

**BILL NO. 24-008  
AS AMENDED**

**ORDINANCE NO. 4956**

**FIRST READING 02.20.2024**

**SECOND READING 03.05.2024**

**AN ORDINANCE AMENDING CHAPTER 7, BUILDINGS AND BUILDING REGULATIONS OF THE REVISED ORDINANCES OF THE CITY OF HANNIBAL BY AMENDED ARTICLE I, DIVISION 1, SECTION 7-25 BUILDING CODE, BY ADOPTING THE 2018 INTERNATIONAL FIRE CODE IN PLACE OF THE 2012 INTERNATIONAL FIRE CODE**

Be it Ordained by the City Council of the City of Hannibal:

**Section 1.** WHEREAS, a review of the Ordinances of the City of Hannibal shows that the City of Hannibal has adopted various international building codes as ordinances of the city of Hannibal;

AND WHEREAS, the City of Hannibal had previously adopted the 2012 International Fire Code;

AND WHEREAS, the Planning and Zoning Commission in conjunction with the Hannibal Fire Department and the Office of the Building Inspector has reviewed said 2012 International Fire Code, as well as the more recently drafted 2018 International Fire Code and has determined that it is necessary to adopt the said 2018 International Fire Code, and has recommended same to the City Council;

AND WHEREAS, the City Council has further reviewed the matter and the proposed revisions as well as the recommendation of the Planning and Zoning Commission and have determined that the revisions are appropriate and in the best interests of the City of Hannibal

NOW THEREFORE, the City Council hereby revises Chapter 7 as follows:

**Section 2.** Section 7-25 is revoked and a new section 7-25 is hereby enacted as follows:

**Sec. 7-25. - Building code.**

(a) Codes adopted. The following documents, along with all their appendices, if any, a copy of which shall be on file in the office of the building inspector, and at the Hannibal Free Public Library, hereby adopted as the building code of the City of Hannibal:

- (1) The 2012 International Building Code;
- (2) The 2018 International Fire Code;
- (3) The 2012 International Residential Code;

- (4) The 2012 Plumbing Code;
- (5) The 2006 International Private Sewage Disposal Code;
- (6) The 2012 International Mechanical Code;
- (7) The 2012 International Fuel Gas Code;
- (8) The 2006 International Energy Conservation Code;
- (9) The 2006 International Property Maintenance Code;
- (10) The 2005 NFPA National Electrical Code.

(b) Amendments. The codes adopted in subsection (a) are hereby amended in the following respects:

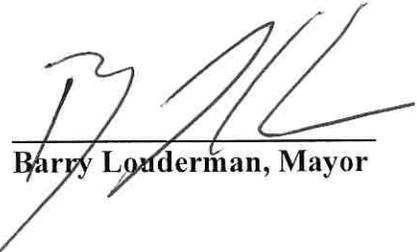
- i. The Property Maintenance Code: PM-106.6, Exemption. There is expressly exempt from section 106.6, Transfer of Ownership, the Small Business Administration—Disaster Assistance Loan Program.
- ii. The 2018 International Fire Code: Excepting the following:
  - 1103.5.1 Fire Sprinklers in Existing Group A 2 Occupancies
  - 3106 Outdoor Assembly Events
  - Appendix L Fire Fighter Air Replacement Systems

**Section 3.** All ordinances and parts of ordinances in conflict with this ordinance, in so far as they conflict, are hereby repealed.

**Section 4.** That this Ordinance shall be in full force and effect from and after its passage and approval.

Adopted this 5 day of March 2024.

Approved this 5 day of March 2024.

  
Barry Louderman, Mayor

ATTEST:

