

Elected Officials Information Packet for Consideration of the 2024 International Fire Code Amendments

Note: The opinions, facts & issues presented herein are those of the Summit Fire and EMS Authority and the Red, White & Blue Fire Protection District.

Introduction: The 2024 International Fire Code (IFC) with amendments is in the process of being adopted by the following: Red, White and Blue and Summit Fire and EMS Fire Protection Districts. We respectfully request the adoption of the IFC with amendments by local municipalities and the Summit County Government. This affords consistency for contractors, developers, fire inspectors, and building officials. Life safety standards would remain the same throughout Summit County for its citizens and visitors and not afford one area a greater or lesser level of fire & life safety in buildings.

The International Fire Code is a **minimum** set of standards that was developed on a National level in public forum hearings. The fire code is a companion code to the other International Codes used by the various building departments countywide. Municipalities, special districts, and counties across the State of Colorado have adopted the series of International Codes with more stringent amendments based on the community's desired needs or expectations of fire and life safety protection. Does the 2018 IFC meet the minimum set of standards that are sufficient for Summit County? Our municipalities, fire districts, building departments, and prior BOCC's have chosen to take a slightly more stringent approach toward fire safety via some amendments.

Detailed Discussion on the amendments to the 2024 IFC:

- The fire departments will conduct three public meetings across Summit County to review the amendments to the 2024 IFC. In addition, each special district must have a public hearing before adoption. The fire districts have solicited constructive feedback from all the building officials in the county. We met with the Summit County Builders Association on May 14 for feedback. Many amendments have existed since the adoption of the International Fire Code in 2000.
- Three items may be considered substantive amendments/changes that the fire departments want to bring to your attention.
 - Residential fire sprinkler requirements. We are proposing to reduce the square footage from 6,000 square feet to 4,500 square feet and allow for multipurpose plumbing systems to be used (P2904).
 - Appendix P. This appendix was developed to ensure consistency with open burning between the towns and county and to help prevent the likelihood of a wildland fire through the activities covered in this appendix.
 - Appendix Q. This appendix adopts the current edition of the Colorado Wildfire Resiliency code.
- The proposed code amendments follow the numerical order established within the fire code. The original code will be printed in regular font. If a change/deletion to the original code is made, you will see a ~~striketrough~~, followed by the proposed change in **red print**. If a new sentence or section is added, it will be in **red print**. Each amendment may be followed by information to clarify the need for the code change. If a tangible cost can be attributed to the amendment, then it will be shown. The one cost we cannot show is the cost of a life or injury to a citizen or emergency services worker. As you know, a value cannot be placed on a life.

Amendments:

102.4 Amend this section to read **Application of Building Code.** The design and construction of new structures shall comply with the *International Building Code or International Residential Code and the International Fire Code*, and any alterations, additions, changes in use or changes in structures required by this code, which are within the scope of the *International Building Code or International Residential Code*, shall be made in accordance therewith.

History: Amendment approved during the adoption of the 2000 International Fire Code.

Restrictiveness: Clarification *Rational:* It clarifies the intent on how and when to apply fire code requirements to new construction. *Costs:* No additional costs.

102.7 Amend this section to read **Referenced codes and standards.** The codes and standards referenced in this code shall be **the most currently published edition of** those that are listed in Chapter 80, and such codes and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections 102.7.1 and 102.7.2.

History: Amendment approved during the adoption of the 2000 International Fire Code.

Restrictiveness: Clarification *Rational:* The national code development process takes three years. It does not use the latest standards or technologies available to building & fire officials, developers, and contractors. *Costs:* No additional costs.

105.1.2 Amend this section to read **Types of permits.** There shall be two types of permits as follows:

1. Operational permit. An operational permit allows the applicant to conduct an operation or a business for which a permit is required by Section 105.5 for either:
 - 1.1. A prescribed period.
 - 1.2. Until renewed or revoked.
2. Construction permits. **A construction permit allows the applicant to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, the likes of which are regulated by this code.** A construction permit **also** allows the applicant to install or modify systems and equipment for which a permit is required by Section 105.6.

History: Amendment approved during the adoption of the 2000 International Fire Code.

Restrictiveness: Clarification *Rational:* This amendment provides clear direction for developers and builders on when and how to apply fire code requirements to new construction. *Costs:* No additional costs.

105.5.36 Amend this section to read **Open burning.** An operational permit is required for the kindling or maintenance of an open fire or a fire on any public street, alley, road, or other public or private ground. Instructions and stipulations of the permit shall be adhered to.

Exception: ~~Recreational fires.~~

History: Amendment approved during the adoption of the 2018 International Fire Code.

Restrictiveness: More Restrictive *Rational:* This amendment allows for local control of recreational fires to help prevent a catastrophic wildland fire in our community. *Costs:* No additional costs

105.5.51 **Amended this section to read Temporary membrane structures, special event structures and tents.** An operational permit is required to operate an air-supported temporary membrane structure, a temporary *special event structure* or a tent having an area in excess of ~~400~~ 200 square feet (18.58 m²).

Exceptions:

1. Tents used exclusively for recreational camping purposes
2. Tents, curtains and extensions attached thereto, when used for funeral services
3. Tents open on all sides, which comply with all of the following:
 - 3.1 Individual tents having a maximum size of ~~700~~ 200 square feet (18.58 m²).
 - 3.2 The aggregate area of multiple tents placed side by side without a fire break clearance of not less than 12 feet (3658 mm) shall not exceed 700 square feet (65 m²) total.
 - 3.3 A minimum clearance of 12 feet (3658 mm) to structures and other tents shall be provided.

