MODULAR BUILDING FOUNDATIONS ADVANCED MODULE

Course Information Title: Modular Building Foundations Advanced Module Date: TBD Location: TBD Instructor: Billy Tyson Hours: 1 Hour Approval Number: CILB-TBD **BCAIB-TBD** Architects-TBD

Modular Building Foundations

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 QUALIFICATIONS
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Presentation Materials

This presentation will use materials from Florida Laws and Codes.

- Florida Statute Chapter 553 Part I
- Florida Statute Chapter 489 Part I
- Florida Administrative Code Section 61-41
- Florida Building Code 2010 Edition

Scope of Presentation

This module has been prepared to examine Florida's regulatory requirements for the installation of modular buildings and their foundations.

We will review the requirements for new and existing modular building installations.

The module is designed to help the designer, contractor, and the building code administrator know what permits are required, and what code requirements are applicable, to the modular unit and it's site related work to make the modular building code compliant for a certificate of occupancy.

Florida Statute 553.35-.36 (TEXT)

SS 553.35 This part shall be known and may be cited as the "Florida Manufactured Building Act of 1979."

SS553.355 Minimum construction requirements established. — The Florida Building Code and the Florida Fire Prevention and Life-safety Codes shall be the minimum construction requirements governing the manufacture, design, construction, erection, alteration, modification, repair, and demolition of manufactured buildings.

Minimum Construction Requirements

All manufactured buildings and their foundations and their subsystems must be constructed to Florida's minimum building code standards as referenced in:

2010 Florida Building Code (Commercial)
2010 Florida Residential Code (1 & 2 Family)
2010 Florida Existing Building Code
2010 Mechanical, Plumbing, Fuel Gas, Accessibility
2010 Florida Fire Prevention Code
2008 National Electric Code

Florida Statute 553.36 Definitions

SS 553.36 (1) "Approved" means conforming to the requirements of the Florida Building Code.

SS553.36 (3) "Closed Construction" (3) means that condition when any building, component, assembly, subassembly, or system is manufactured in such a manner that all portions cannot be readily inspected at the installation site without disassembly or destruction thereof.

SS 553.36 (4) "Open construction" means any building, building component, assembly, or system manufactured in such a manner that all portions can be readily inspected at the building site without disassembly thereof, damage thereto, or destruction thereof.

SS 553.36 Definitions (Cont'd)

■ SS 553.36 (6) "Component" means any assembly, subassembly, or combination of parts for use as a part of a building, which may include structural, electrical, mechanical, and fire protection systems and other systems affecting health and safety. Components that incorporate elements of a building subject to the product approval system adopted under s. 553.842 are subject to approval in accordance with the product approval system upon implementation thereof and are not subject to the rules adopted under this part. Components to which the rules adopted under this part apply are limited to three-dimensional systems for use as part of a building.

SS 553.36 Definitions (Cont'd)

SS 553.36 (7) "Department" means the Department of Business and Professional Regulation.

- SS 553.36 (9) "Insignia" means an approved device or seal issued by the department to indicate compliance with the standards and rules established pursuant to this part.
- SS 553.36 (10) "Install" means the assembly of a manufactured building component or system on site and the process of affixing a manufactured building component or system to land, a foundation, or an existing building, and service connections which are a part thereof.

SS 553.36 Definitions (Cont'd)

(13) "Manufactured building", "modular building," or "factory-built building" means a closed structure, building assembly, or system of subassemblies, which may include structural, electrical, plumbing, heating, ventilating, or other service systems manufactured in manufacturing facilities for installation or erection as a finished building or as part of a finished building, which shall include, but not be limited to, residential, commercial, institutional, storage, and industrial structures. The term includes buildings not intended for human habitation such as lawn storage buildings and storage sheds manufactured and assembled offsite by a manufacturer certified in conformance with this part. This part does not apply to mobile homes.

SS 553.36 Definitions (Cont'd

SS 553.36 (17) "Site" is the location on which a manufactured building is installed or is to be installed.

Note:

- All elements of modular construction must comply with the Florida Building Code.
- The foundation and all subsystems also must comply with the Florida Building Code.
- All materials in the foundation must comply with Florida's product approval requirements as noted in SS 553.842.

