

# 2024 FIRE CODE AMENDMENTS TO THE 2024 INTERNATIONAL FIRE CODE

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## Preface

This document comprises proposed amendments to the 2024 Edition of the *International Fire Code* as published by the International Code Council, Inc, amended by the Authorities Having Jurisdiction. This document is hereafter referenced as the 2024 Fire Code Amendments and is prepared to be adopted by local authorities having jurisdiction. These provisions are not considered to be or enacted as the code unless the provisions are adopted and codified by the local Authority Having Jurisdiction.

### Notes:

Deleted language in the base code has been ~~stricken through~~.

Added language to the code section has been underlined.

The entire section amended has been shown for context.

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## 2024 Fire Code Amendments

### Section 101.2.1 Appendices

Appendix B As Amended  
Appendix C In its entirety  
Appendix D In its entirety  
Appendix E In its entirety  
Appendix H In its entirety  
Appendix L In its entirety  
Appendix N In its entirety

### Section 102.7.3 Local Codes

“International Fuel Gas Code” is deleted and replaced with “NFPA Standard 54/ANSI Z223.1 National Fuel Gas Code, 2024 edition, or the most current version adopted by the Board for the Regulation of Liquefied Petroleum Gas in NAC 590.610.”

“International Plumbing Code” is deleted and replaced with “2024 Uniform Plumbing Code.”

“International Mechanical Code” is deleted and replaced with “2024 Uniform Mechanical Code.”

### Section 105.5.22

*Section 102 is amended to read as follows:*

**Section 105.5.22 Hazardous materials.** An operational permit is required to store, transport on site, dispense, use or handle, hazardous materials in excess of the amounts listed in Table 105.5.22. When a permit is required to be obtained for hazardous materials, the Nevada Combined Agency Hazardous Material Facility Report must be completed and the appropriate fees paid.

### Section 105.5.58 Fire-fighter Air Replenishment Systems:

*Section 105.5.58 is added to Section 105.5 to read as follows:*

**Section 105.5.58 Fire-fighter Air Replenishment System. An operational permit is required to maintain a Fire-fighter-Replenishment System.**

### Section 105.5.59 Emergency responder radio coverage system

*Section 105.5.59 is added to section 105.5 to read as follows:*

**Section 105.5.59 Emergency responder radio coverage system. An operational permit is required for the operation and maintenance of an emergency radio coverage system and related equipment, as specified in Section 510.**

### Section 112: Means of Appeals

*Section 112 is deleted in its entirety*

~~**112.1 General.** In order to hear and decide appeals of orders, decisions or determinations made by the fire code official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the fire code official.~~

~~**112.2 Limitations on authority.** An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this code.~~

~~**112.3 Qualifications.** The board of appeals shall consist of members who are qualified by experience and training on matters pertaining to the provisions of this code and are not employees of the jurisdiction.~~

~~**112.4 Administration.** The fire code official shall take action without delay in accordance with the decision of the board.~~

## Section 202 General Definitions:

The following definitions are amended or added in Section 202 General definitions to read:

**HIGH-RISE BUILDING.** A building with an occupied floor located more than ~~75-55~~ feet (~~22,806-16,764~~ mm) above the lowest level of fire department vehicle access.

**SPECIAL FIRE PROTECTION PROBLEM FACILITIES.** Special Fire Protection Problem Facilities are those facilities that consist of uses similar to the which may result in large size fires or fires with high heat release such as bulk flammable liquid storage, bulk flammable gas storage, large varnish and paint factories, some plastics manufacturing and storage, aircraft hangers, distilleries, refineries, lumberyards, and lumber treatment facilities, grain elevators, chemical plants, coal mines, tunnels, subterranean structures, storage facilities, and warehouses using high rack/piled storage for flammable or pressurized aerosols.

**UNWANTED ALARM.** Any alarm that occurs that is not the result of a potentially hazardous condition.

## Section 203 – Occupancy Classification and Use

### Section 203.7 Institutional Group I

Section 203.7 Institutional Group I, is amended to read:

**203.7.2 Institutional Group I-2.** Institutional Group I-2 occupancy shall include buildings and structures used for medical care on a 24-hour basis for more than ~~five~~ six persons who are incapable of self-preservation. All portions of a care facility which houses patients or residents which are classified by the State Board of Health as a 'Category 2 resident' and which has an occupant load of more than 10 residents, is classified as an 'I-2' occupancy classification. This group shall include, but not limited to, the following:

- Foster care facilities
- Detoxification facilities
- Hospitals
- Nursing homes
- Psychiatric hospitals

**Section 203.7.4 Occupational Classification Group I-4, day care facilities.** Institutional Group I-4 shall include buildings and structures occupied by more than ~~five~~ six persons of any age who receive custodial care for less than 24 hours by persons other than parents or guardians, relatives by blood, marriage, or adoption, and in a place other than the home of the person cared for. This group shall include, but not be limited to, the following: [NAC 477.283]

- Adult day care
- Child day care

Section 203.7 Institutional Group I, is amended to read:

**Classification as Group E.** A child day care facility that provides care for more than ~~five~~ six but no more than 100 children 2 ½ years or less of age, where the rooms in which the children cared for are located on a *level of exit discharge* serving such rooms and each of these child care rooms has an *exit* door directly to the exterior, shall be classified as Group E.

