





2023 Florida Building Code was updated based on...

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### 2023 FLORIDA BUILDING CODE ELECTRICAL REQUIREMENTS

Code Basis	State Amendment
2020 NEC	✓ no
2019 NFPA 72	✓ no
2021 IRC	✓ yes
2021 IBC	✓ yes
2021 IECC	✓ yes

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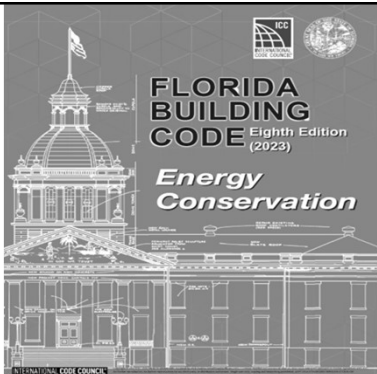
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**SECTION C405  
ELECTRICAL POWER AND LIGHTING  
COMMERCIAL SYSTEMS**

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**New – Walk-in cooler lighting,  
C405.1.1**

New provisions were added for a minimum light efficacy of 40 lumens per watt in walk-in coolers, walk-in freezers, refrigerated warehouse coolers, and refrigerated warehouse freezers.

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### New – Walk-in cooler lighting, C405.1.1

A device must turn off the lights within 15 minutes when the space is not occupied.

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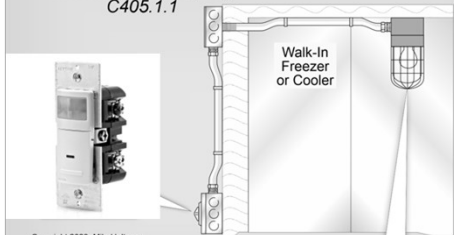
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### Florida Building Energy Code Walk-In Cooler Lighting C405.1.1



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Lights in walk-in coolers, walk-in freezers, refrigerated warehouse coolers and freezers must have an efficacy of not less than 40 lumens per watt. A device must turn off lights within 15 minutes when the space is not occupied.

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- APPLICATIONS:**
- Food processing facilities
  - Parking structures
  - Industrial locations
  - Meat/Wool Sheds

**SPECIFICATIONS:**  
**LED**  
 Length: 23.0"  
 Width: 3.1"  
 Depth: 1.1"  
 Weight: 3.33 lbs  
**LED**  
 Length: 43.2"  
 Width: 3.1"  
 Depth: 1.1"  
 Weight: 4.41 lbs

**WARRANTY LED VAPOR TIGHT**

Warranty LED Vapor Light Fixtures are designed to save energy and meet your lighting requirements in harsher than normal environments. They are vandal resistant and can be used indoors or outdoors. They provide superior light distribution and are intended for applications where moisture and/or dust may be present.

**FEATURES:**

- Wattage available: 20W, 30W and 52W
- Lifetime: 100,000 hours
- Minimum 3' beam
- 30° beam spread
- The 3.33' mounting height contributes
- The product can dim to 50%
- Voltage: 120-277V
- CRI: 90
- CCT: 3000K
- Efficacy: 110lm/W
- DLC Premium Listed
- 5-year warranty
- US 120V suitable for wet locations
- US 8750 LED equipment in Lighting Products
- Temperature Range: 41°F to 147°F (5°C to 122°F)

**MOUNTING OPTIONS:**

- Surface Mounting



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**Change – Occupant Sensor Control  
Function C405.2.1.1**

Modified an exception that full automatic-on controls with no manual control are allowed in areas where the manual operation would endanger occupant safety or security.

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**Change – Occupant Sensor Control  
Function C405.2.1.1**

Exception: Full automatic-on controls with no manual control shall be permitted in corridors, interior parking areas, stairways, restrooms, locker rooms, lobbies, library stacks and areas where manual operation would endanger occupant safety or security.

