

OKLAHOMA UNIFORM BUILDINGCODE COMMISSION RULES

748 - Uniform Building Code Commission Adopted Codes

International Building Code®, 2015 Edition (IBC®, 2015) 748:20-1-1 through 748:20-1-19

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 in the 2015 Edition of the International Building Code® (IBC®, 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 Building Code® (IBC®, 2015), which has been promulgated as a permanent rule pursuant to Oklahoma law at OAC 748:20-1-1. 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 Commission 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 1 - IBC® 2015

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

748:20-1-1. Adoption of International Building Code®, 2015 Edition (IBC® 2015)

(a) The Oklahoma Uniform Building Code Commission (the "OUBCC") hereby adopts the International Building Code®, 2015 Edition (IBC® 2015) as amended and modified in this subchapter as the statewide minimum code for commercial building construction in the State of Oklahoma pursuant to 59 O.S. 1000.23.

(b) The OUBCC through formal action expressly chose to adopt the IBC® 2015 as amended and modified in this subchapter, as the statewide minimum code for commercial building construction in the State of Oklahoma. In like manner, the OUBCC through formal action expressly chose to not adopt the International Building Code®, 2012 Edition (IBC®, 2012) for any purpose.
(c) As part of its 2012 code cycle, the International Code Council, Inc.® (ICC®) reorganized the

(c) As part of its 2012 code cycle, the International Code Council, Inc. (ICC (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]

748:20-1-2. Effect of Adoption

The IBC® 2015 as amended and revised by these rules, is hereby established and adopted as the statewide minimum code for commercial building construction in 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]

748:20-1-3. IBC® 2015 and Other Appendices

(a) None of the appendices of the IBC® 2015 have been adopted by the OUBCC for inclusion in the statewide minimum code for commercial building construction in the State of Oklahoma.(b) The OUBCC hereby creates a new appendix, entitled "Appendix N, Supplemental Storm Shelter"

Requirements."

(c) The OUBCC has removed from Chapter Four of the IBC® 2015 Section 423.3 entitled "Critical emergency operations" and Section 423.4 entitled "Group E occupancies" and has relocated and renumbered those sections to the newly created Appendix N entitled "Supplemental Storm Shelter Requirements."

(d) Appendices A through N are not adopted as the minimum code for commercial building construction 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; Amended at 35 OK Reg 2137, eff 9-17-18]

748:20-1-4. IBC® 2015 Provisions Adopted and Modified

(a) All chapters and provisions within chapters, including exceptions, of the IBC® 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 commercial building construction 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 Chapter 34 for possible future use. The OUBCC has not adopted Chapter 34 and the chapter is not considered part of the statewide minimum code for commercial building construction within the State of Oklahoma.

(c) To the extent any references in the IBC[®] 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 IBC® 2015 as amended and modified in this sub-chapter and in the IBC® 2015 Chapter 35 entitled "Referenced Standards."

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

748:20-1-5. 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]

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

Chapter 1 of the Oklahoma adopted IBC® 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 IBC® 2015 as amended and revised by the OUBCC, as the statewide minimum code to be used by all entities for commercial building construction in jurisdictions throughout the State of Oklahoma. However, the OUBCC's adoption of Chapter 1 "Scope and Administration" of the IBC® 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 commercial building construction.

(2) All provisions of the adopted IBC® 2015, including Chapter 1, as amended and revised by the OUBCC, are hereby established and adopted as the statewide minimum code for commercial building construction 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: 105.1.1 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: 105.1.2 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 IBC® 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 IBC® 2015 and the Commission 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]

748:20-1-7. IBC® [REVOKED]

[Source: Added at 29 Ok Reg 1646, eff 11-1-12; Amended at 32 Ok Reg 2270, eff 11-1-15; Revoked at 35 OK Reg 2137, eff 9-17-18]

748:20-1-8. IBC® 2015 Chapter 3 Use and Occupancy Classification

Chapter 3 of the IBC® 2015 is adopted with the following modifications:

(1) Section 305.2.4 Seven or fewer children in a detached dwelling. This section has been added to align the code with the Oklahoma Department of Human Services regulations for a licensed daycare facility in the home and the change clarifies the total number of children includes both those under and above two and one half years of age. This section has been added to read: 305.2.4 Seven or fewer children in a detached dwelling. A facility such as the above within a detached dwelling and having seven or fewer children receiving such day care shall be permitted to comply with the International Residential Code® (IRC®). This number shall include children two and one half years or less of age.

(2) Section 305.2.5 Eight to twelve children in a detached dwelling. This section has been added to align the code with the Oklahoma Department of Human Services regulations for a licensed daycare facility with eight to twelve children within a detached dwelling, allowing the licensed daycare facility to comply with the requirements of the IRC® so long as the structure is fire-sprinklered, and clarifies the total number of children includes both those under and above two and one-half years of age. This section has been added to read: 305.2.5 Eight to 12 children in a detached dwelling. A facility such as the above within a detached dwelling and having eight to 12 children receiving such day care shall 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®. This number shall include children two and one-half years or less of age.

(3) Section 310.5.2 Lodging houses. This section has been modified to limit a lodging house to four guest rooms if complying with the requirements in the IRC® to align the section with the requirements in Title 74 O. S. § 317.1. This section has been modified to read: 310.5.2 Lodging houses. Owner-occupied lodging houses with four or fewer guest rooms shall be permitted to be constructed in accordance with the IRC®.

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

748:20-1-9. IBC® 2015 Chapter 4 Special Detailed Requirements Based on Use and Occupancy [AMENDED AND RENUMBERED TO 748:20-2-9]

Chapter 4 of the IBC® 2015 is adopted with the following modifications:

(1) Section 406.7.2.1 Canopies used to support gaseous hydrogen systems. This section has been modified by deleting the word "hydrogen" in the heading and in the third requirement; and by adding the wording "lighter-than-air" to the section header to make the section applicable to all lighter-than-air fuels. This section has been modified to read: 406.7.2.1 Canopies used to support lighter-than-air gaseous systems. Canopies that are used to shelter dispensing operations where flammable compressed gases are located on the roof of the canopy shall be in accordance with the following:

(A) The canopy shall meet or exceed Type I construction requirements.

(B) Operations located under canopies shall be limited to refueling only.