**Within a place of religious worship.** Rooms and spaces within places of religious worship providing such care during religious functions shall be classified as part of the primary occupancy.

**Five Six or fewer occupants receiving care.** A facility having ~~five~~ six or fewer persons receiving custodial care shall be classified as part of the primary occupancy.

**Five Six or fewer occupants receiving care in a dwelling unit.** A facility such as the above within a dwelling unit and having ~~five~~ six or fewer persons receiving custodial care shall be classified as a Group R-3 occupancy or shall comply with the *International Residential Code*.

Section 203.9 Residential Group R, is amended to read:

**203.9.1 Occupancy Classification Residential Group R-1.** Residential Group R-1 occupancies containing *sleeping units* where the occupants are primarily transient in nature, including:

- Boarding houses (transient) with more than 10 occupants
- Brothels
- Congregate living facilities (transient) with more than 10 occupants
- Hotels (transient)
- Motels (transient)

**203.9.4 Residential Group R-4.** Residential Group R-4 shall include buildings, structures and portions thereof for more than five but not more than 16 persons, excluding staff, who reside on a *24-hour basis* in a supervised residential environment and receive *custodial care*. Buildings of Group R-4 shall be classified as one of the occupancy conditions specified in Section 203.9.4.1 or 203.9.4.2. Group R-4 occupancies shall meet the requirements for construction as defined in Group R-3, except as otherwise provided for in the *International Building Code*. This group shall include, but not be limited to, the following:

- Alcohol and drug centers
- Assisted living facilities
- Congregate care facilities
- Group homes*
- Halfway houses
- Residential board and care facilities
- Social rehabilitation facilities
- Transitional facilities

Section 307.6 is added to Section 307 to read:

**307.6 Outdoor fireplaces, fire pits and decorative appliances.** Outdoor fireplaces, fire pits and decorative appliances fueled by LP-gas or natural gas, used in assembly occupancies for the public display shall be equipped with an automatic timer shut off valve with a maximum time limit of 3 hours. The timing valve shall be installed a minimum of 2' from the appliance or as approved by the fire code official.

Section 308.1.6.3, is amended to read:

**308.1.6.3 Sky lanterns.** ~~A person shall not release or cause to be released an untethered sky lantern.~~ Sky lanterns are prohibited.

Section 325 is added to Chapter 3 to read:

**Section 325 Battery Recycling and Battery Recycling Storage Facilities**

**325.1 General.** Battery Recycling and Battery Recycling Storage Facilities shall be operated and maintained in accordance with this section and Section 320 where applicable.

**325.1.1 Technical Opinion & Report.** A technical opinion and report complying with 104.8.2, shall be prepared to evaluate the fire risks associated with all new battery recycling facilities and battery recycling storage facilities. The report shall be provided to the fire code official for review and approval.

**325.1.1.1 Items required, to be addressed in the Technical Report:**

1. Battery sorting specifications and procedures.
2. Protection from hazards involving flying debris during fire incidents igniting adjacent storage areas, buildings, or other exposures, where applicable.
3. Protection of areas and equipment where battery recycling occurs, including fire detection and suppression, and protection.
4. An evaluation of the suitability of the processing equipment used.
5. Combustible dust hazards, including cathode and anode powders; and processes that involve or generate dust or powders, as applicable.
6. Firefighting access and water supply.
7. Separation distances between materials, incompatible materials, and water reactive materials, as

- applicable.
8. Intake and inspection procedures and segregation of high-risk batteries.
  9. Storage configuration of batteries or cells, including high piled storage requirements where storage exceeded 6 feet (1.82 m) in height.
  10. Ventilation requirements
  11. Other items as required by the *fire code official*.
  12. Description of method by which the state of charge will be verified and maintained at or below 30%.

**325.1.2 Emergency Procedures & Response Plan.** Battery Recycling and Battery Recycling Storage Facilities shall develop and maintain emergency procedures and a written safety and emergency response plan for each facility. The plan shall include any emergency conditions unique to that facility including the batteries that it may process or store. The plan shall be submitted to the *fire code official* for review and shall be *approved*.

The safety and emergency response plan shall include (but is not limited to) the following:

1. Procedures for employee training related to anticipated emergency scenarios, including fire events, battery off-gassing, thermal runaway, and post-event mitigation.
2. Spill prevention and control measures
3. Procedures for coordination with emergency responders, including access to hazard communication information, including Safety Data Sheets.
4. A facility map detailing the locations of emergency equipment and access routes.
5. Isolation procedures for batteries exhibiting signs of thermal runaway

**325.1.2.1 Abatement.** The emergency response plan shall include procedures for the abatement of hazardous conditions following fire events or battery damage. The abatement plan shall be *approved* by the *fire code official*.

## **325.2 Battery Recycling Facilities**

### **325.2.1 Fire Protection**

**325.2.1.1 Fire Suppression Systems.** Battery recycling facilities shall be protected by an automatic sprinkler system in accordance with Section 903.3

**325.2.1.2 Fire Alarm and Detection Systems.** A listed or *approved* automatic aspirated smoke detection system, radiant energy fire detection system complying with Section 907.2 shall be installed to protect battery recycling and battery recycling storage areas. Alarm signals from detection systems shall be transmitted to a central station and shall be in accordance with NFPA 72.