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**New - Occupant sensor control  
function in corridors, C405.2.1.4**

Occupant sensor controls in corridor spaces must uniformly reduce lighting power to an unoccupied set point not exceeding 50% of full power within 20 minutes after all occupants have left the room.

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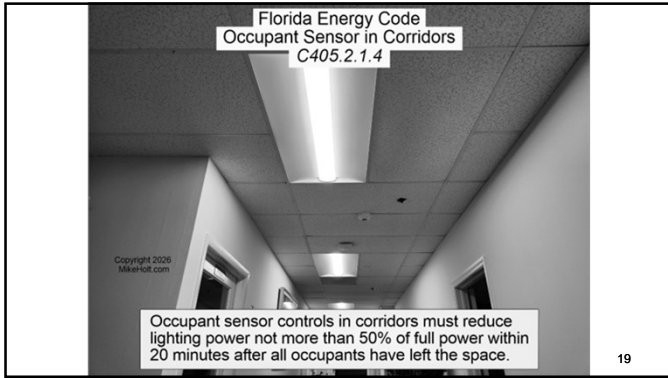
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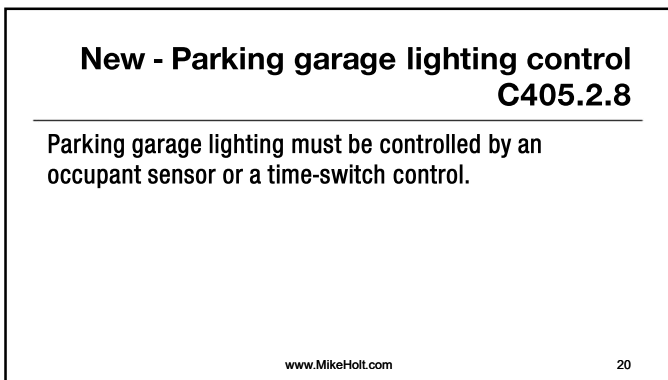
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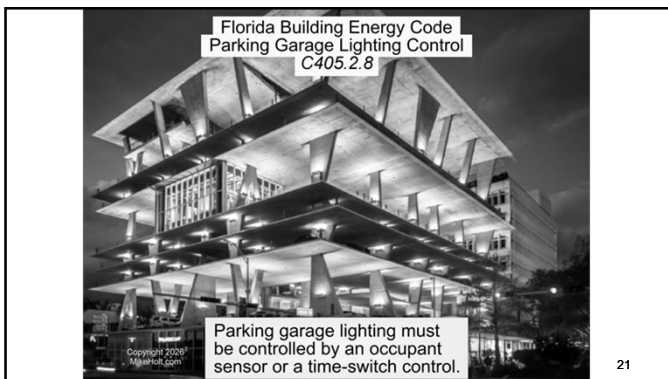
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**New - Electric Vehicle Charging Provisions Commercial Construction, Appendix CC**

If adopted new commercial building must comply with the following:

- CC103.1 Facilitate future installation of EVSE per NEC
- CC103.2, EV-ready spaces and EV-capable spaces must be provided per Table CC103.2.
- CC103.3, Plans must indicate the wiring method and the location of future EV spaces and EVSE.

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**EV READY SPACE DEFINITION**

A designated parking space that is provided with one 40A, 208V or 240V branch circuit for EVSE. The circuit shall terminate in a suitable termination point such as a receptacle, outlet box, enclosure or a hardwired EVSE, and be located in close proximity to the proposed location of the EV parking spaces.

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**EV CAPABLE SPACE DEFINITION**

Electrical distribution equipment capacity and space to support a minimum 40A, 208V or 240V branch circuit for each EV parking space, and the installation of necessary wiring methods and materials to supply EVSE.