(C) The canopy shall be constructed in a manner that prevents the accumulation of gas. (2) Section 406.7.2.2. Canopies sheltering units and devices that dispense lighter than air gas. This section has been added to require all canopies to be designed to prevent the accumulation or entrapment of ignitable vapors under canopies when dispensing lighter than air gas or all electrical equipment installed beneath the canopy is required to be suitable for Class I, Division 2 hazardous (classified) locations. This section has been added to read: 406.7.2.2 Canopies sheltering units and devices that dispense lighter than air gas. Where CNG, LNG, or Hydrogen motor fuel dispensing devices are installed beneath a canopy, the canopy 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 shall extend a minimum of 5 feet (1524 mm) above the highest projection of the canopy. Compression and storage equipment located on the top of the canopy shall be in accordance with current State of Oklahoma adopted International Fire Code®, Section 2309.

(3) Section 419.1 General. This section has been modified to add a new exception to allow Group B, M, and F occupancies located in a detached dwelling unit to be constructed in accordance with the IRC® if they comply with the limitations in Section 419.1.1. This section has been modified

to read: 419.1 General. A live/work unit shall comply with Sections 419.1 through 419.9. Exceptions:

(A) Dwelling or sleeping units that include an office that is less than 10 percent of the area of the dwelling unit are permitted to be classified as dwelling units with accessory occupancies in accordance with Section 508.2.

(B) Group B, M, and F occupancies that are located in a detached dwelling unit complying with the limitations of Section 419.1.1 shall be permitted to be constructed in accordance with the IRC®.

(4) Section 419.1.1 Limitations. This section has been modified to limit the nonresidential portion of the live/work unit to not greater than 2,500 square feet (232 square meters). This section has been modified to read: 419.1.1 Limitations. The following shall apply to all live/work areas:

(A) The nonresidential portion of the live/work unit is permitted to be not greater than 2,500 square feet (232 square meters) in area;

(B) The nonresidential area is permitted to be not more than 50 percent of the area of each live/work unit;

(C) The nonresidential area function shall be limited to the first or main floor only of the live/work unit; and

(D) Not more than five nonresidential workers or employees are allowed to occupy the nonresidential area at any one time.

(5) Section 423.1.1 Scope. This section has been modified to include above and below ground storm shelters and limit the use of the term storm shelter to those structures constructed according to this section. This section has been modified to read: 423.1.1 Scope. This section applies to the construction of above or below ground storm shelters constructed as separate detached buildings, or rooms within buildings, structures, or portions thereof for the purpose of providing safe refuge from storms that produce high winds, such as tornados and hurricanes. Any room or structure, as may be used as a place of refuge during a severe wind storm event, shall not be defined as a storm shelter unless specifically designed to the requirements as listed in Section 423.

(6) Section 423.3 Critical emergency operations. This section, including the exception, has been moved to the newly created Appendix N, entitled "Supplemental Storm Shelter Requirements" and is not adopted as a minimum standard for residential or commercial construction within the State of Oklahoma. This section has been renumbered in Appendix N to become N102. The section number 423.3 itself, will stay as part of this code for numbering alignment but will not have any requirements attached to it.

(7) Section 423.4 Group E occupancies. This section, including exceptions, has been moved to the newly created Appendix N, entitled "Supplemental Storm Shelter Requirements" and is not adopted as a minimum standard for residential or commercial construction within the State of Oklahoma. The section has been renumbered in Appendix N to become N103. The section number 423.4 itself, will stay as part of this code for numbering alignment but will not have any requirements attached to it.

(8) Section 423.5 Required. This section has been added to specify the requirements when storm shelters are provided. This section has been added to read: 423.5 Required. Where storm shelters are provided, they shall be provided in compliance with ICC 500® except as required by Sections 423.5.1 through 423.5.11.

(9) Section 423.5.1 Storm shelter documents. This section has been added to require the construction documents prepared for the storm shelter to be maintained and protected within the storm shelter by the owner or owner's authorized agent. This section has been added to read: 423.5.1 Storm shelter documents. The construction documents which were prepared for the

construction of the storm shelter, shall be maintained and protected within the storm shelter by the owner or owner's authorized agent.

(10) Section 423.5.2 Signage. This section has been added to clarify that all signs for a storm shelter, as outlined in ICC 500® Sections 108, 504.1, 504.1.1, and 504.1.2, comply with the applicable signage requirements of ICC A117.1®. This section has been added to read: 423.5.2 Signage. All signs, as outlined in ICC 500® Sections 108, 504.1, 504.1.1 and 504.1.2 shall comply with the applicable requirements of ICC A117.1®.

(11) Section 423.5.2.1 Entrance signage. This section has been added to clarify entrance signage as required by ICC 500® Section 504.1.1 is not required for the storm shelter when the storm shelter can be accessed from within the host building and is only open to the occupants of the host building. This section has been added to read: 423.5.2.1 Entrance signage. Entrance signage, as outlined in ICC 500® Section 504.1.1 shall not be required at exterior entrances where the shelter can be accessed from within a host building and is only open to the occupants of the host building.

(12) Section 423.5.3 Roof live load reduction for shelters. This section has been added to clarify roof live loads may not be reduced as allowed in Section 1607.12.2.1 (Equation 16-26) if the roof live load is stipulated under ICC 500® Section 303.2. This section has been added to read: 423.5.3 Roof live load reduction for shelters. Roof live load reduction in Section 1607.12.2.1 (Equation 16-26) shall not be allowed for roof live loads stipulated under ICC 500® Section 303.2.

(13) Section 423.5.4 Design wind speed. This section has been added to modify the requirements of ICC 500® Section 304.2 to clarify the minimum design wind speed for all storm shelters in the State of Oklahoma shall be set at 250 miles per hour. This section has been added to read: 423.5.4 Design wind speed. For storm shelters, the minimum design wind speed for the entire State of Oklahoma shall be 250 miles per hour.

(14) Section 423.5.5 Usable storm shelter floor area. This section has been added to modify the requirements of ICC 500® Section 501.1.2 to clarify when calculating the maximum usable floor area of a shelter, the areas within a privacy enclosure for sanitary facilities shall not be included. This section has been added to read: 423.5.5 Usable storm shelter floor area. The usable storm shelter floor area shall be determined by ICC 500® Section 501.1.2.1 or 501.1.2.2. Exception: Areas within privacy enclosures for sanitary facilities shall not be included in the usable floor area calculations.

