

NEW CODES AND STANDARDS

AHCA VIRTUAL DESIGN & CONSTRUCTION SEMINAR

NOVEMBER 16 -18, 2020

Review of Revisions to 7th edition Florida Fire Prevention Code, and the 7th edition of the Florida Building Code

Course Number: AHCA2020_18

Credit Designation: 1 LU| HSW

AIA CES Provider Number: E240

November 18, 2020



AHCA has contracted with a registered provider of AIA-approved continuing education under Provider Number E240. All registered AIA CES Providers must comply with the AIA Standards for Continuing Education Programs.

Any questions or concerns about this provider or this learning program may be sent to cessupport@aia.org or 800-242-3837 Option 3.

This learning program is registered with AIA CES for continuing professional education. As such, it does not include content that may be deemed or construed to be an approval or endorsement by the AIA of any material of construction or any method or manner of handling, using, distributing, or dealing in any material or product.

AIA continuing education credit has been reviewed and approved by AIA CES. Learners must complete the entire learning program to receive continuing education credit. AIA continuing education Learning Units earned upon completion of this course will be reported to AIA CES for AIA members. Certificates of Completion for both AIA members and non-AIA members are available upon request.

1

OBJECTIVE

Learn how the new revisions to the NFPA 101 Life Safety Code, as incorporated into the Florida Fire Prevention Code, and the Florida Building Code affect design requirements of health care facilities.

2

OBJECTIVE

Understand how these requirements directly relate to the health and safety of patients who are treated, examined or housed inside these health care facilities.

3

OBJECTIVE

Be able to apply information provided by this session to the next health care design such as special locking arrangements, and private mode fire alarm signaling.

4

OBJECTIVE

Be able to explain the new design and construction requirements for inpatient hospices, ALFs, hospitals, nursing homes and ambulatory surgical centers.

Review of Revisions to 7th edition Florida Fire Prevention Code, and the 7th edition Florida Building Code

AHCA VIRTUAL SEMINAR 2020



Fire Codes in Florida

7th Edition of Florida Fire Prevention Code

1. State Fire Marshal adopts FFPC composed of NFPA 1 and 101
2. Adopts "latest" edition but must also coordinate with FBC content and release date.
3. Revises NFPA 1 and NFPA 101 for specific Florida requirements

Fire Codes in Florida vs CMS

1. NOTE: Remember, event though Florida is adopting the 2018 edition of NFPA 101 and other referenced NFPA codes, the Federal Government, CMS, is still using the 2012 edition.
2. If the 2012 edition is more stringent than the 2018 edition, you MUST follow the 2012 edition... as examples:
 - Smoke Compartment Size (cannot use 40,000 SF)
 - Soiled Linen and trash receptacles (still limited to 32 gal in 64 sf)

Fire Codes in Florida

7th Edition of Florida Fire Prevention Code

1. The 6th edition of FBC “**required**” the use of Private Operating Mode for new hospitals and nursing homes
2. NFPA 101 only “**permits**” the use of Private Operating Mode
3. Florida Fire Marshals enforce NFPA 101, not the FBC
4. Revised NFPA 101 in the Florida Fire Prevention Code
5. 7th Edition of FFPC now also “**requires**” the use of Private Operating Mode for Hospitals and Nursing Homes.

7th Edition of Florida Fire Prevention Code Revision for Private Operating Mode

1. 18.3.4.3.1 Occupant Notification
- 2) * The private operating mode, as described in NFPA 72, National Fire Alarm and Signaling Code, **shall** be used in patient care areas.
 - (a) Only the attendants and other personnel required to evacuate occupants from a zone, area, floor, or buildings shall be required to be notified.
 - (b) Notification of personnel as specified in 18.3.4.3.1(2)(a) shall include means to readily identify the zone, area, floor, or building in need of evacuation.

