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Career Development

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Significant Changes to CFSC Part III

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Use of Office of Education and Data Management (OEDM) training materials must be approved in writing by the State of Connecticut, Department of Administrative Services' Office of Communications.

Quick Reminder

- Fire Protection Systems Testing
 - Verify testing is being conducted as required
 - Review Reports
 - Make sure deficiencies are being corrected

*Remember that we rely
on the 3rd party
inspection reports!*

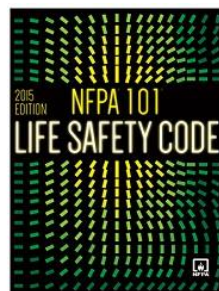


This seminar will present the significant changes to the 2015 International Fire Code (IFC) that was adopted as Part III of the Connecticut Fire Safety Code (CFSC).

Review

- Parts of the CFSC
 - Part I – Administration
 - Part II – General
 - Part III – New Construction, renovations, or change of use & new buildings
 - Part IV – Existing buildings/occupancies

Parent Documents



Part I - Administrative

- Information concerning how the code works
- Important sections to know:
 - How does the code apply to detached one and two family dwellings and townhouses? (100.5; 100.6)
 - Does the code apply to outdoor bleachers? (100.7)
 - Does the code apply to federal property? (100.8)
 - Does the code apply to public service companies? (100.9)

Who is the AHJ?

- SFM – is the AHJ for proper administration, application, interpretation and modifications (103 a)
 - SFM enforces code on state property
 - Decision of SFM can be appealed to Codes and Standards Committee
- LFM – makes the initial determination (103 b)
 - Decision of the LFM can be appealed to the SFM or to Codes and Standards Committee.

- Plans submittal and review (104)
- Building Permit Approval (105)
- Variations or exemptions (106)



Inspections (107)

- Frequency of inspections (as allowed by 29-305)
 - Annual: All R, A-1, A-2, E, H-1, I-1
 - Biennial: A-3, H-2, I-2, I-3, I-4, B-Medical, B-College
 - Triennial: B, H-3, M, S-1, A-4, A-5
 - Quadrennial: F-1, F-2, H-4, H-5, S-2, U
- Also allows the LFM to conduct inspections of construction sites.

- Building Official Reports (108)
- Certificates of Occupancy (109)
- Application (110)
- Changes of Occupancy or Use (111)

CFSC Part II – General/Referenced Publications

- Application
 - CFSC takes precedence over referenced codes or standard.
 - Please note the year of the referenced standard.
- Referenced Publications
 - **Note that the referenced publications are found with Chapter 80 of the IFC and Chapter 2 of the LSC but are modified by Section 202.1 to apply to new and existing.**

Part III – New Construction, Renovations, or Change of Use and New Buildings



Alternative Compliance (101.1.3)

- **2015 International Existing Building Code (IEBC)**
 - Applies only to existing buildings being renovated or undergoing use change.
 - Amendment to IEBC requires compliance with Means of Egress provisions of Part IV CFSC.
 - Non-work areas must comply with Part IV CFSC.
- **Many sections of Chapter 1 have been deleted.**
Take care not to try and apply them.

Definitions (202)

- New Definitions have been added
 - Foster Care Facilities: More than 3 children, 3 y.o. or younger.
 - Night Club: open at night. Has music, dancing, or a show, and may serve alcoholic drinks and food.
 - Use Group definitions and examples have also been added.

Chapter 3 – General Precautions Against Fire

- Most sections have been deleted by CT.
- Sections retained:
 - 301 – General
 - 302 – Definitions
 - 312 – Vehicle Impact Protection
 - 316 – Hazards to Firefighters
 - 317 – Rooftop Gardens and Landscaped Roofs.

312 – Vehicle Impact Protection

- **312.1 General.** Vehicle impact protection required by this code shall be provided by posts that comply with Section 312.2 or by other *approved* physical barriers that comply with Section 312.3.