(15) Section 423.5.6 Door operation. This section has been added to modify the requirements of ICC 500® Section 501.5 to specify means of egress doors shall be operable from the inside of the storm shelter without the use of keys or special knowledge or effort. This section has been added to read: 423.5.6 Door operation. Means of egress doors shall be operable from the inside without the use of keys or special knowledge or effort.

(16) Section 423.5.6.1 Additional doors and shutters operation. This section has been added to clarify doors and shutters designed to protect windows and other unprotected openings not required as a means of egress in storm shelters shall be operable from the inside without the use of keys or special relocatable tools. This section has been added to read: 423.5.6.1 Additional doors and shutters operation. Doors and shutters designed to protect windows or other unprotected openings not in a required means of egress in storm shelters shall be operable from the inside without the use the inside without the use of keys or special relocatable tools.

(17) 423.5.7 Height of storm shelter. This section has been added to clarify how to determine the location of the natural ventilation openings in storm shelters in accordance with ICC 500® Section 702.1.1.1, by providing a definition for the height of the storm shelter to be calculated by average of the vertical dimensions from the floor elevation to the bottom of the storm shelter deck

or to the underside of a hard ceiling within the storm shelter. This section has been added to read: 423.5.7 Height of storm shelter. When determining the location of natural ventilation in accordance with ICC 500® Section 702.1.1.1, the height of the storm shelter shall be defined as an average of the vertical dimensions from the floor elevation to the bottom of the storm shelter deck or to the underside of a hard ceiling within the storm shelter.

(18) Section 423.5.8 Additional facilities for storm shelters. This section has been added to modify the requirements of ICC 500® Section 702.2.2 to clarify when the required number of sanitation facilities for the storm shelter exceeds the number of required facilities provided for the normal occupancy of space, additional facilities may be temporary toilets, chemical toilets or other approved means and must have privacy enclosures with minimum clear inside dimensions of 5 feet by 5 feet (1524 mm by 1524 mm). This section has been added to read: 423.5.8 Additional facilities for storm shelters. Where the required number of sanitation facilities for the storm shelter exceeds the number of facilities provided for the normal occupancy of the space, the additional facilities shall be permitted to be temporary sanitary fixtures, chemical toilets, or other means approved by the authority having jurisdiction. Temporary toilets, chemical toilets, or other approved means shall have temporary or permanent privacy enclosures such as fabric, portable screens, or other means approved by the authority having jurisdiction. Privacy enclosures shall have minimum clear inside dimensions of 5 feet by 5 feet (1524 mm).

(19) Section 423.5.9 Sanitary facilities support systems. This section has been added to modify the requirements of ICC 500® Section 702.2.3 to clarify the support systems discussed in the section are for temporary sanitation facilities. This section has been added to read: 423.5.9. Sanitary facilities support systems. Support systems for the temporary sanitation facilities (e.g. bladders, storage tanks or vessels, etc.) shall be capable of supplying water and containing waste for the design capacity of the tornado shelter.

(20) Section 423.5.10 Conversion of plumbing systems. This section has been added to omit ICC 500® Section 702.2.4 from the minimum requirements of the code. This section has been added to read: 423.5.10 Conversion of plumbing systems. ICC 500® Section 702.2.4 is omitted. (21) Section 423.5.11 First aid kit. This section has been added to modify the requirements of ICC 500® Section 702.4 to specify that first aid kits for community shelters shall be required to be ANSI rated for the number of occupants in the shelter. This section has been added to read: 423.5.11 First aid kit. An ANSI compliant first aid kit rated for the number of storm shelter

occupants, as listed in the construction documents, shall be supplied in all tornado shelters. [Source: Added at 29 Ok Reg 1646, eff 11-1-12; Amended at 32 Ok Reg 2270, eff 11-1-15; Amended at 32 Ok Reg 2107; eff 9-15-17, Amended at 35 OK Reg 2137, eff 9-17-18]

748:20-1-10. IBC® Chapter 8 Interior Finishes [REVOKED]

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

748:20-1-11. IBC® 2015 Chapter 9 Fire Protection Systems [AMENDED AND RENUMBERED TO 748:20-2-14]

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

(1) Section 903.2.7 Group M. This section has been modified to reword subsection 4 D of this text 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 delete the requirement for an emergency voice/alarm communication system in Group E occupancies and require a fire alarm system. This 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 and similar areas are protected by heat detectors or other approved detection devices.

(iii) Shops 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 a 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 of 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.

(4) Section 911.1.3 Size. This section was modified to include an exception to make the fire command center smaller when approved by the fire code official. This section was modified to read: 911.1.3. Size. The room shall be a minimum of 200 square feet (19 square meters) 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]

748:20-1-12. IBC® 2015 Chapter 10 Means of Egress [AMENDED AND RENUMBERED TO 748:20-2-15]

Chapter 10 of the IBC® 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]

748:20-1-13. IBC® 2015 Chapter 16 Structural Design

Chapter 16 of the IBC® 2015 is adopted with the following modification: Section 1611.1 Design rain loads. This section has been modified to increase secondary drain size for short duration intensities. This section has been modified to read: 1611.1 Design rain loads. Each portion of a roof shall be designed to sustain the load of rainwater that will accumulate on it if the primary drainage system for that portion is blocked plus the uniform load caused by water that rises above the inlet of the secondary drainage system at its design flow. The design rainfall shall be based on a rainfall rate of 10.2 inches per hour.

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

748:20-1-14. IBC® 2015 Chapter 18 Soils and Foundations

(a) Chapter 18 of the IBC® 2015 is adopted with the following modification: Section 1809.4 Depth and width of footings has been modified to provide an exception to the code for minor buildings such as small storage buildings to be constructed without expensive foundations and be mounted on skids and would apply to light gage metal or similar carports provided they are adequately anchored. This section has been modified to read: Section 1809.4 Depth and width of footings. The minimum depth of footings below the undisturbed ground surface shall be 12 inches (305 mm). Where applicable, the requirements of Section 1809.5 shall also be satisfied. The minimum width of footings shall be 12 inches (305 mm). Exception: Single story free-standing building meeting all of the following conditions shall be permitted without footings:

(1) Assigned to Occupancy Category 1, in accordance with Section 1604.5;

(2) Light-frame wood or metal construction;

(3) Area of 400 square feet (37 square meters) or less;

(4) Eave height of 10 feet (3048 mm) or less; and

(5) Building height of 15 feet (4572 mm) or less.

