



OKLAHOMA UNIFORM BUILDING CODE COMMISSION RULES

Title 748 - Uniform Building Code Commission

Chapter 20 - Adopted Codes

Subchapter 3 - International Fire Code®, 2015 Edition (IFC®, 2015)

748:20-3-1 through 748:20-3-15

With Emergency Rule updates effective 8/3/2020 through 9/14/2021

748:20-4-1 through 748:20-4-86

NOTICES:

1. Section headers within this document marked "Revoked" do not revoke the current chapter of the 2015 Edition of the International Fire Code®, (IFC®, 2015), associated with this revocation language. This language simply means the modifications made in a previous adoption have been "revoked" and the language reverts to the published content of the currently adopted code without amendment.
2. Through its rulemaking process, the OUBCC has adopted the first printing of the 2015 edition of the International Fire Code® (IFC®, 2015), which has been promulgated as a permanent rule pursuant to Oklahoma law at OAC 748:20-3-1. Errata found and corrected by the ICC®, if any, in a printing of the code other than the specific printing listed previously in this notice, has not been reviewed or approved by any OUBCC technical committee, adopted by the OUBCC itself, or promulgated as a permanent rule by the OUBCC pursuant to Oklahoma law.
3. The rules of the Oklahoma Uniform Building Code found on this website are **unofficial**. The official rules are published in The Oklahoma Administrative Code and The Oklahoma Register, as required by 75 O.S. § 250 et seq. To order an official copy of these rules, contact the Office of Administrative Rules at: (405) 521-4911.

CHAPTER 20 - ADOPTED CODES

[Authority: 59 O.S. 59 § 1000.23]
[Source: Codified 7-15-11]

SUBCHAPTER 3 - IFC® 2015

[Source: Reserved at 28 Ok Reg 2122, eff 7-15-11, Amended at 29 Ok Reg 1646, eff 11-1-12; Amended at 32 Ok Reg 2270, eff 11-1-15]

748:20-3-1. Adoption of International Fire Code®, 2015 Edition (IFC® 2015)

(a) The Oklahoma Uniform Building Code Commission (the "OUBCC") hereby adopts the International Fire Code®, 2015 Edition (IFC® 2015) as amended and modified in this subchapter as the statewide minimum code for residential and commercial fire prevention and fire protection systems in the State of Oklahoma pursuant to 59 O.S. § 1000.23.

(b) The OUBCC through formal action expressly chose to adopt the IFC® 2015 as amended and modified in this subchapter, as the statewide minimum code for residential and commercial fire prevention and fire protection systems in the State of Oklahoma. In like manner, the OUBCC through formal action expressly chose to not adopt the International Fire Code®, 2012 Edition (IFC®, 2012) for any purpose.

(c) As part of its 2012 code cycle, the International Code Council, Inc. (ICC) reorganized the format of certain of its model codes as it was foreseeable to ICC that additional chapters will need to be added in the future as model regulations for new processes or operations are developed. The format reorganization was designed by ICC to accommodate such future chapters by providing reserved (unused) chapters in several parts of certain of its model codes as part of its 2012 code cycle. The format reorganization continues into the ICC's 2015 code cycle and is adopted by the OUBCC to the extent provided in this subchapter by the phrase "reserved for future use" inserted in lieu of titles for chapters.

(d) This material contains information which is proprietary to and copyrighted by the International Code Council, Inc. The acronym "ICC" and the ICC logo are trademarks and service marks of ICC. ALL RIGHTS RESERVED.

[Source: Added at 29 Ok Reg 1646, eff 11-1-12, Amended at 32 Ok Reg 2270, eff 11-1-15, Amended at 34 OK Reg 2107, eff 9-15-17]

748:20-3-2. Effect of Adoption

The IFC® 2015 as amended and revised by these rules is hereby established and adopted as the statewide minimum code for residential and commercial fire prevention and fire protection systems in the State of Oklahoma pursuant to 59 O.S. 1000.23, and may only be amended or altered by other jurisdictions pursuant to Oklahoma law and the administrative rules of the OUBCC as set forth in Title 748, Chapter 15 of the Oklahoma Administrative Code.

[Source: Added at 29 Ok Reg 1646, eff 11-1-12, Amended at 32 Ok Reg 2270, eff 11-1-15]

748:20-3-3. IFC® 2015 and Other Appendices

(a) None of the appendices of the IFC® 2015 have been adopted by the OUBCC for inclusion in the statewide minimum code for residential and commercial fire prevention and fire protection systems in the State of Oklahoma.

(b) The OUBCC hereby creates a new appendix entitled "Appendix N, Egress Path Markings for Existing Buildings."

(c) The OUBCC has removed from Chapter 11 of the IFC® 2015 Section 1104.25 entitled "Egress Path Markings" and has relocated and renumbered the section to the newly created Appendix N entitled "Egress Path Markings for Existing Buildings."

(d) Appendices A through N are not adopted as the statewide minimum code for residential and commercial fire prevention and fire protection systems within the State of Oklahoma. However,

other jurisdictions within the State of Oklahoma may adopt any or all of said appendices in accordance with 59 O.S. § 1000.29.

[Source: Added at 29 Ok Reg 1646, eff 11-1-12, Amended at 32 Ok Reg 2270, eff 11-1-15]

748:20-3-4. IFC® 2015 Provisions Adopted and Modified [AMENDED AND RENUMBERED TO 748:20-4-4]

~~(a) All chapters and provisions within chapters, including exceptions, of the IFC® 2015 not specifically addressed within these rules as being modified, deleted, moved or removed are hereby adopted without modification as the statewide minimum code for residential and commercial fire prevention and fire protection systems within the State of Oklahoma pursuant to 59 O.S. § 1000.23. Chapters and provisions within chapters, including exceptions adopted with modifications are specifically addressed in these rules.~~

~~(b) The ICC® has reserved Chapters 12 through 18, Chapters 38 through 49, Chapter 52, and Chapters 68 through 79 for possible future use. The OUBCC has not adopted Chapters 12 through 18, Chapters 38 through 49, Chapter 52, and Chapters 68 through 79 and these chapters are not considered part of the statewide minimum code for residential and commercial fire prevention and fire protection systems within the State of Oklahoma.~~

~~(c) To the extent any references in the IFC® 2015 as amended and modified in this sub-chapter are made to any other code or standard, the particular edition for that reference is defined in the referenced standards found in the IFC® 2015 as amended and modified in this sub-chapter and in the IFC® 2015 Chapter 80 entitled "Referenced Standards."~~

[Source: Added at 29 Ok Reg 1646, eff 11-1-12, Amended at 32 Ok Reg 2270, eff 11-1-15]

748:20-3-5. Participation in Federal Programs and/or Federally Funded or Financed Projects

In order to maximize federal financial aid, assistance, participation, financing and/or funding in any public project(s) and/or federal financial aid, participation, funding for and participation in any federal program(s) by the State of Oklahoma, its agencies, public trusts and instrumentalities, or by any Oklahoma municipalities and other political subdivisions, that receive financial aid, assistance, participation, financing and/or funding for and participate in any federal program(s), the State of Oklahoma, its agencies and instrumentalities, and any Oklahoma municipalities and other political subdivisions, may cooperate with the United States Government and any agency or instrumentality thereof, in the manner authorized and provided by federal law and regulation and in doing so may perform all necessary functions and take all necessary actions for accomplishing such federal purposes and programs, including but not limited to, following and/or complying with federal laws, regulations and/or requirements arising from or related to federal financial aid, assistance, participation, financing and/or funding, in the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, improvement, expansion, operation, maintenance, removal, and demolition of buildings and structures or any appurtenances attached to such buildings or structures, notwithstanding any provisions of any and all uniform building codes and standards adopted by the OUBCC to the contrary.

[Source: Added at 29 Ok Reg 1646, eff 11-1-12, Amended at 32 Ok Reg 2270, eff 11-1-15]

748:20-3-6. IFC® 2015 Chapter 1 Scope and Administration [AMENDED AND RENUMBERED TO 748:20-4-6]

~~Chapter 1 of the Oklahoma adopted IFC® 2015, includes the following Preamble at the very beginning of the chapter:~~

~~(1) Pursuant to 59 O.S. § 1000.23, the OUBCC has adopted the IFC® 2015 as amended and revised by the Commission, as the statewide minimum code to be used by all entities for residential and commercial fire prevention and fire protection systems in jurisdictions~~

throughout the State of Oklahoma. However, the OUBCC's adoption of Chapter 1 "Scope and Administration" of the IFC® 2015 is for continuity purposes and the OUBCC's adoption of Chapter 1 recognizes the methods of best practice in fully implementing the statewide minimum code for residential and commercial fire prevention and fire protection systems.

(2) All provisions of the adopted IFC® 2015, including Chapter 1, as amended and revised by the OUBCC, are hereby established and adopted as the statewide minimum code for residential and commercial fire prevention and fire protection systems in Oklahoma pursuant to 59 O.S. § 1000.23, which may only be amended or altered pursuant to Oklahoma law and the administrative rules of the OUBCC as set forth in Title 748, Chapter 15 of the Oklahoma Administrative Code. However, the provisions of Chapter 1 adopted herein are only intended to be in force and effect to the extent that the respective provisions do not conflict with State law or the lawful exercise of code administration and enforcement jurisdiction by entities empowered to do so pursuant to applicable law.

(3) Section 105.1.1 Annual permit. This section has been modified to clarify what an annual permit is. This section shall read: An annual permit is a yearly permit which represents a group of individual permits for each alteration to an already approved electrical, gas, mechanical or plumbing installation. The building official is authorized to issue an annual permit upon application therefor to any person, firm or corporation regularly employing one or more qualified tradespersons in the building, structure or on the premises owned or operated by the applicant for the permit.

(4) Section 105.1.2 Annual permit records. This section has been modified to require the building official to collect the OUBCC permit fee for each individual permit that is part of the annual permit at the completion of the annual permit term. This section has been modified to read: Annual permit records. The person to whom an annual permit is issued shall keep a detailed record of alterations made under such annual permit. The building official shall have access to such detailed records of alterations at all times. At the completion of the entity's annual permit term, the applicant shall file such detailed records of alterations with the building official. Pursuant to the authority of 59 O.S. § 1000.25, the building official shall collect fees for each individual permit which is part of the annual permit once the detailed records are submitted and remit such fees to the OUBCC.

(5) The OUBCC's adoption of Chapter 1 in this manner is made with the recognition that the legal authority granting state and local code administration and enforcement jurisdictions the power and discretion to administer and enforce codes arises from Oklahoma laws governing those jurisdictions. Furthermore, the OUBCC also recognizes that many state and local code administration and enforcement jurisdictions have already created, or have the lawful authority to create, departments, offices and administrative policies pursuant to various applicable laws and other adopted model codes with "Scope and Administration" provisions similar to Chapter 1 of the adopted IFC® 2015.

(6) This limited adoption of Chapter 1 is made in recognition of the authority and discretion possessed by jurisdictions to administer and enforce building codes. Exercising such authority and jurisdiction in a manner inconsistent with Chapter 1 must be supported by Oklahoma law. Code administration and enforcement jurisdictions shall not use the OUBCC's limited adoption of Chapter 1 to circumvent the remainder of the requirements established by the Oklahoma adopted IFC® 2015 and the OUBCC will strongly oppose any such practice.

[Source: Added at 29 Ok Reg 1646, eff 11-1-12, Amended at 32 Ok Reg 2270, eff 11-1-15]

748:20-3-7. IFC® 2015 Chapter 2 Definitions [AMENDED AND RENUMBERED TO 748:20-4-7]

Chapter 2 of the IFC® 2015 is adopted with the following modifications:

~~(1) The definition of an AUTHORITY HAVING JURISIDCTION has been added to clarify the different individuals that may have authority with in the code. This definition has been added to read: AUTHORITY HAVING JURISDICTION. Means an organization, office, or individual responsible for enforcing the requirements of the State Adopted Building Codes, including the prior authorization or approval of any equipment, materials, installations or procedures used in all or part of the construction of a new, or alteration or renovation of an existing building or structure, including integral finishes, fixtures and building system therein.~~

~~(2) The definition of a DISPENSING AREA has been added to clarify multiple references in the code with regard to fuel dispensing. This definition has been added to read: DISPENSING AREA. The appropriate hazardous (classified) locations for the fuel being dispensed in accordance with the National Electrical Code®—NFPA® 70.~~

~~(3) The definition of a MAIN RAILROAD TRACK has been added to provide clarity to building code officials. This definition has been added to read: MAIN RAILROAD TRACK. That part of the railway, exclusive of switch tracks, branches, yards, and terminals upon which trains are operated by timetable or train order or both.~~

~~(4) The definition for Residential Group R-3 has been modified to clarify the International Residential Code® 2015 (IRC® 2015) can be utilized so long as the facilities have four or fewer rooms. This definition has been modified to read: [BG] Residential Group R-3. Residential R-3 occupancies where occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-5, or I including Boarding houses (non-transient) with 16 or fewer occupants, Boarding houses (transient) with 10 or fewer occupants, Buildings that do not contain more than two dwelling units, Care facilities that provide accommodations for five or fewer persons receiving care, Congregate living facilities (non-transient with 16 or fewer occupants), Congregate living facilities (transient) with 10 or fewer occupants and Lodging houses with four or fewer guest rooms.~~

~~(A) [BG] Care facilities within a dwelling. Care facilities for five or fewer persons receiving care that are within a single family dwelling are permitted to comply with the IRC® provided an automatic sprinkler system is installed in accordance with Section 903.3.1.3 or Section P2904 of the IRC®.~~

~~(B) [BG] Lodging houses. Owner-occupied lodging houses with four or fewer guest rooms shall be permitted to be constructed in accordance with the IRC®.~~

~~(5) The definition of a SELF-SERVICE STORAGE FACILITY from the International Building Code®, 2015 Edition (Section 202) has been added to the International Fire Code®, 2015 Edition. This definition has been added to read: SELF-SERVICE STORAGE FACILITY. Real property designed and used for the purpose of renting or leasing individual storage spaces to customers for the purpose of storing and removing personal property on a self-service basis.~~

[Source: Added at 29 Ok Reg 1646, eff 11-1-12, Amended at 32 Ok Reg 2270, eff 11-1-15, Amended at 34 OK Reg 2107, eff 9-15-17]

748:20-3-7.1. IFC® 2015 Chapter 3 General Requirements

Chapter 3 of the IFC® 2015 is adopted with the following modification: Section 308.1.6.3 Sky lanterns. This section has been modified to prohibit the use of any sky lanterns in the State of Oklahoma. This section has been modified to read: 308.1.6.3 Sky lanterns. A person shall not release or cause to be released a sky lantern in the State of Oklahoma per Title 68 O.S. § 1624.1.

[Source: Added at 29 Ok Reg 1646, eff 11-1-12, Amended at 32 Ok Reg 2270, eff 11-1-15]

748:20-3-8. IFC® 2015 Chapter 5 Fire Service Features

Chapter 5 of the IFC® 2015 is adopted with the following modification: Section 508.1.3 Size has been modified to include an exception to make the fire command center smaller when approved by the fire code official. This section has been modified to read: 508.1.3 Size. The fire command center shall be a minimum of 200 square feet (19 square meters) in area with a minimum dimension of 10 feet (3048 mm). Exception: When approved by the fire code official the fire command center can be reduced in size to not less than a minimum of 96 square feet (9 square meters) with a minimum dimension of 8 feet (2438 mm).