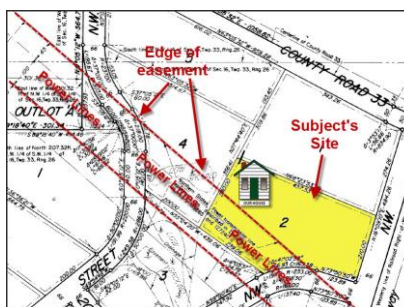
- Provides prescriptive requirements for posts
- Allows other types of barriers.



316 - Hazards to Firefighters

- Trapdoors to be kept closed (316.1)
- Shaftway Markings (316.2)
 - Interior and exterior openings to be labeled
 - plainly marked with the word SHAFTWAY in red letters not less than 6 inches (152 mm) high on a white background.
- 316.3 Pitfalls. The intentional design or *alteration* of buildings to disable, injure, maim or kill intruders is prohibited.
- Roof Obstructions (316.4)
- Security Devices (316.5)

- **316.6.1 Structures.** Structures shall not be constructed within the utility easement beneath high-voltage transmission lines.
- **Exception:** Restrooms and unoccupied telecommunication structures of noncombustible construction less than 15 feet (4572 mm) in height.



- **316.6.2 Outdoor storage.** Outdoor storage within the utility easement underneath high-voltage transmission lines shall be limited to noncombustible material. Storage of hazardous materials including, but not limited to, flammable and *combustible liquids* is prohibited.
- **Exception:** Combustible storage, including vehicles and fuel storage for backup power equipment serving public utility equipment, is allowed, provided that a plan indicating the storage configuration is submitted and *approved*.



Chapter 4 – Special Detailed Requirements Based Upon Use and Occupancy

- Section 401.1 Brings the Building Code requirements into the CFSC for enforcement by the LFM.
 - Concurrent jurisdiction with the Building Official
- Amendments reflect only the Connecticut changes
 - You must also have Chapter 4 of the CSBC for so that you have ALL of the provisions

Chapter 4 contains provisions that are found no where else in the code for new construction.

When you are doing a plan review, it is recommended that you check Chapter 4 requirements before you begin the review.

401 Scope	413 Combustible Storage
402 Covered Mall and Open Mall Buildings	414 Hazardous Materials
403 High-rise Buildings	415 Groups H-1, H-2, H-3, H-4 and H-5
404 Atriums	416 Application of Flammable Finishes
405 Underground Buildings	417 Drying Rooms
406 Motor-vehicle-related Occupancies	418 Organic Coatings
407 Group I-2	419 Live/work Units
408 Group I-3	420 Groups I-1, R-1, R-2, R-3 and R-4
409 Motion Picture Projection Rooms	421 Hydrogen Fuel Gas Rooms
410 Stages, Platforms and Technical Production Areas	422 Ambulatory Care Facilities
411 Special Amusement Buildings	423 Storm Shelters
412 Aircraft-related Occupancies	424 Children's Play Structures
	425 Hyperbaric Facilities
	426 Combustible Dusts,

Chapter 4 Sections Added

- Section 427 – Group E Requirements
- Section 428 – Mezzanines and Equipment Platforms
- Section 429 – Group R-1 Bed & Breakfast Establishments
- Section 430 – Incidental Uses

(Add) Table 430 Incidental Uses

ROOM OR AREA	SEPARATION AND/OR PROTECTION
Furnace room where any piece of equipment is over 400,000 Btu per hour input	1 hour or provide automatic sprinkler system
Rooms with any boiler over 15 psi and 10 horsepower	1 hour or provide automatic sprinkler system
Refrigerant machinery room	1 hour or provide automatic sprinkler system
Hydrogen fuel gas rooms, not classified as Group H	1-hour in Group B, F, M, S and U occupancies; 2-hours in Group A, E, I and R occupancies
Incinerator rooms	2 hours and automatic sprinkler system
Paint shops, not classified as Group H, located in occupancies other than Group F	2 hours; or 1 hour and provide automatic sprinkler system
In Group E occupancies, Laboratories and vocational shops not classified as Group H	1 hour or provide automatic sprinkler system
In Group I-2 occupancies, Laboratories not classified as Group H	1 hour and provide automatic sprinkler system
In ambulatory care facilities, laboratories not classified as group H	1 hour or provide automatic sprinkler system
Laundry rooms over 100 square feet	1 hour or provide automatic sprinkler system