  
Melissa Cogdal, City Clerk

## Changes from 2012-2015 International Fire Code

Code Reference	Change Type	Change Summary
312.3 Vehicle Impact Protection	Addition	This change authorizes the code official to approve barriers other than posts.
315.6, 605.12 Storage and Abandoned Wiring in Plenums	Addition	This change prohibits storage in air-handling plenums. Abandoned material and wiring cables must be removed from plenums.
403 Emergency Preparedness Requirements	Modification	This section has been extensively revised and the content updated for consistency. To assist the fire code official, many portions of this chapter have been relocated in an attempt to consolidate into one section all of the requirements for emergency preparedness.
604.1 Emergency and Standby Power Systems	Addition	This change brings additional requirements related to emergency and standby power systems from the IBC into the IFC to provide for consistency and uniform enforcement. Load-transfer timing and duration are both quantified to assist the fire code official. Criteria have been added for Group 1-2 occupancies that are located in flood hazard areas.
604.2.6, IBC 407.10 Emergency and Standby Power Systems - Group I-2 Occupancies	Addition	Essential electrical systems must comply with IBC Chapter 27 and NFPA 99. This change provides a clear path for the designer to know which standards apply when he or she is designing an essential electrical system for a Group I-2 occupancy.
605.11 Solar Photovoltaic Power Systems	Clarification	The requirements for solar PV systems have been clarified and coordinated with the IBC and NFPA 70.
606.12 Pressure Relief Devices for mechanical Refrigeration	Modification	The revisions to Section 606.12 clarify the code requirements and add references to two International Institute of Ammonia Refrigeration (IAR) standards and one American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. (ASHRAE) standard for design and operation of ammonia refrigeration systems.
607.6 Protection of Fire Service Access Elevators and Occupant Evacuation Elevators	Addition	This is a new requirement to ensure that devices designed to prevent water from infiltrating into fire service access elevator hoistways and occupant evacuation elevator hoistways are properly maintained.
609.2 Commercial Cooking Appliances Producing a Low Volume of Grease-laden Vapors	Modification	Type I exhaust hoods are not required over electric cooking appliances when the appliances produce a minimal amount of grease-laden vapors.
609.3.3.2 Inspection and Cleaning of Commercial Kitchen Exhaust Hoods	Modification	This section references a new standard that addresses the cleaning of commercial cooking exhaust hoods and ducts.
609.4 Gas-fired Appliance Connections	Addition	Listed flexible connectors are required between the fixed fuel-gas piping and cooking appliances on casters or other appliances that are moved for cleaning.
611 Hyperbaric Facilities	Addition	A new Section 611 on hyperbaric facilities has been added to the IFC. According to the provisions of this section, these facilities shall be inspected, tested and maintained in accordance with NFPA 99. Records shall be kept and made available to the fire code official.
807 Decorative Materials Other Than Decorative Vegetation in New and Existing Buildings	Modification	The requirements for decorative materials other than decorative vegetation have been reorganized and clarified.
901.4.1 Required Fire Protection Systems	Clarification	The code has been clarified concerning how an inspector can determine if a fire protection system is to be considered a "required" system or a "nonrequired" system.
901.8.2 Removal of Existing Occupant Use Hose Line	Addition	Existing 1½-inch hose lines can be removed under certain circumstances.
903.2.1 Fire Sprinklers in Group A Occupancies	Modification	When fire sprinklers are required in a Group A occupancy located on a story other than the level of exit discharge, fire sprinklers must be installed on all stories leading to all levels of exit discharge that are used by the Group A occupancy.
903.2.1.6 Assembly Occupancies on Roofs	Addition	Fire sprinklers are now required on all floors between the occupied roof and the level of exit discharge when assembly uses occur on the rooftop of buildings and the occupant load exceeds 100 for Group A-2 or 300 for other Group A occupancies.
903.2.1.7 Multiple Group A Fire Areas	Modification	When multiple Group A-1, A-2, A-3 or A-4 fire areas share egress paths, the occupant load will be combined for determining if a fire sprinkler system is required. The occupant load threshold is 300 or more.
903.2.9 Commercial Motor Vehicles - Fire Sprinkler Requirements	Clarification	This code change provides a specific definition for commercial motor vehicles, which is applicable when the fire code official is determining whether a fire sprinkler system is required in specific occupancies.
903.2.11.2 Buildings 55 Feet or More in Height- Sprinklers Required	Clarification	This section has been revised to clarify how the height of a building is to be measured and that the section applies to buildings that have one or more stories. The exception for airport control towers has been deleted.
903.3.1.1.1 Exempt Locations- Sprinklers Not Required When Automatic Fire Detection System is Provided	Modification	This change introduces the concept of Machine Room-Less elevators (MRLs) to the IFC and provides correlation with ASME A17.1-2007/CSA B44-07. In the 2012 code, sprinkler exemptions are currently provided for elevator machine rooms and machinery spaces. This change expands the exemption to the control rooms and control spaces associated with occupant evacuation elevators. Additionally, the code has been changed regarding area smoke detection and fire command center requirements to reflect the defining of elevator control rooms and control spaces.