History: Amendment approved during the adoption of the 2012 International Fire Code.

Restrictiveness: More restrictive *Rational:* This amendment allows for additional local control to help reduce the chances of tents becoming airborne during our numerous special events. *Costs:* No additional costs

105.5.55 **Amended this section to read Temporary heating or cooking in tents or membrane structures.** **Where required by local regulations,** an operational permit is required to operate temporary heating or cooking equipment within tents or membrane structures.

History: Amendment is proposed for the 2024 International Fire Code. *Restrictiveness:* Clarification

Rational: This amendment allows for local control. *Costs:* No additional costs

105.5.57 **Amended this section to read Temporary heating for construction sites.** **Where required by local regulations,** an operational permit is required to operate temporary heating equipment in structures during the course of construction, *alteration*, or demolition.

History: Amendment is proposed for the 2024 International Fire Code. *Restrictiveness:* Clarification

Rational: This amendment allows for local control. *Costs:* No additional cost

105.7.26 **Add the following section Wildfire Mitigation.** A construction permit is required to perform defensible space requirements of Appendix Q that do not fall under a voluntary wildfire mitigation program.

History: Amendment approved during the adoption of the 2018 International Fire Code.

Restrictiveness: More Restrictive *Rational:* This amendment requires a permit to conduct wildfire mitigation activities as part of a new construction permit issued by a town or county. *Costs:* The cost of the permit is between \$25.00 and \$150.00.

112.1.1 Add the following section **Procedures.** To request a hearing before the board of appeals, the applicant shall file a request in writing to the fire code official. The *fire code official* shall arrange for the board of appeals to meet within 10 working days from receipt of the request. All applicable fees as stated in the fire district fee schedule shall be paid when the written request is made.

History: Amendment approved during the adoption of the 2000 International Fire Code.

Restrictiveness: Clarification *Rational:* This amendment provides guidelines for the appeals process.

Costs: Fees associated with filing an appeal based on the agency's approved fee schedule.

112.3 Amend this section to read **Qualifications.** The board of appeals shall consist of members who are qualified by experience and training to pass on matters pertaining to hazards of fire, explosions, hazardous conditions, or fire protection systems ~~and are not employees of the jurisdiction.~~

History: Amendment approved during the adoption of the 2000 International Fire Code.

Restrictiveness: Clarification *Rational:* Colorado Revised Statutes delegate the authority of appeals within its district to that of the district board. The fire code official is a non-voting, ex-officio of the board of appeals. They are an employee of the fire district, which is in conflict with the original code language. *Costs:* No additional costs.

113.4 Amend this section to read **Violation penalties.** Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under the provisions of this code, shall be guilty of a **misdemeanor**, punishable by a fine of ~~not more than [AMOUNT] dollars~~ or by imprisonment ~~not exceeding [NUMBER OF DAYS]~~, or both such fine and imprisonment **as determined by the court.** Each day that a violation continues after due notice has been served shall be deemed a separate offense.

History: Amendment approved during the adoption of the 2000 International Fire Code.

Restrictiveness: Clarification *Rational:* The fire code intentionally left these sections blank to allow local authorities to insert the appropriate municipal, county, district or state amounts. *Costs:* No additional costs.

GENERAL DEFINITIONS Amend the following definitions

CONTROLLED BURNING. Any fire intentionally ignited to meet specific land management objectives, such as reducing flammable fuels, restore ecosystem health, recycle nutrients, or prepare an area for new trees or vegetation. Controlled burning may also be known by the term “Pile Burning” and “Prescribed Burning.”

DEFENSIBLE SPACE. An area either natural or man-made, where material capable of allowing a fire to spread unchecked has been treated, cleared or modified to slow the rate and intensity of an advancing wildfire and to create an area for fire suppression operations to occur.

FIRE AREA. The aggregate floor area enclosed and bounded by fire walls **meeting the requirements of Section 706 of the International Building Code and fire barriers**, exterior walls or horizontal assemblies of a building. Areas of the building not provided with surrounding walls shall be included in the fire area if such areas are included within the horizontal projection of the roof or floor above. **For buildings constructed under the International**

Residential Code, the fire area is the aggregate floor area enclosed and bounded by the interior side of the drywall or finished wall.

HOME IGNITION ZONE (HIZ). Home Ignition Zone is the home and the area around the home (or structure). The HIZ takes into account both the potential of the structure to ignite and the quality of *defensible space* surrounding it.

MITIGATION. Action that moderates the severity of a fire hazard or risk.

MOBILE FUELING. The operation of dispensing liquid fuels from tank vehicles into the fuel tanks of ~~motor~~ vehicles. Mobile fueling may also be known by the terms “Mobile fleet fueling,” “Wet fueling,” ~~and~~ “Wet hosing,” or “Hot fueling.”

PERMANENT FIRE RING. A permanently constructed feature without air gaps in its surrounding sides and a solid bottom, or earthen bottom free of roots and other organic material, used to contain campfires and prevent them from spreading and turning into a wildfire.

PORTABLE OUTDOOR FIREPLACE. A commercially designed and manufactured device with a screen that prevents ember emissions.

TREE CROWN. The primary and secondary branches growing out from the main stem, together with twigs and foliage.

WILDLAND-URBAN INTERFACE. That geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels.

203.1 Occupancy classification.

203.7.1.4 Amend this section to read Five or fewer persons receiving care. A facility such as the above with five or fewer persons receiving such care shall be classified as Group R-3 or shall comply with the International Residential Code provided an automatic sprinkler system is installed in accordance with Section 903.3.1.3 or International Residential Code Section P2904.