### **325.2.2 Explosion Control**

**325.2.2.1 Explosion control requirements.** Where required by the technical report, explosion control shall be in accordance with Section 911.

**325.2.3 Ventilation.** Indoor recycling areas shall be provided with a mechanical exhaust ventilation system.

**325.2.3.1 Containment Control.** The mechanical exhaust ventilation system shall be designed by a registered design professional in accordance with the *International Mechanical Code*, unless an alternative design is *approved*.

**325.2.3.1.1 Flammable liquid or gas producing operations.** Where a flammable liquid and, or gas is generated as a part of the battery recycling process, the mechanical exhaust system shall be designed in accordance with Section 502.9.5.4 of the *International Mechanical Code*, unless an alternative design is *approved* by the *fire code official*.

**325.2.4 Sorting.** Sorting of batteries shall be in accordance with the technical opinion report, and is subject to AHJ approval.

**325.2.5 Weather Protection.** Where outdoor battery recycling areas, and such areas that are enclosed, such areas shall be considered indoor recycling facilities. A technical opinion report, complying with 325.1.1 shall be provided to address the fire resistance rating of the structure, fire detection, fire suppression, and explosion control within the weather protected area.

### **325.3 Battery Recycling Storage Facilities**

**325.3.1 Storage Arrangement Plan.** A storage plan, which illustrates the storage arrangement, including the location and dimensions of aisleways, storage piles, storage racks, and any fire protection and detection equipment, and its proximity to the storage, shall be provided to and *approved* be the *fire code official*.

**325.3.2 Fire Extinguishers.** Fire extinguishing equipment suitable for all types of batteries present shall be provided throughout battery recycling loading and unloading areas in accordance with NFPA 10, travel distance to reach fire-extinguishing equipment shall not exceed 75 feet (22.9m).

#### **325.3.3 Indoor Recycling Storage:**

**325.3.3.1 Construction Requirements.** Where indoor storage areas are located in a building with other uses, battery storage areas shall be separated from the remainder of the building by 2-hour rated fire barriers or horizontal assemblies. Fire barriers shall be constructed in accordance with Section 707 of the *International Building Code*, and horizontal assemblies shall be constructed in accordance with Section 711 of the *International Building Code*.

#### **325.3.4 Outdoor Recycling Storage:**

**325.3.4.1 Separation.** Outdoor storage and outdoor storage areas used to store batteries, including storage beneath weather protection shall comply with Section 320.4.3

**325.3.4.2 Storage area size limits and separation.** Multiple battery storage areas shall be separated from each other by not less than 20 feet (4572 mm) of open space. No storage area shall encroach upon a fire access lane.

**325.3.4.3 Aisles.** Aisles used for separation of piles shall be configured to allow for firefighting access.

**325.3.4.5.2 Water Supply.** Outdoor storage areas shall be equipped throughout the with an adequate water supply in accordance with section 507. The water supply shall be arranged such that no point on the outdoor storage area exceeds 150 feet from a water supply connection.

**325.3.5 Packaging.** Batteries for recycling are to be stored in weather appropriate noncombustible containers, or containers packaged in accordance with DOTn shipping regulations, and shall be deemed acceptable by the *fire code official*. Under no circumstances will cardboard packaging be used for outdoor storage areas.

**325.3.5.1 Damaged Packaging.** Batteries shall not be stored in damaged packaging, where the damage compromises the container. If packaging is visibly damaged the batteries shall be promptly repackaged in containers complying with 325.3.5.

*Section 403.11.3.2, is amended to read as follows:*

**403.11.3 Crowd managers.** Where facilities or events involve a gathering of greater than 500 people, or 100 people in Group A-2 Occupancies operating as a night club, tavern, or bar, crowd managers shall be provided in accordance with sections 403.11.3.1 through 403.11.3.3.

*Section 503.3 is amended to read as follows:*

**503.3 Marking.** Where required by the *fire code official*, curbs shall be painted red and approved signs or other approved notices or markings that include the words “NO PARKING – FIRE LANE” shall be provided every 100 feet or as required by the

fire code official for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. The means by which fire lanes are designed shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

*Section 505.1 is amended to read as follows:*

**505.1 Address identification.** New and existing buildings shall be provided with approved maintained all-weather address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetic letters. Numbers shall not be spelled out. Each character shall be not less ~~than 4 inches (102 mm) high with a minimum stroke width of ½ inch (12.7 mm)~~ than a nominal height of 6 inches with a minimum ½ inch stroke form residential occupancies and 12 inches with a 1 inch stroke in commercial occupancies, unless otherwise approved by the fire code official. Where required by the fire code official, address identification shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole, or other sign or means shall be used to identify the structure. Address identification shall be maintained.

*Section 507.3 is amended to read as follows:*

**507.3 Fire Flow.** Fire flow requirements for buildings or portions of buildings and facilities shall be determined by an approved method. Subject to the approval of the fire authority, if the required fire flow is not available for adequate fire protection, an automatic fire sprinkler system shall be installed throughout the building or buildings. The sprinkler system must meet the requirements of the appropriate NFPA standard. The provisions of this paragraph do not apply if a fire sprinkler system is otherwise required by this chapter or the adopted codes.