[Source: Added at 29 Ok Reg 1646, eff 11-1-12, Amended at 32 Ok Reg 2270, eff 11-1-15]

748:20-3-9. IFC® 2009 Chapter 6 Building Services and Systems [REVOKED]

[Source: Added at 29 Ok Reg 1646, eff 11-1-12, Revoked at 32 Ok Reg 2285, eff 11-1-15]

748:20-3-10. IFC® 2009 Chapter 8 Interior Finish, Decorative Materials and Furnishings [REVOKED]

[Source: Added at 29 Ok Reg 1646, eff 11-1-12, Amended at 32 Ok Reg 2270, eff 11-1-15]

748:20-3-11. IFC® 2015 Chapter 9 Fire Protection Systems [AMENDED AND RENUMBERED 748:20-4-14]

Chapter 9 of the IFC® 2015 is adopted with the following modifications:

~~(1) Section 903.2.7 Group M. This section has been modified to reword subsection 4 to provide a reasonable limit for these occupancies and adequate protection without excessive burden on Group M occupancies with small areas of upholstered furniture and mattresses. This section has been modified to read: 903.2.7 Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:~~

~~(A) A Group M fire area exceeds 12,000 square feet (1115 square meters).~~

~~(B) A Group M fire area is located more than three stories above grade plane.~~

~~(C) The combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 square meters).~~

~~(D) A group M occupancy where the cumulative area used for the display and sale of upholstered furniture or mattresses exceeds 5,000 square feet (464 square meters).~~

~~(2) 903.2.9 Group S-1. This section has been modified to add an exception to the fifth requirement in the list for when an automatic fire sprinkler system is required. This section has been modified to read: 903.2.9 Group S-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group S-1 occupancy where one of the following conditions exists:~~

~~(A) A Group S-1 fire area exceeds 12,000 square feet (1115 square meters).~~

~~(B) A Group S-1 fire area is located more than three stories above grade plane.~~

~~(C) The combined area of all Group S-1 fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 square meters).~~

~~(D) A Group S-1 fire area used for the storage of commercial motor vehicles where the fire area exceeds 5,000 square feet (464 square meters).~~

~~(E) A Group S-1 occupancy used for the storage of upholstered furniture or mattresses exceeds 2,500 square feet (232 square meters). Exception: Self service storage facility where the fire area is less than 5,000 square feet (464 square meters).~~

~~(3) Section 907.2.3 Group E. This section has been modified to remove the requirement for an emergency voice/alarm system and require a fire alarm system in Group E occupancies. The section has been modified to read: 907.2.3 Group E. A manual fire alarm system that activates~~

~~the occupant notification signal in accordance with Section 907.5 and installed in accordance with 907.6 shall be installed in Group E occupancies. When automatic sprinkler systems or smoke detectors are installed such systems or detectors shall be connected to the building fire alarm system. Exceptions:~~

~~(A) A manual fire alarm system is not required in Group E occupancies with an occupant load of 50 or less.~~

~~(B) Manual fire alarm boxes are not required in Group E occupancies where all of the following apply:~~

~~(i) Interior corridors are protected by smoke detectors~~

~~(ii) Auditoriums, cafeterias, gymnasiums or similar areas are protected by heat detectors or other approved detection devices.~~

~~(iii) Shop and laboratories involving dusts or vapors are protected by heat detectors or other approved detection devices.~~

~~(iv) The capability to activate the evacuation signal from a central point is provided.~~

~~(v) In buildings where normally occupied spaces are provided with a two-way communication system between such spaces and constantly attended receiving station from where a general evacuation alarm can be sounded, except in locations specifically designated by the fire code official.~~

~~(C) Manual fire alarm boxes shall not be required in Group E occupancies where all the following apply:~~

~~(i) The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.~~

~~(ii) The fire alarm system will activate on sprinkler waterflow.~~

~~(iii) Manual activation is provided from a normally occupied location.~~

[Source: Added at 29 Ok Reg 1646, eff 11-1-12, Amended at 32 Ok Reg 2270, eff 11-1-15]

748:20-3-12. IFC® 2015 Chapter 10 Means of Egress [AMENDED AND RENUMBERED TO 748:20-4-15]

~~Chapter 10 of the IFC® 2015 is adopted with the following modifications:~~

~~(1) Section 1010.1.10 Panic and fire exit hardware. This section has been modified to add an exception to the requirement for panic hardware or fire exit hardware on the access doors for electrical rooms and working spaces. This section has been modified to read: 1010.1.10 Panic and fire exit hardware. Doors serving a Group H occupancy and doors serving rooms or spaces with an occupant load of 50 or more in a group A or E occupancy shall not be provided with a latch or lock other than panic hardware or fire exit hardware. Exceptions:~~

~~(A) A main exit of a Group A occupancy shall be permitted to have locking hardware in accordance with Section 1010.1.9.3, Item 2.~~

~~(B) Doors serving a Group A or E occupancy shall be permitted to be electromagnetically locked in accordance with Section 1010.1.9.9.~~

~~(2) Electrical rooms and working spaces with equipment operating at more than 600 volts, nominal, and equipment operating at 600 volts or less, nominal and rated 800 amperes or more and that contain overcurrent devices, switching devices or control devices with exit or exit access doors, shall be equipped with panic hardware or fire exit hardware. The doors shall swing in the direction of egress travel. Exception: Personnel entrance to and egress from doors of the electrical equipment working spaces that are greater than 25 feet (7.6 m) from the nearest edge of the electrical equipment.~~

~~(3) Section 1015.6 Mechanical equipment, systems and devices. This section has been modified to clarify the circumstances under which guards shall be provided and to modify the exception~~

to require the authority having jurisdiction approve the use of a fall/restraint system instead of guards. This section has been modified to read: 1015.6 Mechanical equipment, systems and devices. Guards shall be provided where various components that require services are located on a roof or elevated structure and have a condition as set forth in Sections 1015.6.1 through 1015.6.3. The guard shall be constructed so as to prevent the passage of a sphere 21 inches (533 mm) in diameter. Exception: When approved by the authority having jurisdiction, guards are not required where permanent fall arrest/restraint anchorage connector devices that comply with ANSI/ASSE Z 359.1 are affixed for use during the entire roof covering lifetime. The devices shall be reevaluated for possible replacement when the entire roof covering is replaced. The devices shall be placed not more than 10 feet (3048 mm) on center along hip and ridge lines and placed not less than 10 feet (3048 mm) from roof edges and the open sides of walking surfaces.

(4) Section 1015.6.1 Roof edge. This section has been added to clarify the circumstances required to exist for the installation of guards at the roof edge when the components needing service are within a specific distance of the roof edge. This section has been added to read: 1015.6.1 Roof edge. Guards shall be provided when components are located within 10 feet (3048 mm) of a roof edge or open side of a walking surface or elevated structure and such edge or open side is located more than 30 inches (762 mm) above the floor, roof, or grade below. The guard shall extend not less than 30 inches (762 mm) beyond each end of the component that requires service.

(5) Section 1015.6.2 Skylights. This section has been added to clarify the circumstances for the installation of guards around components near skylights and to provide exceptions to the requirement. This section has been added to read: 1015.6.2 Skylights. Guards shall be provided when a skylight is within 10 feet (3048 mm) of the component that requires service. The guard shall extend 30 inches (762 mm) beyond the edge of the skylight. Exceptions:

(A) Guards are not required when the skylight is located at least 42 inches (1067 mm) above the highest point of the walking surface adjacent to the skylight or component.

(B) Guards are not required if some other provision for skylight fall-thru protection is provided and approved by the authority having jurisdiction.

(6) Section 1015.6.3 Roof hatch. This section has been added to clarify the circumstances for the installation of guards around components installed within a specific distance from the roof hatch. This section has been added to read: 1015.6.3 Roof hatch. Guards shall be provided when a roof hatch is within 10 feet (3048 mm) of the component that requires service. The guard shall extend 30 inches (762 mm) beyond the edge of the roof hatch. If the component is within 10 feet (3048 mm) of the ladder access side of the roof hatch, the guard shall incorporate a self-closing, self-latching gate. The gate shall have a top edge of not less than 42 inches (1067 mm) above the elevated surface adjacent to the gate and shall not allow the passage of a 21 inch (533 mm) sphere.

(7) Section 1015.7 Roof access. This section has been modified to require the authority having jurisdiction approve the use of a fall restraint system instead of a guard in the exception. This section has been modified to read: 1015.7 Roof access. Guards shall be provided where the roof hatch opening is located within 10 feet (3048 mm) of a roof edge or open side of a walking surface and such edge or open side is located more than 30 inches (762 mm) above the floor, roof or grade below. The guard shall be constructed so as to prevent the passage of a sphere 21 inches (533 mm) in diameter. Exception: When approved by the authority having jurisdiction, guards are not required where permanent fall arrest/restraint anchorage connector devices that comply with ANSI/ASSE Z 359.1 are affixed for use during the entire roof covering lifetime. The devices shall be reevaluated for possible replacement when the entire roof covering is replaced. The devices shall be placed not more than 10 feet (3048 mm) on center along hip and

~~ridge lines and placed not less than 10 feet (3048 mm) from roof edges and the open sides of the walking surfaces.~~

[Source: Added at 29 Ok Reg 1646, eff 11-1-12, Amended at 32 Ok Reg 2270, eff 11-1-15]

748:20-3-13. IFC® 2015 Chapter 11 Construction Requirements for Existing Buildings

Chapter 11 of the IFC® 2015 is adopted with the following modifications:

(1) Section 1101.1 Scope. This section has been modified to include an exception allowing for structures complying with the International Existing Building Code® (IEBC®) be considered safe enough to where the provisions of Chapter 11 would not apply and resolve discrepancies between the two codes. This section has been modified to read: 1101.1 Scope. The provisions of this chapter shall apply to existing buildings constructed prior to the adoption of this code.

Exception: Buildings or portions of a building that comply with the latest edition of the IEBC® or the edition that was adopted at the time a remodel occurred.

(2) Section 1103.4.2 Three to five stories. This section has been modified to add a fifth exception to provide relief from this section of the code when vertical openings comply with the requirements of Section 803.2.1 of the IEBC®. This section has been modified to read: 1103.4.2 Three to five stories. In other than Group I-2 and I-3 occupancies, interior vertical openings connecting three to five stories shall be protected by either 1-hour fire-resistant-rated construction or an automatic sprinkler system shall be installed throughout the building in accordance with Section 903.3.1.1 or 903.3.1.2. Exceptions:

(A) Vertical opening protection is not required for Group R-3 occupancies.

(B) Vertical opening protection is not required for open parking garages.

(C) Vertical opening protection for escalators shall be in accordance with Section 1103.4.5, 1103.4.6 or 1103.4.7.

(D) Exit access stairways and ramps shall be in accordance with Section 1103.4.8.

(E) Vertical openings that comply with the requirements of Section 803.2.1 of the IEBC®.

(3) Section 1104.1 General. This section has been modified to allow the means of egress in an existing building to be considered as complying if in the opinion of both the building code official and the fire code official they do not constitute a distinct hazard to life. This section has been modified to read: 1104.1 General. Means of egress in existing buildings shall comply with the minimum egress requirements when specified in Table 1103.1 as further enumerated in Section 1104.2 through 1104.25 or the building code that applied at the time of construction, if, in the opinions of the building official and the fire code official, they do not constitute a distinct hazard to life. Existing buildings that were not required to comply with a building code at the time of construction shall comply with the minimum egress requirements when specified in Table 1103.1 as further enumerated in Sections 1104.2 through 1104.25.

(4) Section 1104.18 Dead ends. This section has been modified to add another exception to the requirements of this section provided the dead ends comply with the requirements of Section 705.6 of the International Existing Building Code®. This section has been modified to read: 1104.18 Dead ends. Where more than one exit or exit access doorway is required, the exit access shall be arranged such that dead ends do not exceed the limits specified in Table 1104.18. In Group I-2, in smoke compartments containing patient sleeping rooms and treatment rooms, dead end corridors shall be in accordance with Section 1105.5.6. Exceptions:

(A) A dead-end passageway or corridor shall not be limited in length where the length of the dead-end passageway or corridor is less than 2.5 time the least width of the dead-end passageway or corridor.

(B) Dead ends that comply with the requirements of Section 805.6 of the IEBC®.

(5) Section 1104.25 Egress path markings. This section, including the exception, has been moved and renumbered into the newly created Appendix N, entitled "Egress Path Markings for Existing Buildings" and is not adopted as a minimum standard for residential or commercial fire prevention and fire protection systems within the State of Oklahoma. The section number 1104.25 itself, will stay as part of this code for numbering alignment but will not have any requirements attached to it.

[Source: Added at 29 Ok Reg 1646, eff 11-1-12, Amended at 32 Ok Reg 2270, eff 11-1-15]

748:20-3-13.1. IFC® 2015 Chapter 57 Flammable and Combustible Liquids [RENUMBERED TO 748:20-3-13.4.

[Source: Added at 32 Ok Reg 2270, eff 11-1-15, Amended at 34 OK Reg 2107, eff 9-15-17]

748:20-3-13.2. IFC® 2015 Chapter 23 Motor Fuel-Dispensing Facilities and Repair Garages

Chapter 23 of the IFC® 2015 is adopted with the following modifications:

(1) Section 2301.7 Liquid natural gas (LNG) motor fuel-dispensing facilities. This section has been added to clarify that motor fuel-dispensing facilities for LNG shall comply with the requirements of Section 2303 and Chapter 55. This section has been added to read: 2301.7 Liquid natural gas motor fuel-dispensing facilities. Motor fuel-dispensing facilities utilizing liquid natural gas (LNG) fuel shall comply with the requirements of Section 2303 and Chapter 55.

(2) Section 2302 Definitions. This section has been modified to add to the terms "Main Railroad Track" and "Dispensing Area" to the list of terms defined in Chapter 2. This section has been modified to read: 2302.1 Definitions. The following terms are defined in Chapter 2:

(A) AIRCRAFT MOTOR-VEHICLE FUEL-DISPENSING FACILITY.

(B) ALCOHOL-BLENDED FUELS.

(C) AUTOMOTIVE MOTOR FUEL-DISPENSING FACILITY.

(D) DISPENSING AREA.

(E) DISPENSING DEVICE, OVERHEAD TYPE.

(F) FLEET VEHICLE MOTOR FUEL-DISPENSING FACILITY.

(G) LIQUEFIED NATURAL GAS (LNG).

(H) MAIN RAILROAD TRACK.

(I) MARINE MOTOR FUEL-DISPENSING FACILITY.

(J) REPAIR GARAGE.

(K) SELF-SERVICE MOTOR FUEL-DISPENSING FACILITY.

(3) Section 2303.1 Location of dispensing devices. This section has been modified to provide a sixth requirement when different types of fuel-dispensing devices for different fuels are located under the same canopy to prevent the accumulation or entrapment of ignitable vapors or all the electrical equipment located under the canopy must be suitable for Class I, Division 2 hazardous (classified) location. This section has been modified to read: 2303.1 Location of dispensing devices. Dispensing devices shall be located as follows:

(A) Ten feet (3048 mm) or more from lot lines.

(B) Ten feet (3048 mm) or more from buildings having combustible exterior wall surfaces or buildings having noncombustible exterior wall surfaces that are not part of a 1-hour-fire-resistance-rated assembly or buildings having combustible overhangs. Exception: Canopies constructed in accordance with the International Building Code® providing weather protection for the fuel islands.

(C) Such that all portions of the vehicle being fueled will be on the premises of the motor fuel-dispensing facility.

(D) Such that the nozzle, when the hose is fully extended, will not reach within 5 feet (1524 mm) of building openings.

(E) Twenty feet (6096 mm) or more from fixed sources of ignition.

(F) Where compressed natural gas (CNG), LNG, or Hydrogen motor fuel-dispensing devices are installed beneath a canopy or within an enclosure, either the canopy or enclosure shall be designed to prevent the accumulation or entrapment of ignitable vapors, including provisions for natural or mechanical ventilation means, or all electrical equipment installed beneath the canopy or within the enclosure shall be suitable for Class I, Division 2 hazardous (classified) locations. Tank vents that are installed within or attached to the canopy or enclosure shall extend a minimum of 5 feet (1524 mm) above the highest projection of the canopy. Compression and storage equipment located on top of the motor fuel-dispensing facility canopies shall be in accordance with current State of Oklahoma adopted International Fire Code®, Section 2309 and International Building Code®, Section 406.

(4) Section 2303.2.1 Local emergency disconnect switches. This section has been added to clarify when local emergency disconnect switches are required and when those switches are required to be interlocked with other local emergency disconnect switches. This section has been added to read: 2303.2.1 Local emergency disconnect switches. A local emergency disconnect switch, provided within 20 feet (6096 mm) of any dispensing unit shall be interlocked with all other dispensing units of the same fuel type and all other dispensing devices located within 20 feet (6096 mm) of the local emergency disconnect switch.