903.3.1.1.2 Bathrooms Exempt from Sprinkler Requirements	Addition	This new section provides criteria for not installing sprinklers in bathrooms of specific Group R occupancies.
903.3.1.2 NFPA 13A Sprinkler System	Clarification	This change correlates Group R limitations on height with the scope of NFPA 13R.
903.3.1.2.2, 1027.6, 1104.22 NFPA 13R Sprinkler Systems - Open-Ended Corridors (Breezeways)	Addition	The intent of Section 903.3.1.2.2 is to clarify that when an NFPA 13R sprinkler system is used, additional heads are required in the open-ended corridor (breezeway). An associated change is in Section 1027.6 for exterior stairways and ramps. To correlate the open-ended corridor concept in existing buildings with these changes, Section 1104.22 has been changed through the deletion of exception 1, which allows the open-ended corridor criteria to dictate the solution.
903.3.8 Limited Area Sprinkler Systems	Modification	This change reduces the number of sprinkler heads that can be used in a limited area sprinkler system from 20 heads to 6 heads. This change provides additional criteria regarding the use of these systems.
904.2, 904.11 Automatic Water Mist Systems	Addition	This change recognizes automatic water mist systems as an alternative, on a limited basis, to automatic fire sprinkler systems. Automatic water mist systems are most commonly used for special protection applications for special hazard applications such as computer room subfloors and machinery spaces.
904.13 Domestic Cooking Systems in Group I-2 Condition 1 Occupancies	Addition	UL 300A has been added to the IFC, and the new definition of Institutional Occupancy Group 2 Condition 1 (Nursing Homes, Assisted Living, etc.) from the IBC for an extinguishing system within the domestic cooking hood of such occupancy has been incorporated.
907.1.2 Fire Alarm Shop Drawings - Design Minimum Audibility Level	Addition	The fire alarm designer is now required to provide the design minimum audibility level for occupant notification, and the phrase "where applicable" has been added to the charging statement to clarify that not all items shown in the list may be applicable for every installation.
907.2.3 Group E Manual Fire Alarm System	Modification	The threshold for requiring a manual fire alarm system has been raised from 30 occupants to 50. The emergency voice/alarm communication system requirement has been raised to 100 occupants.
907.2.6, 907.5.2.1, 907.5.2.3 Fire Alarm and Detection Systems for Group I-2 Condition 2 Occupancies	Clarification	The change to 907.2.6 Exception 2 links the use of "private mode" signaling under NFPA 72 to the fire safety and evacuation plan requirements of Chapter 4. Section 907.5.2.1 has been revised to allow the use of a private mode audible alarm in critical care areas. Section 907.5.2.3 has been revised to allow for the substitution of an audible alarm for a visual alarm in critical care areas.
907.2.9.3 Fire Alarm and Detection System for Group R College and University	Clarification	The addition of the language "occupancies operated by a college or university for student or staff housing" is intended to clarify this section and the requirement for automatic smoke detection.
907.2.11.3, 907.2.11.4 Smoke Alarms near Cooking Appliances and Bathrooms	Addition	This new section provides designers, plan examiners and field inspectors with criteria for locating smoke alarms in relation to cooking appliances and bathrooms. By properly locating smoke alarms, the number of nuisance alarms may be reduced.
907.2.11.7 Smoke Detection System	Addition	This new section provides an option for using a smoke detection system in lieu of single-station and multiple-station alarms in Groups R-2, R-3, R-4 and I-1.
907.2.14 Fire Alarm and Detection Systems for Atriums	Clarification	This change clarifies that smoke detection in atriums is to be based on the rational analysis prescribed in Section 909.4 and that a generic requirement for installation of smoke detection is not necessarily warranted.
907.2.22.1, 907.2.22.2 Smoke Detection for Airport Traffic Control Towers	Addition	This new section provides specific criteria regarding smoke detector locations in airport traffic control towers. A different criterion is used depending on whether or not the airport traffic control tower has single or multiple exits and if it is sprinklered.
909.4.7 Smoke Control System Interaction	Addition	This new section requires the analysis of multiple mechanical smoke control systems. Buildings using smoke control systems may have more than one type of smoke control system, and the interactions of these systems must be evaluated in the design.
909.6.3 Smoke Control Systems - Pressurized Stairways and Elevator Hoistways	Addition	This section has been added for clarification of the responsibility and authority between the fire code official and the building official in relation to smoke control systems.
909.12.1, 909.20.6 Verifications of Mechanical Smoke Control Systems	Modification	This modification allows the fire code official the discretion to bypass individual components from the weekly preprogrammed smoke control verification testing. It further requires testing of all bypassed components on a semiannual basis.
909.21 Elevator Hoistway Pressurization Alternative	Addition	This change provides the option of pressurizing the elevator hoistway in lieu of enclosing the elevator lobby. The entire section has been added to the IFC to facilitate coordination between code officials. Additionally, four exceptions have been added to the pressurization requirements that in effect provide an alternative way for the smoke control system to be designed.
910 Smoke and Heat Removal	Modification	This section has been extensively rewritten as a result of the work done by the Code Technology Committee and specifically the Roof Vent Study Group. It provides direction on Group F-1 and S-1 occupancies greater than 50,000 square feet of undivided area and high-piled combustible storage. Criteria for using either smoke and heat vents or mechanical smoke removal are provided.
913.2.2 Electric Circuits Supplying Fire Pumps	Addition	This new provision references UL Standard 2196, which provides for survivability of fire pump power-supply wiring.
915 Carbon Monoxide Detection	Modification	The requirements for carbon monoxide detection have been completely rewritten to clarify the provisions, relocated to a new Section 916, and expanded to address classrooms in Group E occupancies.
Chapter 10 Means of Egress	Modification	The chapter has been reformatted with the provisions for egress requirements from a space or story being consolidated into a new Section 1006 and a new Section 1007.