7th Edition of Florida Fire Prevention Code Annex for Private Operating Mode

Annex

A.18.3.4.3.1(2) The intent of this is to permit the use of the private operating mode in the patient care areas, including patient sleeping areas, of health care facilities and to provide notification of a fire event only to the staff trained to direct emergency response. This may be accomplished by visual or audible alarm signals in areas usually occupied by staff such as the nurse station, utility rooms, medication room, and staff break room

7th Edition of Florida Fire Prevention Code

Private Operating Mode for Existing

19.3.4.3.1 Occupant Notification. Occupant notification shall be accomplished automatically in accordance with 9.6.3, unless otherwise modified by the following:

(1) * The private operating mode, as described in NFPA 72, National Fire Alarm and Signaling Code, shall be used in patient care areas.

(a) Only the attendants and other personnel required to evacuate occupants from a zone, area, floor, or buildings shall be required to be notified.

(b) Notification of personnel as specified in 18.3.4.3.1(2)(a) shall include means to readily identify the zone, area, floor, or building in need of evacuation.

(c) Existing installations that exceed the requirements of private operating mode, as described in NFPA 72, shall be permitted to remain.

7th Edition of Florida Fire Prevention Code Annex for Existing

- Annex:
- A.19.3.4.3.1(1) It is the intent of this provision to permit the use of the private operating mode in the patient care areas, including patient sleeping areas, of health care facilities and to provide notification of a fire event only to the staff trained to direct emergency response. This may be accomplished by visual or audible alarm signals in areas normally occupied by staff such as the nurse station, utility rooms, medication room, and staff break room

7th Florida Building Code, Chapter 4

Sections 449 Hospitals

449.3.12.2 In all inpatient care rooms, spaces and areas, including sleeping, treatment, diagnostic, and therapeutic, **the private operating mode** as permitted and described in NFPA 72, National Fire Alarm and Signaling Code, **shall be required.**

Only the attendants and other personnel required to evacuate occupants from a zone, area, room, floor, or building shall be required to be notified.

Audible and visual notification devices shall only be permitted to be located at the care providers' stations, the soiled workroom, soiled holding room, clean workroom, staff lounge, medication preparation room, and nurse or supervisor's office, and other staff rooms or areas **as determined by the governing body of the facility.**

7th Florida Building Code, Chapter 4

Sections 450 Nursing Homes

450.3.16.2 In all resident care rooms, spaces and areas, including sleeping, treatment, diagnostic and therapeutic, the design and installation of the *private operating mode* fire alarm as permitted and described in NFPA 72, National Fire Alarm and Signaling Code, **shall be required**.

Only the attendants and other personnel required to evacuate occupants from a zone, area, room, floor or building shall be required to be notified.

Audible and visual notification devices shall only be permitted to be located at the care providers' stations, the soiled workroom, soiled holding room, clean workroom, staff lounge, medication preparation room, nurse or supervisor's office, and other staff rooms or areas as **determined by the governing body of the facility**.

Section 449

Hospitals

- Mobile Units:
- Comply with Part I and Chapter 2.8 of FGI Guidelines
 - Approved in advance by the Agency for Health Care Administration (Agency) before they may be utilized for patient services.
 - Limited to 6 months during a 12-month period... Except as approved by the Agency.
 - Usage may include temporary facilities during repair/replacement of equipment or intermittent use as needed in underserved communities or due to seasonal fluctuation.

Hospital Ceiling Heights

- 449.3.4.2 Ceilings in patient care areas or rooms with ceiling-mounted surgical light fixtures, tracks, rails or pipes and in the centralized kitchens shall be a minimum height of 9 feet (2.7 m).

Hospital Sliding Doors

- 449.3.4.10 A sliding door used for access to any room located on the exit access corridor may be manual or power operated and shall be smoke resistive and have latching hardware or other mechanism that prevents the door from rebounding to a partially open position if the door is forcefully closed.
- 449.3.4.10.1 A sliding door used to access an airborne infection isolation room or a protective environment room shall be equipped with an automatic closer that will close and latch when released.