*Section 507.5.5 is amended to read as follows:*

**507.5.5 Clear space around hydrants.** A 3 foot (914 mm) clear space shall be maintained around the circumference of fire hydrants, except as otherwise required or approved. In addition, a minimum clear space of seven and one-half feet (2286 mm) shall be maintained to both sides directly in front of the front pumper connection. A minimum of three feet (914 mm) shall also be maintained clear to the rear of any fire hydrant. These clearance requirements shall apply to any public or private property.

*Section 508.1.6 is amended to read as follows:*

**508.1.6 Required features.** The fire command center shall comply with NFPA 72 and shall contain the following features: 1-18 adopted as written with the addition of:

1. HVAC. The central control station shall be provided with heating, cooling, and ventilation (HVAC) systems that are independent of any other building system or area. HVAC for the central control station shall be connected to the emergency power system.
2. Lighting. Lighting shall provide adequate illumination and shall be on emergency service with additional battery backup emergency lighting.
3. Inside Telephone Line. A telephone connected to the premises telephone exchange shall be provided. A current premises telephone directory shall be placed next to this telephone.
4. Disconnect. The main switch for disconnecting the utility power and any alternate power sources shall be in the fire command center. Switches shall be covered to prevent utility power deeds and any alternate power sources before entering the building. After the switch is operated, no live electrical panels, conductors, or feeds within the premises shall remain energized excluding the emergency electrical circuits.

*509.1.2 is added to read as follows:*

**509.1.2 General.** A protective cover shall be provided over natural gas meter assemblies serving buildings, or portions thereof, located at an elevation of 5,800 feet (1,767.48 m) or higher. The protective cover shall be designed to be equal to or greater than the Building Design Load (as determined by the Building Department have jurisdiction). The cover shall be approved by the natural gas supplier, shall be installed over the meter assembly, and securely supported to the ground or diagonally to the building wall. When supported to the ground, the footing of the supports shall extend a minimum of 6-inches (152.4 mm) below finished grade. Pre-case concrete piers may be used in lieu of poured footings, provided they are placed on stable soil.

Section 510.1 is deleted and replaced with:

**510.1 Emergency responder communications enhancement systems in new buildings.** Approved in-building emergency responder communications enhancement systems (ERCES) for emergency responders shall be provided in all new buildings. In-building ERCES within the building shall be based on the existing coverage levels of the public safety communications systems utilized by the jurisdiction, measured at the exterior of the building. The ERCES, where required, shall be of a type determined by the fire code official and the frequency license holder(s). This section shall not require improvements of the existing public safety communications systems.

**Exceptions:**

- ~~1. Where approved by the building official and the fire code official, a wired communication system in accordance with Section 907.2.13.2 shall be permitted to be installed or maintained instead of an approved communication coverage system.~~
- ~~2. Where it is determined by the fire code official that the communications coverage system is not needed.~~
- ~~3. In facilities where emergency responder communications coverage is required and such systems, components or equipment required could have a negative impact on the normal operations of that facility, the fire code official shall have the authority to accept an automatically activated emergency responder communication coverage system.~~
- ~~4. One story building not exceeding 12,000 square feet (1115 m<sup>2</sup>) with no below ground area (s).~~

**510.1 Emergency responder communications enhancement systems in new buildings.** Emergency responder radio coverage systems must be provided throughout any building that meets one of the following standards:

1. High-rise buildings: Buildings with a floor used for human occupancy that is located more than 55 feet above that lowest level above fire department vehicle access.
2. Underground and below-grade buildings: Buildings with a floor level that is below the finished floor of the lowest level of the exit discharge of any level.
3. Other buildings: The fire code official is authorized to require a technical opinion and report, in accordance with Section 104.7.2, for buildings whose design, due to location, size, construction type or other factors, could impede radio coverage as required by Section 510.4.1. The report shall make recommendations regarding the need for an emergency responder radio coverage system.

Section 510.2 is deleted and replaced with:

**510.2 Emergency responder communications enhancement system in existing buildings.** Existing buildings shall be provided with approved in-building emergency responder communications enhancement system for emergency responders as required in Chapter 11.

**510.2 Emergency responder communications enhancement system in existing buildings.** Existing buildings, other than buildings with an occupational classification of Residential Group R-3 which do not have approved radio coverage for emergency responders in the building based on existing coverage levels of the public safety communication systems, must be equipped with such coverage according to one of the following conditions.

1. Existing buildings that do not have approved radio coverage, as determined by the Fire Chief, in accordance with Section 510.4.1.
2. Where an existing wired communication system cannot be repaired or is being replaced.
3. Within a time frame established by the adopting authority.

**Exception:** An existing building is not required to be equipped with such coverage where the fire code official determines that the radio coverage for emergency responders is not needed.

Section 510.4.2 is amended to read as follows:

**510.4.2 System design.** The in-building emergency responder communications enhancement system shall be designed in accordance with Section 510.4.2.1 through 510.4.2.8 and NFPA 1225 except 18.12.3.3.