1004.1.1 Cumulative Occupant Loads	Modification	The determination of the cumulative design occupant load for intervening spaces, adjacent levels and adjacent stories has been clarified and combined into a single section. A subsection has been added to address egress from adjacent stories to clarify that the number of occupants from adjacent stories are not added together unless there is a convergence of egress at an intermediate level by occupants leaving a story from above and below that point.
Table 1004.1.2 Occupant Load Factors	Modification	This change has revised the mercantile occupant load factor and created one factor for all floors.
1006, 1007 Numbers of Exits and Exit Access Doorways	Modification	This modification has consolidated the egress requirements for rooms and spaces along with those for stories into a single location. It has also created a single section to deal with the number of exits (Section 1006) and a separate section (Section 1007) to deal with the arrangement and separation requirements.
1007.1 Exit and Exit Access Doorway Configuration	Modification	This section now provides specific information regarding the point where exit separation is to be measured. Where three or more means of egress are required, the code restores performance language to ensure the egress paths are adequately separated.
1009.8 Two-Way Communication	Clarification	This change clarifies that a two-way communication system may serve multiple elevators and that the systems are not required at service elevators, freight elevators, or private residence elevators.
1010.1.9 Door Operations - Locking Systems	Modification	Numerous revisions throughout these locking provisions help clarify requirements and their application by using consistent terminology. These changes allow an existing locking system exception for main doors that are not located at the exterior of the building.
1011.15, 1011.16 Ship Ladders and Ladders	Addition	This section has been added to list the locations where ladders can be used for access. Permanent ladders must follow the construction requirements from the IMC in order to provide consistent installation and a safe usable ladder.
1014.8 Handrail Projections	Modification	This section now provides guidance and enforceable language so the building official can determine when a pair of intermediate handrails begins to obstruct the required egress width of a stairway. This helps to clarify when the width of the stair must be increased due to the two intermediate handrails reducing the available egress width.
1016.2 Egress through Intervening Spaces	Modification	This modification allows occupant egress through an elevator lobby provided access to at least one exit is available without the occupant passing through the lobby. It addresses the extent of the required elevator lobby protection.
1017.2.2 Travel Distance Increase for Group F-1 and S-1 Occupancies	Modification	This modification allows an increased exit access travel distance within Group F-1 or S-1 occupancies meeting specific requirements. Also, it restores a travel distance that was allowed in the 2006 code but not allowed in the 2009 or 2012 editions.
1018.3, 1018.5 Aisles	Modification	The required width of aisles in Groups B and M occupancies as well as aisles in other occupancies are now tied to the widths required for corridors and not just to the capacity based on the occupant load served.
1020.2 Corridor Width and Capacity	Clarification	A new exception helps to clarify the width requirements for corridors within Group I-2 occupancies for areas where bed or stretcher movement is not necessary.
1023.3.1 Stairway Extension	Modification	An interior exit stairway is now permitted to continue directly into an exit passageway without the need for a fire door assembly to separate the two elements.
1029.13.2.2.1 Stepped Aisle Construction Tolerances	Modification	This new section limits the variation allowed between adjacent risers within a stepped aisle. The previous code did not limit the variation for these risers.
1103.4.1 Vertical Openings in Existing Group I-2 and I-3 Occupancies	Modification	Retroactive construction of a 1-hour fire-resistance-rated separation is now required in existing hospitals and jails to protect vertical openings. Alternatives have been included that can be used in lieu of the separation to mitigate the hazard created by the vertical openings.
1103.7.6 Manual Fire Alarm System in Existing Group R-2 Occupancies	Modification	The installation of interconnected smoke alarms within dwelling units along with fire-resistance-rated separation of dwelling units is allowed as an alternative to the retroactive installation of a manual fire alarm system throughout the building in existing Group R-2 occupancies.
1105 Construction Requirements for Existing Group I-2 Occupancies	Addition	Retroactive construction requirements have been added to the IFC to provide a minimum level for fire and life safety in existing Group I-2 occupancies.
2307.4 LP-gas Dispensing Operations	Modification	LP-gas requirements have been revised to improve correlation with other industry standards and to allow self-service LP-gas refueling by the public.
3103.9.1 Structural Design of Multifamily Tents and Membrane Structures	Addition	Temporary multifamily tents and membrane structures are now required to comply with the structural requirements in the IBC.
3105 Temporary Stage Canopies	Addition	Temporary stage canopies are now permitted and regulated under Chapter 31 and must have a structurally sound design.
3203.2 Class I Commodities	Modification	A building containing Class I commodities stored on plastic pallets will now require a fire sprinkler system to be designed based on the NFPA 13 sprinkler criteria. The allowance to include any solid-deck polyethylene pallets as acceptable for Class I commodities has
3206.4.1 Plastic Pallets Used in High-piled Combustible Storage	Modification	NFPA 13 provisions are now referenced to address the use of plastic pallets in high-piled combustible storage. Plastic pallets can affect the classification of the commodity.
3206.9.3 Dead-end Aisles in High-piled Combustible Storage	Clarification	Specific limitations are now provided for dead-end aisles in high-piled combustible storage areas. These limitations are more restrictive than the common path of egress travel limitations due to hazards associated with high-piled combustible storage.
3306.2 Cleaning with Flammable Gas	Addition	Safety requirements for the purging and cleaning of flammable gas piping systems have been added to the 2015 IFC.
3504.1.7, 3510 Hot Work on Flammable and Combustible Liquid Storage Tanks	Addition	Requirements for hot work on tanks containing flammable and combustible liquids is now included in the 2015 IFC.