553.37 Rules; inspections; and insignia

- SS 553.37(3) After the effective date of the Florida Building Code, no manufactured building, except as provided in subsection (12), may be installed in this state unless it is approved and bears the insignia of approval of the department and a manufacturer's data plate. Approvals issued by the department under the provisions of the prior part shall be deemed to comply with the requirements of this part.
- SS 553.37 (4) All manufactured buildings issued and bearing insignia of approval pursuant to subsection (3) shall be deemed to comply with the Florida Building Code and are exempt from local amendments enacted by any local government.
- SS 553.37 (5) No manufactured building bearing department insignia of approval pursuant to subsection (3) shall be in any way modified prior to installation, except in conformance with the Florida Building Code.

553.37 Rules; inspections; and insignia (Cont'd)

■ SS 553.37 (6) Manufactured buildings which have been issued and bear the insignia of approval pursuant to this part upon manufacture or first sale shall not require an additional approval or insignia by a local government in which they are subsequently sold or installed. Buildings or structures that meet the definition of "open construction" are subject to permitting by the local jurisdiction and are not required to bear insignia.

553.375 Recertification of Manufactured Buildings.

SS 553.375 Recertification of manufactured buildings -- Prior to the relocation to a site that has a higher design wind speed, modification, or change of occupancy of a manufactured building within the state, the manufacturer, dealer, or owner thereof may apply to the department for recertification of that manufactured building. The department shall, by rule, provide what information the applicant must submit for recertification and for plan review and inspection of such manufactured buildings and shall establish fees for recertification. Upon a determination by the department that the manufactured building complies with the applicable building codes, the department shall issue a recertification insignia. A manufactured building that bears recertification insignia does not require any additional approval by an enforcement jurisdiction in which the building is sold or installed, and is considered to comply with all applicable codes. <u>As an alternative to recertification by the</u> department, the manufacturer, dealer, or owner of a manufactured building may seek appropriate permitting and a certificate of occupancy from the local jurisdiction in accordance with procedures generally applicable under the Florida Building Code.

553.38 Application and Scope

553.38 Application and scope. – The department shall enforce every provision of the Florida Building Code adopted pursuant hereto, except that local land use and zoning requirements, fire zones, building setback requirements, side and rear yard requirements, site development requirements, property line requirements, subdivision control, and onsite installation requirements, as well as the review and regulation of architectural and aesthetic requirements, are specifically and entirely reserved to local authorities. Such local requirements and rules which may be enacted by local authorities must be reasonable and uniformly applied and enforced without any distinction as to whether a building is a conventionally constructed or manufactured building. A local government shall require permit fees only for those inspections actually performed by the local government for the installation of a factory-built structure. Such fees shall be equal to the amount charged for similar inspections on conventionally built housing.



489.113 Qualifications for practice; restrictions. (1) Any person who desires to engage in contracting on a statewide basis shall, as a prerequisite thereto, establish his or her competency and qualifications to be certified pursuant to this part. To establish competency, a person shall pass the appropriate examination approved by the board and certified by the department. Any person who desires to engage in contracting on other than a statewide basis shall, as a prerequisite thereto, be registered pursuant to this part, unless exempted by this part.

NOTE

- A modular building must have an insignia. A building posted with an Department Insignia is deemed to comply with the Florida Building Code.
- The in plant manufactured portion of the modular needs no local inspection for FBC compliance.
- Modular building installations shall be uniformly treated in the same manner as local site built construction.
- The fees levied for the plan review and inspection of modular building installations should only consider that work performed on site.
- Only licensed contractors can install modular foundations and modular buildings.

Florida Building Code

101.2 Scope.

The provisions of this code shall apply to the construction, *alteration*, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

Exceptions:

1. Detached one- and two-family *dwellings* and multiple singlefamily *dwellings* (*townhouses*) not more than three *stories* above *grade plane* in height with a separate *means of egress* and their accessory structures shall comply with the *Florida Building Code, Residential.* 2. Existing buildings undergoing repair, alterations or additions and change of occupancy shall comply with Chapter 34 of this code. **101.2.1 Appendices.**

Provisions in the appendices shall not apply unless specifically adopted.

Note: In the code text there is not an exception for modular construction.

In fact there is an additional chapter in the Building Code and the Administrative Code that governs modular buildings.