203.7.2.2 Amend this section to read Five or fewer persons receiving care. A facility such as the above with five or fewer persons receiving such care shall be classified as Group R-3 or shall comply with the International Residential Code provided an automatic sprinkler system is installed in accordance Section 903.3.1.3 or Section P2904 of the International Residential Code.

203.9.2.1 Amend this section to read Care facilities within a dwelling. Care facilities for five or fewer persons receiving care that are within a single-family dwelling are permitted to comply with the International Residential Code provided an automatic sprinkler system is installed in accordance with Section 903.3.1.3 or Section P2904 of the International Residential Code.

History: Amended in the 2024 International Fire Code. *Restrictiveness:* Clarification *Rational:* Provides additional methods of meeting the code requirements for sprinklers. *Costs:* No additional cost.

304.1.3 Amend this section to read Vegetation. Weeds, grass, vines or other growth that is capable of being ignited and endangering property, shall be cut down and removed by the owner or occupant of the premises. Vegetation clearance requirements in urban-wildland interface areas shall be in accordance with the ~~International Wildland Urban Interface Code~~ **Appendix Q, local codes, policies, and ordinances.**

History: Amendment approved during the adoption of the 2018 International Fire Code.

Restrictiveness: Clarification *Rational:* The International Wildland Urban Interface Code is not adopted by any jurisdiction in Summit County and is more restrictive than the current Wildfire Mitigation Chapter in the current Building Code. *Costs:* No additional cost.

304.3.4 Amend this section to read Capacity of 1 cubic yard or more. Dumpsters with an individual capacity of 1.0 cubic yard [200 gallons (0.76 m³)] or more shall not be stored in buildings or placed within 5 feet (1524 mm) of combustible walls, openings or combustible roof eave lines unless the dumpsters are constructed of noncombustible materials or of combustible materials with a peak rate of heat release not exceeding 300 kW/m² where tested in accordance with ASTM E1354 at an incident heat flux of 50 kW/m² in the horizontal orientation.

Exceptions:

1. Dumpsters in areas protected by an approved automatic sprinkler system installed throughout in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3.
2. Storage in a structure shall not be prohibited where the structure is of Type I or IIA construction, located not less than 10 feet (3048 mm) from other buildings and used exclusively for dumpster or container storage.
3. Storage in a structure shall not be prohibited where the structure complies with local codes, policies, and ordinances as mandated by the authority having jurisdiction.

History: Amendment approved during the adoption of the 2012 International Fire Code.

Restrictiveness: Clarification *Rational:* The exception meets the current regulations enforced by the Town of Breckenridge. *Costs:* No additional cost.

304.3.5 Amend this section to read Capacity exceeding 1.5 cubic yards. Dumpsters and containers with an individual capacity of 1.5 cubic yards [40.5 cubic feet (1.15 m³)] or more shall not be stored in buildings or placed within 5 feet (1524 mm) of combustible walls, openings or combustible roof eave lines.

Exceptions:

1. Dumpsters or containers that are placed inside buildings in areas protected by an approved automatic sprinkler system installed throughout in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3.
2. Storage in a structure shall not be prohibited where the structure is of Type I or IIA construction, located not less than 10 feet (3048 mm) from other buildings and used exclusively for dumpster or container storage.
3. Storage in a structure shall not be prohibited where the structure is in compliance with local codes, policies, and ordinances as mandated by the authority having jurisdiction.

History: Amendment approved during the adoption of the 2012 International Fire Code

Restrictiveness: Clarification *Rational:* The exception meets the current regulations enforced by the Town of Breckenridge. *Costs:* No additional cost.

308.1.5 Amend this section to read **Open-flame devices in wildfire risk areas.** Torches and other devices, machines or processes liable to start or cause fire ~~shall not be operated or used in or on wildfire risk areas, except by a permit in accordance with Section 105.5 secured from the fire code official.~~ shall comply with local fire restrictions.

Exception: Use within inhabited premises or designated campsites that are not less than 30 feet (9144 mm) from grass-, grain-, brush- or forest-covered areas.

History: Amendment is proposed during the adoption of the 2024 International Fire Code

Restrictiveness: Clarification *Rational:* This aligns with the Operating Plan and fire restriction requirements as outlined in the document. *Costs:* No additional cost.

308.1.7 Amend this section to read **Sky lanterns.** A person shall not release or cause to be released an ~~untethered~~ sky lantern unless otherwise approved by the Fire Code Official.

History: Amendment is proposed during the adoption of the 2024 International Fire Code

Restrictiveness: Clarification *Rational:* This amendment is geared toward prohibiting the use of sky lanterns. There are times when they may be approved such as along the blue river during First Friday events. *Costs:* No additional cost.

311.2.2 Amend this section to read **Fire protection.** Fire alarm, sprinkler and standpipe systems shall be maintained in an operable condition at all times.

Exceptions:

1. Where the premises have been cleared of all combustible materials and debris and, in the opinion of the fire code official, the type of construction, fire separation distance and security of the premises do not create a fire hazard.
2. Where approved by the fire code official, buildings that will not be heated and where fire protection systems will be exposed to freezing temperatures, fire alarm and sprinkler systems are permitted to be placed out of service and standpipes are permitted to be maintained as dry systems (without an automatic water supply), provided that the building does not have contents or storage, and windows, doors and other openings are secured to prohibit entry by unauthorized persons.
3. Where approved by the fire code official, fire alarm and sprinkler systems are permitted to be placed out of service in seasonally occupied buildings: that will not be heated; where fire protection systems will be exposed to freezing temperatures; where fire areas do not exceed ~~12,000~~ **4,500 square feet** (~~1115~~ **418.06** m²); and/or that do not store motor vehicles or hazardous materials.