Table 5003.1.1 Maximum Allowable Quantities of Hazardous Material	Modification	Table 5003.1.1(1) contains several revisions affecting consumer fireworks, combustible fibers, unstable reactive materials, alcohol-based hand rubs and gas rooms.
5101.4, 5104 Plastic Aerosol Containers	Modification	Aerosol products are now allowed in plastic containers up to 33.8 fluid ounces, or 1 liter, in size. Specific product criteria must be met if the plastic containers exceed 4 fluid ounces.
5307 Carbon Dioxide (CO <sub>2</sub> ) Systems Used in Beverage Dispensing Applications	Addition	Large refrigerated carbon dioxide systems create a life safety hazard. Regulation of these systems is now included in the 2015 IFC.
5704.2.9.7.3 Flame Arresters on Protected Above-Ground Storage Tanks	Deletion	Flame arresters or pressure-vacuum (PV) breather valves are no longer required on all protected above-ground storage tanks, only those containing Class I flammable liquids.
5808 Hydrogen Fuel Gas Rooms	Addition	Requirements applicable to a hydrogen fuel gas room have been included in the IFC, providing correlation with industry standards.
Appendix B, B105 Fire-Flow Requirements for Buildings	Modification	Criteria have been added to Appendix B that specify the amount of reduction available for each type of fire sprinkler system and establish the method for determining the minimum water supply requirement and duration based on the reduced fire-flow requirement.
Appendix C Fire Hydrant Locations and Distribution	Modification	The revisions to Appendix C provide refinement of the fire hydrant spacing requirements and add footnotes that increase hydrant spacing based on the installation of an automatic sprinkler system.
Appendix K Construction Requirements for Existing Ambulatory Care Facilities	Addition	The new Appendix K addresses retroactive construction requirements for existing Ambulatory Care Facilities. The appendix requirements are in addition to the retroactive construction requirements in IFC Chapter 11.
Appendix L Fire Fighter Air Replenishment Systems	Addition	This new appendix provides criteria for the design, installation and testing of Fire Fighter Air Replenishment Systems (FARS) for use during firefighting operations. <b>DO NOT ADOPT THIS ONE - APPENDIX L</b>
Appendix M Retroactive Installation of Fire Sprinklers in Existing High-Rise Buildings	Addition	An automatic fire sprinkler system is required to be retroactively installed in existing high-rise buildings.