Section 511 is added to read as follows:

**511.1 Firefighter Equipment Rooms.** In all new high-rise buildings of ten (10) or more stories in height, The Reno Fire Department will evaluate the need for firefighter equipment rooms. If required by the Fire Chief, the owner/operator shall provide and equip firefighter equipment rooms intended for the sole use of the fire department during emergency operations. The number, location, type, size, inventory, and access of the firefighter equipment rooms shall be approved by the fire department.

Section 901.11 is added to read as follows:

**901.11 Unwanted fire alarms.** Unwanted fire alarms are a violation of this code. Then a fire alarm system is required by this code, it shall be the responsibility of the property owner or owner’s authorized agent to maintain the system and properly educate occupants, tenants, and/or employees in accepted behavioral practices that will minimize or eliminate false and/or nuisance alarms. This includes nuisance activations in response to predictable environmental stimuli such as but not limited to cooking fumes, smoking, and construction activities. Where unwanted alarms become repetitive, the fire code official is authorized to charge fees or issue administrative citations to the property owner in accordance with the fee schedule or administrative code as established by the applicable governing authority.

Section 903.2 is amended to read as follows:

**Section 903.2 Where required.** Approved automatic sprinkler systems in new buildings and structures shall be provided in locations described in Section 903.2.1 through 903.2.12. In all occupancies except Group R-3 and U occupancies, a building that is more than two stories in height shall, including any height added by useable floor space, have an automatic fire sprinkler system throughout. Any open parking garage and any airport control tower is exempt from this requirement to install an automatic sprinkler system.

Tables 903.2.1 and 903.2.2

**Exception:** Spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1-hour *fire barriers* constructed in accordance with Section 707 of the *International Building Code* or not less than 2-hour *horizontal assemblies* constructed in accordance with Section 711 of the *International Building Code*, or both.

Section 903.2.1.2 is amended to read as follows:

**903.2.1.2 Group A-2.** An automatic sprinkler system shall be provided for Group A-2 occupancies and throughout all stories from the A-2 occupancy to and including the levels of exit discharge serving that occupancy where one of the follow conditions exists:

1. The fire area exceeds 5,000 square feet (464 m<sup>2</sup>)
2. The fire area has an occupant load of 100 or more.
3. The fire area is located on the floor other than a level of exit discharge serving such occupancies.

Occupancies containing a casino, regardless of occupancy classification, must be designed and built with a sprinkler system classified as an Ordinary Hazard Group 2.

Add Table 903.2.1 to Section 903.2, to read as follows:

**Table 903.2.1<sup>a</sup> Required Automatic Sprinklers by Fire Area, Response Time and Height for Buildings Designed and Constructed with the International Building Code Including A, B, E, F, H, I, M, S, and U Occupancies. Sprinklers are required when any one of the listed conditions are met, or when otherwise required by this Code.**

Fire Authority	Fire Area <sup>b,c</sup> In square feet (sf)	Height In stories	Response Time In minutes (min)
Carson City Fire Department	≥ 5,000 <sup>e</sup>	>2	NA
Central Lyon County Fire Protection District	≥ 5000	> 2	-
East Fork Fire Protection District	≥ 5,000	>2	NA

Elko City Fire Department	≥ 5,000	> 2	-
North Lake Tahoe Fire Protection District	≥5,000	2 with basement or >2	NA
North Lyon Fire Protection District	≥5,000	>2	NA
Reno Fire Department	>5,000	>2	NA
Smith Valley Fire Protection District	≥ 5,000	>2	NA
Sparks Fire Department	≥5,000	>2	>6
Storey County Fire Protection District	≥5,000	2 with basement or >2	NA
Tahoe Douglas Fire Protection District	All	NA	NA
Truckee Meadows Fire Protection District <sup>d</sup>	≥5,000	>2	NA

This table is in addition to any other automatic sprinkler requirements in this code.

- a. Fire areas may be separated according to IBC 707.3.10.
- b. Any addition or remodel that increases the fire area will be included in the calculation for the total square footage.
- c. Airport towers and open parking garages complying with IBC 406.5 are exempt from this table.
- d. All S-1 occupancies within the Truckee Meadows Fire Protection District shall have a fire sprinkler system installed, regardless of square footage.

*Add Table 903.2.2 to read as follows:*

**Table 903.2.2<sup>a</sup> Required Automatic Sprinklers by Fire Area, Response Time and Height For Structures Designed and Constructed with the International Residential Code Sprinklers are required when any one of the listed conditions are met, or when otherwise required by this Code.**

Fire Authority	Fire Area <sup>b</sup> In square feet (sf)	Height In stories	Response Time In minutes (min)
Carson City Fire Department	≥ 5,000 <sup>c</sup>	-	-
Central Lyon County Fire Protection District	≥5000	>2	-

East Fork Fire Protection District	≥ 5000	>2	-
Elko City Fire Department	≥ 5000	>2	-
North Lake Tahoe Fire Protection District	≥ 5,000	2 with basement or ≥3	-
North Lyon Fire Protection District	≥ 5,000	-	-
Reno Fire Department	>5,000	-	>6
Smith Valley Fire Protection District	≥ 5,000	>2	-
Sparks Fire Department	≥ 5000	-	>6
Storey County Fire Protection District	≥ 5000	-	-
Tahoe Douglas Fire Protection District	>3,600	2 with basement or ≥2	-
Truckee Meadows Fire Protection District	New: ≥ 5,000 sf Existing: > 7,000 sf	-	-

- This table is in addition to any other automatic sprinkler requirements in this code.
- Any addition or remodel that increases the fire area will be included in the calculation for the total square footage. The use of fire walls and fire barriers shall not be allowed to be used to reduce the size of the fire areas.
- A one-time increase in the fire area is permitted provided said increase is <50% of the structure's existing permitted fire area square footage.