In Groups I-2, laundry rooms over 100 square feet	1 hour
Group I-3 cells and Group I-2 patient rooms equipped with padded surfaces	1 hour
In Group I-2, physical plant maintenance shops	1 hour
In ambulatory care facilities or group I-2 occupancies, waste and linen collection rooms with containers that have an aggregate volume of 10 cubic feet or greater	1 hour
In other than ambulatory care facilities and group I-2 occupancies, waste and linen collection rooms over 100 square feet	1 hour or provide automatic sprinkler system
In ambulatory care facilities or group I-2 occupancies, storage rooms greater than 100 square feet	1 hour
Stationary lead-acid battery systems having a liquid electrolyte capacity of more than 50 gallons for flooded lead-acid, nickel cadmium or VRLA, or more than 1,000 pounds for lithium-ion and lithium metal polymer used for facility standby power, emergency power or uninterruptable power supplies	1 hour in Group B, F, M, S and U occupancies; 2 hours in Group A, E, I and R occupancies
Storage rooms over 100 square feet	1 hour or provide automatic sprinkler system

For SI: 1 square foot = 0.0929m², 1 pound per square inch(ksi) = 6.9 kPa, 1 British thermal unit (Btu)=0.293 watts, 1 horsepower = 746 watts, 1 gallon = 3.785 L, 1 cubic foot = 0.0283 meters cubed

Chapter 5 Fire Service Features

- Sections retained by Connecticut
 - 501 – General
 - 502 – Definitions
 - 503 – Fire Apparatus Access Roads
 - 504 – Access to Building Openings and Roofs
 - 508 – Fire Command Center
 - 509 – Fire Protection and Utility Equipment Identification and Access
 - 510 – Emergency Responder Radio Coverage

503 – Fire Apparatus Access Roads



- 503.1 Fire apparatus access roads shall extend to within 150 feet of all portions of the exterior walls
 - Exceptions
 - Sprinkler protected buildings
 - Unusual hardships
 - Solar voltaic power generation facilities
 - Dimensions
 - Width: 20 feet
 - Vertical: 13'-6"
 - LFM may permit modifications

- 503.2.3: Surface shall support fire apparatus in all – weather driving capabilities.
- 503.2.4: Required turning radius to be determined by the LFM.
- 503.2.5: Dead ends limited to 150 feet with an approved area for turning fire apparatus.
- 503.2.6: Bridges must support load and be maintained.
- 503.2.7: Grade to be established by the LFM.
- 503.2.8: Angle of approach to be established by LFM.

- 503.3: Marking: “NO PARKING – FIRE LANE signs to be provided and maintained.
- 503.4: Widths and clearances to be maintained without obstruction.
 - 503.4.1: Traffic calming devices prohibited unless approved by the LFM
- 503.5 Required gates or barricades: LFM may require gates and barricades . Electric operators tested and listed to UL 325
- 503.6 Security Gates: Approved by LFM and maintained.

504 – Access to Building Openings and Roofs



- Exterior doors and their function shall not be eliminated with LFM approval.
- Sign required. Dimensions per 504.2
- Stairway access to roof required in new buildings 4 or more stories with slopes less than 4:12
- Stairway shall be marked at all floors.

508- Fire Command Center

- Required in high rise
 - Location approved by fire chief
 - Enclosed in 1-hour rating
 - At least 200 sq. ft.
 - Layout approved
 - Storage prohibited



508.1.6 Required Features

- Voice Evacuation Unit
- FD Communications System
- Fire Alarm System Annunciator
- Elevator Location Annunciator
- HVAC Status Indicators and Controls
- FD Control Panel for Smoke Evac
- Controls to unlock stair doors simultaneously
- Sprinkler valve and water-flow detector displays
- Emergency and Standby Power Status Indicators
- Telephone
- Fire Pump Status Indicators
- Building Plans