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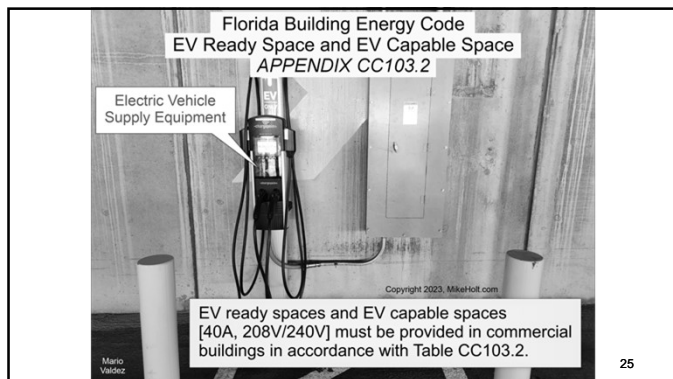
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**New - Electric Vehicle Charging  
New commercial buildings, CC103.2**

The electrical distribution equipment circuit directory shall identify the spaces as “EV Capable” or “EV Ready.” The box or enclosure provided for future EVSE shall be marked “For EVSE Use.” The marking shall comply with NFPA 70, Section 110.21(B).

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TABLE CC103.2 EV READY SPACE AND EV CAPABLE SPACE REQUIREMENTS

TOTAL NUMBER OF PARKING SPACES	MINIMUM NUMBER OF EV READY SPACES	MINIMUM NUMBER OF EV CAPABLE SPACES
1	1	0
2-10	2	0
11-15	2	3
16-20	2	4
21-25	2	5
26+	2	20% of total parking spaces

**CC103.3 Identification.**  
Construction documents shall indicate the raceway or cable assembly termination point and the proposed location of future EV spaces and EVSE. Construction documents shall also provide information on the wiring methods, wiring schematics and electrical load calculations to verify that the service capacity and premises wiring system have sufficient capacity to simultaneously charge all EVs at all required EV spaces at the full rating of the EVSE.

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**2023 Florida Energy Code,  
Commercial  
Changes Summary**

- Walk-in cooler lighting requirements added to C405.1.1.
- Occupant sensor controls now required for corridors per C405.2.1 and C405.2.1.4
- Lighting controls now required for parking garages per C405.2.8.
- New Appendix CC covering “Electric Vehicle Charging Provisions For New Commercial Construction.”

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**SECTION R404  
ELECTRICAL POWER AND LIGHTING  
RESIDENTIAL SYSTEMS**

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**New - Air-sealed electrical and  
communication boxes, RE402.4.6**

New section adds sealing, insulation, marking, and installation requirements for air-sealed electrical and communication boxes that penetrate the building thermal envelope.

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## BUILDING ENVELOPE DEFINITION

The basement walls, exterior walls, floors, ceilings, roofs and any other building element assemblies that enclose conditioned space or provide a boundary between conditioned space and exempt or unconditioned space.

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Florida Building Energy Code  
Air-Sealed Electrical Boxes  
R402.4.6

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Electrical boxes that penetrate the air barrier of the building envelope must be caulked, taped, gasketed, or air-sealed at the element being penetrated.

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## New - Air-sealed electrical and communication boxes, RE402.4.6

Air-sealed boxes shall be marked in accordance with NEMA OS 4. Air-sealed boxes shall be installed in accordance with the manufacturer's instructions.

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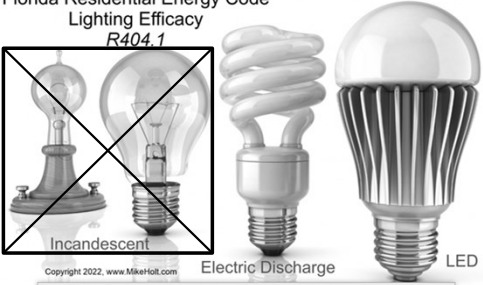
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Florida Residential Energy Code  
Lighting Efficacy  
R404.1



Incandescent Electric Discharge LED

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100% of permanently installed luminaires, excluding those in kitchen appliances, must utilize lamps with an efficacy of not less than 65 lumens-per-watt.