(5) Section 2303.2.2 Emergency disconnect switch lighting. This section has been added to clarify the requirements for providing illumination for emergency disconnect switch lighting. This section has been added to read: 2303.2.2 Emergency disconnect switch lighting. Permanent lighting shall be provided during hours of operation in times of darkness at all dispensing devices, required signage, emergency disconnects and emergency shutdown controls. The lighting shall be designed to provide illumination such that all dispensing devices, required signage, emergency disconnect switches and emergency shutdown controls are visible to the operator.

(6) Section 2304.3.7 Quantity Limits. This section has been modified to include an exception to the requirement that dispensing devices at unsupervised locations be programmed or set to limit uninterrupted fuel delivery to 25 gallons and require manual action to resume delivery. This section has been modified to read: 2304.3.7 Quantity limits. Dispensing equipment used at unsupervised locations shall comply with one of the following:

(A) Dispensing devices shall be programmed or set to limit uninterrupted fuel delivery to 25 gallons (95 L) and require a manual action to resume delivery. Exception: Dispensing devices that are equipped with a listed breakaway device or equal approved by the Authority Having Jurisdiction. Such emergency breakaway device shall be installed, maintained and replaced in accordance with the manufacturer's instructions.

(B) The amount of fuel being dispensed shall be limited in quantity by a preprogrammed card as approved.

(7) Section 2307.3 Attendants. This section has been modified to add an exception to the requirement for an attendant when the dispensing equipment meets the guidelines of NFPA® 58 for a "Low emission transfer." This section has been modified to read: 2307.3 Attendants. Motor fuel-dispensing operations for LP-gas shall be conducted by qualified attendants or in accordance with Section 2307.7 by persons trained in the proper handling of LP-gas. Exception: When the dispensing equipment meets the guidelines of NFPA® 58 for "Low emission transfer" an attendant is not required.

(8) Section 2307.4.1 Low emission transfer. This section has been added to clarify when the dispensing equipment meets the guidelines of NFPA® 58, Section 6.28.5 for "Low emission transfer" then the transfer distance shall be reduced by one-half. This section has been modified to read: 2307.4.1 Low emission transfer. When the dispensing equipment is installed in accordance with Section 6.28.5 of NFPA® 58 for "Low emission transfer," the transfer distance requirements in Table 6.5.2.1 and Section 6.25.4.3(1) of NFPA® 58 shall be reduced by one-half.

(8) Section 2307.4.1 Low emission transfer. This section has been added to clarify when the dispensing equipment meets the guidelines of NFPA® 58, Section 6.28.5 for "Low emission transfer" then the transfer distance shall be reduced by one-half. This section has been modified to read: 2307.4.1 Low emission transfer. When the dispensing equipment is installed in accordance with Section 6.28.5 of NFPA® 58 for "Low emission transfer," the transfer distance requirements in Table 6.5.2.1 and Section 6.25.4.3(1) of NFPA® 58 shall be reduced by one-half.

(9) Section 2307.7 Public fueling of motor vehicles. This section has been modified to provide an exception to the owner's requirement to train users when the dispensing equipment meets the guidelines of NFPA® 58 for a "Low emission transfer." This section has been added to read: 2307.7 Public fueling of motor vehicles.

(A) Self-service LP-gas dispensing systems, including key, code and card lock dispensing systems, shall be limited to the filling of permanently mounted containers providing fuel to the LP-gas powered vehicle.

(B) The requirements for self-service LP-gas dispensing systems shall be in accordance with the following:

(i) The arrangement and operation of the transfer of product into a vehicle shall be in accordance with this section and Chapter 61.

(ii) The system shall be provided with an emergency shut-off switch located within 100 feet (30 480 mm) of, but not less than 20 feet (6096 mm) from dispensers.

(iii) The owner of the LP-gas motor fuel-dispensing facility or the owner's designee shall provide for the safe operation of the system and the training of users. Exception: If the LP-gas motor fuel-dispensing facility meets the requirements of a low emission transfer station per NFPA® 58, then training of the users is not the responsibility of the facility.

(iv) The dispenser and hose-end valve shall release not more than 1/8 fluid ounce (4 cc) of liquid to the atmosphere upon breaking the connection with the fill valve on the vehicle.

(v) Portable fire extinguishers shall be provided in accordance with Section 2305.5.

(vi) Warning signs shall be provided in accordance with Section 2305.6.

(vii) The area around the dispenser shall be maintained in accordance with Section 2305.7.

(10) Section 2308.3.2 Warning signs. This section has been added to include warning signs to be posted on Compressed Natural Gas (CNG) dispensing devices. This section has been added to read: 2308.3.2 Warning signs. Warning signs complying with Section 310 shall be posted as follows:

(A) Warning sign(s) shall be conspicuously posted within sight of each dispenser in the fuel dispensing area and shall state the following:

(i) No smoking

(ii) Shut off motor

(iii) Flammable Gas

- (iv) Natural gas vehicle fuel cylinders shall be inspected at intervals not exceeding 3 years or 36,000 miles to ensure safe operation of the vehicle
 - (v) Natural gas fuel cylinders past their end-of-life date shall not be refueled and shall be removed from service.
 - (B) A warning sign with the words "No smoking, flammable gas" shall be posted in all compressor and storage areas.
 - (C) The lettering on the sign shall be legible and large enough to be visible from each point of transfer.
 - (D) The service pressure of each dispenser shall be posted in view of the operator.
- (11) Section 2308.4 Private fueling of motor vehicles. This section has been modified to allow for the industry practice of utilizing CNG trailers that are not permanently attached to CNG powered vehicles and delete the requirement for the owner to ensure the user of a CNG powered vehicle to be properly trained on the vehicle's filling procedures. This section has been modified to read: 2308.4 Private fueling of motor vehicles.
- (A) Self-service CNG dispensing systems, including key, code and card lock dispensing systems, shall be limited to the filling of approved, permanently mounted fuel containers.
 - (B) In addition to the requirements in Section 2305, the owner of a self-service CNG motor fuel-dispensing facility shall ensure the safe operation of the system.
- (12) Section 2308.7 Emergency shutdown control. This section has been modified to change the word "control" to "devices" in the section heading, clarify the requirements of the emergency manual shutdown device and provide an exception to those requirements for time-fill applications. This section has been modified to read: 2308.7 Emergency shutdown devices. A remote and local emergency manual shutdown device shall be provided. Upon activation, the emergency shutdown system shall automatically close valves between the main gas supply and the compressor and between the storage containers and dispensers, and automatically shut off the power supply to the compressor and the following associated devices: dispensing enclosures; remote pumps; power, control, and signal circuits; and electrical equipment in the hazardous (classified) locations surrounding the fuel dispensing enclosures. All labeled emergency shutdown devices shall be interconnected, whether required or not. Resetting from an emergency shutoff condition shall require manual intervention and the manner of resetting shall be approved by the Authority Having Jurisdiction. Exception: In time-fill applications, in lieu of a defined remote and local emergency manual shutdown device, an emergency manual shutdown device shall be provided within 50 feet (15 240 mm) of each fixed point of dispensing hose attachment and located inside and outside the compressor area within 10 feet (3048 mm) of the main access to the compressor area.
- (13) Section 2308.7.1 Remote emergency shutdown device. This section has been added to clarify the distance requirements remote emergency manual shutdown device placement and provide for an exception to the maximum distance required when located within line of sight of the dispensing enclosures and approved by the Authority Having Jurisdiction. This section has been added to read: 2308.7.1 Remote emergency shutdown device. A remote emergency manual shutdown device shall be located within 100 feet (30 480 mm) of, but not less than 20 feet (6096 mm) from all dispensing enclosures and shall be provided inside and outside the compressor area within 10 feet (3048 mm) of the main access to the compressor area. Exception: A remote emergency shutdown device may be located greater than 100 feet (30 480 mm) from one or more dispensing enclosures when within line of sight of the dispensing enclosures and approved by the Authority Having Jurisdiction.
- (14) Section 2308.7.2 Local emergency shutdown device. This section has been added to require a local emergency manual shutdown device be provided within 15 feet (4572 mm) of each

dispensing enclosure. This section has been added to read: 2308.7.2 Local emergency shutdown device. A local emergency manual shutdown device shall be located within 15 feet (4572 mm) of each dispensing enclosure.

(15) Section 2311.4.3 Ventilation. This section has been modified to clarify the point at which the mechanical ventilation should be exhausted in a basement or pit. This section has been modified to read: 2311.4.3. Ventilation. Where class I liquids or LP-gas are stored or used within a building having a basement or pit wherein flammable vapors could accumulate, the basement or pit shall be provided with mechanical ventilation in accordance with the International Mechanical Code®, at a minimum rate of 1 1/2 cubic feet per minute per square foot (cfm/square foot) [0.0008 cubic meters per (second meter squared)] taken from a point within 12 inches (305 mm) of the floor to prevent the accumulation of flammable vapors.

(16) Section 2311.5 Preparation of vehicles for repair. This section has been modified to clarify Liquefied Natural Gas vehicles comply with Section 2311.5.1 as applicable. This section has been modified to read: 2311.5 Preparation of vehicles for repair.

(A) For vehicles powered by gaseous fuels, the fuel shutoff valves shall be closed prior to repairing any portion of the vehicle fuel system.

(B) Vehicles powered by gaseous fuels in which the fuel system has been damaged shall be inspected and evaluated for fuel system integrity prior to being brought into the repair garage. The inspection shall include testing of the entire fuel delivery system for leakage.

Liquefied Natural Gas (LNG) vehicles shall comply with Section 2311.5.1 as applicable.

(17) Section 2311.5.1 Liquefied Natural Gas (LNG) This section has been added to clarify the process needed to measure and record the pressure of the LNG vehicle fuel system prior to and on every third day while in the repair facility to ensure the fuel pressure does not exceed the maximum allowable fuel pressure. This section has been added to read: 2311.5.1 Liquefied Natural Gas. Liquefied Natural Gas (LNG) vehicle fuel system pressure shall be measured and recorded prior to entering the repair facility and at least every third day the vehicle remains in the building. Records shall be posted on the windshield of the vehicle. The maximum allowable system pressure shall be no more than 170 psig. Pressure above 170 psig shall be reduced by operating the vehicle, or limited venting outdoors as required.

(18) Section 2311.7 Repair garages for vehicles fueled by lighter-than-air fuels. This section has been modified to include a third exception for repair garages where work is conducted only on vehicles that have been defueled and their systems purged with nitrogen gas and where there are standard operating procedures to document and maintain the fueling status throughout the repair operations are approved. This section has been modified to read: 2311.7 Repair garages for vehicles fueled by lighter-than-air fuels. Repair garages for the conversion and repair of vehicles that use CNG, liquefied natural gas (LNG), hydrogen or other lighter-than-air motor fuels shall be in accordance with Sections 2311.7 through 2311.7.2.3 in addition to the other requirements of Section 2311. Exceptions:

(A) Repair garages where work is conducted only on vehicles that have been defueled and their systems purged with nitrogen gas, and where standard operating procedures to document and maintain the fueling status throughout the repair operations has been approved.

(B) Repair garages where work is not performed on the fuel system and is limited to exchange of parts and maintenance not requiring open flame or welding on the CNG-, LNG-, hydrogen- or other lighter-than-air-fueled motor vehicle.

(C) Repair garages for hydrogen-fueled vehicles where work is not performed on the hydrogen storage tank and is limited to the exchange of parts and maintenance not requiring open flame or welding on the hydrogen-fueled vehicle. During the work, the entire hydrogen

fuel system shall contain a quantity that is less than 200 cubic feet (5.6 cubic meters) of hydrogen.

(19) Section 2311.7.1.1 Design. This section has been modified to clarify exhaust outlets should be located within 18 inches (475 mm) of the high point of the room on exterior walls or the roof and to change the ventilation rate from not less than 1 cubic foot per minute per 12 cubic feet of room volume to 1 cubic foot per square foot of room area. This section has been modified to read: 2311.7. 1.1 Design.

(A) Indoor locations shall be ventilated utilizing air supply inlets and exhaust outlets arranged to provide uniform air movement to the extent practical. Inlets shall be uniformly arranged on exterior walls near floor level. Outlets shall be located within 18 inches (457 mm) of the high point of the room in exterior walls or the roof.

(B) Ventilation shall be by a continuous mechanical ventilation system or by a mechanical ventilation system activated by a continuously monitoring natural gas detection system or, for hydrogen, a continuously monitoring flammable gas detection system, each activating at a gas concentration of not more than 25 percent of the lower flammable limit (LFL). In all cases, the system shall shut down the fueling system in the event of failure of the ventilation system.

(C) The ventilation rate shall be not less than 1 cubic foot per minute per square foot [0.0051 cubic meters per (second square meter)] of room area.

[Source: Added at 34 Ok Reg 2107, eff 9-15-17]

748:20-3-13.3. IFC® 2015 Chapter 55 Cryogenic Fluids

Chapter 55 of the IFC® is adopted with the following modification: Section 5501.1 Scope. This section has been modified to add a third exception for liquefied natural gas (LNG) facilities for LNG vehicular applications to comply with Chapter 23 and NFPA® 52. This section has been modified to read: 5501.1 Scope.

(1) Storage, use and handling of cryogenic fluids shall comply with this chapter and NFPA® 55. Cryogenic fluids classified as hazardous materials shall also comply with the general requirements of Chapter 50. Partially full containers containing residual cryogenic fluids shall be considered as full for the purposes of the controls required. Exceptions:

(A) Fluids used as refrigerants in refrigeration systems (see Section 606).

(B) Liquefied natural gas (LNG), which shall comply with NFPA® 59 A.

(C) LNG facilities for LNG vehicular applications, which shall comply with Chapter 23 and NFPA® 52.

(2) Oxidizing cryogenic fluids, including oxygen, shall comply with Chapter 63, as applicable.

(3) Flammable cryogenic fluids, including hydrogen, methane, and carbon monoxide, shall comply with Chapters 23 and 58, as applicable.

(4) Inert cryogenic fluids, including argon, helium and nitrogen, shall comply with ANSI/CGA P-18.

[Source: Added at 34 Ok Reg 2107, eff 9-15-17]

748:20-3-13.4. IFC® 2015 Chapter 57 Flammable and Combustible Liquids

Chapter 57 of the IFC® 2015 is adopted with the following modification: Section 5705.5 Alcohol-based hand rubs classified as Class I or II. This section has been modified to require guards or shields on alcohol-based hand rub dispensers when installed over a carpeted area. This section has been modified to read: 5705.5 Alcohol-based hand rubs classified as Class I or II liquids. The use of wall-mounted dispensers containing alcohol-based hand rubs classified as Class I or II liquids shall be in accordance with all of the following:

(1) The maximum capacity of each dispenser shall be 68 ounces (2 L).

- (2) The minimum separation between dispensers shall be 48 inches (1219 mm)
- (3) The dispensers shall not be installed above, below, or closer than 1 inch (25 mm) to an electrical receptacle, switch, appliance, device or other ignition source. The wall space between the dispenser and the floor or intervening counter top shall be free of electrical receptacles, switches, appliances, devices or other ignition sources.
- (4) Dispensers shall be mounted so that the bottom of the dispenser is not less than 42 inches (1067 mm) and not more than 48 inches (1219 mm) above the finished floor.
- (5) Dispensers shall not release their contents except when the dispenser is manually activated. Facilities shall be permitted to install and use automatically activated "touch free" alcohol-based hand-rub dispensing devices with the following requirements:
 - (A) The facility or persons responsible for the dispensers shall test the dispensers each time a new refill is installed in accordance with the manufacturer's care and use instructions.
 - (B) Dispensers shall be designed and must operate in a manner that ensures accidental or malicious activations of the dispensing devices are minimized. At a minimum, all devices subject to or used in accordance with this section shall have the following safety features:
 - (i) Any activations of the dispenser shall only occur when an object is placed within 4 inches (98 mm) of the sensing device.
 - (ii) The dispenser shall not dispense more than the amount required for hand hygiene consistent with label instructions as regulated by the United States Food and Drug Administration (USFDA).
 - (iii) An object placed within the activation zone and left in place will cause only one activation.
- (6) Storage and use of alcohol-based hand rubs shall be in accordance with the applicable provisions of Sections 5704 and 5705.
- (7) Dispensers when installed over a carpeted area shall have a guard or shield to prevent alcohol-based hand rub product from dispensing onto the floor.