FBC 101.4.8 Manufactured buildings. For additional administrative and special code requirements, see section 428, *Florida Building Code*, *Building*, and Rule 9B-1 F.A.C.

Note: DCA was under Rule 9B-1 F.A.C. and when the Governor placed the modular building program under DBPR the program now falls under Rule 61-41 F.A.C.. The building code was printed prior to the Governors action and the text in the code will not reflect this until the next printing of the code in 2013.

FBC 102.7 Relocation of manufactured buildings.

- 1. Relocation of an existing manufactured building does not constitute an alteration.
- 2. A relocated building shall comply with wind speed requirements of the new location, using the appropriate wind speed map. If the existing building was manufactured in compliance with the Standard Building Code (prior to March 1, 2002), the wind speed map of the Standard Building Code shall be applicable. If the existing building was manufactured in compliance with the Florida Building Code (after March 1, 2002), the wind speed map of the *Florida Building Code* shall be applicable.
- 3. A relocated building shall comply with the flood hazard area requirements of the new location, if applicable.

105.2.2 Minor Repairs.

Ordinary minor repairs may be made with the approval of the building official without a permit, provided the repairs do not include the cutting away of any wall, partition or portion thereof, the removal or cutting of any structural beam or load-bearing support, or the removal or change of any required means of egress, or rearrangement of parts of a structure affecting the egress requirements; additionally, ordinary minor repairs shall not include addition to, alteration of, replacement or relocation of any standpipe, water supply, sewer, drainage, drain leader, gas, soil, waste, vent or similar piping, electric wiring systems or mechanical equipment or other work affecting public health or general safety, and such repairs shall not violate any of the provisions of the technical codes.

105.3.7 Applicable Code for Manufactured Buildings.

Manufacturers should be permitted to complete all buildings designed and approved prior to the effective date of a new code edition, provided a clear signed contract is in place. The contract shall provide specific data mirroring that required by an application for permit, specifically, without limitation, date of execution, building owner or dealer, and anticipated date of completion. However, the construction activity must commence within 6 months of the contract's execution. The contract is subject to verification by the Department of Community Affairs. Note: Now under DBPR.

105.11 Notice of termite protection.

A permanent sign which identifies the termite treatment provider and need for re-inspection and treatment contract renewal shall be provided. The sign shall be posted near the water heater or electric panel.

Note: Modular foundations require termite protection and the modular will be posted at the electric panel as required by the building code.

107.3 Examination of documents.

The *building official* shall examine or cause to be examined the accompanying submittal documents and shall ascertain by such examinations whether the construction indicated and described is in accordance with the requirements of this code and other pertinent laws or ordinances.

Exceptions:

1. Building plans approved pursuant to Section 553.77(5), *Florida Statutes*, and state-approved manufactured buildings are exempt from local codes enforcing agency plan reviews except for provisions of the code relating to erection, assembly or construction at the site. Erection, assembly and construction at the site are subject to local permitting and inspections. <u>Photocopies of plans approved</u> <u>according to FAC 9B-1.009, F.A.C., shall be sufficient for local</u> <u>permit application documents of record for the modular building</u> <u>portion of the permitted project.</u>

107.3.5 Minimum plan review criteria for buildings.

The examination of the documents by the building official shall include the following minimum criteria and documents: a floor plan; site plan; foundation plan; floor/roof framing plan or truss layout: all fenestration penetrations; flashing; and rough opening dimensions; and all exterior elevations:

Exemptions.

Plans examination by the building official shall not be required for the following work:

1.Replacing existing equipment such as mechanical units, water heaters, etc.

2. Reroofs

- 3. Minor electrical, plumbing and mechanical repairs
- 4. Annual maintenance permits

5. Prototype plans

Except for local site adaptations, siding, foundations and/or modifications. Except for structures that require waiver.

6. Manufactured buildings plan except for foundations and modifications of buildings on site.

110.3 Inspections

8. Manufactured building inspections. The building department shall inspect construction of foundations; connecting buildings to foundations; installation of parts identified on plans as site installed items, joining the modules, including utility crossovers; utility connections from the building to utility lines on site; and any other work done on site which requires compliance with the Florida Building Code. Additional inspections may be required for public educational facilities (see Section 423.27.20).

1209.1 Crawl spaces.

Crawl spaces shall be provided with a minimum of one access opening not less than 18 inches by 24 inches (457 mm by 610 mm).