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**New - Electric Vehicle Charging Provisions Residential Construction, Appendix RF**

New appendix specifies electric vehicle charging provisions for one- and two-family dwellings and townhouses, including provision for future installation of EVSE, a raceway, and service capacity.

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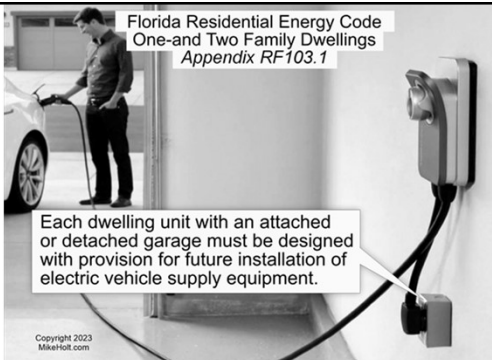
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Florida Residential Energy Code  
One- and Two Family Dwellings  
Appendix RF103.1



Each dwelling unit with an attached or detached garage must be designed with provision for future installation of electric vehicle supply equipment.

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### New - Electric Vehicle Charging Provisions Residential Construction, Appendix RF

**RF103.2 Raceway.**

A minimum trade size 1 raceway shall be installed for a branch circuit for an EVSE originating at the panel and terminating in a enclosure. The enclosure provided for the future EVSE shall be labeled "EV CAPABLE" and comply with NFPA 70 Section 110.21(B).

**RF103.3 Service capacity.**

The panel for the EVSE branch circuit shall be provided with open space for a two-pole 40A overcurrent protective device that is identified in the panel circuit directory as "EV CAPABLE."

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### 2023 Florida Energy Code, Residential Changes Summary

- Air barrier and insulation requirements for electrical and communication boxes in Section R402.4.6.
- R404.1 has been expanded from 90% to 100% of all permanently installed luminaires.
- New Appendix RF covering "Electric Vehicle Charing Provisions for One- and Two-Family Dwellings and Townhouse."

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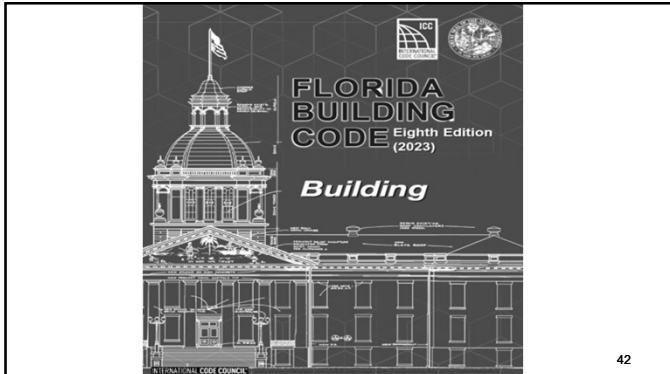
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**CHAPTER 4**  
**SPECIAL DETAILED REQUIREMENTS**  
**BASED ON OCCUPANCY/USE**

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**SECTION 454**  
**SWIMMING POOLS**

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**New – Surf Pools**  
**454.1.12.7**

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New construction criteria have been added for electrical systems for artificial lagoons.

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**New – Surf Pools  
454.1.12.7**

The term “surf pool” means a pool that is designed to generate waves dedicated to the activity of surfing on a surfboard or a surfing device commonly used in the ocean and intended for sport, as opposed to the general play intent of wave pools, or other large-scale public swimming pools.

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Electrical installations, including the bonding and grounding of components, must comply with NEC 682 which covers artificial made bodies of water. Outlets supplying pump motors connected to single-phase 120V through 240V branch circuits and outlets supplying other electrical equipment rated 15A or 20A must be GFCI protected.

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**CHAPTER 9  
FIRE PROTECTION SYSTEMS**

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**SECTION 907  
FIRE ALARM SYSTEMS**

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**New – Group S (fire alarm detection),  
907.2.25**

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New section added requiring a manual fire alarm system that activates the occupant notification system to be installed in Group S public and self-storage occupancies three stories or greater in height for interior corridors and common areas.