[Source: Added at 34 Ok Reg 2107, eff 9-15-17]

748:20-3-13.5. IFC® 2015 Chapter 61 Liquefied Petroleum Gases

Chapter 61 of the IFC® 2015 is adopted with the following modifications:

- (1) Section 6106.1 Attendants. This section has been modified to provide an exception to the requirement for a qualified attendant if the motor fuel-dispensing equipment meets the guidelines of NFPA® 58 for a "Low emission transfer." This section has been modified to read: 6106.1 Attendants. Dispensing of LP-gas shall be performed by a qualified attendant. Exception: When the dispensing equipment meets the guidelines of NFPA® 58 for "Low emission transfer" an attendant is not required.
- (2) Section 6106.2 Overfilling. This section has been modified to include an overfilling prevention device on the container as one of the ways to measure the volume in the container. This section has been modified to read: 6106.2 Overfilling. LP-gas containers shall not be filled or maintained with LP-gas in excess of either the volume determined using the fixed liquid-level gauge installed in accordance with the manufacturer's specifications and in accordance with Section 5.7.5 of NFPA® 58, the volume determined by the overfilling prevention device installed on the container, or the weight determined by the required percentage of water capacity marked on the container. Portable LP-gas containers shall not be refilled unless equipped with an overfilling prevention device (OPD) where required by Section 5.7.3 of NFPA® 58.

[Source: Added at 34 Ok Reg 2107, eff 9-15-17]

748:20-3-14. IFC® 2015 Chapter 80 Referenced Standards [AMENDED AND RENUMBERED TO 748:20-4-85]

~~Chapter 80 of the IFC® 2015 is adopted with the following modifications:~~

~~(1) The reference to the International Building Code® has been modified to include after the title the words "as adopted and modified by the State of Oklahoma through the OUBCC." This section has been modified to read: IBC® 15 International Building Code® as adopted and modified by the State of Oklahoma through the OUBCC.~~

~~(2) The reference to the International Existing Building Code® has been modified to include after the title the words "as adopted and modified by the State of Oklahoma through the OUBCC." This section has been modified to read: IEBC® 15 International Existing Building Code® as adopted and modified by the State of Oklahoma through the OUBCC.~~

~~(3) The reference to the International Fuel Gas Code® has been modified to include after the title the words "as adopted and modified by the State of Oklahoma through the OUBCC." This section has been modified to read: IFGC® 15 International Fuel Gas Code® as adopted and modified by the State of Oklahoma through the OUBCC.~~

~~(4) The reference to the International Mechanical Code® has been modified to include after the title the words "as adopted and modified by the State of Oklahoma through the OUBCC." This section has been modified to read: IMC® 15 International Mechanical Code® as adopted and modified by the State of Oklahoma through the OUBCC.~~

~~(5) The reference to the International Plumbing Code® has been modified to include after the title the words "as adopted and modified by the State of Oklahoma through OUBCC." This section has been modified to read: IPC® 15 International Plumbing Code® as adopted and modified by the State of Oklahoma through the OUBCC.~~

~~(6) The reference to the International Residential Code® has been modified to include after the title the words "as adopted and modified by the State of Oklahoma through the OUBCC." This section has been modified to read: IRC® 15 International Residential Code® as adopted and modified by the State of Oklahoma through the OUBCC.~~

~~(7) The referenced standard for NFPA® 2 Hydrogen Technologies Code has been modified to change the edition year from 2011 to 2016. This Section has been modified to read: 02-16 Hydrogen Technologies Code.~~

~~(8) The referenced standard for NFPA® 70® National Electrical Code® has been modified to include after the title the words "as adopted and modified by the State of Oklahoma through the OUBCC." This section has been modified to read: 70-14 National Electrical Code® as adopted and modified by the State of Oklahoma through the OUBCC.~~

[Source: Added at 29 Ok Reg 1646, eff 11-1-12, Amended at 32 Ok Reg 2270, eff 11-1-15, Amended at 34 OK Reg 2107, eff 9-15-17]

748:20-3-15. Appendix N, Egress Path Markings for Existing Buildings

This appendix has been newly created and entitled "Appendix N, Egress Path Markings for Existing Buildings." The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

(1) Section N101 General. This section has been added to clarify scope and intent for this appendix. This section has been added to read: N101 General.

(A) Section N101.1 Scope. This section has been added to specify the provisions of the appendix and shall apply to existing high-rise buildings of Group A, B, E, I, M and R-1 occupancies. This section has been added to read: N101.1 Scope. The provisions of this appendix shall apply to existing high-rise buildings of Group A, B, E, I, M, and R-1 occupancies in addition to the requirements of Chapter 11.

(B) Section N101.2 Intent. This section has been added to specify the intent of this appendix is to provide an additional degree of life-safety to persons occupying existing high-rise buildings of Group A, B, E, I, M and R-1 occupancies. This section has been added to read: N101.2 Intent. The intent of this appendix is to provide an additional degree of life-safety to

persons occupying existing high-rise buildings of Group A, B, E, I, M and R-1 occupancies where such buildings do not contain luminous egress path markings.

(2) Section N102. Egress path markings. This section, formerly numbered Section 1104.25 has been moved into Appendix N entitled "Egress Path Markings for Existing Buildings." The section has been added to read: N102. Egress path markings. Existing high-rise buildings of Group A, B, E, I, M and R-1 occupancies shall be provided with luminous egress path markings in accordance with Section 1025. Exception: Open, unenclosed stairwells in historic buildings designated as historic under a state or local historic preservation program.

[Source: Added at 32 Ok Reg 2270, eff 11-1-15]

SUBCHAPTER 4. IFC® 2015

748:20-4-1. Adoption of the International Fire Code® (IFC®) [RESERVED]

748:20-4.2. Effect of Adoption [RESERVED]

748:20-4.3. IFC® and Other Appendices [RESERVED]

748:20-4-4. IFC® 2015 Provisions Adopted and Modified

(a) All chapters and provisions within chapters, including exceptions, of the IFC® 2015 not specifically addressed within these rules as being modified, deleted, moved or removed are hereby adopted without modification as the statewide minimum code for residential and commercial fire prevention and fire protection systems within the State of Oklahoma pursuant to 59 O.S. § 1000.23. Chapters and provisions within chapters, including exceptions adopted with modifications are specifically addressed in these rules.

(b) The ICC® has reserved Chapters 12 through 18, Chapters 38 through 49, Chapter 52, and Chapters 68 through 79 for possible future use. The OUBCC has not adopted Chapters 12 through 18, Chapters 38 through 49, Chapter 52, and Chapters 68 through 79 and these chapters are not considered part of the statewide minimum code for residential and commercial fire prevention and fire protection systems within the State of Oklahoma.

(c) In light of the notice by ICC® of the creation of a new Chapter 39 entitled "Processing and Extraction Facilities" in the IFC® 2018, the OUBCC has created a Chapter 39 entitled "Processing and Extraction Facilities" as hereby amended and modified to clarify requirements to be utilized when processing and extracting fats and oils from plant based materials, not currently addressed in the IFC® 2015 as amended and modified in this sub-chapter.

(d) To the extent any references in the IFC® 2015 as amended and modified in this sub-chapter are made to any other code or standard, the particular edition for that reference is defined in the referenced standards found in the IFC® 2015 as amended and modified in this sub-chapter and in the IFC® 2015 Chapter 80 entitled "Referenced Standards."

748:20-4-5. Participation in Federal Programs and/or Federally Funded or Financed Projects [RESERVED]

748:20-4-6. IFC® 2015 Chapter 1 Scope and Administration

Chapter 1 of the Oklahoma adopted IFC® 2015, includes the following Preamble at the very beginning of the chapter:

(1) Pursuant to 59 O.S. § 1000.23, the OUBCC has adopted the IFC® 2015 as amended and revised by the Commission, as the statewide minimum code to be used by all entities for residential and commercial fire prevention and fire protection systems in jurisdictions

throughout the State of Oklahoma. However, the OUBCC's adoption of Chapter 1 "Scope and Administration" of the IFC® 2015 is for continuity purposes and the OUBCC's adoption of Chapter 1 recognizes the methods of best practice in fully implementing the statewide minimum code for residential and commercial fire prevention and fire protection systems.

(2) All provisions of the adopted IFC® 2015, including Chapter 1, as amended and revised by the OUBCC, are hereby established and adopted as the statewide minimum code for residential and commercial fire prevention and fire protection systems in Oklahoma pursuant to 59 O.S. § 1000.23, which may only be amended or altered pursuant to Oklahoma law and the administrative rules of the OUBCC as set forth in Title 748, Chapter 15 of the Oklahoma Administrative Code. However, the provisions of Chapter 1 adopted herein are only intended to be in force and effect to the extent that the respective provisions do not conflict with State law or the lawful exercise of code administration and enforcement jurisdiction by entities empowered to do so pursuant to applicable law.

(3) Section 105.1.1 Annual permit. This section has been modified to clarify what an annual permit is. This section shall read: An annual permit is a yearly permit which represents a group of individual permits for each alteration to an already approved electrical, gas, mechanical or plumbing installation. The building official is authorized to issue an annual permit upon application therefor to any person, firm or corporation regularly employing one or more qualified tradespersons in the building, structure or on the premises owned or operated by the applicant for the permit.

(4) Section 105.1.2 Annual permit records. This section has been modified to require the building official to collect the OUBCC permit fee for each individual permit that is part of the annual permit at the completion of the annual permit term. This section has been modified to read: Annual permit records. The person to whom an annual permit is issued shall keep a detailed record of alterations made under such annual permit. The building official shall have access to such detailed records of alterations at all times. At the completion of the entity's annual permit term, the applicant shall file such detailed records of alterations with the building official. Pursuant to the authority of 59 O.S. § 1000.25, the building official shall collect fees for each individual permit which is part of the annual permit once the detailed records are submitted and remit such fees to the OUBCC.

(5) Table 105.6.9 Permit Amounts for Compressed Gases. This table has been modified to add carbon dioxide used in carbon dioxide enrichment systems and carbon dioxide used in insulated liquid carbon dioxide beverage dispensing systems to the list of types and amounts of compressed gases where an operational permit is required, if the amount of compressed gases used for the storage, use or handling of the compressed gases at normal temperature and pressure (NTP), is in excess of the amount listed in the table. This table has been modified to read: Table 105.6.9 Permit Amounts for Compressed Gases. The table contains ten rows with two columns per row as described below:

(A) Row 1 contains the headers for the two columns as listed below:

(i) Row 1, column 1 is entitled "Type of Gas."

(ii) Row 1, column 2 is entitled "Amount (cubic feet at NTP)."

(B) Row 2 contains the following information for the two columns listed in the header row number 1:

(i) Row 2, column 1 lists the compressed gas type entitled "Carbon dioxide used in carbon dioxide enrichment systems."

(ii) Row 2, column 2 lists the amount of cubic feet at NTP of "875 (100 lbs.)"

(C) Row 3 contains the following information for the two columns listed in the header row number 1:

- (i) Row 3, column 1 lists the compressed gas type entitled "Carbon dioxide used in insulated liquid carbon dioxide beverage dispensing applications."
- (ii) Row 3, column 2 lists the amount of cubic feet at NTP of "875 (100 lbs.)"
- (D) Row 4 contains the following information for the two columns listed in the header row number 1:
- (i) Row 4, column 1 lists the compressed gas type entitled "Corrosive;"
- (ii) Row 4, column 2 lists the amount of cubic feet at NTP of "200."
- (E) Row 5 contains the following information for the two columns listed in the header row number 1:
- (i) Row 5, column 1 lists the compressed gas type entitled "Flammable (except cryogenic fluids and liquefied petroleum gases.)"
- (ii) Row 5, column 2 lists the amount of cubic feet at NTP of "200."
- (F) Row 6 contains the following information for the two columns listed in the header row number 1
- (i) Row 6, column 1 lists the compressed gas type entitled "Highly toxic."
- (ii) Row 6, column 2 lists the amount of cubic feet at NTP of "Any Amount."
- (G) Row 7 contains the following information for the two columns listed in the header row number 1:
- (i) Row 7, column 1 lists the compressed gas type entitled "Inert and simple asphyxiant."
- (ii) Row 7, column 2 list the amount of cubic feet at NTP of "6,000."
- (H) Row 8 contains the following information for the two columns listed in the header row number 1:
- (i) Row 8, column 1 lists the compressed gas type "Oxidizing (including oxygen)."
- (ii) Row 8, column 2 lists the amount of cubic feet at NTP of "504."
- (I) Row 9 contains the following information for the two columns listed in the header row number 1:
- (i) Row 9, column 1 lists the compressed gas type "Pyrophoric."
- (ii) Row 9, column 2 lists the amount of cubic feet at NTP of "Any Amount."
- (J) Row 10 contains the following information for the two columns listed in the header row number 1:
- (i) Row 10, column 1 lists the compressed gas type "Toxic."
- (ii) Row 10, column 2 lists the amount of cubic feet at NTP of "Any amount."
- (K) Below the table is a footnote that reads: "For SI: 1 cubic foot equals 0.02832 cubic meters."
- (6) Section 105.6.49 Plant extraction systems. This section has been added to require an operational permit for a plant extraction system. This section has been added to read: 105.6.49 Plant extraction systems. An operational permit is required to use plant extraction systems.
- (7) Section 105.7.19 Gas detection systems. This section has been added to require a construction permit for the installation of or modification to a gas detection systems. The section clarifies that maintenance performed in accordance with the code is not considered a modification and shall not require a permit. This section has been added to read: 105.7.19 Gas detection systems. A construction permit is required for the installation of or modification to gas detection systems. Maintenance performed in accordance with this code is not considered a modification and shall not require a permit.
- (8) Section 105.7.20 Plant extraction systems. This section has been added to require a construction permit for the installation of or modification to plant extraction systems. The section clarifies that maintenance performed in accordance with the code, is not considered a modification and shall not require a construction permit. This section has been added to read:

105.7.20 Plant extraction systems. A construction permit is required for the installation of or modification to plant extraction systems. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.

(9) The OUBCC's adoption of Chapter 1 in this manner is made with the recognition that the legal authority granting state and local code administration and enforcement jurisdictions the power and discretion to administer and enforce codes arises from Oklahoma laws governing those jurisdictions. Furthermore, the OUBCC also recognizes that many state and local code administration and enforcement jurisdictions have already created, or have the lawful authority to create, departments, offices and administrative policies pursuant to various applicable laws and other adopted model codes with "Scope and Administration" provisions similar to Chapter 1 of the adopted IFC® 2015.

(10) This limited adoption of Chapter 1 is made in recognition of the authority and discretion possessed by jurisdictions to administer and enforce building codes. Exercising such authority and jurisdiction in a manner inconsistent with Chapter 1 must be supported by Oklahoma law. Code administration and enforcement jurisdictions shall not use the OUBCC's limited adoption of Chapter 1 to circumvent the remainder of the requirements established by the Oklahoma adopted IFC® 2015 and the OUBCC will strongly oppose any such practice.

748:20-4-7. IFC® 2015 Chapter 2 Definitions

Chapter 2 of the IFC® 2015 is adopted with the following modifications:

(1) The definition of an AUTHORITY HAVING JURISIDCTION has been added to clarify the different individuals that may have authority with in the code. This definition has been added to read: AUTHORITY HAVING JURISDICTION. Means an organization, office, or individual responsible for enforcing the requirements of the State Adopted Building Codes, including the prior authorization or approval of any equipment, materials, installations or procedures used in all or part of the construction of a new, or alteration or renovation of an existing building or structure, including integral finishes, fixtures and building system therein.