History: Amendment approved during the adoption of the 2012 International Fire Code.

Restrictiveness: Clarification *Rational:* The exception meets the current building size amendments for these types of life safety systems. *Costs:* No additional cost.

313.1 Amend this section to read **General.** Fueled equipment including, but not limited to, motorcycles, mopeds, ~~and the like lawn care equipment and portable generators,~~ shall not be stored, operated, or repaired within a building.

History: Amendment is proposed during the adoption of the 2024 International Fire Code.

Restrictiveness: Clarification *Rational:* This amendment allows building managers to store portable generators and lawn care equipment in buildings or parking garages due to the limited amount of storage some facilities have. *Costs:* No additional cost.

315.3 Amend this section to read Storage in buildings. Storage of materials in buildings shall be orderly and stacks shall be stable. Storage of combustible materials shall be separated from heaters or heating devices by distance or shielding so that ignition cannot occur. **Storage room doors shall be provided with approved signage.**

History: Amendment approved during the adoption of the 2012 International Fire Code.

Restrictiveness: More restrictive *Rational:* The identification of accessory use rooms assists fire crews and inspectors with immediate identification during annual inspections and emergency situations. *Costs:* Minimal.

315.3.1 Amend this section to read Ceiling clearance. Storage shall be maintained 2 feet (610 mm) or more below the ceiling in nonsprinklered areas of buildings or not less than 18 inches (457 mm) below sprinkler head deflectors in sprinklered areas of buildings.

Exceptions:

1. The 2-foot (610 mm) ceiling clearance is not required for storage along walls in nonsprinklered areas of buildings **where the shelving does not exceed 30-inches (762 mm) in depth.**
2. The 18-inch (457 mm) ceiling clearance is not required for storage along walls in areas of buildings equipped with an automatic sprinkler system in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3

History: Amendment approved during the adoption of the 2018 International Fire Code.

Restrictiveness: Clarification *Rational:* The exception change meets the requirements of NFPA 13 and NFPA 25 requirements. *Costs:* No additional cost.

315.3.3 Amend this section to read Equipment rooms. Combustible material shall not be stored in boiler rooms, mechanical rooms, ~~or~~ **elevator machine rooms, electrical equipment rooms, fire command centers, or other rooms where a potential ignition source exists, as determined by the fire code official or** as specified in Section 508.1.5.

History: Amendment approved during the adoption of the 2012 International Fire Code.

Restrictiveness: Clarification *Rational:* Lack of adequate storage in buildings has led owners to use every space available for supplies. The results lead to poor storage habits with potentially combustible materials and ignition sources being in close contact. *Costs:* No additional cost.

320.1 Amend this section to read General. The storage of lithium-ion and lithium-metal batteries shall comply with Section 320 and **applicable State Statutes.**

Exceptions:

1. New or refurbished batteries installed in the equipment, devices or vehicles they are designed to power.
2. New or refurbished batteries packed for use with the equipment, devices or vehicles they are designed to power.
3. Batteries in original retail packaging that are rated at not more than 300 watt-hours for lithium-ion batteries or contain not more than 25 grams of lithium metal for lithium metal batteries.
4. Temporary storage of batteries or battery components during the battery manufacturing process prior to completion of final quality control checks.

5. Temporary storage of batteries during the vehicle manufacturing or repair process.

History: Amendment is proposed during the adoption of the 2024 International Fire Code.

Restrictiveness: Clarification *Rational:* As battery technologies are ever changing along with State requirements, this change would ensure that the Fire Code is aligned with Statute if it is more restrictive than the Fire Code. *Costs:* No additional cost.

322.4 Amend this section to read Battery charging areas. Where approved, powered micromobility devices shall be permitted to be charged in a room or area that complies with all of the following:

1. Only listed devices utilizing listed charging equipment shall be permitted to be charged.
2. Is provided with sufficient electrical receptacles to allow the charging equipment for each device to be directly connected to a receptacle. Extension cords and relocatable power taps shall not be used.
3. Storage of combustible materials, combustible waste or hazardous materials shall not be permitted.
4. The charging operation shall not be conducted in or obstruct any required means of egress.
5. Removable storage batteries shall not be stacked or charged in an enclosed cabinet unless the cabinet is specially designed and approved for such purpose.
6. A minimum distance of 18 inches (457.2 mm) shall be maintained between each removable storage battery during charging operations unless each battery is isolated from neighboring batteries by an approved fire-resistant material.
7. A minimum of 18 inches (457.2 mm) shall be maintained between the location of the battery on each powered micromobility device during charging operations.
8. The ~~indoor room or area~~ **building** shall be protected by an *approved* fire alarm system ~~utilizing air-aspirating smoke detectors or radiant energy sensing fire detection.~~

History: Amendment is proposed for the 2024 International Fire Code. *Restrictiveness:* Clarification

Rational: This simplifies the fire alarm requirements and provides additional protection in the building.

Costs: Upgrading the fire alarm system from the room or area to the entire building.

Section 323 Add a new section entitled Electric Vehicle Charging

323.1 Add a new section to read Electric Vehicle Charging Stations inside a Structure. Electric vehicle charging stations installed inside a structure shall be installed in compliance with NFPA 70, State and Local requirements, and be installed in immediate proximity to an exit, appropriately sized for a vehicle, in case of a fire involving the vehicle.

Exception:

One- and two-family dwellings built under the International Residential Code

History: Added for the 2024 International Fire Code. *Restrictiveness:* Clarification *Rational:* This amendment allows for local control on the location of EV Charging controllers inside a structure.

