

## **FLORIDA BUILDING CODE – MECHANICAL, 5<sup>th</sup> EDITION (2014) ADVANCED CODE OVERVIEW OF CHANGES**

### **COURSE SYLLABUS**

#### **COURSE DESCRIPTION**

This course will provide contractors and construction industry professionals with one hour of advanced code training, specifically regarding the significant changes found in the Florida Building Code, Mechanical, 5<sup>th</sup> edition (2014).

#### **NUMBER OF HOURS**

There is one 50-minute classroom hour.

#### **COURSE OBJECTIVES**

Upon completion, contractors and construction industry professionals will be able to:

- Define key terminology recently changed in the Florida Building Code, Mechanical.
- Identify key provisions that have been updated from the previous version of the Florida Building Code, Mechanical.
- Recognize areas of applicability that require compliance by the Florida Building Code, Mechanical with an emphasis on significant changes.
- Understand significant changes and modifications that have the greatest impact with respect to residential construction.
- Apply existing provisions and incorporate recent modifications to ensure code compliance.

#### **COURSE DETAIL AND TOPICAL OUTLINE**

10 minutes     *Summary of provisions of the Florida Building Code - Mechanical, 5<sup>th</sup> Edition, (2014):*

##### **CHAPTER 2 - DEFINITIONS:**

##### **Section R202 - Definitions**

New Definitions: Air-Handling Unit; Building; Clothes Dryer; Conditioned Space; Design Flood Elevation; Environmental Air; Mechanical Joint; Noncombustible Materials; Press Joint; Third-Party Certification Agency; Third-Party Certified; Third-Party Tested

##### Removed Definitions:

Addition; Air Barrier; Air-handling unit; Air porosity; Attic; Drawband; Duct Fitting; Enclosed support platform; Flexible non-metal duct; Gaskets or gasketing; Integral Flange Duct Collar Fitting;

- 10 minutes *Summary of provisions of the Florida Building Code - Mechanical, 5<sup>th</sup> Edition, (2014):*  
**CHAPTER 3 – GENERAL REGULATIONS:**  
Section 301 – General  
    Section 301.3 Identification  
    Section 301.4 Plastic pipe, fittings and components  
    Section 301.5 Third-party testing and certification  
Section 304 – Installation  
    Section 304.3 Elevation of ignition source (and Exception)  
    Section 304.7 Private garages (and Exception)  
Section 306 - Access and Service Space  
    Section 306.3 Appliances in attics (and Exceptions)  
Section 401 - General  
    Section 401.2 Ventilation required  
    Section 401.4 Intake opening location  
Section 403 - Mechanical Ventilation  
    Section 403.1 Ventilation system  
    Section 403.3 Outdoor airflow rate (and Exception)
- 10 minutes *Summary of provisions of the Florida Building Code - Mechanical, 5<sup>th</sup> Edition, (2014):*  
**CHAPTER 5 – EXHAUST SYSTEMS:**  
Section 504 - Clothes Dryer Exhaust  
    Section 504.6.4 Duct length  
        Section 504.6.4.1 Specified length  
            Table 504.6.4.1 Dryer Exhaust Duct Fitting Equivalent Length  
        Section 504.6.4.2 Manufacturer’s instructions  
Section 506 Commercial kitchen hood ventilation system ducts and exhaust equipment  
    Section 506.3.11 Grease duct enclosures  
        Section 506.3.11.1 Shaft enclosure  
        Section 506.3.11.2 Field-applied grease duct enclosure  
        Section 506.3.11.3 Factory-built grease duct assemblies  
        Section 506.3.11.4 Duct enclosure not required
- 10 minutes *Summary of provisions of the Florida Building Code - Mechanical, 5<sup>th</sup> Edition, (2014):*  
**CHAPTER 5 – EXHAUST SYSTEMS:**  
Section 508 Commercial kitchen makeup air

- Section 508.1 Makeup air
  - Section 508.1.1 Makeup air temperature
- Section 510 Hazardous Exhaust Systems
  - Section 510.8 Duct construction
    - Section 510.8.1 Duct joints
- Section 513 Smoke Control Systems
  - Section 513.1 Scope and purpose
  - Section 513.2 General design requirements
  - Section 513.3 Special inspection and test requirements
  - Section 513.4 Analysis
    - Section 513.4.1 Stack effect
    - Section 513.4.2 Temperature effect of fire
    - Section 513.4.3 Wind effect
    - Section 513.4.4 HVAC systems
    - Section 513.4.5 Climate
    - Section 513.4.6 Duration of operation
  - Section 513.5 Smoke barrier construction

10 minutes     *Summary of provisions of the Florida Building Code - Mechanical, 5<sup>th</sup> Edition, (2014):*

**CHAPTER 5 – EXHAUST SYSTEMS:**

- Section 513 Smoke Control Systems
  - Section 513.5.1 Leakage area
  - Section 513.5.2 Opening protection (and Exceptions)
    - Section 513.5.2.1 Ducts and air transfer openings
- Section 516 Carbon Monoxide Control Systems
  - Section 516.1 Carbon monoxide control systems

*Excerpt from Florida Building Code – Building, 5<sup>th</sup> Edition, (2014):*

- Section 908 Emergency Alarm Systems
  - Section 908.7 Carbon Monoxide Protection

**CHAPTER 6 – DUCT SYSTEMS:**

- Section 602 – Plenums
  - Section 602.2 Construction
    - Section 602.2.1 Materials within plenums (and Exceptions)
      - Section 602.2.1.1 Wiring
      - Section 602.2.1.5 Foam Plastic Insulation
        - Section 602.2.1.5.1 Separation required
        - Section 602.2.1.5.2 Approval
        - Section 602.2.1.5.3 Covering

10 minutes     *Summary of provisions of the Florida Building Code - Mechanical, 5<sup>th</sup> Edition, (2014):*

**CHAPTER 6 – DUCT SYSTEMS:**

Section 603 Duct Construction and Installation

Section 603.1 General

Section 603.1.1 Space Provided (and Exception)

Section 603.2 Duct Sizing

Section 603.4 Metallic Ducts (and Exception)

Table 603.4 Duct Construction Minimum Sheet Metal Thicknesses  
For Single Dwelling Units

Section 603.4.1 Minimum Fasteners

Section 603.5 Nonmetallic Ducts

Section 607 Duct and Transfer Openings

Section 607.5 Where required

Section 607.5.1 Fire walls

Section 607.5.1.1 Horizontal exits

Section 607.5.2 Fire barriers (and Exceptions)

Section 607.5.3 Fire partitions (and Exceptions)

*Total Time: 60 minutes*

**METHOD OF PRESENTATION**

This seminar will be delivered classroom style through an instructor lecturing on the topics using a slide show presentation. Students will observe the presentation which will show static text and photos. Participant discussion will be allowed continually through the course.

**METHOD OF EVALUATION**

Concepts will be discussed and questions will be answered prior to moving on to the next subject. This will ensure that the student will grasp the topic and will be afforded an opportunity to ask specific questions prior to moving on to the next topic.

**QUALIFICATION OF INSTRUCTORS**

See attached resumes and credentials.

**MINIMUM QUALIFICATIONS FOR ANY FUTURE INSTRUCTORS**

Any future instructor shall be qualified by education or experience to teach a course within their area of expertise (or parts of the course assigned) as it relates to our course content pursuant to qualification by the respective licensing standards boards.

Qualifications for these instructors shall include: An active or inactive state certified or registered contractor's license with at least five years experience may teach any technical course within the scope of their license. No contractor whose license has been suspended or revoked shall teach or serve as a continuing education instructor.