(b) Such buildings shall have an approved wooden floor, or shall be placed on a concrete slab having a minimum thickness of 3 1/2 inches (89 mm). Buildings shall be anchored to resist uplift as required by Section 1609.

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

748:20-1-15. IBC® 2015 Chapter 29 Plumbing Systems

Chapter 29 of the IBC® 2015 is adopted with the following modification: Section 2902.4.1 Directional signage has been modified to limit the requirement to Group A, B, I, M, and R-1 occupancies, clarify the number of signs needed, and provided two exceptions to the requirement. This section has been modified to read: 2902.4.1 Directional signage. Directional signage indicating the route to the required public toilet facilities in group A, B, I, M, and R-1 occupancies shall be posted in a lobby, corridor, aisle, or similar space, such that the sign can be readily seen from the main entrance to the building or tenant space. Only one sign at each main entrance that is intended for public use shall be required. Exceptions:

(1) Group A occupancies that are part of an overall group E occupancy need not have directional signage.

(2) Private-use Group B occupancies need not have directional signage. [Source: Added at 29 Ok Reg 1646, eff 11-1-12; Amended at 32 Ok Reg 2270, eff 11-1-15]

748:20-1-16. IBC® 2015 Chapter 32 Encroachments into the Public Right-of-Way

Chapter 32 of the IBC® 2015 is adopted with the following modification: Section 3201.3 Other Laws has been modified to allow the authority having jurisdiction the ability in unusual circumstances to evaluate the risk of making an exception to a requirement in this chapter. This section has been modified to read: 3201.3 Other Laws. The provisions of this chapter shall not be construed to permit the violation of other laws or ordinances regulating the use and occupancy of public property or to prevent the holders of public right-of-way to grant special permission for encroachments in their rights-of-way greater than those permitted in Section 3202. [Source: Added at 29 Ok Reg 1646, eff 11-1-12; Amended at 32 Ok Reg 2270, eff 11-1-15]

748:20-1-17. IBC® Chapter 34 Existing Buildings and Structures [REVOKED]

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

748:20-1-18. IBC® 2015 Chapter 35 Referenced Standards

Chapter 35 of the IBC® 2015 is adopted with the following modifications:

(1) The reference to ICC 500® has been modified to change the sections to be referenced. This section has been modified to read: ICC 500®-14 ICC/NSSA Standard on the Design and Construction of Storm Shelters, Code reference sections: 202, 423.5, 423.5.1, 423.5.2, 423.5.2.1, 423.5.3, 423.5.4, 423.5.5, 423.5.6, 423.5.6.1, 423.5.7, 423.5.8, 423.5.9, 423.5.10, and 423.5.11.
 (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 Energy Conservation Code® has been modified to change the edition year to 2006. This section has been modified to read: IECC®-06 International Energy Conservation Code®.

(4) The reference to the International Fire 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: IFC®-15 International Fire Code® as adopted and modified by the State of Oklahoma through the OUBCC.

(5) 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.

(6) 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.

(7) 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 the 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.

(8) 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.

(9) The referenced standard for NFPA® 70 National Electrical Code® has been modified to add 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; Amended at 35 OK Reg 2137, eff 9-17-18]

748:20-1-19. Appendix N, Supplemental Storm Shelter Requirements

This appendix has been newly created and entitled "Supplemental Storm Shelter Requirements". 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 design requirements for this appendix. This section has been added to read: N101 General.

(A) N101.1 Scope. This section has been added to specify the provisions of the appendix shall apply exclusively to the installation of storm shelters in critical emergency operation facilities and Group E occupancies. This section has been added to read: N101.1 Scope. The provisions of this appendix shall apply exclusively to the installation of storm shelters in critical emergency operation facilities and Group E occupancies.

(B) N101.2 Design. This section has been added to specify the technical requirements for the items herein shall comply with ICC 500® and Section 423. This section has been added to read: N101.2 Design. Technical requirements for items herein shall comply with ICC 500® and Section 423.

(2) Section N102 Critical emergency operations. This section, formerly numbered Section 423.3 has been moved into appendix N entitled "Supplemental Storm Shelter Requirements" and has been modified to require all 911 call stations, emergency operations centers and normally occupied fire, rescue ambulance and police stations to have a storm shelter constructed in accordance with ICC 500® and Section 423. The section has been added to read: N102 Critical emergency operations. All 911 call stations, emergency operations centers and normally occupied

fire, ambulance, and police stations shall have a storm shelter constructed in accordance with ICC 500[®] and Section 423. Exception: Entire Buildings meeting the requirements for shelter design in ICC 500[®] and Section 423.

(3) Section N103 Group E occupancies. This section, formerly numbered Section 423.4 has been moved into appendix N entitled "Supplemental Storm Shelter Requirements" and has been modified to require Group E occupancies with an aggregate load over 50 to have a storm shelter and limit the requirement for the storm shelter capacity to classrooms and administrative areas in a new building or addition to an existing structure and not the entire occupant load of the structure. This section has been added to read: N103 Group E occupancies. All group E occupancies with an aggregate occupant load of 50 or more shall have a storm shelter constructed in accordance with ICC 500® and Section 423. The storm shelter shall be capable of housing the occupant load of the classrooms and administrative areas in the new building or addition containing the Group E occupancy. Exceptions:

(A) Group E day care facilities.

(B) Group E occupancies accessory to places of religious worship.

(C) Entire buildings meeting the requirements for storm shelter design in ICC 500[®] and Section 423.