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Florida Building Code  
Fire Alarm Detection  
907.2.25

A manual fire alarm system is required to be installed public and self-storage occupancies three stories or greater in height for interior corridors and common areas.

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**New – Group S (fire alarm detection),  
907.2.25**

An exception to manual fire alarm boxes is provided where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

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**SECTION 913  
FIRE PUMPS**

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### Change - Circuits supplying fire pumps 913.2.2

Encasement in a minimum of 2 inches of concrete has been added as a new method for protecting cables used for survivability of circuits supplying fire pumps.

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### Change - Circuits supplying fire pumps 913.2.2

Cables supplying fire pumps shall be one of the following:

1. Cables listed in accordance with UL 2196 with a fire-resistance rating of not less than 1 hour.
2. Electrical circuit protective systems with a fire-resistance rating of not less than 1 hour, installed in accordance with their listing requirements.
3. Construction having a fire-resistance rating of not less than 1 hour.
4. Cable or raceway encased in a minimum of 2 inches of concrete.

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#### Lifeline® MC: Two-Hour Fire Resistive Cables Fire Resistive Cable for Survivability in a Fire



##### Applications

Lifeline® MC fire resistive cables were designed to meet and have successfully passed the two-hour fire rating certification test per UL 2196, Standard for Tests for Fire Resistive Cables.

Lifeline® MC Cables can be used in the following applications to provide survivability during a fire:

- Tall Buildings
- Emergency Feeder Cables
- Stairwell Pressurization
- Elevators / OED
- Emergency lighting for roadway and transit tunnels when cables include optional LSZH jacket over armor
- Fire Pumps
- Ventilating Fans
- Exit Lighting

##### Specifications and Ratings

- Listed to UL 1569, Metal Clad Cables, as the following type:
  - Type MC 600 Volt, Rated 90°C
  - For Wet Locations
  - For Cable Tray Use IEEE 1202/ FT4 Rated, ST1 Limited Smoke
- Classified to UL 2196, Standard for Tests for Fire Resistive Cables, for two-hours installations
- Electrical Circuit Integrity System (FHIT) No. 50 of the UL Fire Resistance Directory
- NFPA 70, NFPA 101 compliant
- Corrugated Copper Armor meets Equipment Grounding Conductor requirements of NEC Table 250.122

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**Change - Circuits supplying fire pumps  
913.2.2**

A new exception to the required protection of cables has been added for cables, located within a fire pump room or generator room which is separated from the remainder of the occupancy with fire-resistance-rated construction.

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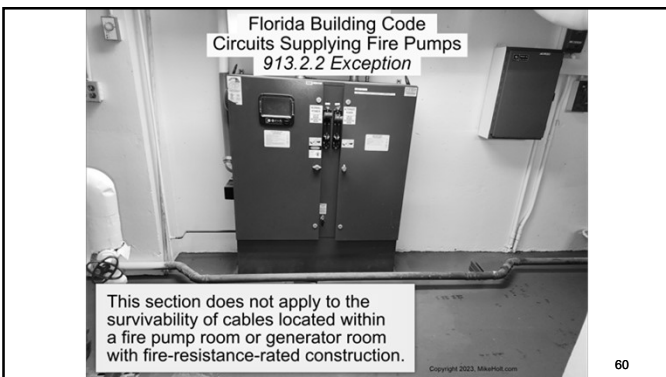
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## CHAPTER 10 MEANS OF EGRESS

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### New – Electrical Rooms 1006.2.2.4

- New section added requiring the location and number of exit or exit access doorways to be provided for electrical rooms in accordance with NEC 110.26.