Section 450

Nursing Homes

- Electrical Requirements:
 - 450.3.14.2 Nonmetallic sheathed cable or similar systems are not permitted for power and lighting wiring in any facility.
 - 450.3.14.3 For purposes of electrical requirements, a resident room, a resident therapy area or an examination room that is not equipped with a piped medical gas or vacuum system shall be reviewed as a Category 3 space as defined in NFPA 99 Health Care Facilities Code.

Nursing Home Electrical Requirements

- 450.3.14.3 Continued:
- A resident room, a resident therapy area or an examination room that is equipped with a piped medical gas or vacuum system shall be reviewed as a Category 2 space as defined in NFPA 99 Health Care Facilities Code, and Chapter 27, Electrical Systems, of this code.
- 450.3.14.4 There shall be at least one duplex receptacle located at the head of the resident bed connected to the critical branch of the essential electrical system.

Nursing Home Essential Electrical System

- 450.3.18.1 A Type 1 essential electrical system shall be provided in all new nursing homes as described in NFPA 99, Health Care Facilities Code. The emergency power for this system shall meet the requirements of a Level 1, Type 10, **Class 54 generator** as described in NFPA 110, Standard for Emergency and Standby Power Systems.
- **NOTE:** This means that all new nursing homes must have at least 72 hour of fuel...includes the 1/3 additional fuel storage required by NFPA 110 and therefore meets the new rule.

Nursing Home Lighting Requirements

- 450.3.15.3 All lighting in the resident use areas including corridors, shared spaces, treatment areas, sleeping areas, social areas and living areas shall meet the recommendations of ANSI/IES RP-28-07 Lighting and the
- Visual Environment for Senior Living as referenced in Chapter 35 of this code.
- 450.3.15.4 All general resident room lighting and all corridor lighting used by residents shall be designed to minimize glare such as indirect lighting.

Nursing Home Hurricane Requirements

- 450.4.1.3 DURING AND IMMEDIATELY FOLLOWING.
- A period of 96 hours following the loss of normal support utilities to the facility that are necessary to support the health, safety and welfare of the residents and staff. These support utilities include but are not limited to normal electrical power, potable water supply, sewer and telecommunications.

Nursing Home Fuel Requirements

- 450.4.2.9.2 The emergency power supply (EPS) shall be fueled by fuel stored on-site. The fuel supply shall be sized to fuel the generator for 100-percent load for 72 hours or for 96 hours of actual demand load of the occupied resident area(s) and resident support area(s) and resident support utilities during and immediately following a disaster, whichever is greater.
- Where used to meet the requirements of Section 450.4.2.6.2, the fuel calculation **must include the cooling demand.**

Nursing Home Emergency Electrical System

- 450.4.2.9.6 A new facility shall be equipped with either a permanent on-site **optional standby system** to operate at least the nonessential loads of the electrical system or the entire normal branch of the electrical system for a period of 96 hours for the demand load of the generator.
 - **Meaning:** Can design the Level I generator to run at the same time as the Optional Standby Generator or can design the entire electrical system to be run by the Optional Standby Generator.

Different Definitions Between NFPA 99 and NFPA 110

- NFPA 99 Type: (Not the same thing as Type as used in NFPA 110.)
 - Refers to the Category of the Essential Electrical System (EES) as defined by NFPA 99...such as Type 1 EES, Type 2, EES, and Type 3, EES
- NFPA 110 Type: Refers to the length of time to transfer the electrical load from the normal power source to the stand-by power source

NFPA 110 Definitions

- **Level:** Refers to the Emergency Power Supply System (EPSS). Level 1 systems are installed where failure of the equipment to perform could result in loss of human life or serious injuries.
- **Type:** The type defines the maximum time, in seconds, that the EPSS will permit the load terminals of the transfer switch to be without acceptable electrical power.
- **Class:** The class defines the minimum time, in hours, for which the EPSS is designed to operate at its rated load without being refueled or recharged.