Building Information Card

- Containing:
 - General building information
 - Name
 - Height
 - Use groups
 - Building population by day and by night
 - Building Construction Info
 - Stairways information
 - Building Services Information
 - Fire Protection Systems Information
 - Hazardous Areas Information

510 – Emergency Responder Radio Coverage



- All new buildings shall have approved radio coverage for emergency responders within the building.
 - Exceptions:
 - Where wired communications per 907.2.13.2 is installed
 - Where LFM determines it is not required
 - Where radio coverage will have negative impact

• 510.4: Technical Requirements

- Min -95 dBm receivable in building and received at agency radio system when transmitted from the building.
- Amplification system allowed
 - Technical Criteria document will be maintained by the LFM
 - Standby power required.
- Signal Booster Requirements
 - Water proof cabinet
 - Electrically supervised, monitored
 - FCC Certification prior to installation.

- Approval prior to installation
- Acceptance Test Procedure
 - 90% coverage
 - Divide each floor into 20 equal parts
 - Calibrated radio
 - Failure of not more than 2 nonadjacent areas shall not result in failure of the test.
 - Test area location in the center of each test area.
- System shall be maintained operational at all times
 - Inspected and tested annually. Report sent to LFM

Chapter 6 – Building Services and Systems

- 603-Fuel-Fired Appliances
- 604-Emergency & Standby Power
- 605-Electrical Equip.
- 606-Mechanical Refrigeration
- 607 – Elevators
- 608-Storage Battery Systems
- 609-Commercial Hoods
- 610-Cooking Oil
- 611-Hyperbaric Facilities



603 – Fuel-Fired Appliances

- General Rule: Install in accordance with standard, instructions and listing.
- 603.4 Portable unvented heaters
 - Prohibited in A, E, I, R-1, R-2, R-3, R-4
 - Exceptions: 1 & 2 Family Dwellings, outdoor appliances
 - Shall not be located in or obtain combustion air from sleeping rooms, bathrooms, toilet rooms, or storage closets.

603.4.2 Portable Outdoor Gas-Fired Heating Appliances

- Prohibited locations:
 - Inside any occupancy where connected to the fuel gas container
 - Inside tents, canopies and membrane structures
 - On exterior balconies
 - Except as permitted by section 6.20 of NFPA 58.
 - 5' clearance required to building and exits



- Portable outdoor gas-fired heater must be listed and utilize fuel gas container that is integral to the appliance.
- Installed and maintained according to instructions
- Tip-over switch required
- Approved fuel gas container
 - Change-out prohibited when public is present
 - Capacity limited to 20-pounds
 - Indoor storage of containers prohibited.

603.7 Discontinuing of Operation

- LFM is authorized to order that measures be taken to prevent the operation of any existing stove,, oven, furnace, boiler, or any other heat-producing device or appliance found to be defective or in violation of the code.
 - After notice is given, the LFM is authorized to take measures to prevent the operation of appliance, without notice, when inspection shows an immediate fire hazard or when imperiling human life.

- 603.9 Gas Meters

- Above-group gas meters, regulators, and piping subject to damage shall be protected in accordance with Section 312.



604 – Emergency and Standby Power Systems

- Installed in accordance with NEC, NFPA 110, or NFPA 111
- Load transfer within 10 seconds for emergency power and 60 seconds for standby power.
- Must provide power for at least 2 hours before re-fueling or re-charging



(Add) **604.2.17 Electric fire pumps**

Buildings provided with standby electrical power for the purpose of continuing operations or occupancy shall provide standby power in accordance with Article 701 of the 2017 NFPA 70, National Electrical Code, portion of the State Building Code for any electric fire pump installed to provide an adequate water supply or minimum operating pressure to a required automatic sprinkler system.