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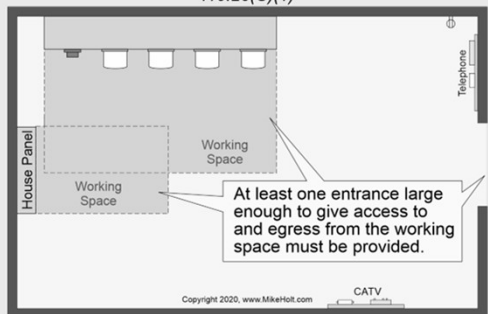
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Requirements for Electrical Installations  
Access to and Egress from Working Space, Minimum Required  
110.26(C)(1)



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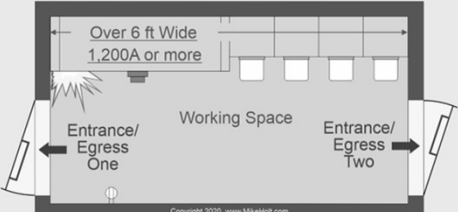
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**Requirements for Electrical Installations  
Access to and Egress from Working Space, Large Equipment  
110.26(C)(2)(1)**



Where equipment over 6 ft wide rated 1,200A or more contains overcurrent, switching, or control devices, an entrance to and egress from the required working space not less than 24 in. wide and 6½ ft high is required at each end of the working space.

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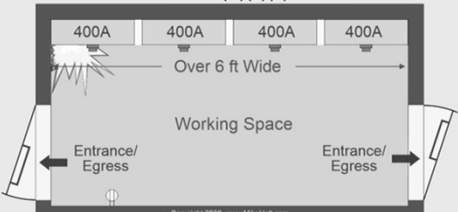
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**Requirements for Electrical Installations, Access to and Egress from Working Space, Combined Service Equipment  
110.26(C)(2)(2)**



Service disconnecting means installed per 230.71(B) with a combined rating of 1,200A or more and over 6 ft wide requires an entrance to and egress from the required working space not less than 24 in. wide and 6½ ft high at each end of the working space.

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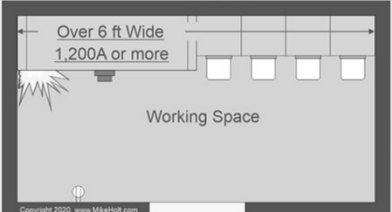
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**Requirements for Electrical Installations, Entrance to and Egress from Working Space, Unobstructed Egress  
110.26(C)(2)(a)**



A single entrance is permitted where the location allows a continuous and unobstructed way of egress travel.

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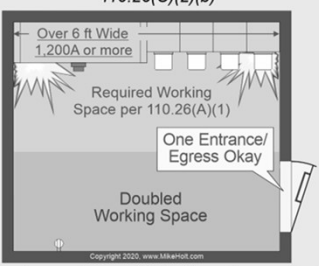
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Requirements for Electrical Installations, Entrances to and Egress from Working Space, Large Equipment, Double Working Space  
110.26(C)(2)(b)



One entrance/egress is permitted where the required working space is doubled, and equipment is located so the edge of the entrance is no closer than the required working space distance.

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**New – Electrical Rooms**  
**1006.2.2.4**

- Panic hardware is also required in accordance with Section 1010.2.9.2.

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Requirements for Electrical Installations, Entrance to and Egress from Working Space, Fire Exit Hardware on Doors  
110.26(C)(3)



Personnel doors located less than 25 ft from the nearest edge of working space for equipment rated 800A or more containing overcurrent, switching, or control devices must have listed panic or listed fire exit hardware.

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**New - Illumination level under normal power, 1008.2.1**

- New language has been added requiring that the illumination level along exit access stairways, exit stairways, and their required landings to be not less than 10 footcandles at the walking surface when the stairway is in use.