Types vs Levels in Emergency Electrical Systems

- **Type 1 EES (Essential Electrical System) requires a Level 1 EPSS (Emergency Power Supply System):** installed where failure of the equipment to perform could result in loss of human life or serious injuries. (EPS is an Emergency Power Supply...generator or other)
- **Type 2 or 3 EES requires a Level 2 EPSS:** Installed where failure of the EPSS to perform is less critical to human life and safety.
- All of these Types 1,2 or 3 must meet requirements in NFPA 110
- Optional stand-by generators **are not required** to meet NFPA 110

Difference Between Emergency Electrical Systems

- **Optional Standby System:** Intended to supply power to public or private facilities or property where life safety does not depend on the performance of the system. These systems are intended to supply on-site generated power to selected loads either automatically or manually. NFPA 70
- **Legally Required System:** Required by any governmental agency having jurisdiction. These systems are intended to automatically supply power to selected loads (other than those classed as emergency systems) in the event of failure of the normal source. NFPA70

Hospital/ Nursing Home Priority Wall Construction

- 449.3.4.5/450.3.5.9 All fire walls, fire barriers, smoke barriers, horizontal exits and exit passageway partitions shall be constructed **prior to the construction of all intervening walls**. Where rated walls, barriers or partitions intersect, the continuity of the higher priority wall, barrier, or partition shall be maintained through the intersection.

Hospital/Nursing Home Window Sill Heights

- Window Sill Heights:
- Required by CMS 42 CFR Chapter 482.41/483.90
 - 449.3.4.1 Each patient sleeping room, except for special nursing care units or rooms, newborn nurseries and neonatal intensive care units or rooms, shall have a window(s) with a view, visible from the patient's bed, to the exterior of the building or to an atrium that is visually open to the exterior of the building
 - The sill height of the window(s) shall be a **maximum of 36 inches (0.914 m)**. Special nursing care units or rooms shall have a window(s) as required by this section and The Guidelines, except the sill height shall be a maximum of 60 inches (1.524 m).

Hospital/ Nursing Homes

Pairs of Doors and Access Corridor

- Where a pair of double doors opening to a room or closet, are located on the exit access corridor **and are not required to be equipped** with closers, **a door coordinator is not required.**
- All double doors must have either automatic flush bolts or semi-automatic flush bolts on the inactive leaf as follows.
 - Automatic Flush Bolts: automatically latch when the active leaf is closed
 - Semi-Automatic Flush Bolts: automatically latch when the inactive leaf is closed and unlatch manually. (Can only be used when the active leaf alone provides the required egress width.)
- Astragal (or other smoke resistive method) is required on all double doors

Hospital/Nursing Homes Smoke Resistive Shutters

- 449.3.4.11/450.3.5.13 The use of fire shutters for opening protection shall NOT be permitted
- 449.3.4.12/450.3.5.13 Shutters in openings of smoke partitions to rooms and areas that are permitted to be open to other areas in accordance with Section 407 shall be permitted without automatic closing of the shutter.
- NOTE: These paragraphs takes precedence over other sections of the FBC.

Hospital/Nursing Home Nurse Call

- 449.3.13/450.3.17 Nurse call system. Reference The Guidelines for other requirements. **The requirements for nurse call systems as described in NFPA 99 shall not apply**

ASC

Operating and Recovery Rooms

- 451.3.2 One operating room that has a minimum clear floor area of **270 square feet**. Only this size or larger operating room(s) shall be listed as an operating room(s) for purposes of licensure.
- 451.3.2.1 If provided, smaller operating rooms, and all procedure, examination or treatment rooms shall meet the requirements for these rooms as described in The Guidelines.
- 451.3.3.1 Only the phase I post-anesthesia recovery positions, as described in The Guidelines, will be listed as recovery positions for purposes of licensure.

ASC Medical Gas

- 451.3.15 Medical gas. There shall be a piped medical gas installation in the licensed operating room of the ASC that shall comply with the requirements of NFPA 99 Health Care Facilities Code for a Category 1 piped gas and vacuum system.