Current data shows us that an EV fire inside a parking garage can over run the sprinkler system and fire rated assemblies resulting in catastrophic fires. *Costs:* Increased water demand for sprinkler systems requires additional or larger sprinklers. Increased fire rated assemblies and installation of fire blankets are all possible additional costs.

403.11.3.1 Amend this section to read Number of crowd managers. Not fewer than two trained crowd managers, and not fewer than one trained crowd manager for each 250 persons **in a controlled access area** or portion thereof, shall be provided for the gathering.

Exceptions:

1. Outdoor events **in a controlled access area** with fewer than ~~1,000~~ **500** persons in attendance shall not require crowd managers.
2. Assembly occupancies used exclusively for religious worship with an occupant load not exceeding ~~1,000~~ **500** shall not require crowd managers.
3. The number of crowd managers shall be reduced where, in the opinion of the fire code official, the fire protection provided by the facility and the nature of the event warrants a reduction.

History: Amendment is proposed for the 2024 International Fire Code. *Restrictiveness:* More restrictive. *Rational:* Reduces the trigger for crowd managers for events. With our limited response staff, helps ensure that attendees can be alerted of an emergency and moved to a safe location. *Costs:* Possible additional staff or security staffing costs.

505.1 Amend this section to read Address identification. New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Where required by the fire code official, address numbers shall be provided in additional approved locations to facilitate emergency response. Address numbers shall be Arabic numerals or alphabet letters. Numbers shall be a minimum of ~~4 inches (102 mm)~~ **12 inches (127 mm)** high, **unless otherwise approved**, with a minimum stroke width of 1.5 inch (**12.7 mm**). Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or sign or means shall be used to identify the structure. Address numbers shall be maintained **and visible in all weather conditions**.

Exception: One- and two-family dwelling buildings have address numbers that shall be a minimum of 5 inches (127 mm) high or 4 inches (101.6 mm) reflective on a contrasting background, unless otherwise approved, with a minimum stroke width of .5 inches (12.7 mm) visible from the street or road fronting the property. Address numbers shall be maintained and visible in all weather conditions.

History: Amendment is proposed during the adoption of the 2024 International Fire Code.

Restrictiveness: More restrictive *Rational:* Visibility concerns in Summit County during the winter pose problems for police, EMS & fire. This amendment came at the request of police, fire and ambulance for ease in locating a structure in adverse conditions. This does allow the code official to reduce the size of the address numbers for use with reflective signs or for specific unit numbers.

Costs: Minimal

506.1.2 Amend this section to read Key boxes for ~~nonstandardized~~ fire service elevator keys. Key boxes provided for ~~nonstandardized~~ fire service elevator keys shall comply with Section 506.1 and all of the following:

1. The key box shall be compatible with an existing rapid entry key box system in use in the jurisdiction and approved by the *fire code official*.
2. The front cover shall be permanently labeled with the words “FIRE DEPARTMENT USE ONLY—ELEVATOR KEYS.”

3. The key box shall be mounted at each elevator bank at the lobby nearest to the lowest level of fire department access.
4. The key box shall be mounted 5 feet 6 inches (1676 mm) above the finished floor to the right side of the elevator bank.
5. Contents of the key box are limited to fire service elevator keys. Additional elevator access tools, keys and information pertinent to emergency planning or elevator access shall be permitted where authorized by the fire code official.
6. In buildings with two or more elevator banks, a single key box shall be permitted to be used where such elevator banks are separated by not more than 30 feet (9144 mm). Additional key boxes shall be provided for each individual elevator or elevator bank separated by more than 30 feet (9144 mm).

History: Amendment is proposed during the adoption of the 2024 International Fire Code.

Restrictiveness: More restrictive *Rational:* This amendment allows for the Fire Department to continue to require a special lock box at each elevator to help ensure quick access to operational keys and emergency evacuation keys. *Costs:* The cost of the special key box which has been required prior to the 2024 fire code.

508.1 Amend this section to read General. Where required by other sections of this code, **buildings, structures, or facilities that are greater than 50,000 square feet (4645 m²)**, and in all buildings classified as high-rise buildings by the International Building Code, a fire command center for fire department operations **may** be provided, **as required by the Fire Code Official**, and shall comply with Sections 508.1.1 through 508.1.7.

History: Amendment approved during the adoption of the 2018 International Fire Code.

Restrictiveness: More restrictive *Rational:* This slight increase in restrictiveness in the large square footage buildings is done to allow the limited personnel on scene to conduct effective tactical operations. *Costs:* All alarm, elevator, sprinkler, generator, emergency communications, indicators, HVAC controls have to be routed to an approved location anyway, so the cost again is minimal.

509.2.1 Add a section to read Sprinkler valve room door. Where allowed by the International Building Code, sprinkler valve room access doors shall swing out from the room and be equipped with panic hardware.

History: Amendment is proposed for the 2024 International Fire Code. *Restrictiveness:* More restrictive *Rational:* This amendment came as a request of local sprinkler contractors as a safety measure. If the water main were to break in the sprinkler valve room, anyone working in the area may become trapped because of the pressure on the door, preventing them from opening it towards them. *Costs:* There should be no additional costs as this changes the hardware and opening direction of the door.

601.1 Amend this section to read Scope. The provisions of this chapter shall apply to the installation, operation, testing, ~~and~~ maintenance, **and identification** of the following building services and systems:

1. Electrical systems, equipment and wiring.
2. Information technology server rooms.
3. Elevator systems, emergency operation and recall.
4. Fuel-fired appliances, heating systems, chimneys and fuel oil storage.
5. Commercial cooking equipment and systems.