Section 903.2.3 is amended to read as follows:

**903.2.3 Group E.** An automatic sprinkler system shall be provided for Group E occupancies ~~as follows~~ where one of the following exists:

- Throughout all Group E fire areas greater than ~~12,000~~ 5,000 square feet (~~1,115~~ 464 m<sup>2</sup>) in area.
- The Group E fire area is located on a floor other than a level of exit discharge serving such occupancies.  
**Exception:** In buildings where every classroom has not fewer than one exterior exit door at ground level, an automatic sprinkler system is not required in any area below the lowest level of exit discharge serving that area.
- Group E fire area has an occupant load of 300 or more.
- Daycare facilities where there is occupancy from 12:00 am – 6:00 am and care for 7 or more children.
- In high schools where automatic fire sprinkler systems are provided, the automatic fire sprinkler systems for automotive and woodworking shops must be designed to Ordinary Hazard, Group 1 automatic fire sprinkler systems criteria, or as required by the Authority Having Jurisdiction.

Section 903.2.11.7 is added to read as follows:

**903.2.11.7. Protection of available storage height.** In Group S-1 and all other storage areas the fire sprinkler system shall be designed to protect storage up to the maximum available storage height. The minimum sprinkler density shall be equivalent to that required for a Class IV commodity pursuant to NFPA 13.

Section 903.3.1.1 is amended to read as follows:

**903.3.1.1 NFPA 13 Sprinkler Systems.** Where the provisions of this code require that a building or portion thereof be equipped throughout with an *automatic sprinkler system* in accordance with this section, sprinklers shall be installed throughout in accordance with NFPA 13 except as provided in Section 903.3.1.1.1 and 903.1.1.2.

All Group R-3 occupancies larger than ten thousand (10,000) square feet (3,048 m<sup>2</sup>) in area or exceeding four (4) stories in height are required to have automatic sprinklers installed throughout in accordance with NFPA 13.

903.4 is amended to read as follows:

**903.4.1 Sprinkler system supervision and alarms.** Valves controlling the water supply for *automatic sprinkler systems*, pumps, tanks, water levels and temperatures, critical air pressures and water-flow switches on all sprinkler systems shall be electrically supervised by a *listed* fire alarm control unit.

**Exceptions:**

1. Automatic sprinkler systems protecting one- and two- family dwellings that have not been converted to an R-4 as defined by 203.9.4.
2. Limited area systems in accordance with Section 903.3.8
3. Automatic sprinkler systems installed in accordance with NFPA 13R where a common supply main is used to supply both domestic water and the automatic sprinkler system, and a separate shutoff valve for the automatic sprinkler system is not supervised.
4. Jockey pump control valves that are sealed or locked in open position.
5. Control valves to commercial kitchen hoods, painted spray booths or dip tanks that are sealed or locked in the open position. This exception will not apply to any of the above-mentioned control valves if they are located in a building equipped with any fire alarm or protection system that is required to be monitored by a central station fire alarm company.
6. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
7. Trim valves to pressure switches in dry, pre-action, and deluge sprinkler systems that are sealed or locked in the open position.

**903.4.3 Alarms.** An *approved* audible and visual sprinkler waterflow alarm device, located on the exterior of the building in an *approved* location, shall be connected to each *automatic sprinkler system*. Such sprinkler waterflow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Where a waterflow switch is required by Section 903.4.1 to be electrically supervised, such sprinkler waterflow alarm devices shall be actuation of the *automatic sprinkler system* shall actuate the building *fire alarm system*. One interior audible and visual notification appliance shall be provided near the main entrance or in a normally occupied location. In multiple-tenant facilities, one interior audible and visual notification appliance shall be provided near the main entrance or in a normally occupied location for each tenant space.

**Exception:** *Automatic sprinkler systems protecting one- and two-family dwellings.*

Section 903.4.4 is added to read as follows:

**903.4.4 Floor control valves.** Approved supervised indicating control valves shall be provided at the point of connection to the riser and/or standpipe on each floor ~~in high-rise buildings~~ in multi-story buildings.

Section 906.2 is amended to read as follows:

**906.2 General requirements.** Portable fire extinguishers shall be selected, installed, and maintained in accordance with this section and NFPA 10. The internal components of carbon, dioxide, wet chemical, halogenated agent, aqueous film-forming foam (AFFF) and film-forming fluoroprotein (FFFP) portable fire extinguishers shall be examined in accordance with ~~N.F.P.A.~~ NFPA Standard 10, 2022 edition, Table 7.3.3.1. The internal components of all other portable fire extinguishers shall be examined annually.