**Changes from 2015-2018 International Fire Code**

Code Reference	Change Type	Change Summary
314.4 Indoor Display of Vehicles	Modification	This section is revised to clarify it applies to both liquid-fueled vehicles and gaseous-fueled vehicles. Additionally, it has been modified to allow the Fire Code Official the ability to determine the best method of safeguarding the vehicle regarding the battery and electrical system.
315.3.1 Ceiling Clearance for Indoor Storage	Modification	Exceptions have been added which allow an increase in the height of storage along walls in sprinklered and nonsprinklered buildings.
315.1, 315.7, 105.6.29 Outdoor Pallet Storage	Addition	Requirements are added to the code for height limitation and separation to buildings and property lines for the outdoor storage of idle pallets constructed of wood or plastic. See also Significant Change to Section 2810 for pallet storage at pallet recycling and manufacturing
403.12.3, 403.12.3.1 Crowd Managers	Modification	The threshold for crowd managers dropped from 1,000 to 500 people for certain events.
404.2.3, 404.2.3.1, 404.2.3.2, 404.2.3.3 Lockdown Plans	Addition	Updates and prescribes details for facility lockdown plans.
510 Emergency Responder Radio Coverage	Modification	Requirements for emergency responder radio coverage have been revised to address industry and equipment enhancements with a new reference to NFPA 1221.
603.1, 603.3 Fuel-fired Appliances	Modification	Fuel oil storage allowances in Section 603 have been revised to clarify applicability to internal combustion engines, such as generators and fire pumps. Fuel oil storage is increased to 1,320 gallons if the building is sprinklered and the tank is listed to UL 142.
605.13, 605.16, 605.17 Refrigerants with Lower Flammability Hazards	Addition	Adds requirements regarding safety concerns for lower flammability refrigerant gases.
608.3 Nonmetallic Cooking Oil Storage Tanks	Modification	Adds listing and capacity requirements for cooking oil storage.
807.1, 807.2, 807.5 Combustible Decorative Materials	Modification	The limitations on decorative combustible materials are clarified as to where they apply.
807.4 Artificial Decorative Vegetation	Modification	The limitations on decorative combustible materials are clarified as to where they apply.
901.4.6.1, 901.4.6.2, 901.4.6.3, 901.4.6.4 Fire Pump and Fire Sprinkler Riser Rooms	Addition	Additional requirements have been added for automatic sprinkler system riser rooms and fire pump rooms.
901.6.2 Integrated Fire Protection System Testing	Addition	Test criteria has been added to the code with a reference to NFPA 4 to ensure that where multiple fire protection systems or life safety systems are integrated, that the acceptance process and subsequent testing must evaluate all of the integrated systems as a whole.
901.8.2 Removal of Occupant- use Hose Lines	Modification	Test criteria has been added to the code with a reference to NFPA 4 to ensure that where multiple fire protection systems or life safety systems are integrated, that the acceptance process and subsequent testing must evaluate all of the integrated systems as a whole.
903.2.1 Sprinklers in Group A Occupancies	Clarification	Clarifies the requirements for fire sprinkler protection in Group A occupancies.
903.2.3 Sprinklers in Group E Occupancies	Modification	Provides occupant load threshold for automatic sprinkler system requirements in Group E occupancies.
903.3.1.1.2 Sprinklers in Bathrooms in Group R Occupancies	Modification	Removes fire sprinkler requirements from small bathrooms in Group R-4 occupancies.
903.3.1.2.1 Sprinklers Beneath Balconies	Modification	Correlates automatic sprinkler system requirements in Chapter 9 with IBC Chapter 7 for exterior balconies of Group R occupancies.
903.3.1.2.3 Protection of Attics in Group R Occupancies	Addition	Sprinkler protection of acceptable alternative methods for the protection of attics are now addressed for mid-rise buildings housing multifamily occupancies and equipped with an NFPA 13R sprinkler system.
903.3.3 Sprinkler Obstructions	Modification	The code now directs the user to the sprinkler design standard to address sprinkler obstructions.
904.12 Commercial Cooking Operations	Modification	The installation of fire-extinguishing systems as protection for commercial cooking operations must now comply with NFPA 96. In addition, commercial cooking systems are now permitted to be protected with a water mist fire-extinguishing system.
904.13 Domestic Cooking in Institutional Occupancies	Modification	Requires an automatic fire-extinguishing system to protect domestic cooking appliances in care facilities.
904.14, Table 901.6.1 Aerosol Fire-extinguishing Systems	Addition	Requires automatic fire suppression in domestic cooking systems in care facilities.
905.3.1 Class III Standpipes	Modification	Standpipe systems are now required in buildings four or more stories in height. In addition, a Class I standpipe is allowed in Group B and Group E occupancies rather than a Class III.
905.4 Class I Standpipe Hose Connections	Modification	Allows a modification of hose connection locations for Class I standpipes serving open stairways.
905.11 Locking Caps on Standpipe Outlets	Modification	This revision authorizes the code official to require locking caps on dry standpipe hose connection outlets.
906.1 Portable Fire Extinguishers	Modification	Provides schools options for fire extinguisher placement.
907.1.2 Fire Alarm Construction	Modification	Aligns requirements for fire alarm plans and documentation requirements with NFPA 72.
907.2.1 Fire Alarms in Group A Occupancies	Modification	A new fire alarm threshold has been added for Group A occupancies where an occupant load of 100 or more is located on a level other than the level of exit discharge.