(2) The definition of a DISPENSING AREA has been added to clarify multiple references in the code with regard to fuel dispensing. This definition has been added to read: DISPENSING AREA. The appropriate hazardous (classified) locations for the fuel being dispensed in accordance with the National Electrical Code® – NFPA® 70.

(3) The definition of GAS DETECTION SYSTEM has been added to clarify multiple references in the code with regard to gas detection. This section has been added to read: GAS DETECTION SYSTEM. A system or portion of a combination system that utilizes one or more stationary sensors to detect the presence of a specified gas at a specified concentration and initiate one or more responses required by this code, such as notifying a responsible person, activating an alarm signal, or activating or deactivating equipment. A self-contained gas detection and alarm device is not classified as a gas detection system.

(4) The definition of a MAIN RAILROAD TRACK has been added to provide clarity to building code officials. This definition has been added to read: MAIN RAILROAD TRACK. That part of the railway, exclusive of switch tracks, branches, yards, and terminals upon which trains are operated by timetable or train order or both.

(5) The definition of MISCELLA has been added to clarify multiple references in the code. This definition has been added to read: MISCELLA. A mixture, in any proportion, of the extracted oil or fat and the extracting solvent.

(6) The definition for Residential Group R-3 has been modified to clarify the International Residential Code® 2015 (IRC® 2015) can be utilized so long as the facilities have four or fewer rooms. This definition has been modified to read: [BG] Residential Group R-3. Residential R-3

occupancies where occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-5, or I including Boarding houses (non-transient) with 16 or fewer occupants, Boarding houses (transient) with 10 or fewer occupants, Buildings that do not contain more than two dwelling units, Care facilities that provide accommodations for five or fewer persons receiving care, Congregate living facilities (non-transient with 16 or fewer occupants), Congregate living facilities (transient) with 10 or fewer occupants and Lodging houses with four or fewer guest rooms.

(A) [BG] Care facilities within a dwelling. Care facilities for five or fewer persons receiving care that are within a single-family dwelling are permitted to comply with the IRC® provided an automatic sprinkler system is installed in accordance with Section 903.3.1.3 or Section P2904 of the IRC®.

(B) [BG] Lodging houses. Owner-occupied lodging houses with four or fewer guest rooms shall be permitted to be constructed in accordance with the IRC®.

(7) The definition of a SELF-SERVICE STORAGE FACILITY from the International Building Code®, 2015 Edition (Section 202) has been added to the International Fire Code®, 2015 Edition. This definition has been added to read: SELF-SERVICE STORAGE FACILITY. Real property designed and used for the purpose of renting or leasing individual storage spaces to customers for the purpose of storing and removing personal property on a self-service basis.

748:20-4-8. IFC® Chapter 3 [RESERVED]

748:20-4-9. IFC® Chapter 4 [RESERVED]

748:20-4-10. IFC® Chapter 5 [RESERVED]

748:20-4-11. IFC® Chapter 6 [RESERVED]

748:20-4-12. IFC® Chapter 7 [RESERVED]

748:20-4-13. IFC® Chapter 8 [RESERVED]

748:20-4-14. IFC® 2015 Chapter 9 Fire Protection Systems

Chapter 9 of the IFC® 2015 is adopted with the following modifications:

(1) Section 902.1 Definitions. This section has been modified to clarify the definition for a "GAS DETECTION SYSTEM," has been added to the list of definitions defined in Chapter 2. This section has been modified to read: 902.1 Definitions. The following terms are defined in Chapter 2.

(A) ALARM NOTIFICATION APPLIANCE.

(B) ALARM SIGNAL.

(C) ALARM VERIFICATION FEATURE.

(D) ANNUNCIATOR.

(E) AUDIBLE ALARM NOTIFICATION APPLIANCE.

(F) AUTOMATIC.

(G) AUTOMATIC FIRE-EXTINGUISHING SYSTEM.

(H) AUTOMATIC SMOKE DETECTION SYSTEM.

(I) AUTOMATIC SPRINKLER SYSTEM.

(J) AUTOMATIC WATER MIST SYSTEM.

(K) AVERAGE AMBIENT SOUND LEVEL.

(L) CARBON DIOXIDE EXTINGUISHING SYSTEM.

(M) CLEAN AGENT.
(N) COMMERCIAL MOTOR VEHICLE.
(O) CONSTANTLY ATTENDED LOCATION.
(P) DELUGE SYSTEM.
(Q) DETECTOR, HEAT.
(R) DRY-CHEMICAL EXTINGUISHING AGENT.
(S) ELEVATOR GROUP.
(T) EMERGENCY ALARM SYSTEM.
(U) EMERGENCY VOICE/ALARM COMMUNICATIONS.
(V) FIRE ALARM BOX, MANUAL.
(W) FIRE ALARM CONTROL UNIT.
(X) FIRE ALARM SIGNAL.
(Y) FIRE ALARM SYSTEM.
(Z) FIRE AREA.
(AA) FIRE DETECTOR, AUTOMATIC.
(BB) FIRE PROTECTION SYSTEM.
(CC) FIRE SAFETY FUNCTIONS.
(DD) FIXED BASE OPERATOR (FBO).
(EE) FOAM-EXTINGUISHING SYSTEM.
(FF) GAS DETECTION SYSTEM.
(GG) HALOGENATED EXTINGUISHING SYSTEM.
(HH) IMPAIRMENT COORDINATOR.
(II) INITIATING DEVICE.
(JJ) MANUAL FIRE ALARM BOX.
(KK) MULTIPLE-STATION ALARM DEVICE.
(LL) MULTIPLE-STATION SMOKE ALARM.
(MM) NOTIFICATION ZONE.
(NN) NUISANCE ALARM.
(OO) PRIVATE GARAGE.
(PP) RECORD DRAWINGS.
(QQ) SINGLE-STATION SMOKE ALARM.
(RR) SLEEPING UNIT.
(SS) SMOKE ALARM.
(TT) SMOKE DETECTOR.
(UU) STANDPIPE SYSTEM, CLASSES OF.
 (i) Class I system.
 (ii) Class II system.
 (iii) Class III system.
(VV) STANDPIPE, TYPES OF.
 (i) Automatic dry.
 (ii) Automatic wet.
 (iii) Manual dry.
 (iv) Manual wet.
 (v) Semiautomatic dry.
(WW) SUPERVISING STATION.
(XX) SUPERVISORY SERVICE.
(YY) SUPERVISORY SIGNAL.
(ZZ) SUPERVISORY SIGNAL-INITIATING DEVICE.

(AAA) TIRES, BULK STORAGE OF.

(BBB) TRANSIENT AIRCRAFT.

(CCC) TROUBLE SIGNAL.

(DDD) VISIBLE ALARM NOTIFICATION APPLIANCE.

(EEE) WET-CHEMICAL EXTINGUISHING AGENT.

(FFF) WIRELESS PROTECTION SYSTEM.

(GGG) ZONE.

(HHH) ZONE, NOTIFICATION.

(2) Section 903.2.7 Group M. This section has been modified to reword subsection 4 to provide a reasonable limit for these occupancies and adequate protection without excessive burden on Group M occupancies with small areas of upholstered furniture and mattresses. This section has been modified to read: 903.2.7 Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:

(A) A Group M fire area exceeds 12,000 square feet (1115 square meters).

(B) A Group M fire area is located more than three stories above grade plane.

(C) The combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 square meters).

(D) A group M occupancy where the cumulative area used for the display and sale of upholstered furniture or mattresses exceeds 5,000 square feet (464 square meters).

(3) Section 903.2.9 Group S-1. This section has been modified to add an exception to the fifth requirement in the list for when an automatic fire sprinkler system is required. This section has been modified to read: 903.2.9 Group S-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group S-1 occupancy where one of the following conditions exists:

(A) A Group S-1 fire area exceeds 12,000 square feet (1115 square meters).

(B) A Group S-1 fire area is located more than three stories above grade plane.

(C) The combined area of all Group S-1 fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 square meters).

(D) A Group S-1 fire area used for the storage of commercial motor vehicles where the fire area exceeds 5,000 square feet (464 square meters).

(E) A Group S-1 occupancy used for the storage of upholstered furniture or mattresses exceeds 2,500 square feet (232 square meters). Exception: Self-service storage facility where the fire area is less than 5,000 square feet (464 square meters).

(4) Section 907.2.3 Group E. This section has been modified to remove the requirement for an emergency voice/alarm system and require a fire alarm system in Group E occupancies. The section has been modified to read: 907.2.3 Group E. A manual fire alarm system that activates the occupant notification signal in accordance with Section 907.5 and installed in accordance with 907.6 shall be installed in Group E occupancies. When automatic sprinkler systems or smoke detectors are installed such systems or detectors shall be connected to the building fire alarm system. Exceptions:

(A) A manual fire alarm system is not required in Group E occupancies with an occupant load of 50 or less.

(B) Manual fire alarm boxes are not required in Group E occupancies where all of the following apply:

(i) Interior corridors are protected by smoke detectors

(ii) Auditoriums, cafeterias, gymnasiums or similar areas are protected by heat detectors or other approved detection devices.

- (iii) Shop and laboratories involving dusts or vapors are protected by heat detectors or other approved detection devices.
- (iv) The capability to activate the evacuation signal from a central point is provided.
- (v) In buildings where normally occupied spaces are provided with a two-way communication system between such spaces and constantly attended receiving station from where a general evacuation alarm can be sounded, except in locations specifically designated by the fire code official.
- (C) Manual fire alarm boxes shall not be required in Group E occupancies where all the following apply:
- (i) The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.
- (ii) The fire alarm system will activate on sprinkler waterflow.
- (iii) Manual activation is provided from a normally occupied location.
- (5) Section 916 Gas Detection Systems. This section header has been added to the code to clarify a new section of code has been added. This section heading has been added to read: Section 916 Gas Detection Systems.
- (6) Section 916.1 Gas detection systems. This section has been added to specify when the requirements for gas detection systems are provided, they shall be in compliance with section 916.2 through 916.11. This section has been added to read: 916.1 Gas detection systems. Gas detection systems required by this code shall comply with Sections 916.2 through 916.11.
- (7) Section 916.2 Permits. This section has been added to specify permits shall be required as set forth in Section 105.7. This section has been modified to read: 916.2 Permits. Permits shall be required as set forth in Section 105.7.
- (8) Section 916.2.1 Construction documents. This section has been added to require construction documentation to be submitted with the application for permit. It requires the documentation of the gas detection system design and equipment be used, demonstrate compliance with the requirements of this code and be provided with the permit application. This section has been added to read: 916.2.1 Construction documents. Documentation of the gas detection system design and equipment to be used that demonstrates compliance with the requirements of this code shall be provided with the application for permit.
- (9) Section 916.3 Equipment. This section has been added to require gas detection system equipment to be designed for use with the gases being detected and be installed in accordance with the manufacturer's instructions. This section has been added to read: 916.3 Equipment. Gas detection system equipment shall be designed for use with the gases being detected and shall be installed in accordance with the manufacturer's instructions.
- (10) Section 916.4 Power connections. This section has been added to require gas detection systems to be permanently connected to the building electrical power supply or be permitted to be cord connected to an unswitched receptacle using an approved restraining means that secures the plug to the receptacle. This section has been added to read: 916.4 Power connections. Gas detection systems shall be permanently connected to the building electrical power supply or shall be permitted to be cord connected to an unswitched receptacle using an approved restraining means that secures the plug to the receptacle.
- (11) Section 916.5 Emergency and standby power. This section has been added to require standby or emergency power to be provided to the gas detection system, or if the power supply is interrupted, the system shall initiate a trouble signal at an approved location. This section has been added to read: 916.5 Emergency and standby power. Standby or emergency power shall be provided or the gas detection system shall initiate a trouble signal at an approved location if the power supply is interrupted.

(12) Section 916.6 Sensor locations. This section has been added to require sensors to be installed in approved locations where leaking gases are expected to accumulate. This section has been added to read: 916.6 Sensor locations. Sensors shall be installed in approved locations where leaking gases are expected to accumulate.

(13) Section 916.7 Gas sampling. This section has been added to require gas sampling to be performed continuously and require sample analysis to be processed immediately after sampling, except under certain conditions. HPM stands for "Hazardous Production Material" as defined in Chapter 2 of this code. This section has been added to read: 916.7 Gas sampling. Gas sampling shall be performed continuously. Sample analysis shall be processed immediately after sampling, except as follows:

(A) For HPM gases, sample analysis shall be performed at intervals not exceeding 30 minutes.

(B) For toxic gases that are not HPM, sample analysis shall be performed at intervals not exceeding 5 minutes, in accordance with Section 6004.2.2.7.

(C) Where a less frequent or delayed sampling interval is approved.

(14) Section 916.8 System activation. This section has been added to require a gas detection alarm to be initiated where any sensor detects a concentration of gases exceeding the thresholds specified in this section. The section requires upon activation of a gas detection alarm, alarm signals or other required responses to be specified by the section of this code requiring a gas detection system. The section further requires the alarm signals to be both audible and visible alarm signals that are distinct from fire alarm and carbon monoxide signals. IDLH stands for "Immediately Dangerous to Life and Health" as defined in Chapter 2 of the IBC®. This section has been added to read: 916.8 System activation. A gas detection alarm shall be initiated where any sensor detects a concentration of gas exceeding the following thresholds:

(A) For flammable gases, a gas concentration exceeding 25 percent of the lower flammability limit (LFL).

(B) For nonflammable gases, a gas concentration exceeding one-half of the IDLH, unless a different threshold is specified by the section of this code requiring a gas detection system.

(15) Upon activation of a gas detection alarm, alarm signals or other required responses shall be specified by the section of this code requiring a gas detection system. Audible and visible alarm signals associated with a gas detection alarm shall be distinct from fire alarm and carbon monoxide alarm signals.

(16) Section 916.9 Signage. This section has been added to require signage to be provided adjacent to gas detection system alarm signaling devices that advises occupants of the nature of the signals and actions to take in response to the signal. This section has been added to read: 916.9 Signage. Signs shall be provided adjacent to gas detection system alarm signaling devices that advise occupants of the nature of the signals and actions to take in response to the signal.

(17) Section 916.10 Fire alarm system connections. This section has been added to prohibit gas sensors and gas detection systems to be connected to fire alarm systems unless approved and connected in accordance with the fire alarm equipment manufacturer's instructions. This section has been added to read: 916.10 Fire alarm system connections. Gas sensors and gas detection systems shall not be connected to fire alarm systems unless approved and connected in accordance with the fire alarm equipment manufacturer's instructions.

(18) Section 916.11 Inspection, testing and sensor calibration. This section has been added to require gas detection systems to be inspected and tested not less than annually and sensors to be calibrated as specified by the sensor manufacturer. This section has been added to read: 916.11 Inspection, testing and sensor calibration. Inspection and testing of gas detection systems shall be conducted not less than annually. Sensor calibration shall be confirmed at the time of sensor

installation and calibration shall be performed at the frequency specified by the sensor manufacturer.

748:20-4-15. IFC® 2015 Chapter 10 Means of Egress

Chapter 10 of the IFC® 2015 is adopted with the following modifications:

(1) Section 1010.1.9.8 Sensor release of electrically locked egress doors. This section has been modified to permit the use of sensor release of electronic locking systems on doors located in a means of egress in any occupancy except Group H, where installed and operated in accordance with specific criteria. This section has been modified to read: 1010.1.9.8 Sensor release of electrically locked egress doors. Sensor release of electric locking systems shall be permitted on doors located in a means of egress in any occupancy except Group H where installed and operated in accordance with all of the following criteria:

(A) The sensor shall be installed on the egress side, arranged to detect an occupant approaching the doors, and shall cause the electric locking system to unlock.

(B) The electric locks shall be arranged to unlock by a signal from or loss of power to the sensor.

(C) Loss of power to the lock or locking system shall automatically unlock the electric locks.