**Exceptions:**

1. Travel distance to reach an extinguisher shall not apply to the spectator seating portions of Group A-5 Occupancies.
2. Thirty-day inspections shall not be required, and maintenance shall be allowed to be ~~once every three years~~ annually for dry-chemical or halogenated agent portable fire extinguishers that are supervised by a listed and approved electronic monitoring device, provided that all of the following conditions are met:
  - 2.1. Electronic monitoring shall confirm that extinguishers are properly positioned, properly charged and unobstructed.
  - 2.2 Loss of power or circuit continuity to the electronic monitoring device shall initiate a trouble signal.
  - 2.3 The extinguishers shall be installed inside of a building or cabinet in a noncorrosive environment.
  - 2.4 Electronic monitoring devices and supervisory circuits shall be tested ~~every three years~~ annually when extinguisher maintenance is performed.
  - 2.5 A written log of required hydrostatic test dates for extinguishers shall be maintained by the owner to verify that hydrostatic tests are conducted at the frequency required by NFPA 10.
3. In Group I-3, portable fire extinguishers shall be permitted to be located at staff locations.

*Section 907.2.9.4 is added to read as follows:*

**907.2.9.4 Automatic smoke detection system in Group R-4.** An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be installed in corridors, waiting areas open to corridors and habitable spaces other than sleeping units and kitchens.

**Exceptions:**

1. Smoke detection in habitable spaces is not required where the facility is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.
2. An automatic smoke detection system is not required in buildings that do not have interior corridors serving sleeping units and where each sleeping unit has a means of egress door opening directly to an exit or to an exterior exit access that leads directly to an exit.

*Section 907.2.11.8 is added to read as follows:*

**907.2.11.8 Alternative to single- and multiple-station smoke alarms.** Fire alarm in place of single and multiple-station smoke alarms may be replaced by an NFPA 72 Household compliant fire alarm system. Plans shall be submitted to the local fire authority and permit obtained prior to installation. All fire alarm installation contractors shall be required to be licensed by both the Nevada State Contractors Board and Nevada State Fire Marshal (F License).

*Section 907.5.2.1.1 is amended to read as follows:*

**907.5.2.1.1 Average sound pressure.** The audible alarm notification appliances shall provide a sound pressure level of 15 decibels (dBA) above the average ambient sound level or 5 dBA above the maximum sound level having a duration of at least 60 seconds, whichever is greater, in every occupiable space within the building. The minimum sound pressure level shall be 90 dBA in mechanical equipment rooms and 80 dBA in all other occupancies.

*Section 907.5.2.3 is amended to read as follows:*

**907.5.2.3 Visible Alarms.** Visible alarm notification appliances shall be provided in accordance with Sections 907.5.2.3.1 through 907.5.2.3.3.

**Exceptions:**

1. Visible alarm notification appliances are not required in alterations, except where an existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed.
2. Visible alarm notification appliances shall not be required in exits as defined in Chapter 2.
3. Visible alarm notification appliances shall not be required in elevator cars.
4. Visual alarm notification appliances are not required in critical care areas of Group I-2, Condition 2 occupancies that are in compliance with Section 907.2.6, Exception 2.
5. Visible alarm notification appliances are not required in storage rooms, electrical rooms and mechanical

rooms that are not normally occupied and are less than 400 square feet.

6. Visible alarm notification appliances are not required in janitor closets.
7. A visible alarm notification appliance installed in a nurses' control station or other continuously attended staff location in a Group I-2, Condition 2 suite shall be an acceptable alternative to the installation of visible alarm notification appliances throughout the suite or unit in Group I-2, Condition 2 occupancies that are in compliance with Section 907.2.63, Exception 2.

*Section 907.10 is amended to read as follows:*

**Section 907.10 Smoke alarm maintenance.** Smoke alarms shall be tested and maintained in accordance with the manufacturer's instructions. Smoke alarms shall be replaced when they fail to respond to operability tests, or when they exceed 10 years from the date of manufacture, unless an earlier replacement is specified in the manufacturer's published instructions. The provisions of this section apply when any work that requires a permit is conducted on a new or existing building or structure.

*Section 913.4 is amended to read as follows:*

**913.4 Valve Supervision.** Where provided, the fire pump suction, discharge and bypass valves, and isolation valves on the backflow prevention device or assembly shall be supervised open by one of the following methods.

1. Central-station, proprietary or remote-station signaling service.
2. Local signaling service that will cause the sounding of an audible signal at a constant attended location.
3. Locking valves open.
4. ~~Sealing of valves and approved weekly recorded inspection where valves are located within fenced enclosures under the control of the owner.~~

*Section 915.1.1 is amended to read as follows:*

**915.1.1 Where Required.** Carbon monoxide detection shall be provided in Group I-1, I-2, I-4, and R, including, without limitation, Residential Group R-3 occupancies used for transient occupancy of less than 30 days, and in classrooms in Group E occupancies in the locations specified in Section 915.2 where any of the conditions in Sections 915.1.2 through 915.1.6 exist.

1. In buildings that contain a CO source.
2. In buildings that contain or are supplied by a CO-producing forced-air furnace.
3. In buildings with attached private garages.
4. In buildings that have a CO-producing vehicle that is used within the building.