1031.10 Inspection and Testing of Emergency Egress Lighting	Modification	Inspection and testing requirements for emergency egress lighting are relocated into Chapter 10 Means of Egress and revised to allow self-diagnostics.
1103.5.1 Fire Sprinklers in Existing Group A-2 Occupancies	Addition	A section has been added to Chapter 11 which requires the retrofit installation of a fire sprinkler system in existing Group A-2 occupancies where alcoholic beverages are consumed if the occupant load is 300 or more. <b>DO NOT ADOPT THIS ONE</b>
1103.9 Carbon Monoxide Alarms in Existing Buildings	Modification	Carbon monoxide alarms are no longer required to be retroactively installed in existing Groups I-1, I-2, I-4, and R based on occupancy classification. The retroactive installation of carbon monoxide alarms is only required in existing sleeping rooms and dwelling units.
1104.16.2 Wall Openings Adjacent to Fire Escapes	Modification	Door and window openings within 10 feet of a fire escape must be protected with ¾-hour opening protectives unless the building is sprinklered.
1105.6.2 Fire-protection-rated Doors in Existing Group I-2	Addition	Fire-protection-rated doors in existing Group I-2 occupancies have three options for automatic closing operations.
Chapter 12 Energy Systems	Addition	This new chapter has been added to the IFC to address all configurations of energy systems. This chapter contains the emergency power, standby power, and stationary battery storage system requirements from Chapter 6 of the 2015 IFC along with new requirements for other methods of energy generation and storage.
1204.5 Rapid Shutdown for Solar Photovoltaic Power Systems	Addition	Rapid shutdown is required on solar photovoltaic systems to reduce the shock hazard to emergency responders.
1206.2 Stationary Storage Battery Systems	Modification	This revision moves the stationary battery storage system requirements from Section 608 to Section 1206.2 and includes new battery technologies and required safety features.
Chapter 22 Combustible Dust	Modification	Reference to the new NFPA 652, "Standard on the Fundamentals of Combustible Dust," is added to provide guidance and criteria when evaluating combustible dust hazards.
2303.2.1 Height of Emergency Disconnect Switch	Addition	This new section provides specific height limitations for emergency disconnect switches for fuel dispensing operations.
2306.7.3.1 Protection from Vehicle Impact	Addition	The fire code official has the authority to require additional vehicle impact protection at fuel dispensing facilities.
2309.6, 2309.6.1 Defueling of Hydrogen Fueled Vehicles	Modification	The requirements for repairing vehicles fueled by compressed or liquefied hydrogen gas have been updated to address current technologies and processes.
2311.6 Repair of Vehicles Fueled by CNG and LNG	Addition	The requirements for repairing vehicles fueled by compressed or liquefied natural gas have been updated to address current technologies and processes.
2311.8 Repair of Vehicles Fueled by Lighter-than-air Fuels	Modification	The requirements for repairing vehicles fueled by compressed or liquefied compressed gas have been updated to address current technologies and processes.
2403.2.1.3 Classified Electrical Areas Around Spray Booths	Modification	The size of the classified area around spray booth openings is reduced to 3 feet.
2404.2, 2404.3.1, 914.9 Spray Rooms and Spray Booths	Modification	Requirements for spray booths and spray operations are correlated between the IFC and the IBC.
2810 Outdoor Storage of Pallets at Pallet Manufacturing and Recycling Facilities	Addition	This new section adds criteria for outdoor pallet storage at pallet manufacturing facilities and pallet recycling facilities. It provides specific height limits and separation to property lines and buildings, but also allows for the distances to be modified based on providing additional fire protection features.
Chapter 31 Umbrella Structures	Clarification	A new definition is added for umbrella structures which results in regulation of umbrella structures when they exceed 400 square feet.
3103.3.1 Tents and Membrane Structures Used as Special Amusement Buildings	Addition	Special amusement buildings located in temporary tents are required to be equipped with an automatic sprinkler system.
3103.6, 3103.9 Structural Stability of Tents	Modification	Temporary tents and membrane structures are required to provide construction documents which address their structural stability and load carrying capacity. Larger tents and membrane structures have been added to the list of temporary facilities which must comply.
3104.2 Fabrics for Tents and Membrane Structures	Addition	The application of testing criteria for flame spread of tent and membrane structures has been clarified.
3105, 105.6.47, 105.7.22 Temporary Special Event Structures	Addition	The requirements for temporary stage structures are expanded to include all temporary structures greater than 400 square feet when used at special events.
3106 Outdoor Assembly Events	Addition	This section adds requirements specific to outdoor public gatherings and improves the correlation of requirements in the IBC and IFC. <b>DO NOT ADOPT THIS ONE</b>
3107.13 LP-gas Containers and Tanks Adjacent to Tents and Membrane	Modification	Requirements for the use and separation of LP-gas containers in and around tents and membrane structures have been revised.
Chapter 32 High-piled Combustible Storage	Modification	The requirements in the chapter have been updated to correlate with current NFPA 13 requirements and recent FM Global fire tests.
3304.5, 3308, 3309.1 Fire Watch During Construction and Demolition	Modification	Criteria for requiring fire watch has been added to the code along with clarification to the functions and duties of the fire watch personnel.
Chapter 38 Higher Education Laboratories	Addition	A new chapter has been added to the IFC to specifically regulate college and university laboratories. Correlating sections have been added to a new Section 427 in the IBC.