[Source: Added at 32 Ok Reg 2270, eff 11-1-15; Amended at 35 OK Reg 2137, eff 9-17-18]

SUBCHAPTER 2. IBC® 2015

748:20-2-1. Adoption of the International Building Code® (IBC®) [RESERVED]

748:20-2-2. Effect of Adoption [RESERVED]

748:20-2-3. IBC® and Other Appendices [RESERVED]

748:20-2-4. IBC® Provisions Adopted and Modified [RESERVED]

748:20-2-5. Participation in Federal Programs and/or Federally Funded or Financed Projects [RESERVED]

748:20-2-6. IBC® Chapter 1 [RESERVED]

748:20-2-7. IBC® 2015 Chapter 2 Definitions

<u>Chapter 2 of the IBC® 2015 is adopted with the following modification: The definition of a GAS</u> <u>DETECTION SYSTEM has been added to clarify multiple references in the code. The definition has</u> <u>been added to read: GAS DETECTION SYSTEM. A system or portion of a combination system that</u> <u>utilizes one or more stationary sensors to detect the presence of a specified gas at a specified</u> <u>concentration and initiate one or more responses required by this code, such as notifying a</u> <u>responsible person, activating an alarm signal, or activating or deactivating equipment. A selfcontained gas detection and alarm device is not classified as a gas detection system.</u>

748:20-2-8. IBC® Chapter 3 [RESERVED]

748:20-2-9. IBC® 2015 Chapter 4 Special Detailed Requirements Based on Use and Occupancy

<u>Chapter 4 of the IBC® 2015 is adopted with the following modifications:</u> (1) Section 406.7.2.1 Canopies used to support gaseous hydrogen systems. This section has been modified by deleting the word "hydrogen" in the heading and in the third requirement; and by adding the wording "lighter-than-air" to the section header to make the section applicable to all lighter-than-air fuels. This section has been modified to read: 406.7.2.1 Canopies used to support lighter-than-air gaseous systems. Canopies that are used to shelter dispensing operations where flammable compressed gases are located on the roof of the canopy shall be in accordance with the following:

(A) The canopy shall meet or exceed Type I construction requirements.

(B) Operations located under canopies shall be limited to refueling only.

(C) The canopy shall be constructed in a manner that prevents the accumulation of gas. (2) Section 406.7.2.2. Canopies sheltering units and devices that dispense lighter-than-air gas. This section has been added to require all canopies to be designed to prevent the accumulation or entrapment of ignitable vapors under canopies when dispensing lighter-than-air gas or all electrical equipment installed beneath the canopy is required to be suitable for Class I, Division 2 hazardous (classified) locations. This section has been added to read: 406.7.2.2 Canopies sheltering units and devices that dispense lighter-than-air gas. Where CNG, LNG, or Hydrogen motor fuel dispensing devices are installed beneath a canopy, the canopy 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 shall extend a minimum of 5 feet (1524 mm) above the highest projection of the canopy. Compression and storage equipment located on the top of the canopy shall be in accordance with current State of Oklahoma adopted International Fire Code®, Section 2309.

(3) Section 419.1 General. This section has been modified to add a new exception to allow Group B, M, and F occupancies located in a detached dwelling unit to be constructed in accordance with the IRC® if they comply with the limitations in Section 419.1.1. This section has been modified to read: 419.1 General. A live/work unit shall comply with Sections 419.1 through 419.9. Exceptions:

(A) Dwelling or sleeping units that include an office that is less than 10 percent of the area of the dwelling unit are permitted to be classified as dwelling units with accessory occupancies in accordance with Section 508.2.

(B) Group B, M, and F occupancies that are located in a detached dwelling unit complying with the limitations of Section 419.1.1 shall be permitted to be constructed in accordance with the IRC®.

(4) Section 419.1.1 Limitations. This section has been modified to limit the nonresidential portion of the live/work unit to not greater than 2,500 square feet (232 square meters). This section has been modified to read: 419.1.1 Limitations. The following shall apply to all live/work areas:

(A) The nonresidential portion of the live/work unit is permitted to be not greater than 2,500 square feet (232 square meters) in area;

(B) The nonresidential area is permitted to be not more than 50 percent of the area of each live/work unit;

(C) The nonresidential area function shall be limited to the first or main floor only of the live/work unit; and

(D) Not more than five nonresidential workers or employees are allowed to occupy the nonresidential area at any one time.

(5) Section 423.1.1 Scope. This section has been modified to include above and below ground storm shelters and limit the use of the term storm shelter to those structures constructed according to this section. This section has been modified to read: 423.1.1 Scope. This section applies to the construction of above or below ground storm shelters constructed as separate detached buildings, or rooms within buildings, structures, or portions thereof for the purpose of providing safe refuge from storms that produce high winds, such as tornados and hurricanes. Any room or structure, as may be used as a place of refuge during a severe wind storm event, shall not be defined as a storm shelter unless specifically designed to the requirements as listed in Section 423.

(6) Section 423.3 Critical emergency operations. This section, including the exception, has been moved to the newly created Appendix N, entitled "Supplemental Storm Shelter Requirements" and is not adopted as a minimum standard for residential or commercial construction within the State of Oklahoma. This section has been renumbered in Appendix N to become N102. The section number 423.3 itself, will stay as part of this code for numbering alignment but will not have any requirements attached to it.

(7) Section 423.4 Group E occupancies. This section, including exceptions, has been moved to the newly created Appendix N, entitled "Supplemental Storm Shelter Requirements" and is not adopted as a minimum standard for residential or commercial construction within the State of Oklahoma. The section has been renumbered in Appendix N to become N103. The section number 423.4 itself, will stay as part of this code for numbering alignment but will not have any requirements attached to it.

(8) Section 423.5 Required. This section has been added to specify the requirements when storm shelters are provided. This section has been added to read: 423.5 Required. Where storm shelters are provided, they shall be provided in compliance with ICC 500® except as required by Sections 423.5.1 through 423.5.11.

(9) Section 423.5.1 Storm shelter documents. This section has been added to require the construction documents prepared for the storm shelter to be maintained and protected within the storm shelter by the owner or owner's authorized agent. This section has been added to read: 423.5.1 Storm shelter documents. The construction documents which were prepared for the construction of the storm shelter, shall be maintained and protected within the storm shelter by the owner or owner's authorized agent.

(10) Section 423.5.2 Signage. This section has been added to clarify that all signs for a storm shelter, as outlined in ICC 500® Sections 108, 504.1, 504.1.1, and 504.1.2, comply with the applicable signage requirements of ICC A117.1®. This section has been added to read: 423.5.2 Signage. All signs, as outlined in ICC 500® Sections 108, 504.1, 504.1.1 and 504.1.2 shall comply with the applicable requirements of ICC A117.1®.

(11) Section 423.5.2.1 Entrance signage. This section has been added to clarify entrance signage as required by ICC 500® Section 504.1.1 is not required for the storm shelter when the storm shelter can be accessed from within the host building and is only open to the occupants of the host building. This section has been added to read: 423.5.2.1 Entrance signage. Entrance signage, as outlined in ICC 500® Section 504.1.1 shall not be required at exterior entrances where the shelter can be accessed from within a host building and is only open to the occupants of the host building.