*Section 1023.9.1 is amended to read as follows:*

**1023.9.1 Signage requirements.** Stairway identification signs shall comply with all of the following requirements:

1. The signs shall be a minimum size of 18 inches (457mm) by 12 inches (305 mm).
2. The letters designating the identification of the interior exit stairway and ramp shall be not less than 1 ½ inches (38mm) in height.
3. The number designating the floor level shall be not less than 5 inches (127mm) in height and located in the center of the sign.
4. Other lettering and numbers shall be not less than 1 inch (25mm) in height.
5. Characters and their background shall have a non-glare finish. Characters shall contrast with their background, with either light characters on a dark background or dark characters on a light background.
6. Where signs required by Section 1023.9 are installed in the interior exit stairways and ramps of buildings subject to Section 1025, the signs shall be made of the same materials as required by Section 1025.4.
7. The background color of the sign shall be green if roof access is available from the signed stairway. The background color of the sign shall be red if roof access is not available from the signed stairway.

*Chapter 11 is deleted*

*Section 4104.2 is deleted*

*Section 5601.1.3 is amended to read as follows:*

**5601.1.3 Fireworks.** Except as otherwise provided in this section, the possession, manufacture, storage, sale, use, and handling of Class 1.3 and Class 1.4 pyrotechnics are only allowed in jurisdictions where specifically approved by local ordinance.

**Exceptions:**

1. Storage and handling of fireworks is allowed in Section 5604.
2. Manufacture, assembly and testing of fireworks as allowed in Section 5605.
3. The use of fireworks for firework displays as allowed in Section 5608.
4. Except as otherwise provided in this section, the possession, manufacture, storage, sale, use and handling of Class 1.3 and Class 1.4 pyrotechnics are only allowed in jurisdictions where specifically approved by local ordinance.
5. The possession, storage, sale, handling and use of specific types of Division 1.4G fireworks where allowed by applicable laws, ordinances, and regulations, provided such fireworks comply with CPSC 16 CFR Parts 1500 and 1507, and DOTn 49 CFR Parts 100-185, as applicable for consumer fireworks.

*Section 5601.1.6 is amended to read as follows:*

**5601.1.6 Exploding targets.** The possession, manufacture, sale, and use of exploding targets, including binary exploding targets, are prohibited.

*Section 6101.1 is amended to read as follows:*

**6101.1 Scope.** Storage, handling and transportation of liquified petroleum gas (LP-gas) and the installation of LP-gas equipment pertinent to systems for such uses shall comply with this chapter and NFPA 58. Properties of LP-gases shall be determined in accordance with Appendix B of NFPA 58. In the event of a conflict between any provision in this chapter and the regulations of the Board for the Regulation of Liquified Petroleum Gas, the regulations of the Board take precedence.

**Appendix B is adopted in whole in accordance with 2024 Edition of the International Fire Code Section 101.2.**

*The following definition is added in Section B102 Definitions to read as follows:*

**Special Fire Protection Problem Facilities.** Special Fire Protection Problem Facilities are those facilities that consist of uses similar to that which may result in large size fires or fires with high heat release such as bulk flammable liquid storage, bulk flammable gas storage, large varnish and paint factories, some plastics manufacturing and storage, aircraft hangers, distilleries, refineries, lumberyards and lumber treatment facilities, grain elevators, chemical plants, coal mines, tunnels, subterranean structures, storage facilities, and warehouses using high rack/piled storage for flammables or pressurized aerosols.

*Section B103.3 is amended to read as follows:*

**B103.3 Areas without water supply systems.** For information regarding water supplies for fire-fighting purposes in rural and suburban areas in which adequate and reliable water supply systems do not exist, the fire code official is authorized to utilize the International Wildland-urban Interface Code or NFPA 1142 where the site is not considered as a “special fire protection problem” as defined in Section B102.

Table B105.2 of Appendix B Fire-Flow Requirements for Buildings is amended to read as follows:

**TABLE B105.2**

**REQUIRED FIRE FLOW FOR BUILDINGS OTHER THAN ONE-AND TWO-FAMILY DWELLINGS, GROUP R-3 AND R-4 BUILDINGS AND TOWNHOUSES**

<b>AUTOMATIC SPRINKLER SYSTEM (DESIGN STANDARD)</b>	<b>MINIMUM FIRE FLOW (gallons per minute)</b>	<b>FLOW DURATION (hours)</b>
No auto sprinkler system	Value in Table B105.1(2)	Duration in Table B105.1(2)
Section 903.3.1.1 of the International Fire Code	<del>25</del> <u>50</u> % of the value in Table B105.1(2) <sup>a</sup> -	Duration in Table B105.1(2) at the reduced flow rate
Section 903.3.1.2 of the International Fire Code	<del>25</del> <u>50</u> % of the value in Table B105.1(2) <sup>a</sup>	Duration in Table B105.1(2) at the reduced flow rate

For SI: 1 gallon per minute = 3.785 L/m

- a. The reduced flow rate shall be not less than 1,000 1,500 gallons per minute.

*Adopt Appendix C in its entirety.*

*Adopt Appendix D in its entirety.*

*Adopt Appendix E in its entirety.*

*Adopt Appendix H in its entirety.*

*Adopt Appendix L in its entirety.*

*Adopt Appendix N in its entirety.*