6. Commercial cooking oil storage.
7. Mechanical refrigeration systems.
8. Hyperbaric facilities.
9. Clothes dryer exhaust systems.
10. Storage rooms.
11. Fire Command
12. Sprinkler riser

History: Amendment is proposed for the 2024 International Fire Code. *Restrictiveness:* More restrictive *Rational:* This adds the labeling of three additional building components to help responders quickly locate specific features of the building. *Costs:* Minimal costs as many rooms are already labeled as part of the signage package for the building.

604.6.2.4 Amend this section to read Responsibility to provide keys. The building owner shall provide up to ~~three~~ **five** standardized fire service elevator keys where required by the *Fire Code Official*, upon installation of a standardized fire service key switch or switches in the building.

History: Amendment is proposed for the 2024 International Fire Code. *Restrictiveness:* More restrictive *Rational:* This amendment is designed to comply with the number of sets of keys that we require for large structures. *Costs:* Typically these keys are provided by the elevator manufacturer free of charge to the building owner.

605.2.1.6 Add a section to read Chimneys and Heating Appliances. Chimneys and fireboxes for solid, fuel burning appliances shall be inspected annually by a qualified individual or company. They shall be inspected for soundness, corrosion, proper support, and freedom from combustible deposits. A certificate of inspection in a form acceptable to the *Fire Code Official* shall be transmitted.

History: Amendment approved during the adoption of the 2000 International Fire Code. *Restrictiveness:* More restrictive *Rational:* Chimney fires are one of the leading causes of fires in Summit County. This amendment does NOT require that the chimney be cleaned but only that it is inspected to see if it is in need of repair or needs cleaning. Many HOA groups have requested such an amendment because many fear that some users in a condominium who use a fireplace excessively or improperly will endanger their entire condo complex. This does NOT apply to single-family homes or townhomes where the chimney is not in a common space. *Costs:* None if completed by a qualified property manager. If performed by a chimney company, group rates for an inspection range from \$75 to \$125 for an inspection per unit.

605.8 Amend this section to read Gas and utility meters. Above-ground gas and utility meters, regulators and piping subject to damage shall be protected by a barrier complying with Section 312 or otherwise protected in an approved manner. **Gas and utility meters and piping shall be protected from snow & ice shedding from a roof area. Snow and ice build-up around gas & utility meters shall be kept clear at all times.**

History: Amendment approved during the adoption of the 2000 International Fire Code. *Restrictiveness:* More restrictive *Rational:* The authors of the code do not reside in areas of heavy winter conditions such as those seen in Summit County. This amendment came as a result of a request from Xcel Energy, the building and fire departments. Several fires and explosions have occurred in Summit County as a result of gas meters being torn loose from falling ice/snow. *Costs:* None, if the

items are placed under a gable end of a structure, minimal if a shed type roof is constructed over such utilities.

608.2 Amend this section to read Permits. An operational permit ~~shall~~ **may** be obtained for refrigeration systems as set forth in Section 105.5.46

History: Amendment is proposed for the 2024 International Fire Code. *Restrictiveness:* Less restrictive *Rational:* This amendment is designed to allow each fire agency to issue permits for refrigeration systems. Not all systems require permits and the word shall makes them all have to comply with permitting requirements. *Costs:* None, this amendment is designed to actually reduce permitting and inspection costs.

704.1.1 Add section to read Fire-resistance-rated labeling. The fire-resistance rating shall be marked in an approved manner on the following fire resistance rated construction features:

1. Structural members
2. Exterior walls
3. Fire walls, fire barriers, fire partitions
4. Horizontal assemblies
5. Shaft enclosures

History: Amendment is proposed for the 2024 International Fire Code. *Restrictiveness:* More restrictive *Rational:* This amendment helps ensure that every contractor on a site knows the fire restive requirements and can seal any penetration through the listed construction feature appropriately. *Costs:* Minimal

704.1.2 Add section to read Fire rated Products. The fire rated material and manufacturer information shall be labeled next to all sealed penetrations. The information shall be provided on all plan sets at all penetration locations.

History: Amendment is proposed for the 2024 International Fire Code. *Restrictiveness:* More restrictive. *Rational:* This amendment helps ensure that fire-rated products are compatible with other products and proper sealants are used. *Costs:* Minimal

704.1.3 Add section to read Smoke barrier labeling. The fire-resistance rating and smoke-resistant characteristics of smoke barriers shall be marked in an approved manner on the rated construction feature.

History: Amendment approved in the 2018 International Fire Code. *Restrictiveness:* Clarification *Rational:* This amendment helps ensure that penetrations through smoke barriers after initial construction are properly sealed with work that occurs during remodels. *Costs:* Usually part of the initial cost during new construction.

803.13 Amend this section to read Laminated products factory produced with an attached wood substrate. Laminated products factory produced with ~~or without~~ an attached wood substrate shall comply with one of the following:

1. The laminated product shall meet the criteria of Section 803.1.1 when tested in accordance with NFPA 286 using the product mounting system, including adhesive, of actual use.

2. The laminated product shall have a Class A, B or C flame spread index and smoke-developed index based on the requirements of Table 803.3, in accordance with ASTM E84 or UL 723. Test specimen preparation and mounting shall be in accordance with ASTM E2579.