ASC

Fire Alarm

- 451.3.2.2 In lieu of audible alarm signals, visible alarm-indicating appliances shall be permitted to be used in critical care areas such as the operating room suite and the phase I recovery suite.
- NOTE: Although not in the Life Safety Code, local and federal fire authorities may permit this.

Section 464

Assisted Living Facilities

- Small Facilities that are 16 or fewer must meet only the requirements of section 464
- Large Facilities more than 16 licensed beds must meet Section 464
- And *The Guidelines for the Design and Construction of Residential Health, Care, and Support Facilities* (The Guidelines) Part 1 General, and Chapter 4.1 *Special Requirements for Assisted Living Facilities*

Assisted Living Facilities

- New HVAC Requirements:
- 464.4.2.1 Mechanical systems shall be designed to maintain dry-bulb temperatures between 70°F (18°C) and 81°F (27°C) in resident-occupied areas and in areas intended for resident occupancy. Residents who have individually controlled thermostats in their bedrooms or apartments shall be permitted to control temperatures in those areas, including maintaining temperatures outside the range stated previously.

Assisted Living Facilities

- 464.4.2.2 A new facility shall be equipped with either a permanent on-site power source to operate safe indoor air temperatures, life safety systems and equipment for resident care needs, or there shall be a permanently installed quick connect for a temporary power source for safe indoor air temperatures, life safety systems and equipment for resident care needs.
- By Rule, the temporary power source **MUST** be onsite.

Assisted Living Facilities

- See Chapter 59A-36.025, Florida Administrative Code, “Emergency Environmental Control for Assisted Living Facilities” for additional requirements.
- 464.4.2.2.1 If the alternate power source is a generator, it shall comply with the requirements of NFPA 70 for either an optional standby system or a legally required system.
- Can be operated on NATURAL GAS...but only as an additional Gen
- 464.4.2.2.2 **Gasoline shall not be permitted as a fuel source.**

Section 467

Inpatient Hospice

- Complete revision of this Section
- Clean up of older references and verbiage
- Added for window sill height
- Added rooms designed for privacy
- Added Nurse Call similar to nursing homes
- Added and Clarified Emergency Electrical System

Hospice Inpatient Sleeping Room

- 467.4.1.2 The design for privacy shall not restrict a patient's access at any time to the room entrance, resident armchair, toilet or bathroom, wardrobe, exterior window or closet.
- 467.4.2 Each patient sleeping room shall have a window(s), with a maximum sill height of 36 inches (0.914 m) for any building constructed after July 5, 2016, or door with a clear glass light in compliance with Section 1205.2 of this code. The window or door shall open directly to an atrium or to the outside of the building with a minimum of 20 feet (6.10 m) in clear and unobstructed vista measured perpendicularly from the window or door.

Hospice Emergency Electrical System

- 467.8.3.1 A Type 3 essential electrical system shall be provided in all hospice facilities as described in National Fire Protection Association Life Safety Code 99, “Health Care Facilities”, and incorporated by reference in Rule 69A-3.012, Florida Administrative Code. The emergency power for this system shall meet the requirements of a Level 2, type 10, Class 48 generator as described in National Fire Protection Association Life Safety Code 110, “Emergency Standby Power Systems”, and incorporated by reference in Rule 69A-3.012, Florida Administrative Code.
- 467.8.3.2 The essential electrical system shall have at a minimum one automatic transfer switch. Separate electrical branches are not required.

Section 469

Office Surgery

- 469.2.1.2 Part 1 and Part 2: Outpatient Facility Types
- Chapter 2.1, Common Elements for Outpatient Facilities of The Guidelines for Design and Construction of Outpatient Facilities

NEW CODES AND STANDARDS

AHCA VIRTUAL DESIGN & CONSTRUCTION SEMINAR

NOVEMBER 16 -18, 2020

Thank you for your attention!