(12) Section 423.5.3 Roof live load reduction for shelters. This section has been added to clarify roof live loads may not be reduced as allowed in Section 1607.12.2.1 (Equation 16-26) if the roof live load is stipulated under ICC 500® Section 303.2. This section has been added to read: 423.5.3 Roof live load reduction for shelters. Roof live load reduction in Section 1607.12.2.1 (Equation 16-26) shall not be allowed for roof live loads stipulated under ICC 500® Section 303.2.

(13) Section 423.5.4 Design wind speed. This section has been added to modify the requirements of ICC 500® Section 304.2 to clarify the minimum design wind speed for all storm shelters in the State of Oklahoma shall be set at 250 miles per hour. This section has been added to read: 423.5.4 Design wind speed. For storm shelters, the minimum design wind speed for the entire State of Oklahoma shall be 250 miles per hour.

(14) Section 423.5.5 Usable storm shelter floor area. This section has been added to modify the requirements of ICC 500® Section 501.1.2 to clarify when calculating the maximum usable floor area of a shelter, the areas within a privacy enclosure for sanitary facilities shall not be included. This section has been added to read: 423.5.5 Usable storm shelter floor area. The usable storm shelter floor area shall be determined by ICC 500® Section 501.1.2.1 or 501.1.2.2. Exception: Areas within privacy enclosures for sanitary facilities shall not be included in the usable floor area calculations.

(15) Section 423.5.6 Door operation. This section has been added to modify the requirements of ICC 500® Section 501.5 to specify means of egress doors shall be operable from the inside of the storm shelter without the use of keys or special knowledge or effort. This section has been added to read: 423.5.6 Door operation. Means of egress doors shall be operable from the inside without the use of keys or special knowledge or effort.

(16) Section 423.5.6.1 Additional doors and shutters operation. This section has been added to clarify doors and shutters designed to protect windows and other unprotected openings not required as a means of egress in storm shelters shall be operable from the inside without the use of keys or special relocatable tools. This section has been added to read: 423.5.6.1 Additional doors and shutters operation. Doors and shutters designed to protect windows or other unprotected openings not in a required means of egress in storm shelters shall be operable from the inside without the use of keys or special relocatable tools.

(17) 423.5.7 Height of storm shelter. This section has been added to clarify how to determine the location of the natural ventilation openings in storm shelters in accordance with ICC 500® Section 702.1.1.1, by providing a definition for the height of the storm shelter to be calculated by average of the vertical dimensions from the floor elevation to the bottom of the storm shelter deck or to the underside of a hard ceiling within the storm shelter. This section has been added to read: 423.5.7 Height of storm shelter. When determining the location of natural ventilation in accordance with ICC 500® Section 702.1.1.1, the height of the storm shelter shall be defined as an average of the vertical dimensions from the floor elevation to the bottom of the storm shelter deck or to the underside of a hard ceiling within the storm shelter.

(18) Section 423.5.8 Additional facilities for storm shelters. This section has been added to modify the requirements of ICC 500[®] Section 702.2.2 to clarify when the required number of sanitation facilities for the storm shelter exceeds the number of required facilities provided for the normal occupancy of space, additional facilities may be temporary toilets, chemical toilets or other approved means and must have privacy enclosures with minimum clear inside dimensions of 5 feet by 5 feet (1524 mm by 1524 mm). This section has been added to read: 423.5.8 Additional facilities for storm shelters. Where the required number of sanitation facilities for the storm shelter exceeds the number of facilities provided for the normal occupancy of the space, the additional facilities shall be permitted to be temporary sanitary fixtures, chemical toilets, or other means approved by the authority having jurisdiction. Temporary toilets, chemical toilets, or other approved means shall have temporary or permanent privacy enclosures such as fabric, portable screens, or other means approved by the authority having jurisdiction. Privacy enclosures shall have minimum clear inside dimensions of 5 feet by 5 feet (1524 mm by 1524 mm). (19) Section 423.5.9 Sanitary facilities support systems. This section has been added to modify the requirements of ICC 500[®] Section 702.2.3 to clarify the support systems discussed in the section are for temporary sanitation facilities. This section has been added to read: 423.5.9. Sanitary facilities support systems. Support systems for the temporary sanitation facilities (e.g.

bladders, storage tanks or vessels, etc.) shall be capable of supplying water and containing waste for the design capacity of the tornado shelter.

(20) Section 423.5.10 Conversion of plumbing systems. This section has been added to omit ICC 500® Section 702.2.4 from the minimum requirements of the code. This section has been added to read: 423.5.10 Conversion of plumbing systems. ICC 500® Section 702.2.4 is omitted.
(21) Section 423.5.11 First aid kit. This section has been added to modify the requirements of ICC 500® Section 702.4 to specify that first aid kits for community shelters shall be required to be ANSI rated for the number of occupants in the shelter. This section has been added to read: 423.5.11 First aid kit. An ANSI compliant first aid kit rated for the number of storm shelter occupants, as listed in the construction documents, shall be supplied in all tornado shelters.
(22) Section 427 Cultivation, Extraction and Processing Plant Material. This section header has been added to create and identify requirements related to cultivation, extraction and processing of plant material, covered by the 2018 edition of NFPA® 1, Fire Code, not otherwise covered by the IBC® or IFC®. This section has been added to read: 427 Cultivation, Extraction and Processing Plant Material.

(23) Section 427.1 General. This section has been added to clarify plant growing facilities that utilize carbon dioxide enrichment systems in accordance with Section 5307.4 of the International Fire Code® and plant processing or extraction facilities in accordance with Chapter 39 of the International Fire Code® shall also comply with Sections 427.2 through 427.6 of this code. This section has been added to read: 427.1 General. Plant growing facilities that utilize carbon dioxide enrichment systems in accordance with Section 5307.4 of the International Fire Code® and plant processing or extraction facilities in accordance with Chapter 39 of the International Fire Code® shall also comply with Sections 427.2 through 427.6.

(24) Section 427.2 Construction. This section has been added to clarify the construction of buildings used for the extraction process that include the act of extraction of the oils and fats by use of solvent, desolventizing of the raw material, production of the miscella, distillation of the solvent from the miscella and solvent recovery shall comply with the section. An exception has been provided for extraction processes that utilize nonhazardous solvents or carbon dioxide. This section has been added to read: 427.2 Construction. The construction of buildings used for the extraction process that include the act of extraction of the oils and fats by use of solvent, desolventizing of the raw material, production of the oils and fats by use of solvent, desolventizing of the raw material, production of the miscella, distillation of the solvent from the miscella and solvent recovery shall comply with this section. Exception: Extraction process that utilizes nonhazardous solvents or carbon dioxide.