History: Amendment is proposed for the 2024 International Fire Code. *Restrictiveness:* Clarification
Rational: This amendment helps ensure continuity between the code and national standards. *Costs:* Minimal

901.4.2 Amend this section to read **Nonrequired fire protection systems.** A fire protection system or portion thereof not required by this code, ~~or the International Building Code, or the International Residential Code~~ shall be ~~allowed to be furnished for partial or installed throughout a building for~~ complete protection provided that such installed system meets the applicable requirements of this code, ~~and the International Building Code, and the International Residential Code.~~

History: Amendment approved during the adoption of the 2012 International Fire Code.
Restrictiveness: More restrictive *Rational:* A partial fire suppression system gives the owner, occupants and firefighters a false sense of security. A fire starting in the unprotected portion of a building may overwhelm the fire suppression system in the protected portion of the building. The results could lead to the total loss of the building. In addition, a partial sprinkler system does not allow the building any fire insurance cost reductions. *Costs:* Depending on the design and construction type of the building, the range would be \$3.00 to \$6.00 per square foot. Buildings allowed to be developed in areas with no water source or low water pressure will incur additional costs.

901.4.4 Amend this section to read **Fire areas.** Where buildings, or portions thereof, are divided into fire areas so as not to exceed the limits established for requiring a fire protection system in accordance with this chapter, such fire areas shall be separated by fire ~~barriers~~ **walls** constructed in accordance with ~~Section 707 of the International Building Code~~ or horizontal assemblies constructed in accordance with ~~Section 711 of the International Building Code~~, or both, having a fire-resistance rating of not less than that determined in accordance with ~~Section 707.3.10 of the International Building Code.~~

History: Amendment approved during the adoption of the 2012 International Fire Code.
Restrictiveness: Clarification *Rational:* Simplifies the definition. *Costs:* No additional costs.

903.2.1.1 Amend this section to read **Group A-1.** An automatic sprinkler system shall be provided throughout ~~stories~~ **buildings** containing Group A-1 occupancies ~~and throughout all stories from the Group A-1 occupancy to and including the levels of exit discharge serving that occupancy~~ where one of the following conditions exists:

1. The fire area exceeds 12,000 square feet (1115 m²).
2. The fire area has an occupant load of ~~300~~ **50** or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.
4. The fire area contains a multiple-theater complex.

903.2.1.2 Amend this section to read **Group A-2.** An automatic sprinkler system shall be provided throughout ~~stories~~ **buildings** containing Group A-2 occupancies ~~and throughout all stories from the Group A-2 occupancy to and including the levels of exit discharge serving that occupancy~~ where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet (464 m²).
2. The fire area has an occupant load of ~~100~~ **50** or more.

3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.

903.2.1.3 Amend this section to read **Group A-3.** An automatic sprinkler system shall be provided throughout ~~stories~~ **buildings** containing Group A-3 occupancies ~~and throughout all stories from the Group A-3 occupancy to and including the levels of exit discharge serving that occupancy~~ where one of the following conditions exists:

1. The fire area exceeds 12,000 square feet (1115 m²).
2. The fire area has an occupant load of ~~300~~ **50** or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.

903.2.1.4 Amend this section to read **Group A-4.** An automatic sprinkler system shall be provided throughout ~~stories~~ **buildings** containing Group A-4 occupancies ~~and throughout all stories from the Group A-4 occupancy to and including the levels of exit discharge serving that occupancy~~ where one of the following conditions exists:

1. The fire area exceeds 12,000 square feet (1115 m²).
2. The fire area has an occupant load of ~~300~~ **50** or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.

903.2.1.6 Amend this section to read **Assembly occupancies on roofs.** Where an occupied roof has an assembly occupancy with an occupant load exceeding ~~100~~ **50** for Group A-2 and ~~300~~ for other Group A occupancies, ~~all floors between the occupied roof and the level of exit discharge shall be equipped with an automatic sprinkler system in~~ **an automatic sprinkler system shall be provided throughout stories the building** in accordance with Section 903.3.1.1 or 903.3.1.2.

~~Exception: Open parking garages of Type I or Type II construction.~~

903.2.1.7 Amend this section to read **Multiple fire areas.** An automatic sprinkler system shall be provided where multiple fire areas of Group A-1, A-2, A-3 or A-4 occupancies share exit or exit access components and the combined occupant load of these fire areas is ~~300~~ **50** or more.

903.2.2 Amend this section to read **Ambulatory care facilities.** An automatic sprinkler system shall be installed throughout the entire ~~floor~~ **building** containing an ambulatory care facility where either of the following conditions exist at any time:

1. Four or more care recipients are incapable of self-preservation.
2. One or more care recipients that are incapable of self-preservation are located at other than the level of exit discharge serving such a facility.

~~In buildings where ambulatory care is provided on levels other than the level of exit discharge, an automatic sprinkler system shall be installed throughout the entire floor as well as all floors below where such care is provided, and all floors between the level of ambulatory care and the nearest level of exit discharge, the level of exit discharge, and all floors below the level of exit discharge.~~

~~**Exception:** Floors classified as an open parking garage are not required to be sprinklered.~~

903.2.2.2 Amend this section to read **Laboratories involving research and development or testing.** *An automatic sprinkler system* shall be installed throughout ~~the fire areas~~ **buildings** utilized for the research and development or testing of lithium-ion or lithium metal batteries.

903.2.3 Amend this section to read **Group E.** An automatic sprinkler system shall be provided for Group E occupancies as follows:

1. Throughout all Group E fire areas greater than 12,000 square feet (1115 m²) in area.
2. 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.

3. The Group E fire area has an occupant load of ~~300~~ 50 or more.

903.2.7 Amend this section to read **Group M.** An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:

1. A Group M fire area exceeds 12,000 square feet (1115 m²).
2. A Group M fire area is located more than three stories above grade plane.
3. The combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m²).
4. The Group M fire area has an occupant load of 50 or more.