1209.2 Attic spaces.

An opening not less than 20 inches by 30 inches (559 mm by 762 mm) shall be provided to any *attic* area having a clear height of over 30 inches (762 mm). A 30-inch (762 mm) minimum clear headroom in the *attic* space shall be provided at or above the access opening.

1209.3 Mechanical appliances.

Access to mechanical appliances installed in under-floor areas, in *attic* spaces and on roofs or elevated structures shall be in accordance with the *Florida Building Code*, *Mechanical*. Florida Building Code (Cont'd) Wind Loads For Modular's

New Modular Construction- "Never Occupied"In accordance with FBC Chapter 16.

Existing Modular Construction- " Once occupied and being moved"

■ In accordance with FBC Chapter 102.7.

All foundations shall comply with current FBC.

Modular Building Foundations

All sections and provisions of chapter 18 of the Florida Building Code shall apply where applicable for Modular Building foundation support and termite control.

1807.1.4 Permanent wood foundation systems.

Permanent wood foundation systems shall be designed and installed in accordance with AF&PA PWF. Lumber and plywood shall be treated in accordance with AWPA U1 (Commodity Specification A, Use Category 4B and Section 5.2) and shall be identified in accordance with Section 2303.1.8.1.

1804.3 Site grading.

The ground immediately adjacent to the foundation shall be sloped away from the building at a slope of not less than one unit vertical in 20 units horizontal (5-percent slope) for a minimum distance of 10 feet (3048 mm) measured perpendicular to the face of the wall. If physical obstructions or lot lines prohibit 10 feet (3048 mm) of horizontal distance, a 5-percent slope shall be provided to an *approved* alternative method of diverting water away from the foundation. Swales used for this purpose shall be sloped a minimum of 2 percent where located within 10 feet (3048 mm) of the building foundation. Impervious surfaces within 10 feet (3048 mm) of the building foundation shall be sloped a minimum of 2 percent away from the building.

Exception: Where climatic or soil conditions warrant, the slope of the ground away from the building foundation shall be permitted to be reduced to not less than one unit vertical in 48 units horizontal (2-percent slope).

The procedure used to establish the final ground level adjacent to the foundation shall account for additional settlement of the backfill.

Concrete

SECTION 1901 GENERAL

1901.1 Scope.

The provisions of this chapter shall govern the materials, quality control, design and construction of concrete used in structures.

Exception: Buildings and structures located within the high-velocity hurricane zone shall comply with the provisions of Sections 1917 and 1919 through 1929.

<u>Masonry</u>

SECTION 2101 GENERAL

2101.1 Scope.

This chapter shall govern the materials, design, construction and quality of masonry.

Exception: Buildings and structures located within the high-velocity hurricane zone shall comply with the provisions of Section 2114 and Sections 2118 through 2122.



SECTION 2201 GENERAL

2201.1 Scope.

The provisions of this chapter govern the quality, design, fabrication and erection of steel used structurally in buildings or structures.

Exception: Buildings and structures located within the high-velocity hurricane zone shall comply with the provision of Sections 2214 through 2224.

Florida Building Code (Cont'd)

Steel Cont'd

SECTION 2203 IDENTIFICATION AND PROTECTION OF STEEL FOR STRUCTURAL PURPOSES

2203.1 Identification.

Identification of structural steel members shall comply with the requirements contained in AISC 360. Identification of cold-formed steel members shall comply with the requirements contained in AISI S100. Identification of coldformed steel light-frame construction shall also comply with the requirements contained in AISI S200. Other steel furnished for structural load-carrying purposes shall be properly identified for conformity to the ordered grade in accordance with the specified ASTM standard or other specification and the provisions of this chapter. Steel that is not readily identifiable as to grade from marking and test records shall be tested to determine conformity to such standards.

Florida Building Code (Cont'd)

Wood

SECTION 2301 GENERAL 2301.1 Scope. The provisions of this chapter shall govern the materials, design, construction and quality of wood members and their fasteners.

Exception: Buildings and structures located within the high-velocity hurricane zone shall comply with the provisions of Sections 2314 through 2330.

Florida Building Code (Cont'd)

Wood Cont'd

2304.13 Preparation of building site and removal of debris.

2304.13.1

All building sites shall be graded to provide drainage under all portions of the building **not** occupied by basements.