(25) Section 427.2.1 Noncombustible construction. This section has been added to clarify extraction equipment and processes utilizing materials classified as physical hazards in accordance with Section 307 of this code and the International Fire Code® shall be located in a room constructed of noncombustible construction. This section has been added to read: 427.2.1 Noncombustible construction. Extraction equipment and processes utilizing materials classified as physical hazards in accordance with Section 307 and the International Fire Code® shall be located in a room constructed of noncombustible materials.

(26) Section 427.2.2 Prohibited occupancies. This section has been added to clarify extraction equipment and extraction processes utilizing materials classified as physical hazards in accordance with Section 307 of this code and the International Fire Code® are not permitted in any building containing a Group A, E, I or R occupancy. This section has been added to read: 427.2.2 Prohibited occupancies. Extraction equipment and extraction processes utilizing materials classified as physical hazards in accordance with Section 307 and the International Fire Code® shall not be located in any building containing a Group A, E, I, or R occupancy. (27) Section 427.3 Equipment 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 this code and the International Fire Code® as solvents shall be located in a room dedicated to extraction and the room shall not be used for any other purpose. The section prohibits the storage of solvents in the extraction room. This section has been added to read: 427.3 Equipment location. The extraction equipment and extraction processes utilizing materials classified as physical hazards in accordance with Section 307 and the International Fire Code® as solvents shall be located in a room dedicated to extraction and the room shall not be used for any other purpose. The extraction equipment and extraction processes utilizing materials classified as physical hazards in accordance with Section 307 and the International Fire 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.
(28) Section 427.4 Interior finish. This section has been added to require the interior finish of walls and ceilings in plant growing, processing and extraction facilities to comply with this section and Section 803 of this code. This section has been added to read: 427.4 Interior finish. Interior finish of walls and ceilings in plant growing, processing and extraction facilities shall comply with this section and Section 803.

(29) Section 427.4.1 Plastic, mylar and other thin sheeting. This section has been added to require plastic, mylar or other thin sheeting that covers any walls or ceilings comply with this section and Section 803. This section has been added to read: 427.4.1 Plastic, mylar and other thin sheeting. Plastic, mylar and other thin sheeting that covers any walls or ceilings shall comply with this section and Section 803.

(30) Section 427.4.1.1 Installation. This section has been added to prohibit plastic, mylar or other thin sheeting from being hung from ceilings or suspended overhead structures to create divider walls or rooms. This section has been added to read: 427.4.1.1 Installation. Plastic, mylar and other thin sheeting shall not be hung from ceilings or suspended overhead structures to create divider walls or rooms.

(31) Section 427.5 Emergency power system. This section has been added to require emergency power to lighting and ventilation systems in the extraction room when the extraction process utilizes hydrocarbon gases or liquids as solvents, in accordance with Section 2702. This section has been added to read: 427.5 Emergency power system. For extraction processes utilizing hydrocarbon gases or liquids as solvents, the extraction room lighting and ventilation system shall be provided with emergency power in accordance with Section 2702.

(32) Section 427.6 Means of egress. This section has been added to require at least one means of egress door from an extraction room, utilizing materials classified as physical hazards in accordance with Section 307 of this code and the International Fire Code®, to swing in the direction of egress travel. The section requires the egress door to be equipped with panic hardware or fire exit hardware and to have a self-closing or automatic-closing device. This section has been added to read: 427.6 Means of egress. Extraction rooms utilizing materials classified as physical hazards in accordance with Section 307 and the International Fire Code® shall have a minimum of one exit access door that swings in the direction of egress travel. The exit access door shall be equipped with panic hardware or fire exit hardware and a self-closing or automatic-closing device.

748:20-2-10. IBC® Chapter 5 [RESERVED]

748:20-2-11. IBC® Chapter 6 [RESERVED]

748:20-2-12. IBC® Chapter 7 [RESERVED]

748:20-2-13. IBC® Chapter 8 [RESERVED]

748:20-2-14. IBC® 2015 Chapter 9 Fire Protection Systems

Chapter 9 of the IBC® 2015 is adopted with the following modifications: (1) Section 902.1 Definitions. This section has been modified to clarify the definition of a "GAS DETECTION SYSTEM" has been added to chapter two of the code. This section has been modified to read: 902.1 Definitions. The following terms are defined in Chapter 2: (A) [F] ALARM NOTIFICATION APPLIANCE. (B) [F] ALARM SIGNAL. (C) [F] ALARM VERFICATION FEATURE. (D) [F] ANNUNCIATOR. (E) [F] AUDIBLE ALARM NOTIFICATION APPLIANCE. (F) [F] AUTOMATIC. (G) [F] AUTOMATIC FIRE-EXTINGUISHING SYSTEM. (H) [F] AUTOMATIC SMOKE DETECTION SYSTEM. (I) [F] AUTOMATIC SPRINKLER SYSTEM. (J) [F] AUTOMATIC WATER MIST SYSTEM. (K) [F] AVERAGE AMBIENT SOUND LEVEL. (L) [F] CARBON DIOXIDE EXTINGUISHING SYSTEMS. (M) [F] CEILING LIMIT. (N) [F] CLEAN AGENT. (O) [F] COMMERCIAL MOTOR VEHICLE. (P) [F] CONSTANTLY ATTENDED LOCATION. (Q) [F] DELUGE SYSTEM. (R) [F] DETECTOR, HEAT. (S) [F] DRY-CHEMICAL EXTINGUISHING AGENT. (T) [F] ELECTRICAL CIRCUIT PROTECTIVE SYSTEM. (U) [F] ELEVATOR GROUP. (V) [F] EMERGENCY ALARM SYSTEM. (W) [F] EMERGENCY VOICE/ALARM COMMUNICATIONS. (X) [F] FIRE ALARM BOX, MANUAL. (Y) [F] FIRE ALARM CONTROL UNIT. (Z) [F] FIRE ALARM SIGNAL. (AA) [F] FIRE ALARM SYSTEM. (BB) FIRE AREA. (CC) [F] FIRE COMMAND CENTER. (DD) [F] FIRE DETECTOR, AUTOMATIC. (EE) [F] FIRE PROTECTION SYSTEM. (FF) [F] FIRE SAFETY FUNCTIONS. (GG) [F] FOAM-EXTINGUISHING SYSTEM. (HH) [F] GAS DETECTION SYSTEM. (II) [F] HALOGENATED EXTINGUISHING SYSTEM. (JJ) [F] INITIATING DEVICE. (KK) [F] MANUAL FIRE ALARM BOX. (LL) [F] MULTIPLE-STATION ALARM DEVICE. (MM) [F] MULTIPLE-STATION SMOKE ALARM.