605 – Electrical Issues

- Covers a variety of common electrical issues.
- Requires that any issues with permanent wiring be brought to the attention of the Electrical Inspector



- 605.2: Illumination required in service equipment areas, electrical panel boards.
- 605.3: 30" wide X 36" deep by 78" high working clearance required in front of electric service equipment.
- Doors to electric control panel rooms required to be labeled "**ELECTRICAL ROOM**"

- 605.4: Multiplug Adapters
 - Must comply with NEC
- 605.5: Extension cords
 - Shall not be used in place of permanent wiring
 - Shall not be affixed to structure or extended through walls, ceilings, floors.
 - Ampacity not less than the rated appliance
 - Maintained in good condition. No splices, deterioration, or damage.
 - Extension cords must be grounded where serving grounded portable appliances

Portable Electric Space Heaters

(605.10)



- May be used in all occupancies except I-2
 - Exception: where heating element can not exceed 212F
- Must be listed and labeled
- Plugged directly into approved receptacle
- Shall NOT be plugged into extension cord
- Shall not be used within 3 feet of combustibles
- Operated only in areas for which they are listed

605.11 Solar Photovoltaic Power Systems

- Installed in accordance with Building Code and NEC
- Access & Pathways
 - Roof access points shall not require placement of ladders over wall openings.
 - Access points shall conflict with overhead obstructions



R-3 Photovoltaic Systems (605.11.1.2)



- Array size limited to 150' X 150'
- Multiple arrays separated by 3' wide clear access pathway.
- Hip Roofs
 - 3' clear width pathway from eave to ridge
- Shall be located not less than 3' from ridge to allow for ventilation

Other than Use R-3 (605.11.1.3)

- Minimum 6' clear perimeter around the edges of the roof
- 4' wide clearance to roof standpipe connections or ventilation hatches
- 4' clearance around roof access hatches
- At least one 4' wide pathway to parapet or roof edge
- Smoke Ventilation
 - Array size limited to 150 X 150
 - Options include 8' or 4' pathways to venting areas
- Ground mounted systems: 10' clear brush-free area.

Abandoned Plenum Wiring (605.12)

- Abandoned wires in air-handling plenums must be removed.
- Unused cables that are not labeled for future use shall be considered abandoned.

- **608 – Mechanical Refrigeration**
 - Refers to IMC for installation requirements
 - Requires:
 - Periodic Testing
 - Emergency Signs
 - Refrigerant detector
 - Remote controls
 - Emergency Stops
- **607 Elevators**
 - Refers to State Elevator Code

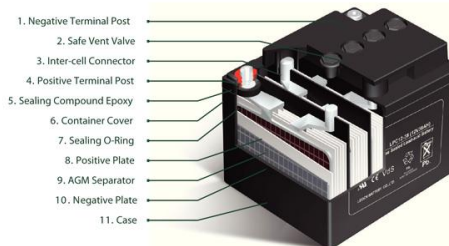
Stationary Storage Batteries (608)



- Applies to:
 - Electrolyte cap > 50 gal for flooded lead-acid, nickel cadmium, and valve-regulated lead-acid, or
 - >1,000 lbs of lithium-ion or lithium metal polymer
 - **Applies when used for standby power, emergency power, or UPS**

- Safety Caps required
 - Nonrecombinant Batteries
 - Safety Venting caps required
- **Nonrecombinant battery** – A storage **battery** in which, under conditions of normal use, hydrogen and oxygen gases created by electrolysis are vented into the air outside of the **battery**.

VRLA BATTERY CONSTRUCTION



- Recombinant Batteries

- Self-sealing flame arresting safety vents

- **"recombinant" batteries**, which means that the oxygen evolved at the positive plates will largely recombine with the hydrogen ready to evolve on the negative plates, creating water and preventing water loss ...



Other requirements

- 608.3 Thermal runaway detection or control
- (Amd) 608.4 Room construction per CSBC
- 608.5 Spill control and neutralization required for lead-acid, nickel-cadmium or other batteries with free flowing electrolyte.
- 608.6 Room ventilation
 - Monitoring of mechanical systems required
- 608.9 Smoke detection system in accordance with 907.2 required in room.

Commercial Kitchen Hoods (609)



- Designed and installed per IMC
- Required above all
 - commercial cooking appliances and
 - domestic appliances used for commercial purposes
 - that produce grease-laden vapors
 - Exception: tested appliances that produce less than 5 mg/m³ or less of grease.