2304.13.2

The foundation and the area encompassed within 1 foot (305 mm) therein shall have all vegetation, stumps, dead roots, cardboard, trash, and foreign material removed and the fill material shall be free of vegetation and foreign material. The fill shall be compacted to assure adequate support of the foundation.

2304.13.3

After all work is completed, loose wood and debris shall be completely removed from under the building and within 1 foot (305 mm) thereof. All wood forms and supports shall be completely removed. This includes, but is not limited to: wooden grade stakes, forms, contraction spacers, tub trap boxes, plumbing supports, bracing, shoring, forms, or other cellulosecontaining material placed in any location where such materials are not clearly visible and readily removable prior to completion of the work. Wood shall not be stored in contact with the ground under any building.

Florida Administrative Code FAC 61-41.006 (4) (c)

Upon Agency's approval of plans, satisfactory inspection of a building, or both approval of plans and a building constructed in accordance with those plans, the approved plans, the inspection report, or the plans and inspection report shall be transmitted to the Department through the Building Code Information System.

Note: Plans can be accessed at <u>floridabuilding.org</u>. Go to the manufactured building matrix, find the line titled "find a plan" and prompt with one click, put in the plan tracking number and search. The plan will be available for review.

61-41.009 Design Plan and Systems Approval.
(2) Approved Plans. Plans are approved for all code related items installed at the manufacturing facility in accordance with Sections 553.37(1) and 553.38, F.S. All code related items not installed at the manufacturing facility shall be clearly noted on the plans cover page as "Items to be site installed and subject to local code review and compliance."

61-41.011 Alterations and Relocation.

(1) Alteration or Conversion. Any unauthorized modification, alteration, or conversion made to an approved manufactured building prior to installation shall void the insignia of approval. The insignia affixed to the building shall be confiscated by the inspection agency or the building official as authorized by the Department and returned to the Department.

FAC 61-41.011 (2) Off site modifications. Modifications made in an approved manufacturing facility shall require certification by the Department pursuant to this paragraph. Modifications made in other than an approved manufacturing facility are subject to the local authority having jurisdiction.

FAC 61-41.011

(3) On-site Modifications. On-site modifications to previously approved manufactured buildings must be inspected by the local authority having jurisdiction and must comply with the Florida Building Code. The manufactured building is subject to locally adopted codes when it is taken out of compliance with the applicable state approved plans. Upon issuance of a certificate of occupancy for the modified manufactured building, the old insignia shall be removed and returned to the Department.

FAC 61-41.011

- (4) Relocation of an existing manufactured building does not constitute an alteration.
- (5) A relocated manufactured building shall comply with wind speed requirements of the new location, using the appropriate wind speed map. If the existing building was manufactured in compliance with the 1997 Standard Building Code (prior to March 1, 2002), the wind speed map of the Standard Building Code shall be applicable. If the existing building was manufactured in compliance with the Florida Building Code (after March 1, 2002), the wind speed map of the Florida Building Code shall be applicable.

FAC 61-41.0221 Manufacturer's Obligations Upon Sale of Building.

The manufacturer shall provide a TRANSPORTATION AND INSTALLATION BOOKLET with each new building and component package. It shall include:
(1) Precautions and instructions for transportation of buildings and modules; and
(2) Installation instructions.

SUMMARY

- 1. Modular construction is in accordance with the Florida Building Code.
- 2. Foundations must be constructed in accordance with the Florida Building Code.
- 3. Only qualified Florida licensed contractors are permitted to install modular buildings.
- 4. Foundations should be designed to fit modular's. Do not alter a modular to fit foundations.
- 5. Altered modular buildings on site at installation will void the Florida issued insignia.

SUMMARY (Cont'd)

6. Prepare the building site for the modular unit.
Make sure all organic material is removed from the modular building site.

- The foundation site should be termite treated by a licensed pest control company and the termite certificate posted in the modular unit.
- Make sure storm water is moved away from the foundation.
- Coordinate inspections with the local AHJ and make sure all site related scopes of work requiring inspection have been inspected and signed off on the inspection record supplied by the local AHJ.

REVIEW QUESTIONS

Question #1: What section of the Florida Administrative Code Rules contains additional regulations for modular construction in Florida?