(D) The doors shall be arranged to unlock from a manual unlocking device located 40 inches to 48 inches (1016 mm to 1219 mm) vertically above the floor and within 5 feet (1524 mm) of the secured doors. Ready access shall be provided to the manual unlocking device and the device shall be clearly identified by a sign that reads "PUSH TO EXIT." When operated, the manual unlocking device shall result in direct interruption of the power to the electric lock - independent of other electronics - and the doors electric lock shall remain unlocked for not less than 30 seconds.

(E) Activation of the building fire alarm system, where provided, shall automatically unlock the electric lock, and the electric lock shall remain unlocked until the fire alarm system has been reset.

(F) Activation of the building automatic fire sprinkler system or fire detection system, where provided, shall automatically unlock the electric lock. The electric lock shall remain unlocked until the fire alarm system has been reset.

(G) The door locking system units shall be listed in accordance with UL 294.

(2) Section 1010.1.9.9. Door hardware release of electrically locked egress doors. This section has been modified to change part of the section heading and permit door hardware release of electric locking systems to be on all doors in a means of egress in any occupancy except Group H, where installed and operated in accordance with specific requirements. This section has been modified to read: 1010.1.9.9. Door hardware release of electrically locked egress doors. Door hardware release of electric locking systems shall be permitted on doors in the means of egress in any occupancy except Group H where installed and operated in accordance with all of the following:

(A) The door hardware that is affixed to the door leaf has an obvious method of operation that is readily operated under all lighting conditions.

(B) The door hardware is capable of being operated with one hand and shall comply with Section 1010.1.9.5.

(C) Operation of the door hardware directly interrupts the power to the electric lock and unlocks the door immediately.

(D) Loss of power to the electric locking system automatically unlocks the door.

(E) Where panic or fire exit hardware is required by Section 1010.1.10, operation of the panic or fire exit hardware also releases the electric lock.

(F) The locking system units shall be listed in accordance with UL 294.

(3) Section 1010.1.10 Panic and fire exit hardware. This section has been modified to change the door type, and allow for doors provided with panic hardware or fire exit hardware serving Group A or E occupancies to be permitted to be electrically locked, in accordance with Section 1010.1.9.8, or 1010.1.9.9. This section has been further modified to require personnel doors in rooms or spaces that contain electrical equipment rated 800 amperes or more that contain overcurrent devices, switching devices, or control devices where the personnel door intended for entrance to and egress from the working space is less than 25 feet from the nearest edge of the working space, to be equipped with panic hardware or fire exit hardware. This section has been modified to read: 1010.1.10 Panic and fire exit hardware. Swinging doors serving a Group H occupancy and swinging doors serving rooms or spaces with an occupant load of 50 or more in a Group A or E occupancy shall not be provided with a latch or lock other than panic hardware or fire exit hardware. Exceptions:

(A) A main exit of a Group A occupancy shall be permitted to have locking devices in accordance with Section 1010.1.9.3, Item 2.

(B) Doors provided with panic hardware or fire exit hardware and serving a Group A or E occupancy shall be permitted to be electrically locked in accordance with Section 1010.1.9.8 or 1010.1.9.9.

(4) Electrical rooms with equipment rated 1200 amperes or more and over 6 feet (1829 mm) wide, and that contain overcurrent devices, switching devices or control devices with exit or exit access doors, shall be equipped with panic hardware or fire exit hardware. The doors shall swing in the direction of egress travel.

(5) Where electrical equipment rated 800 amperes or more that contains overcurrent devices, switching devices, or control devices is installed and there is a personnel door(s) intended for entrance to and egress from the working space less than 25 feet (7.6 m) from the nearest edge of the working space, the personnel door shall be equipped with panic hardware or fire exit hardware. The door(s) shall open in the direction of egress.

(6) Section 1015.6 Mechanical equipment, systems and devices. This section has been modified to clarify the circumstances under which guards shall be provided and to modify the exception to require the authority having jurisdiction approve the use of a fall/restraint system instead of guards. This section has been modified to read: 1015.6 Mechanical equipment, systems and devices. Guards shall be provided where various components that require services are located on a roof or elevated structure and have a condition as set forth in Sections 1015.6.1 through 1015.6.3. The guard shall be constructed so as to prevent the passage of a sphere 21 inches (533 mm) in diameter. Exception: When approved by the authority having jurisdiction, guards are not required where permanent fall arrest/restraint anchorage connector devices that comply with ANSI/ASSE Z 359.1 are affixed for use during the entire roof covering lifetime. The devices shall be reevaluated for possible replacement when the entire roof covering is replaced. The devices shall be placed not more than 10 feet (3048 mm) on center along hip and ridge lines and placed not less than 10 feet (3048 mm) from roof edges and the open sides of walking surfaces.

(7) Section 1015.6.1 Roof edge. This section has been added to clarify the circumstances required to exist for the installation of guards at the roof edge when the components needing service are within a specific distance of the roof edge. This section has been added to read: 1015.6.1 Roof edge. Guards shall be provided when components are located within 10 feet (3048 mm) of a roof edge or open side of a walking surface or elevated structure and such edge or open side is located more than 30 inches (762 mm) above the floor, roof, or grade below. The

guard shall extend not less than 30 inches (762 mm) beyond each end of the component that requires service.

(8) Section 1015.6.2 Skylights. This section has been added to clarify the circumstances for the installation of guards around components near skylights and to provide exceptions to the requirement. This section has been added to read: 1015.6.2 Skylights. Guards shall be provided when a skylight is within 10 feet (3048 mm) of the component that requires service. The guard shall extend 30 inches (762 mm) beyond the edge of the skylight. Exceptions:

(A) Guards are not required when the skylight is located at least 42 inches (1067 mm) above the highest point of the walking surface adjacent to the skylight or component.

(B) Guards are not required if some other provision for skylight fall-thru protection is provided and approved by the authority having jurisdiction.

(9) Section 1015.6.3 Roof hatch. This section has been added to clarify the circumstances for the installation of guards around components installed within a specific distance from the roof hatch. This section has been added to read: 1015.6.3 Roof hatch. Guards shall be provided when a roof hatch is within 10 feet (3048 mm) of the component that requires service. The guard shall extend 30 inches (762 mm) beyond the edge of the roof hatch. If the component is within 10 feet (3048 mm) of the ladder access side of the roof hatch, the guard shall incorporate a self-closing, self-latching gate. The gate shall have a top edge of not less than 42 inches (1067 mm) above the elevated surface adjacent to the gate and shall not allow the passage of a 21 inch (533 mm) sphere.

(10) Section 1015.7 Roof access. This section has been modified to require the authority having jurisdiction approve the use of a fall-restraint system instead of a guard in the exception. This section has been modified to read: 1015.7 Roof access. Guards shall be provided where the roof hatch opening is located within 10 feet (3048 mm) of a roof edge or open side of a walking surface and such edge or open side is located more than 30 inches (762 mm) above the floor, roof or grade below. The guard shall be constructed so as to prevent the passage of a sphere 21 inches (533 mm) in diameter. Exception: When approved by the authority having jurisdiction, guards are not required where permanent fall arrest/restraint anchorage connector devices that comply with ANSI/ASSE Z 359.1 are affixed for use during the entire roof covering lifetime. The devices shall be reevaluated for possible replacement when the entire roof covering is replaced. The devices shall be placed not more than 10 feet (3048 mm) on center along hip and ridge lines and placed not less than 10 feet (3048 mm) from roof edges and the open sides of the walking surfaces.

748:20-4-16. IFC® Chapter 11 [RESERVED]

748:20-4-17. IFC® Chapter 12 [RESERVED]

748:20-4-18. IFC® Chapter 13 [RESERVED]

748:20-4-19. IFC® Chapter 14 [RESERVED]

748:20-4-20. IFC® Chapter 15 [RESERVED]

748:20-4-21. IFC® Chapter 16 [RESERVED]

748:20-4-22. IFC® Chapter 17 [RESERVED]

748:20-4-23. IFC® Chapter 18 [RESERVED]

748:20-4-24. IFC® Chapter 19 [RESERVED]

748:20-4-25. IFC® Chapter 20 [RESERVED]

748:20-4-26. IFC® Chapter 21 [RESERVED]

748:20-4-27. IFC® Chapter 22 [RESERVED]

748:20-4-28. IFC® Chapter 23 [RESERVED]

748:20-4-29. IFC® Chapter 24 [RESERVED]

748:20-4-30. IFC® Chapter 25 [RESERVED]

748:20-4-31. IFC® Chapter 26 [RESERVED]

748:20-4-32. IFC® Chapter 27 [RESERVED]

748:20-4-33. IFC® Chapter 28 [RESERVED]

748:20-4-34. IFC® Chapter 29 [RESERVED]

748:20-4-35. IFC® Chapter 30 [RESERVED]

748:20-4-36. IFC® Chapter 31 [RESERVED]

748:20-4-37. IFC® Chapter 32 [RESERVED]

748:20-4-38. IFC® Chapter 33 [RESERVED]

748:20-4-39. IFC® Chapter 34 [RESERVED]

748:20-4-40. IFC® Chapter 35 [RESERVED]

748:20-4-41. IFC® Chapter 36 [RESERVED]

748:20-4-42. IFC® Chapter 37 [RESERVED]

748:20-4-43. IFC® Chapter 38 [RESERVED]

748:20-4-44. IFC® 2015 Chapter 39 Processing and Extraction Facilities

Chapter 39 of the IFC® has been created and added to the 2015 edition to address plant processing and extraction facilities. This chapter title has been added to read: Chapter 39 Processing and Extraction Facilities. Chapter 39 is adopted as follows:

- (1) Section 3901 General. This section heading has been added to clarify a new section of code has been added to address the scope, utilization of existing buildings and permit requirements for plant processing and extraction facilities. This section heading has been added to read: Section 3901. General.

(2) Section 3901.1 Scope. This section has been added to clarify plant processing and extraction facilities will comply with this chapter and the International Building Code®. The section clarifies the extraction process includes the act of extracting oils and fats by the use of a solvent, desolventizing of the raw material, production of the miscella, distillation of the solvent and solvent recovery. The section further requires the use, storage and transfilling and handling of hazardous materials in these facilities to comply with the chapter, other applicable provisions of this code and the International Building Code®. This section has been added to read: 3901.1 Scope. Plant processing or extraction facilities shall comply with this chapter and the International Building Code®. The extraction process includes the act of extraction of the oils and fats by use of a solvent, desolventizing of the raw material, production of the miscella, distillation of the solvent from the miscella and solvent recovery. The use, storage, transfilling, and handling of hazardous materials in these facilities shall comply with this chapter, other applicable provisions of this code and the International Building Code®.

(3) Section 3901.2 Existing buildings or facilities. This section has been added to clarify when existing buildings or facilities used for the processing of plants or where the medium of extraction or solvent is changed, they shall comply with this chapter. This section has been added to read: 3901.2 Existing buildings or facilities. Existing buildings or facilities used for the processing of plants or where the medium of extraction or solvent is changed shall comply with this chapter.

(4) Section 3901.3 Permits. This section has been added to clarify permits shall be required as set forth in Sections 105.6 and 105.7. This section has been added to read: Permits shall be required as set forth in Sections 105.6 and 105.7.

(5) Section 3902 Definitions. This section heading has been added to signify the start of a new section of code related to definitions. This section heading has been added to read: 3902 Definitions.

(6) Section 3902.1 Definitions. This section has been added to clarify what terms have definitions in Chapter 2. This section has been added to read: 3902.1 Definitions. The following terms are defined in Chapter 2:

(A) DESOLVENTIZING.

(B) MISCELLA.

(7) Section 3903 Processing and Extraction. This section heading has been added to signify the start of new section of code related to processing and extraction. This section heading has been added to read: 3903 Processing and Extraction.

(8) Section 3903.1 Construction. This section has been added to clarify all processing shall be located in buildings complying with the International Building Code®. This section has been added to read: 3903.1 Construction. Processing shall be located in a building complying with the International Building Code®.

(9) Section 3903.2 Prohibited occupancies. This section has been added to clarify that any extraction equipment and extraction processes utilizing materials classified as physical hazards in accordance with Section 307 of the International Building Code® and other provisions of this code shall not be located in any building containing a Group A, E, I or R occupancy. This section has been added to read: 3903.2 Prohibited occupancies. Extraction equipment and extraction processes utilizing materials classified as physical hazards in accordance with Section 307 of the International Building Code® and other provisions of this code shall not be located in any building containing a Group A, E, I or R occupancy.

(10) Section 3903.3 Location. This section has been added to clarify extraction equipment and extraction processes utilizing materials classified as physical hazards in accordance with Section 307 of the International Building Code® and other provisions of this code shall be located in a

room dedicated to extraction and prohibits the room from being used for any other purpose. The section prohibits the storage of solvents in the extraction room. This section has been added to read: 3903.3 Location. The extraction equipment and extraction processes utilizing materials classified as physical hazards in accordance with Section 307 of the International Building Code® and other provisions of this code as solvents shall be located in a room dedicated to extraction and the room shall not be used for any other purpose. There shall be no storage of solvents in the extraction room.

(11) Section 3903.4 Post-process purification and winterization. This section has been added to clarify post processing and winterization involving the heating, cooling or pressurizing of miscella to other than normal pressure or temperature shall be approved and performed in an appliance listed for such use and shall comply with Sections 3903.4.1 or 3903.4.2. The section prohibits the use of domestic or commercial cooking appliances. This section has been added to read: 3903.4 Post-process purification and winterization. Post-processing and winterization involving the heating, cooling or pressurizing of the miscella to other than normal pressure or temperature shall be approved and performed in an appliance listed for such use and shall comply with Sections 3903.4.1 or 3903.4.2. Domestic or commercial cooking appliances and cooling appliances shall not be used.

(12) Section 3903.4.1 Industrial ovens. This section has been added to require industrial ovens, when used, to comply with Chapter 30. This section has been added to read: 3903.4.1 Industrial Ovens. The use of industrial ovens shall comply with Chapter 30.

(13) Section 3903.4.2 Refrigerators, freezers and other cooling equipment. This section has been added to require refrigerators, freezers and other cooling equipment used to store or cool flammable liquids to be listed for the storage of flammable and/or combustible liquids or shall be listed for Class I Division I locations in accordance with NFPA 70®. This section has been added to read: 3903.4.2 Refrigerators, freezers and other cooling equipment. Refrigerators, freezers and other cooling equipment used to store or cool flammable liquids shall be listed for the storage of flammable and/or combustible liquids or shall be listed for Class I, Division I locations in accordance with NFPA 70®.

(14) Section 3903.4.3. Post-processing. This section has been added to require post-processing operations, including dispensing of flammable liquids between containers, to be performed within a hazardous exhaust fume hood rated for exhausting flammable vapors and listed in accordance UL 1805. The section requires the electrical equipment utilized within the hazardous exhaust fume hood to be rated for use in flammable atmospheres and provides an exception for the exhaust fume hood when an approved exhaust system is installed in accordance with NFPA 91®. This section has been added to read: 3903.4.3 Post-processing. Post-processing operations, including dispensing of flammable liquids between containers, shall be performed within a hazardous exhaust fume hood rated for exhausting flammable vapors and listed in accordance with UL 1805. Electrical equipment used within the hazardous exhaust fume hood shall be rated for use in flammable atmospheres. Exception: A hazardous exhaust fume hood is not required where an approved exhaust system is installed in accordance with NFPA 91®.

(15) Section 3903.5 Use of flammable and combustible liquids. This section has been added to specify the use of flammable and combustible liquids for liquid extraction processes, including dispensing of flammable liquids between containers, where the liquid is boiled, distilled, or evaporated, to be located within a hazardous exhaust fume hood, rated for exhausting flammable vapors and listed in accordance with UL 1805. The section requires all electrical equipment used within the hazardous exhaust fume hood to be rated for use in flammable atmospheres, prohibits the heating of flammable or combustible liquids over an open flame, and provides exceptions when certain conditions are met. This section has been added to read: 3903.5 Use of flammable

and combustible liquids. The use of flammable and combustible liquids for liquid extraction processes, including dispensing of flammable liquids between containers, where the liquid is boiled, distilled, or evaporated shall be located within a hazardous exhaust fume hood, rated for exhausting flammable vapors and listed in accordance with UL 1805. Electrical equipment used within the hazardous exhaust fume hood shall be rated for use in flammable atmospheres.