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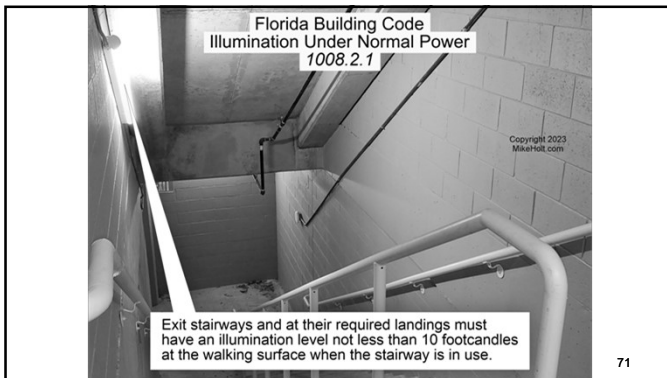
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**Chapter 15**  
**Roof Assemblies / Rooftop Structures**

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**New - Cable and Raceway under Roof Decks, 1510.12**

New section added requiring conduit and cables installed below the roof deck to have a minimum clearance of 1 ½ inch from the lowest surface of the roof deck except where they penetrate the roof deck.

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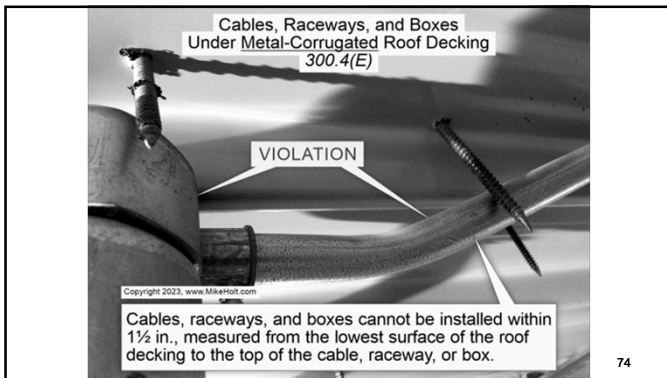
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**New - Cable and Raceway under Roof Decks, 1510.12**

An exception to this requirement is provided for structural concrete decks.

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**New - Cable and Raceway under Roof Decks, 1510.12**

Exception: Lines, pipes, conduit and cables installed under structural concrete decks.

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**2023 Florida Building Code Changes Summary**

- 454.1.12.7 adds new construction criteria for artificial lagoons.
- 907.5.25 now requires a manual fire alarm system for storage occupancies.
- New List Item #4 and Exception to 913.2.2 regarding circuits supplying fire pumps.
- 1006.2.2.4 number of exit doorways to comply with 110.26
- 1008.2.1 the illumination level shall not be less than 10 footcandles at the walking surface when the stairway is in use.
- 1510.12 added new exception for raceway under roof deck.

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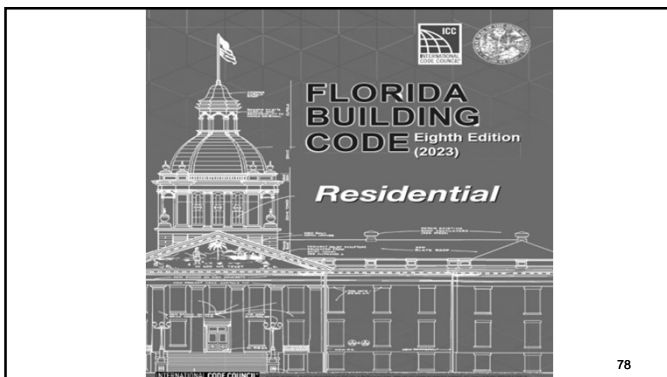
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### Revision – Smoke Alarm Near Cooking Appliance, R314.3.1

Section revised to prohibit smoke alarms listed and marked “helps reduce cooking nuisance alarms” from being installed less than 6 feet (1828 mm) horizontally from a permanently installed cooking appliance.

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### Revision – Smoke Alarm Near Cooking Appliance, R314.3.1

1. Ionization smoke alarms shall not be installed less than 20 feet horizontally from a permanently installed cooking appliance.
2. Ionization smoke alarms with an alarm-silencing switch shall not be installed less than 10 feet horizontally from a permanently installed cooking appliance.
3. Photoelectric smoke alarms shall not be installed less than 6 feet horizontally from a permanently installed cooking appliance.
4. Smoke alarms listed and marked “helps reduce cooking nuisance alarms” shall not be installed less than 6 feet horizontally from a permanently installed cooking appliance.