(NN) [F] NOTIFICATION ZONE. (OO) [F] NUISANCE ALARM. (PP) PRIVATE GARAGE. (QQ) [F] RECORD DRAWINGS. (RR) [F] SINGLE-STATION SMOKE ALARM. (SS) [F] SMOKE ALARM. (TT) [F] SMOKE DETECTOR. (UU) [F] SMOKEPROOF ENCLOSURE. (VV) [F] STANDPIPE SYSTEM, CLASSES OF. (i) Class I system. (ii) Class II system. (iii) Class III system. (WW) [F] STANDPIPE, TYPES OF. (i) Automatic dry. (ii) Automatic wet. (iii) Manual dry. (iv) Manual wet. (v) Semiautomatic dry. (XX) [F] SUPERVISING STATION. (YY) [F] SUPERVISORY SERVICE. (ZZ) [F] SUPERVISORY SIGNAL. (AAA) [F] SUPERVISORY SIGNAL-INITIATING DEVICE. (BBB) [F] TIRES, BULK STORAGE OF. (CCC) [F] TROUBLE SIGNAL. (DDD) [F] VISIBLE ALARM NOTIFICATION APPLIANCE. (EEE) [F] WET CHEMICAL EXTINGUISHING SYSTEM. (FFF) [F] WIRELESS PROTECTION SYSTEM. (GGG) [F] ZONE. (HHH) [F] ZONE, NOTIFICATION.

(2) Section 903.2.7 Group M. This section has been modified to reword subsection 4 D of this section 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 delete the requirement for an emergency voice/alarm communication system in Group E occupancies and require a fire alarm system. This 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 and similar areas are protected by heat detectors or other approved detection devices.

(iii) Shops 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 a 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 of 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 911.1.3 Size. This section was modified to include an exception to make the fire command center smaller when approved by the fire code official. This section was modified to read: 911.1.3. Size. The room shall be a minimum of 200 square feet (19 square meters) 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).

(6) 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.

(7) 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.

(8) Section 916.2 Permits. This section has been added to specify permits shall be required as set forth in Section 105.7 of the International Fire Code®. This section has been modified to read: 916.2 Permits. Permits shall be required as set forth in Section 105.7 of the International Fire Code®.

(9) 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.

(10) Section 916.3 Equipment. This section has been added to require gas detection systems to be designed for use with the gases being detected and to 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.

(11) 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.

(12) 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.

(13) 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.

(14) Section 916.7 Gas sampling. This section has been added to require gas sampling to be performed continuously and be processed immediately after sampling, except under certain conditions. The section further requires 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. The section requires audible and visible alarm signals associated with the gas detection alarm to be distinct from fire alarm and carbon monoxide signals. 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 of the International Fire Code®. (C) Where a less frequent or delayed sampling interval is approved.

(15) 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 this code. 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. (16) 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.

(17) 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. (18) 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 systems unless approved and connected in accordance with the fire alarm systems unless approved and connected in accordance with the fire alarm systems unless approved and connected in accordance with the fire alarm systems unless approved and connected in accordance with the fire alarm equipment manufacturer's instructions.

(19) Section 916.11 Inspection, testing and sensor calibration. This section has been added to require gas detection systems and sensors to be inspected, tested and calibrated in accordance with the International Fire Code®. This section has been added to read: 916.11 Inspection, testing and sensor calibration. Gas detection systems and sensors shall be inspected, tested and calibrated in accordance with the International Fire Code®.

(20) Section 917 Emergency Responder Radio Coverage. This section has been modified to change the section title number from 916 to 917. This section has been modified to read: Section 917 Emergency Responder Radio Coverage.

(21) Section 917.1 General. This section has been modified to change the section reference from 916.1 to 917.1. This section has been modified to read: 917.1 General. Emergency responder radio coverage shall be provided in all new buildings in accordance with Section 510 of the International Fire Code®.

748:20-2-15. IBC® 2015 Chapter 10 Means of Egress

Chapter 10 of the IBC® 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 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

<u>Group A or E occupancy shall not be provided with a latch or lock other than panic hardware or fire exit hardware. Exceptions:</u>

(A) A main exit of a Group A occupancy shall be permitted to have locking hardware 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 1,200 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.

748:20-2-16. IBC® Chapter 11 [RESERVED]

748:20-2-17. IBC® Chapter 12 [RESERVED]

748:20-2-18. IBC® Chapter 13 [RESERVED]

748:20-2-19. IBC® Chapter 14 [RESERVED]

748:20-2-20. IBC® Chapter 15 [RESERVED]

748:20-2-21. IBC® Chapter 16 [RESERVED]

748:20-2-22. IBC® Chapter 17 [RESERVED]

748:20-2-23. IBC® Chapter 18 [RESERVED]

748:20-2-24. IBC® Chapter 19 [RESERVED]

748:20-2-25. IBC® Chapter 20 [RESERVED]

748:20-2-26. IBC® Chapter 21 [RESERVED]

748:20-2-27. IBC® Chapter 22 [RESERVED]

748:20-2-28. IBC® Chapter 23 [RESERVED]

748:20-2-29. IBC® Chapter 24 [RESERVED]

748:20-2-30. IBC® Chapter 25 [RESERVED]

748:20-2-31. IBC® Chapter 26 RESERVED]

748:20-2-32. IBC® Chapter 27 [RESERVED]

748:20-2-33. IBC® Chapter 28 [RESERVED]

748:20-2-34. IBC® Chapter 29 [RESERVED]

748:20-2-35. IBC® Chapter 30 [RESERVED]

748:20-2-36. IBC® Chapter 31 [RESERVED]

748:20-2-37. IBC® Chapter 32 [RESERVED]

748:20-2-38. IBC® Chapter 33 [RESERVED]

748:20-2-39. IBC® Chapter 34 [RESERVED]

748:20-2-40. IBC® Chapter 35 [RESERVED]