Heating of flammable or combustible liquids over an open flame is prohibited. Exceptions:

(A) The use of a heating element not rated for flammable atmospheres, where documentation from the manufacturer, or approved testing laboratory indicates the element is rated for heating of flammable liquids.

(B) Unheated processes at atmospheric pressure using less than 16 oz. (473 ml) of flammable liquids are not required to be located within a hazardous exhaust fume hood.

(C) A hazardous exhaust fume hood is not required where an approved exhaust system is installed in accordance with NFPA 91®. Electrical equipment used within this room shall be rated for use in flammable atmosphere.

(16) Section 3903.6 Liquefied petroleum gas. This section has been added to require plant processing and extraction utilizing liquefied petroleum gas to comply with Sections 3903.6.1 through 3903.6.4 and other applicable provisions of this code. This section has been added to read: 3903.6 Liquefied Petroleum gas. Plant processing and extraction utilizing liquefied petroleum gas shall comply with Section 3903.6.1 through 3903.6.4 and other applicable provisions of this code.

(17) Section 3903.6.1 Release of gas. This section has been added to prohibit liquefied petroleum gases from being released to the atmosphere except when released in accordance with Section 7.3 of NFPA 58®. This section has been added to read: 3903.6.1 Release of gas. Liquefied petroleum gases shall not be released to the atmosphere except where released in accordance with Section 7.3 of NFPA 58®.

(18) Section 3903.6.2 Exhaust. This section has been added to require any plant processing and extraction utilizing liquefied petroleum gas including processes for off-gassing spent plant material and oil retrieval to be located under a chemical fume hood, listed in accordance with UL 1805. The section provides an exception where an approved exhaust system is installed in accordance with NFPA 91®. This section has been added to read: 3903.6.2 Exhaust. Plant processing and extraction utilizing liquefied petroleum gas, including processes for off-gassing spent plant material and oil retrieval, shall be located under a chemical fume hood, listed in accordance with UL 1805. Exception: A chemical fume hood is not required where an approved exhaust system is installed in accordance with NFPA 91®.

(19) Section 3903.6.3 Electrical. This section has been added to require the extraction room where liquefied petroleum gas is used as a solvent to be classified as Class I, Division I hazardous location in accordance with NFPA 70®. The section requires all conductive equipment and conductive objects within the extraction room to be bonded and grounded with a resistance of less than 1.0 times 10 to the sixth power ohms in accordance with NFPA 70®. This section has been added to read: 3903.6.3 Electrical. The extraction room where liquefied petroleum gas is used as a solvent shall be classified as Class I, Division I hazardous location in accordance with NFPA 70®. All conductive equipment and conductive objects within the extraction room shall be bonded and grounded with a resistance of less than 1.0 times 10 to the sixth power ohms in accordance with NFPA 70®.

(20) Section 3903.6.4 Automatic fire-extinguishing system. This section has been added to require chemical fume hoods and enclosures, including ductwork required by Section 3903.6.2 to be provided with an automatic fire-extinguishing system complying with Section 903.3.1.1, 904.6, 904.8 or 904.10. This section has been added to read: 3903.6.4 Automatic fire-

extinguishing system. Chemical fume hoods and enclosures, including ductwork required by Section 3903.6.2 shall be provided with an automatic fire-extinguishing system complying with Section 903.3.1.1, 904.6, 904.8 or 904.10.

(21) Section 3903.7 Carbon dioxide extraction. This section has been added to require plant processing and extraction facilities utilizing carbon dioxide solvents to comply with Sections 3903.7.1 through 3903.7.3, Section 5307 and other applicable provisions of the code. This section has been added to read: 3903.7 Carbon dioxide extraction. Plant processing and extraction facilities utilizing carbon dioxide solvents shall comply with Sections 3903.7.1 through 3903.7.3, Section 5307 and other applicable provisions of this code.

(22) Section 3903.7.1 Storage and handling. This section has been added to require all carbon dioxide compressed gas cylinders to be secured to a fixed object to prevent falling. This section has been added to read: 3903.7.1 Storage and handling. All carbon dioxide compressed gas cylinders shall be secured to a fixed object to prevent falling.

(23) Section 3903.7.2 Gas detection system. This section has been added to require a gas detection system complying with Sections 916 and 5307.4.3 to be provided in a room where carbon dioxide solvents are used in the extraction process. This section has been added to read: 3903.7.2 Gas detection system. A gas detection system complying with Sections 916 and 5307.4.3 shall be provided in a room where carbon dioxide solvents are used in the extraction process.

(24) Section 3903.7.3 Carbon dioxide discharge. This section has been added to require the carbon dioxide equipment pressure relief device and blow-off valves to be piped to the exterior of the building. This section has been added to read: 3903.7.3 Carbon dioxide discharge. The carbon dioxide extraction equipment pressure relief device and blow-off valves shall be piped to the exterior of the building.

(25) Section 3904 Systems and Equipment. This section heading has been added to signify the start of new section of code to address the systems and equipment for processing and extraction facilities. This section header has been added to read: 3904 Systems and Equipment.

(26) Section 3904.1 General requirements. This section has been added to require systems and equipment used with the processing and extraction of oils and products from plants, to comply with Sections 3904.2 through 3904.4 and 5003.2, and other applicable provisions of this code, the International Building Code® and International Mechanical Code®. This section has been added to read: 3904.1 General requirements. Systems and equipment used with the processing and extraction of oils and products from plants shall comply with Sections 3904.2 through 3904.4 and 5003.2, and other applicable provisions of this code, the International Building Code®, and International Mechanical Code®.

(27) 3904.2 Systems and equipment. This section has been added to require systems and equipment used for the extraction of oils from plant material to be listed or approved for the specific use or require the unlisted systems and equipment to be reviewed by a registered design professional who will review and consider any information provided by the systems designer or manufacturer. The section requires for systems and equipment not listed for a specific use that a technical report, in accordance with Section 3904.3, be prepared by the registered design professional and submitted to the fire code official for review and approval, and requires the firm or individual preparing the technical report to be approved by the fire code official prior to performing the analysis. This section has been added to read: 3904.2 Systems and equipment. Systems or equipment used for the extraction of oils from plant material shall be listed or approved for the specific use. If the system used for extraction of oils and products from plant material is not listed, the system shall be reviewed by a registered design professional. The registered design professional shall review and consider any information provided by the

system's designer or manufacturer. For systems and equipment not listed for the specific use, a technical report in accordance with Section 3904.3 shall be prepared and submitted to the fire code official for review and approval. The firm or individual preparing the technical report shall be approved by the fire code official prior to performing the analysis.

(28) 3904.3 Technical report. This section has been added to specify a technical report must be reviewed and approved by the fire code official as required by Section 3904.2 prior to the equipment being located or installed at the facility. The section requires the report to be prepared by a registered design professional or other professional approved by the fire code official. This section has been added to read: 3904.3 Technical report. A technical report, reviewed and approved by the fire code official as required by Section 3904.2, is required prior to the equipment being located or installed at the facility. The report shall be prepared by a registered design professional or other professional approved by the fire code official.

(29) 3904.3.1 Report content. This section has been added to list out the items to be included in the technical report required in Section 3904.3. This section has been added to read: Section 3904.3.1 Report content. The technical report shall contain all of the following:

(A) Manufacturer information.

(B) Preparer of record of the technical report.

(C) Date of review and report revision history.

(D) Signature page, including all of the following:

(i) Author of the report.

(ii) Date of the report.

(iii) Date and signature of registered design professional of record performing the design or peer review.

(E) Model number of the item evaluated. If the equipment is provided with a serial number the serial number shall be included for verification at the time of site inspection.

(F) Methodology of the design or peer review process used to determine minimum safety requirement. Methodology shall consider the basis of design, and shall include a code analysis and code path to demonstrate whether specific codes or standards are applicable.

(G) Equipment description. A list of every component and subassembly, such as fittings, hose, quick disconnects, gauges, site glass, gaskets, valves, pumps, vessels, containers and switches, of the system or equipment, indicating the manufacturer, model number, material and solvent compatibility. Manufacturer's data sheets shall be provided.

(H) A general flow schematic or general process flow diagram of the process. Post-processing or winterization shall be included in this diagram. Primary components of the process equipment shall be identified and match the equipment list required in Item 7. Operating temperatures, pressures and solvent state of matter shall be identified in each primary step or component. A piping and instrumentation diagram (PID or P&ID) shall be provided.

(I) Analysis of the vessel(s) if pressurized beyond standard atmospheric pressure. Analysis shall include purchased and fabricated components.

(J) Structural analysis for the frame system supporting the equipment.

(K) Process safety analysis of the extraction system, from the introduction of raw product to the end of the extraction process.

(L) Comprehensive process hazard analysis considering failure modes and points of failure throughout the process. The process hazard analysis shall include a review of emergency procedure information provided by the manufacturer of equipment or process and not that of the facility, building or room.

(M) Review of the assembly instructions, operational and maintenance manuals provided by the manufacturer.

(N) List of references used in the analysis.

(30) Section 3904.4 Site Inspection. This section has been added to specify prior to the operation of the extraction equipment, when required by the fire code official, the engineer of record or approved professional, as approved in Section 3904.2, inspect the site of the extraction process once equipment has been installed for compliance with the technical report and building analysis. The section requires the engineer of record or approved professional to provide a report of the findings and observations of the site inspection to the fire code official prior to the approval of the extraction process. It requires the field inspection report authored by the engineer of record to include the serial number of the equipment used in the process and confirm that the equipment installed is the same model and type of equipment identified in the technical report. This section has been added to read: 3904.4 Site inspection. Prior to the operation of the extraction equipment, where required by the fire code official, the engineer of record or approved professional, as approved in 3904.2, shall inspect the site of the extraction process once equipment has been installed for compliance with the technical report and the building analysis. The engineer of record or approved professional shall provide a report of the findings and observations of the site inspection to the fire code official prior to the approval of the extraction process. The field inspection report authored by the engineer of record shall include the serial number of the equipment used in the process and shall confirm that the equipment installed is the same model and type of equipment identified in the technical report.

(31) Section 3905 Safety Systems. This section header has been added to signify the addition of new section of code related to the safety systems for extraction and processing facilities. This section heading has been added to read: Section 3905 Safety Systems.

(32) Section 3905.1 Gas detection. This section has been added to require a continuous gas detection system to be provided for extraction processes utilizing flammable gases as solvents. It requires the gas detection threshold be not greater than 25 percent of the lower explosive limit/lower flammability limit (LEL/LFL) of the materials. This section has been added to read: 3905.1 Gas detection. For extraction processes utilizing flammable gases as solvents, a continuous gas detection system shall be provided. The gas detection threshold shall be not greater than 25 percent of the lower explosive limit/lower flammability limit (LEL/LFL) of the materials.

(33) Section 3905.1.1 System design. This section has been added to require the flammable gas detection system to be listed or approved and calibrated to the types of fuels or gases used for the extraction process. The section requires the gas detection system to be designed to activate when the level of flammable gas exceeds 25 percent of the LFL. This section has been added to read: 3905.1.1 System design. The flammable gas detection system shall be listed or approved and shall be calibrated to the types of fuels or gases used for the extraction process. The gas detection system shall be designed to activate when the level of flammable gases exceeds 25 percent of the LFL.

(34) Section 3905.1.2 Gas detection system components. This section has been added to require gas detection system control units and gas detectors to be listed and labeled in accordance with specific standards for use with the gases and vapors being detected. This section has been added to read: 3905.1.2 Gas detection system components. Gas detection system control units shall be listed and labeled in accordance with UL 864 or UL 2017. Gas detectors shall be listed and labeled in accordance with UL 2075 for use with the gases and vapors being detected.

(35) Section 3905.1.3 Operation. This section has been added to require the activation of the gas detection system to result in the initiation of specific actions to activate alarms and the

ventilation systems while deactivating heating systems, located in the extraction room. This section has been added to read: 3905.1.3 Operation. Activation of the gas detection system shall result in all of the following:

(A) Initiation of distinct audible and visual alarm signals in the extraction room.

(B) Deactivation of all heating systems located in the extraction room.

(C) Activation of the mechanical ventilation system, where the system is interlocked with gas detection.

(36) Section 3905.1.4 Failure of the gas detection system. This section has been added to require specific actions to occur when the gas detection system experiences a failure. This section has been added to read: 3905.1.4 Failure of the gas detection system. Failure of the gas detection system shall result in the deactivation of the heating system; activation of the mechanical ventilation system where the system is interlocked with the gas detection system; and initiation of a trouble signal to sound in an approved location.

(37) Section 3905.1.5 Interlocks. This section has been added to require electrical components within the extraction room to be interlocked with the gas detection system and disable all light switches and electrical outlets when the gas detection system is activated. This section has been added to read: 3905.1.5 Interlocks. Electrical components within the extraction room shall be interlocked with the gas detection system. Activation of the gas detection system shall disable all light switches and electrical outlets.

(38) Section 3905.2 Emergency shutoff. This section has been added to require an emergency shutoff system to be provided when extraction processes utilize gaseous hydrocarbon-based solvents. This section has been added to read: 3905.2 Emergency shutoff. Extraction processes utilizing gaseous hydrocarbon-based solvents shall be provided with emergency shutoff systems in accordance with Section 5803.1.3.

(39) Section 3905.3 Emergency power system. This section has been added to require the extraction room lighting and extraction room ventilation system to be provided with emergency power for extraction processes utilizing hydrocarbon gases or liquids as solvents, in accordance with Section 2702 of the International Building Code®. This section has been added to read: 3905.3 Emergency power system. For extraction processes utilizing hydrocarbon gases or liquids as solvents, the extraction room lighting and extraction room ventilation system shall be provided with emergency power in accordance with Section 2702 of the International Building Code®.

748:20-4-45. IFC® Chapter 40 [RESERVED]

748:20-4-46. IFC® Chapter 41 [RESERVED]

748:20-4-47. IFC® Chapter 42 [RESERVED]

748:20-4-48. IFC® Chapter 43 [RESERVED]

748:20-4-49. IFC® Chapter 44 [RESERVED]

748:20-4-50. IFC® Chapter 45 [RESERVED]

748:20-4-51. IFC® Chapter 46 [RESERVED]

748:20-4-52. IFC® Chapter 47 [RESERVED]

748:20-4-53. IFC® Chapter 48 [RESERVED]

748:20-4-54. IFC® Chapter 49 [RESERVED]

748:20-4-55. IFC® Chapter 50 [RESERVED]

748:20-4-56. IFC® Chapter 51 [RESERVED]

748:20-4-57. IFC® Chapter 52 [RESERVED]

748:20-4-58. IFC® 2015 Chapter 53 Compressed Gases

Chapter 53 of the IFC® is adopted with the following modifications:

(1) Section 5302.1 Definitions. This section has been modified to clarify the definition for a "CARBON DIOXIDE ENRICHMENT SYSTEM" has been added to the list of definitions defined in Chapter 2. This section has been modified to read: 5302.1 Definitions. The following terms are defined in Chapter 2:

(A) CARBON DIOXIDE ENRICHMENT SYSTEM.

(B) COMPRESSED GAS.

(C) COMPRESSED GAS CONTAINER.

(D) COMPRESSED GAS SYSTEM.

(E) NESTING.

(F) TUBE TRAILER.

(2) Section 5307 Compressed gases not otherwise regulated. This section header has been modified to change the title from "Carbon Dioxide Systems used in Beverage Dispensing Applications" to "Compressed gases not otherwise regulated" and to update Section 5307 to address more than carbon dioxide systems used in beverage dispensing applications. This section header has been modified to read: 5307 Compressed Gases Not Otherwise Regulated.

(3) Section 5307.1 General. The original Section 5307.1 published in the 2015 IFC® has been modified and moved to Section 5307.3 and a new Section 5307.1 with the same section heading entitled: "General" has been added to clarify compressed gases in storage or use not regulated by material specific provisions in other chapters of the code, including asphyxiant, irritant and radioactive gases, shall comply with this section in addition to other requirements in this chapter. This section has been modified to read: 5307.1 General. Compressed gases in storage or use not regulated by the material-specific provisions of Chapters 6, 54, 55, and 60 through 67, including asphyxiant, irritant and radioactive gases, shall comply with this section in addition to other requirements of this chapter.