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### Kidde's New Smoke Alarm Designed to Reduce Cooking Nuisance Alarms

The new Kidde smoke alarms are said to be the first to meet the new UL 217 safety standard for distinguishing real fires from harmless smoke.

May 21, 2019 Lisa Montgomery Jump to Comments

MEBANE, N.C. — Nuisance smoke alarms continue to be a problem due to certain detectors not being able to tell the difference between the between smoke from a charred roast in the oven and a genuine, life-threatening, property-destroying house fire.

But that's changing, thanks to new UL safety standards set to go into effect about this time next year.

Specifically, the UL Standard for Smoke Alarms, UL 217, 8th Edition, dictates that smoke alarms be able to differentiate between conditions, ignoring cooking smoke and responding to actual fire emergencies — a move that will make smoke alarms a more effective tool at saving lives.



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### New- Stationary Engine Generators R329

- New section added requiring stationary fuel engine generators to comply with the listing instructions and the NEC.

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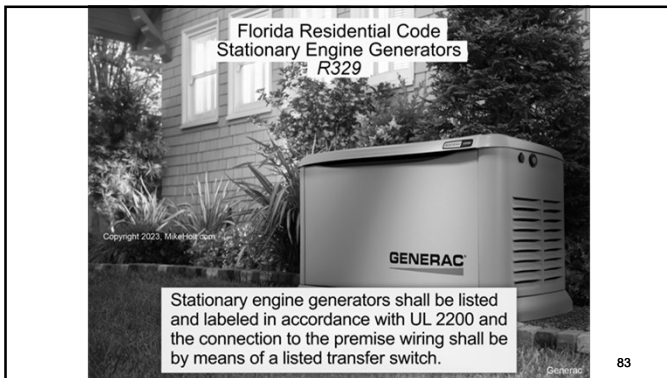
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### New- GFCI Protection for Outdoor Outlets, E3408

- New section added matching TIA 20-19 that modifies section 210.8(F) of the 2020 NEC.
- A new exception has been added stating that GFCI protection is not required for listed and labeled HVAC equipment.

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### New- GFCI Protection for Outdoor Outlets, E3408

- 210.8(F) GFCI Protection for Outdoor Outlets. All outdoor outlets for dwellings, other than those covered in 210.8(A)(3), Ex (3) that are supplied by single-phase branch circuits rated 150 volts to ground or less, 50A or less, shall have GFCI protection.
- Ex 1: GFCI protection shall not be required on lighting outlets other than those covered in 210.8(C).

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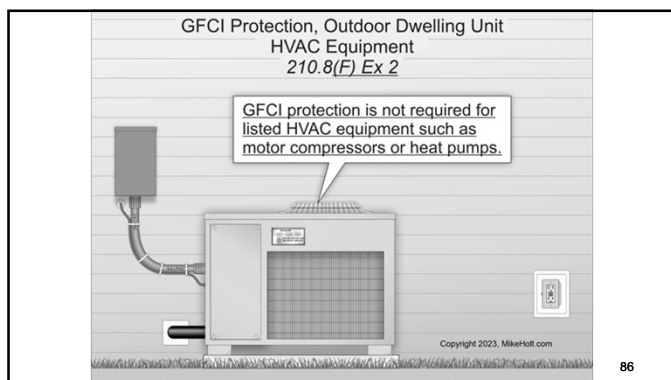
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### 2023 Florida Residential Code Changes Summary

- New List Item #4 to R314.3.1 regarding smoke alarms listed and marked “helps reduce cooking nuisance alarms.”
- New Section R329 covering Stationary Generator Systems.
- E3408.1 added to mirror TIA 20-19 to section 210.8(F) of the 2020 NEC.

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**Questions ?**

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