(A) 69A-3.012
(B) 9B-1
(C) 9N-3
(D) 61-41

Answer: (D) 61-41 Explanation: FBC 428.1, FAC61-41.003, slide #21. Question #2: What Florida State agency is tasked with regulating modular building construction in Florida?
(A) Federal Bureau of Housing and Urban Development (HUD)
(B) Florida's Emergency Management Agency (FEMA)
(C) Florida's Dept. of Business & Professional Regulation (DBPR)
(D) Florida's Construction Industry Licensing Board (CILB)

Answer: (C) DBPR Explanation: SS 553.36(7) Department means the Department of Business & Professional Regulation, slide #11. Question #3: Modular building construction is required to be inspected in the manufacturing facility, not by the Local Authority Having Jurisdiction, Local AHJ, but by a DBPR 468 licensed inspector because it is considered open construction. (A) True

(B) False

Answer: (B) False

Explanation: Open construction is the type construction inspected by the Local Building Department. Closed construction is, finished construction, the type construction inspected in the manufacturing plant because it cannot be inspected at the local level (SS553.36 Definitions, number (3) Closed Construction) – slide #9. Question #4: The local building official can perform a plan review of the modular building portion of a permitted project and can levy fees for the plan review.

- (A) True
- (B) False
- Answer: (B) False

Explanation: The local building department can review the building when reviewing the foundation and all other site related portions of the permitted project, but cannot levy a fee for the review of the modular building. Modular buildings have been reviewed by a Department approved Third Party Agency. The modular manufacturer has already paid a fee for that review. Modular buildings found to have noncompliant code design must be reported to DBPR for design compliance resolution. The building department does not have superseding authority over DBPR final decisions of compliance (SS 553.37(b)). – slide #14.

Question #5: In State Statute 553.36 definitions a component can be a window, door, or an appliance (e.g. a refrigerator, stove, or furniture). (A) True (B) False

Answer: (B) False Explanation: All components as defined in SS 553.36 are three dimensional systems used as part of a modular building and cannot be removed without affecting the DBPR approval status of the building, slide #10. Question #6: A modular building can be installed on a mobile home (HUD) foundation system and be considered Florida Building Code compliant. (A) True (B) False

Answer: (B) False Explanation: HUD foundations components and designs have not been tested according to the Florida Building Code and do not comply with SS553.36(6) or SS553.842. – slide #10. Question #7: In plant modular building constructed buildings do not have to comply with a local jurisdiction's amendments to the Florida Building Code. (A) True

(B) False

Answer: (A) True Explanation: Modular buildings must comply with the Florida Building Code but not local amendments to the code (SS 553.37(4)) – slide #14. Question #8: Modular buildings can be installed on a wood foundation. (A) True

(B) False

Answer: (A) True Explanation: Modular buildings can be installed on any foundation system referenced in the Florida Building Code. Wood foundations are referenced in the FBC 1807.1.4 "Permanent wood foundation systems", slide #32. Question #9: An existing moved modular building constructed prior to March 01, 2002 must be installed using the wind speed from (______). (A) the building code in effect when moved. (B) the Southern Standard Building Code

- (C) the 2001 Florida Building Code
- (D) the 2004 Florida Building Code

Answer: (B) the Southern Standard Building Code Explanation: The installation should be accordance with the code to which the modular was constructed (FBC 102.7 2."Relocation of manufactured buildings", and FAC 61-41.011(5) "A relocated manufactured building ...") – slide #22. Question #10: A screened porch addition can have the interior wall of the porch be supported by the modular building if an engineer designs the addition with the modular foundation. (A) Yes if designed by an engineer that validates the design of the modular will support the additional loads, but the insignia must be returned to DBPR.

(B) Yes if the engineer that designed the modular designs the foundation and addition.

(C) Yes as long as structural calculations are submitted to the Building Official validating the foundation structural soundness will support the modular and the porch.

(D) No, a modular exterior wall cannot be used to support additional loads.

Answer: (A) Yes if designed by an engineer that validates the design of modular will support the additional loads, but the insignia must be returned to DBPR.