(4) Section 5307.2 Ventilation. The original Section 5307.2 published the 2015 IFC®, entitled "Permits" has been stricken from the code. A new Section 5307.2 entitled "Ventilation" has been added in its place. This section has been added to clarify indoor storage and use areas and storage buildings shall be provided with ventilation in accordance with Section 5004.3; and where mechanical ventilation is provided, the system shall be operational during such time as the building or space is occupied. The section provides exceptions to the requirement for mechanical ventilation when a gas detection system complying with Section 5307.2.1 is utilized and when areas containing insulated liquid carbon dioxide systems used in beverage dispensing applications comply with Section 5307.3. This section has been added to read: 5307.2 Ventilation: Indoor storage and use areas and storage buildings shall be provided with

ventilation in accordance with Section 5004.3. Where mechanical ventilation is provided, the systems shall be operational during such time as the building or space is occupied. Exceptions:

(A) A gas detection system complying with Section 5307.2.1 shall be permitted in lieu of mechanical ventilation.

(B) Areas containing insulated liquid carbon dioxide systems used in beverage dispensing applications shall comply with Section 5307.3.

(5) Section 5307.2.1 Gas detection systems. This section has been added to require a gas detection system complying with Section 916 or where approved, an oxygen depletion alarm system, either of which initiates audible and visible alarm signals in the room or area where the sensors are installed, shall be provided. This section has been added to read: 5307.2.1 Gas detection systems. In rooms or areas not provided with ventilation in accordance with Section 5307.2, a gas detection system complying with Section 916 or, where approved, an oxygen depletion alarm system, either of which initiates audible and visible alarm signals in the room or area where the sensors are installed, shall be provided.

(6) Section 5307.3 Insulated liquid carbon dioxide systems used in beverage dispensing applications. The original Section 5307.3 published in the 2015 IFC® entitled "Equipment" has been stricken and the originally published Section 5307.1 entitled "General" has been modified and moved to change the title of the section from "General" to "Insulated liquid carbon dioxide systems used in beverage dispensing applications." The section requires insulated liquid carbon dioxide systems with more than 100 pounds (45.4 kg) of carbon dioxide used in beverage dispensing applications to comply with Section 5307.3.1. This section has been modified to read: 5307.3 Insulated liquid carbon dioxide systems used in beverage dispensing applications. Insulated liquid carbon dioxide systems with more than 100 pounds (45.4 kg) of carbon dioxide used in beverage dispensing applications shall comply with Section 5307.3.1.

(7) Section 5307.3.1. Ventilation. The original section 5307.5 published in the 2015 IFC® has been modified and moved to Section 5307.3.1 by changing the title of the section from "Required protection" to "Ventilation." The section requires insulated liquid carbon dioxide storage tanks, cylinders, piping and equipment located indoors and in any other indoor areas where a leak of carbon dioxide may accumulate to be provided with mechanical ventilation and to be designed to have a negative pressure in relation to the surrounding area. The section contains an exception if there is a gas detection system complying with Section 5307.3.2. This section has been added to read: 5307.3.1 Ventilation. Where insulated liquid carbon dioxide storage tanks, cylinders, piping and equipment are located indoors, rooms or areas containing storage tanks, cylinders, piping and equipment, and other areas where a leak of carbon dioxide is expected to accumulate, shall be provided with mechanical ventilation in accordance with Section 5004.3 and designed to maintain the room containing the carbon dioxide at a negative pressure in relation to the surrounding area. Exception: A gas detection system complying with Section 5307.3.2 shall be permitted in lieu of mechanical ventilation.

(8) Section 5307.3.2 Gas detection system. This section has been added to specify where ventilation is not provided in accordance with Section 5307.3.1, a gas detection system shall be provided in rooms or indoor areas and in below grade outdoor locations with insulated carbon dioxide systems. The section specifies where carbon dioxide sensors shall be provided and requires the system to be designed to activate audible and visible supervisory alarms under specific circumstances and at specific locations. This section has been added to read: 5307.3.2 Gas detection system. Where ventilation is not provided in accordance with Section 5307.3.1, a gas detection system shall be provided in rooms or indoor areas and in below grade outdoor locations with insulated carbon dioxide systems. Carbon dioxide sensors shall be provided

within 12 inches (305 mm) of the floor in the area where the gas is expected to accumulate or other approved locations. The system shall be designed as follows:

(A) Activates an audible and visible supervisory alarm at a normally attended location upon detection of a carbon dioxide concentration of 5,000 ppm (9000 mg/cubic meter).

(B) Activates an audible and visible alarm within the room or immediate area where the system is installed upon the detection of a carbon dioxide concentration of 30,000 ppm (54 000 mg/cubic meter).

(9) Section 5307.4 Carbon dioxide enrichment systems. The originally published Section 5307.4 entitled "Protection from damage" has been stricken from the code and has been replaced with a new Section 5307.4 entitled "Carbon dioxide enrichment systems." The section specifies the design, installation and maintenance of carbon dioxide enrichment systems with more than 100 pounds (45.4 kg) of carbon dioxide and carbon dioxide enrichment systems with any quantity of carbon dioxide having a remote fill connection, to comply with Sections 5307.4.1 through 5307.4.7. This section has been added to read: 5307.4 Carbon dioxide enrichment systems. The design, installation and maintenance of carbon dioxide enrichment systems with more than 100 pounds (45.4 kg) of carbon dioxide, and carbon dioxide enrichment systems with any quantity of carbon dioxide having a remote fill connection, shall comply with Sections 5307.4.1 through 5307.4.7.

(10) Section 5307.4.1 Documentation. This section has been added to list the information that must be submitted with the application for permit. This section has been added to read: 5307.4.1 Documentation. The following information shall be provided with the application for permit:

(A) Total aggregate quantity of liquid carbon dioxide in pounds or cubic feet at normal temperature and pressure.

(B) Location and total volume of the room where the carbon dioxide enrichment operation will be conducted. Identify whether the room is at grade or below grade.

(C) Location of containers relative to equipment, building openings, and means of egress.

(D) Manufacturer's specifications and pressure rating, including cut sheets, of all piping and tubing to be used.

(E) A piping and instrumentation diagram that shows piping support and remote fill connections.

(F) Details of container venting, including but not limited to vent line size, material and termination location.

(G) Alarm and detection system and equipment, if applicable.

(H) Seismic support for containers.

(11) Section 5307.4.2 Equipment. This section has been added to require pressure relief, vent piping, fill indicators, fill connections, vent terminations, piping systems and the storage, use and handling of carbon dioxide to be in accordance with Chapter 53 and NFPA 55. This section has been added to read: 5307.4.2 Equipment. Pressure relief, vent piping, fill indicators, fill connections, vent terminations, piping systems and the storage, use and handling of carbon dioxide shall be in accordance with Chapter 53 and NFPA 55.

(12) Section 5307.4.3. Gas detection system. This section has been added to require a gas detection system complying with Section 916 to be provided in rooms or indoor areas in which the carbon dioxide enrichment process is located, in rooms or areas where container systems are located, and in other areas where carbon dioxide is expected to accumulate. The section provides directions on where the carbon dioxide sensors will be located, how the system shall be designed and specifications for alarm activation. This section has been added to read: 5307.4.3 Gas detection system. A gas detection system complying with Section 916 shall be provided in rooms or indoor areas in which the carbon dioxide enrichment process is located, in rooms or

indoor areas in which container systems are located, and in other areas where carbon dioxide is expected to accumulate. Carbon dioxide sensors shall be provided within 12 inches (305 mm) of the floor in the area where the gas is expected to accumulate or leaks are most likely to occur. The system shall be designed as follows:

(A) Activates a low-level alarm upon detection of carbon dioxide concentration of 5,000 ppm (9000 mg/cubic meter).

(B) Activates a high-level alarm upon detection of carbon dioxide concentration of 30,000 ppm (54 000 mg/cubic meter).

(13) Section 5307.4.3.1 System activation. This section has been added to specify the required automatic system activation steps for both low level and high level gas detection alarms. This section has been added to read: 5307.4.3.1 System activation.

(A) Activation of the low level gas detection system alarms shall automatically:

(i) Stop the flow of carbon dioxide to the piping system.

(ii) Activate the mechanical exhaust ventilation system.

(iii) Activate the audible and visible supervisory alarm signal at an approved location within the building.

(B) Activation of the high-level gas detection system alarm shall automatically:

(i) Stop the flow of carbon dioxide to the piping system.

(ii) Activate the mechanical exhaust ventilation system.

(iii) Activate the audible and visible evacuation alarm both inside and outside of the carbon dioxide enrichment area, and the area in which the carbon dioxide containers are located.

(14) Section 5307.4.4 Pressurizing and ventilation. This section has been added to require rooms or indoor areas in which carbon dioxide enrichment is provided to be maintained at a negative pressure in relation to the surrounding areas in the building. The section requires a mechanical ventilation system to be provided in accordance with the International Mechanical Code® and other requirements in the section. This section has been added to read: 5307.4.4 Pressurizing and ventilation. Rooms or indoor areas in which carbon dioxide enrichment is provided shall be maintained at a negative pressure in relation to the surrounding areas in the building. A mechanical ventilation system shall be provided in accordance with the International Mechanical Code® that complies with all of the following:

(A) Mechanical ventilation in the room or area shall be at a rate of not less than 1 cfm per square foot [0.00508 cubic meters divided by (s times meters squared)].

(B) When activated by the gas detection system, the mechanical ventilation system shall remain on until manually reset.

(C) The exhaust system intakes shall be taken from points within 12 inches (305 mm) of the floor.

(D) The ventilation system shall discharge to the outdoors in an approved location.

(15) Section 5307.4.5 Signage. This section has been added to require hazard identification signs to be posted at the entrance to the room and indoor areas where the carbon dioxide enrichment process is located and at the entrance to the rooms or indoor areas where the carbon dioxide containers are located. The section specifies the minimum size of the sign and the required warning language for the sign. This section has been added to read: 5307.4.5 Signage. Hazard identification signs shall be posted at the entrance to the room and indoor areas where the carbon dioxide enrichment process is located and at the entrance to the room or indoor area where the carbon dioxide containers are located. The sign shall be not less than 8 inches (200 mm) in width and 6 inches (150 mm) in height and indicate: CAUTION - CARBON DIOXIDE

GAS. VENTILATE THE AREA BEFORE ENTERING. A HIGH CARBON DIOXIDE (CO2) GAS CONCENTRATION IN THIS AREA CAN CAUSE ASPHYXIATION.

(16) Section 5307.4.6 Seismic and structural design. This section has been added to require carbon dioxide system containers and piping to comply with the seismic design requirements in Chapter 16 of the International Building Code® and not exceed the floor loading limitation of the building. This section has been added to read: 5307.4.6 Seismic and structural design. Carbon dioxide system containers and piping shall comply with the seismic design requirements in Chapter 16 of the International Building Code® and shall not exceed the floor loading limitation of the building.

(17) Section 5307.4.7 Container refilling. This section has been added to prohibit refilling of carbon dioxide containers located indoors, unless filled from a remote connection located outdoors. This section has been added to read: 5307.4.7 Container refilling. Carbon dioxide containers located indoors shall not be refilled unless filled from a remote connection located outdoors.

(18) Section 5307.5 Required protection. The originally published section 5307.5 entitled "Required protection" in the 2015 IFC® has been modified and moved to Section 5307.3.1 entitled "Ventilation."

(19) Section 5307.5.1 Ventilation. This section has been stricken from the code.

(20) Section 5307.5.2 Emergency alarm system. This section has been stricken from the code.

(21) Section 5308 Compressed gases not otherwise regulated. This section header and the subsequent sections 5308.1 General and 5308.2 Ventilation have been stricken from the code.

748:20-4-59. IFC® Chapter 54 [RESERVED]

748:20-4-60. IFC® Chapter 55 [RESERVED]

748:20-4-61. IFC® Chapter 56 [RESERVED]

748:20-4-62. IFC® Chapter 57 [RESERVED]

748:20-4-63. IFC® Chapter 58 [RESERVED]

748:20-4-64. IFC® Chapter 59 [RESERVED]

748:20-4-65. IFC® Chapter 60 [RESERVED]

748:20-4-66. IFC® Chapter 61 [RESERVED]

748:20-4-67. IFC® Chapter 62 [RESERVED]

748:20-4-68. IFC® Chapter 63 [RESERVED]

748:20-4-69. IFC® Chapter 64 [RESERVED]

748:20-4-70. IFC® Chapter 65 [RESERVED]

748:20-4-71. IFC® Chapter 66 [RESERVED]

748:20-4-72. IFC® Chapter 67 [RESERVED]

748:20-4-73. IFC® Chapter 68 [RESERVED]

748:20-4-74. IFC® Chapter 69 [RESERVED]

748:20-4-75. IFC® Chapter 70 [RESERVED]

748:20-4-76. IFC® Chapter 71 [RESERVED]

748:20-4-77. IFC® Chapter 72 [RESERVED]

748:20-4-78. IFC® Chapter 73 [RESERVED]

748:20-4-79. IFC® Chapter 74 [RESERVED]

748:20-4-80. IFC® Chapter 75 [RESERVED]

748:20-4-81. IFC® Chapter 76 [RESERVED]

748:20-4-82. IFC® Chapter 77 [RESERVED]

748:20-4-83. IFC® Chapter 78 [RESERVED]

748:20-4-84. IFC® Chapter 79 [RESERVED]

748:20-4-85. IFC® 2015 Chapter 80 Referenced Standards

Chapter 80 of the IFC® 2015 is adopted with the following modifications:

(1) The reference to the International Building Code® has been modified to include after the title the words "as adopted and modified by the State of Oklahoma through the OUBCC." This section has been modified to read: IBC®-15 International Building Code® as adopted and modified by the State of Oklahoma through the OUBCC.

(2) The reference to the International Existing Building Code® has been modified to include after the title the words "as adopted and modified by the State of Oklahoma through the OUBCC." This section has been modified to read: IEBC®-15 International Existing Building Code® as adopted and modified by the State of Oklahoma through the OUBCC.

(3) The reference to the International Fuel Gas Code® has been modified to include after the title the words "as adopted and modified by the State of Oklahoma through the OUBCC." This section has been modified to read: IFGC®-15 International Fuel Gas Code® as adopted and modified by the State of Oklahoma through the OUBCC.

(4) The reference to the International Mechanical Code® has been modified to include after the title the words "as adopted and modified by the State of Oklahoma through the OUBCC." This section has been modified to read: IMC®-15 International Mechanical Code® as adopted and modified by the State of Oklahoma through the OUBCC.

(5) The reference to the International Plumbing Code® has been modified to include after the title the words "as adopted and modified by the State of Oklahoma through OUBCC." This section has been modified to read: IPC®-15 International Plumbing Code® as adopted and modified by the State of Oklahoma through the OUBCC.

(6) The reference to the International Residential Code® has been modified to include after the title the words "as adopted and modified by the State of Oklahoma through the OUBCC." This section has been modified to read: IRC®-15 International Residential Code® as adopted and modified by the State of Oklahoma through the OUBCC.

(7) The referenced standard for NFPA® 2 Hydrogen Technologies Code has been modified to change the edition year from 2011 to 2016. This Section has been modified to read: 02-16 Hydrogen Technologies Code.

(8) The referenced standard for NFPA® 70® National Electrical Code® has been modified to include after the title the words "as adopted and modified by the State of Oklahoma through the OUBCC." This section has been modified to read: 70-14 National Electrical Code® as adopted and modified by the State of Oklahoma through the OUBCC.

(9) A reference to the UL Standard 1805 - 2002 Standard for Laboratory Hoods and Cabinets has been added to the list of UL standards. This standard has been added to read: UL 1805 - 2002: Standard for Laboratory Hoods and Cabinets. 3903.4.3, 3903.5, 3903.6.2.

748:20-4-86. IFC® Appendix O [RESERVED]