Chapter 39 Processing and Extraction Facilities	Addition	A new chapter has been added to the IFC to specifically regulate the process of extracting oils from plant material.
Table 5003.1.1(1) Consumer Fireworks	Modification	Addresses the explosive nature of Division 1.4G explosives and removes the 100 percent increase in quantity for sprinklers where these items are stored.
5003.1.1(1), 5003.11.1, 6303.1.1.2 Maximum Allowable Quantity for Class 3 Oxidizers	Modification	The maximum allowable quantity for Class 3 oxidizers is increased by about 10 percent in control areas and Groups M and S occupancies.
5003.8.3.4 Construction of Control Areas	Modification	The fire-resistance rating of the floor of a control area in a Type IV building is allowed to be reduced to 1-hour if the building is sprinklered and does not exceed three stories in height.
5005.1.12 Protection of Hazardous Materials Piping Systems	Modification	Requirements for leak detection and emergency shutoff for high hazard gases and liquids only apply when the maximum allowable quantity per control area is exceeded.
5103.2, 5104.1.2 Aerosol Products in Plastic Containers	Modification	Limitations on aerosol products in plastic containers is revised and the use of Plastic Aerosol X products is prohibited in higher life hazard occupancies.
5103.2.2, 5104.2.2 5104.3.3, 5104.8 5106.2.2 Aerosol Cooking Spray Products	Addition	Specific fire protection requirements are added to address aerosol cooking spray products.
5306.1, 5306.2 Medical Gas Storage	Modification	Requirements for construction and ventilation of interior medical gas rooms and gas cabinets are revised.
5307.1, 5307.3 Liquid Carbon Dioxide Systems for Beverage Dispensing	Modification	Requirements for liquefied CO <sub>2</sub> in beverage dispensing applications have been correlated with requirements for gas detection systems.
5307.4 Carbon Dioxide Enrichment Systems	Addition	Carbon dioxide enrichment systems are now regulated by the International Fire Code when the system contains more than 100 pounds of CO <sub>2</sub> , or when the refill connection is remote from the tank or vessel.
5707 Mobile Fueling Operations	Addition	On-demand mobile fueling is allowed to occur at approved locations and under the control of a permit issued by the fire code official.
6104.3 Location of LP-gas Containers	Modification	New Footnote g specifies separations between above-ground LP-gas containers and public ways.
E 102.1.7.1 Hazard Classification of Oxidizers	Modification	This change revised the oxidizer classification of sodium dichloro-s-triazinetriene anhydrous (sodium dichloroisocyanurate anhydrous).
Chapter N Indoor Trade Shows and Exhibitions	Addition	This new chapter provides specific regulation to address the hazards associated with large trade shows and exhibitions. Many of the regulations can be found elsewhere in the IFC, but this appendix provides a single location with the regulations dealing with these events.

## PUBLIC HEARING NOTICE

Hannibal City Council will conduct a public hearing on Tuesday, February 20, 2024 at 6:45pm at City Hall in the Council Chambers-2<sup>nd</sup> Floor, 320 Broadway, Hannibal, MO to update fire code from 2012 to 2018.