Explanation: The modular is a Florida building code compliant design in accordance with American Society of Civil Engineers (ASCE) but the department did not approve it that way and the insignia must be returned to the Department (FAC 61-41.011(3)), slide # 44. Question #11: Once a new code cycle is in effect a modular can be installed using the previous edition of the code for _____

(A) One year from the effective date of the new code.(B) one hundred eighty days from the effective date of the new code.

(C) one hundred eighty days from the date of sale of the modular prior to the effective date of the new code.(D) one hundred eighty days.

Answer: (C) one hundred eighty days from the date of sale of the modular prior to the effective date of the new code. Explanation: FBC 105.3.7 allows a modular to be built 180 days after the sale when a code cycle changes, slide 24. Question #12: Modular buildings are exempt from FBC required termite protections and notices. (A) True (B) False

Answer: (B) False Explanation: Modular building installations must comply with Florida's termite protection requirements. FBC 101.4.8, slide 25. Question #13: When submitting plans to the local building department for the foundation the Building Official can require a raised seal set of plans for the modular. (A) True

(B) False

Answer: (B) False Explanation: FBC 107.3 Exception #1 states photo copies shall be sufficient for local permit application documents of record for the modular building portion of the permitted project, slide 26. Question #14: Modular building crawl spaces do not have to provide access under a modular building. (A) True (B) False

Answer: (B) False Explanation: Where a foundation design provides a crawl space under a modular the crawl space must be provided with a 18" x 24" access hole (FBC 1209.1 "Crawl Spaces")slide 29. Question #15: When installing a light frame modular foundation the foundation must be designed to maintain earth over the foundation, have the grade slope away from the building, and provide access to the crawl space.

(A) True (B) False

Answer: (A) True

Explanation: The foundation and earth grade around the building must be code compliant and approved by the local AHJ thus requiring the crawl space to be ventilated, the foundation to be covered with earth, and the site grade to pitch away from the building (FBC 1203.3 "Under floor Ventilation", FBC 1809.4 Depth of Foundation, and 1804.3 "site grading", slides 29 & 33. Question #16: A moved existing modular building is considered altered when moved. (A) True

(B) False

Answer: (B) False Explanation: Florida Administrative Code Rule 61-41.011 states a moved modular building does not constitute an altered building, slide 45. Question #17: A mobile home installer licensed by the Department of Highway Safety & Motor Vehicles (DHMV) can lawfully set only modular residences.

(A) True, as long as the mobile home installer has workers compensation insurance for construction.
(B) False, licensure by the Department of Highway Safety & Motor Vehicles (DHMV) does not qualify an installer for any type modular installations.

Answer: (B) False, Licensure by the Department of Highway Safety & Motor Vehicles (DHMV) does not qualify an installer for any type modular installations.

Explanation: Anyone engaged in construction must have a license issued by the Construction Industry Licensing Board (CILB). Anyone that engages in sub-contract work from a contractor of owner must have a CILB issued contractor's license (SS 489.113). Mobile home installers are licensed by DHMV and only authorized to install HUD manufactured mobile homes (FAC 15C-1.0102) - slide 18.

Question #18: A modular building foundation using structural steel beams must be identified for compliance with the

(A) AISC 360
(B) ACI 530-08
(C) ASTM C90-06b
(D) ACI 318-08

Answer: (A) AISC 360 Explanation: See reference standards of the Florida Building Code Chapter 35, and FBC 2203.1., slide 37. Question #19: Ground contact wood foundation material must be labeled in accordance with ______. (A) Wood Frame Construction Manual (WFCM-01) (B) American Wood Products Association (AWPA) (C) American Concrete Institute (ACI 318-08) (D) American Institute or Timber Construction (AITC 108-93)

Answer: (B) American Wood Products Association (AWPA) Explanation: See reference standards of the Florida Building Code Chapter 35, and FBC 1807.1.4) - Slide 32. Question #20: Site grade slopes around building foundation walls shall slope _____ for a minimum distance of _____ feet. (A) 10% - 20 (B) 3% - 10 (C) 5% - 15 (D) 5% -10

Answer: (D) 5% -10 Explanation: FBC 1804.3 slide 33

Conclusion

Proof of Compliance

The webinar software will track the time when each student enters and leaves the webinar.
 Students will be required to e-mail the Codes and Standards Office at the beginning and end of the course stating he/she personally

completed the course.

 "Certificate of Completion" will e-mailed to them only after receipt of the required e-mails