverse affect to the respiratory system

## 101.4.8 Radon

Whether radon is in a particular house depends upon 2 things:

1. Is it present
2. Is the air pressure character of the house negative (draws air i )

## 101.4.8 Radon

Initial radon test is done via placement of canisters throughout building with charcoal inside.

One canister for every 400 sq. ft.

Placed at eye level, away from doors and windows

Remain for 24 – 48 hours and sent to lab



## 101.4.8 Radon

Removing radon consists of “action levels”, the first is to seal the slab and ventilate the property. Next is to change air pressure character of property so that soil gas cannot be drawn in. This later activity may require vent piping under the slab.

## 101.4.8 Radon

Radon resistant techniques consist of

1. Increased attention to moisture barriers in slabs to prevent air infiltration
2. Slab cracking control and reduction
3. Installing under slab systems for possible future use