• Operation and Maintenance

- Shall be in operation with grease filters in place when protected equipment is in operation
- Grease extractors shall be in operation when protected equipment is operated

**TABLE 609.3.3.1
COMMERCIAL COOKING SYSTEM INSPECTION FREQUENCY**

TYPE OF COOKING OPERATIONS	FREQUENCY OF INSPECTION
High-volume cooking operations such as 24-hour cooking, charbroiling or wok cooking	3 months
Low-volume cooking operations such as places of religious worship, seasonal businesses and senior centers	12 months
Cooking operations utilizing solid fuel-burning cooking appliances	1 month
All other cooking operations	6 months

Commercial Cooking Oil Storage

(610)



- Applies to above-ground tanks > 60 gal.
 - NFPA 30
 - Class IIIB Liquid
- Metallic tanks shall be listed
- Nonmetallic Tanks
 - Listed
 - Capacity not to exceed 220 gal.
- Venting Required

Chapter 7 Fire and Smoke Protection Features



- (Amd) 701.1 Scope

- Chapter 7 of the Fire Code governs the maintenance of the materials, systems, and assemblies used for structural fire resistance and fire-resistance rated construction.
- Chapter 7 of the CSBC also applies

Significant Sections

- 703.1 requires that fire-resistance rated construction be maintained and repaired where damaged
- Smoke dampers and smoke barrier doors shall be maintained per NFPA 105.
- Fire doors and dampers shall be maintained per NFPA 80
- Hold-open devices and closers must operate
- Doors must close and latch

- 703.3 Ceilings. No hangings from the grid system of fire rated ceiling assemblies.



Chapter 8 Interior Finishes

- (ADD) Section 809 Acoustical Ceiling Systems
 - Section added for consistency with CSBC
 - System to be designed to conform with engineering practices
 - Materials shall be installed in accordance with the manufacturers recommendations
 - Suspended systems to comply with ASTM C 635 and ASTM C 636
 - Fire-resistance rated systems to be installed per listing and the CSBC.

Chapter 9 Significant Changes

2015 CODE: 901.4.1 Required Fire Protection Systems. Fire protection systems required by this code or the *International Building Code* shall be installed, repaired, operated, tested, and maintained in accordance with this code. A fire protection system for which a design option, exception or reduction to the provisions of this code, or the *International Building Code* has been granted shall be considered to be a required system.

903.2.1.2 Group A-2 Sprinkler Requirements

- AS provided for A-2 fire areas and intervening floors where:
 - Fire area exceeds 5,000 s.f.
 - Where addition of existing A-2 creates an increase in the building area causing the aggregate A-2 area to exceed 12,000 s.f.
 - Occupant load exceeds 300
 - Occupant load exceeds 100 in dance hall, discotheques, nightclubs assembly occupancies with festival seating
 - Fire area located on floor other than LED

Portable Fire Extinguishers (906)



- 906.1 As required by the CFPC and
- 906.2 in Group R-1 Bed & Breakfasts in kitchen
 - Listed range top extinguishing unit or commercial hood with fire suppression may be used in lieu of the fire extinguisher

Fire Alarms (907)

- (Add) 907.2.11.2.2 **Alterations and Additions.** Requires that when alterations occur within Groups R-2, R-3, and R-4, smoke alarms be installed as for new dwellings.
- 907.2.11.6 **Power Source.** In new construction, AC/DC smoke alarms required. If smoke alarms with strobe lights, that are not equipped with battery back-up are used, the smoke alarm shall be connected to an emergency electrical system.

Automatic Telephone Dialing Devices (907.6.6.1)

- Requires automatic dialers to comply with CGS 28-25b (c).
- Sec. 28-25b. Public safety answering points. Automatic alarms or alerting devices. Private safety answering points. Report. Emergency medical dispatch.
 - (a) Each public safety answering point shall be capable of transmitting requests for law enforcement, fire fighting, medical, ambulance or other emergency services to a public or private safety agency that provides the requested services.
 - (b) Each public safety answering point shall be equipped with a system approved by the office for the processing of requests for emergency services from the physically disabled.
 - (c) No person shall connect to a telephone company's network any automatic alarm or other automatic alerting device which causes the number "9-1-1" to be automatically dialed and provides a prerecorded message in order to directly access emergency services, except for a device approved by the office and required by a physically disabled person to access a public safety answering point.

Electric Fire Pumps (913.5.5)

- Requires standby power for fire pumps when the building is provided with standby power for the purposes of continuing operations or occupancy.



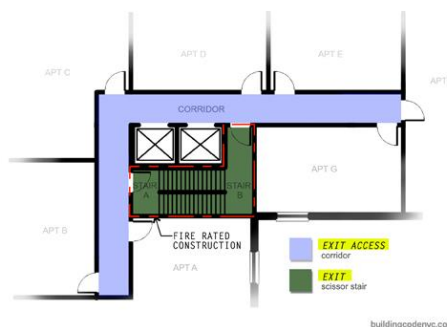
Electric fire pump

Carbon Monoxide Detectors (915)

- Where Required:
 - 915.1.1 Group I-1, I-2, I-4, R, and E where:
 - 915.1.2 Dwelling and sleeping units contain fuel burning appliances or fireplace
 - 915.1.3 Dwelling or sleeping units served by a fuel burning forced hot air furnace
 - 915.1.4 Where fuel burning appliance is located outside of a dwelling or sleeping unit
 - 915.1.5 Private Garages. Where dwelling or sleeping units are in buildings with attached private garages.
 - 915.2.3.1 Group E, located on the ceiling of rooms containing fuel burning heating equipment and within the first room or area served by the first supply-air register of a fuel fired furnace

Means of Egress (Chapter 10)

No major changes




Part IV Special Occupancies & Operations (Chapters 20 – 37)

- Ch. 20 Aviation Facilities
- Ch. 21 Dry Cleaning
- Ch. 22 Combustible Dust
- Ch. 23 Motor Fuel Dispensing and Repair
 - Refers to CFPC
- Ch. 24 Flammable Finishes
- Ch. 25 Fruit & Crop Ripening
Deleted
- Ch. 26 Fumigation & Insecticidal Fogging
- Ch. 27 Semiconductor Fabrication
- Ch. 28 Lumber Yards...
- Ch. 29 Manufacture of Organic Coatings
- Ch. 30 Industrial Ovens
- Ch. 31 Tents, Membrane Structures
- Ch. 32 High-Piled Combustible Storage
- Ch. 33 Fire Safety During Construction, Demolition
 - Refers to CFPC
- Ch. 34 Tire Rebuilding
- Ch. 35 Welding/Hot Work
- Ch. 36 Marinas
- Ch. 37 Combustible Fibers
Deleted

Part V Hazardous Materials

(Chapters 50 – 67)

- Ch. 50 General Provisions
- Ch. 51 Aerosols
- Ch. 53 Compressed Gases
- Ch. 54 Corrosive Materials
- Ch. 55 Cryogenic Materials
- Ch. 56 Explosives & Fireworks
 - Refers also to State Regs. and NFPA 1124
- Ch. 57 Flammable & Combustible Liquids
- Ch. 58 Flammable Gases and Flammable Cryogenic Fluids
- Ch. 59 Flammable Solids
- Ch. 60 Highly Toxic and Toxic Materials
- Ch. 61 LPG
- Ch. 62 Organic Peroxides
- Ch. 63 Oxidizers
- Ch. 64 Pyrophoric Materials
- Ch. 65 Pyroxylin Plastics
- Ch. 66 Unstable Materials
- Ch. 67 Water Reactive Solids and Liquids



ques·tion
 /'kwesCH(ə)n/ ◌◌

noun
 plural noun: questions

1. a sentence worded or expressed so as to elicit information.
 "we hope this leaflet has been helpful in answering your questions"
synonyms: [inquiry](#), [query](#), [interrogation](#)
 "please answer my question"

verb
 3rd person present: questions

1. ask questions of (someone), especially in an official context.
 "four men were being questioned about the killings"
synonyms: [interrogate](#), [cross-examine](#), [cross-question](#), [quiz](#), [catechize](#); [More](#)