903.2.9 Amend this section to read **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:

1. A Group S-1 fire area exceeds ~~12,000~~ 4,500 square feet (~~1115~~ 418.06 m²).
2. A Group S-1 fire area is located more than ~~three~~ two stories above grade plane.
3. The combined area of all Group S-1 fire areas on all floors, including any mezzanines, exceeds ~~24,000~~ 4,500 square feet (~~1115~~ 418.06 m²).
4. A Group S-1 fire area used for the storage of commercial motor vehicles where the fire area exceeds 5,000 square feet (464 m²).
5. A Group S-1 fire area used for the storage of lithium-ion or lithium metal powered vehicles where the fire area exceeds 500 square feet (46.4m²).

903.2.9.1 Amend this section to read **Repair garages.** An automatic sprinkler system shall be provided throughout all buildings used as repair garages in accordance with Section 406.8 of the International Building Code, as shown: 1. Buildings having two or more stories above grade plane, including basements, with a fire area containing a repair garage exceeding ~~10,000~~ 4,500 square feet (~~929.03~~ 418.06 m²).

2. Buildings not more than one story above grade plane, with a fire area containing a repair garage exceeding ~~12,000~~ 4,500 square feet (~~1115~~ 418.06 m²).
3. Buildings with repair garages servicing vehicles parked in basements.
4. A Group S-1 fire area used for the repair of commercial motor vehicles where the fire area exceeds 5,000 square feet (464 m²).
5. A Group S-1 fire area used for the storage of lithium-ion or lithium metal powered vehicles where the fire area exceeds 500 square feet (46.4m²).

903.2.10 Amend this section to read **Group S-2 parking garages.** An automatic sprinkler system shall be provided throughout buildings classified as parking garages where any of the following conditions exist:

1. Where the *fire area* of the enclosed parking garage, in accordance with Section 406.6 of the *International Building Code*, exceeds ~~12,000~~ 4,500 square feet (~~1115~~ 418.06 m²).
2. Where the enclosed parking garage, in accordance with Section 406.6 of the *International Building Code*, is located beneath other groups.

Exception: Enclosed parking garages located beneath Group R-3 occupancies.

3. Where the fire area of the open parking garage, in accordance with Section 406.5 of the *International Building Code*, exceeds 48,000 square feet (4460 m²).

903.2.11.1 Amend this section to read **Stories without openings.** An automatic sprinkler system shall be installed throughout all ~~stories~~ **buildings**, ~~including basements, of all buildings~~ where the floor area of the story exceeds 1,500 square feet (139 m²) and where the story does not comply with the following criteria for exterior wall openings:

1. Openings below grade that lead directly to ground level by an exterior stairway complying with Section 1011 or an outside ramp complying with Section 1012. Openings shall be located in each 50 linear feet (15 240mm), or fraction thereof, of exterior wall in the story on not fewer than one side. The required openings shall be distributed such that the lineal distance between adjacent openings does not exceed 50 feet (15 240 mm).
2. Openings entirely above the adjoining ground level totaling not less than 20 square feet (1.86 m²) in each 50 linear feet (15 240 mm), or fraction thereof, of exterior wall in the story on not fewer than one side. The required openings shall be distributed such that the lineal distance between adjacent openings does not exceed 50 feet (15 240 mm). The height of the bottom of the clear opening shall not exceed 44 inches (1118 mm) measured from the floor.

903.2.11.1.2 Amend this section to read **Openings on one side only.** Where openings in a story are provided on only one side and the opposite wall of such story is more than 75 feet (22 860 mm) from such openings, the ~~story~~ **building** shall be equipped throughout with an approved automatic sprinkler system, or openings shall be provided on not fewer than two sides of the story.

903.2.11.1.3 Amend this section to read **Basements.** Where any portion of a basement is located more than 75 feet (22 860 mm) from openings required by Section 903.2.11.1, or where walls, partitions or other obstructions are installed that restrict the application of water from hose streams, the ~~basement~~ **building** shall be equipped throughout with an approved automatic sprinkler system.

903.2.11.3 Amend this section to read **Buildings 55 feet or more in height.** An automatic sprinkler system shall be installed throughout buildings that have one or more stories with an occupant load of 30 or more located 55 feet (16 764 mm) or more above the lowest level of fire department vehicle access, measured to the finished floor.

Exceptions:

~~1. Occupancies in Group F-2.~~

903.2.13 Add a new section to read **Group B or Mixed Occupancies.** An automatic sprinkler system shall be provided throughout all buildings containing Group B or mixed occupancies where one of the following conditions exists:

1. The fire area exceeds 4,500 square feet (415 418.06 m²).
2. Where the combined fire areas of Group B and mixed occupancies on all floors including mezzanines and basements is greater than 4,500 square feet (415 418.06 m²).

903.2.14 Add a new section to read **Buildings Constructed under the International Residential Code.** An automatic sprinkler system installed in accordance with Section 903.3.1.3 shall be provided throughout all detached one and two-family dwellings and multiple single-family dwellings (townhouses), complying with the requirements of the *International Residential Code*, whose total aggregate fire area exceeds 4,500 square feet (415 418.06 m²).

Exception: Unless otherwise required by more restrictive local codes, policies, amendments, ordinances, or plat note.

History: Amendments 903.2.1.1 through 903.2.11.3 were approved during the adoption of the 2012 International Fire Code and amendments 903.2.13 and 903.2.14 were approved during the adoption of the 2018 International Fire Code. *Restrictiveness:* More restrictive *Rational:* Most of these amendments have been in place since 1988. Here in Summit County we have challenges with limited resources, adverse weather, and hazardous driving conditions not to mention extended drive times for neighboring fire department support. We want to reduce the threshold for fire sprinklers to account for these challenges. The fire districts initially requested more stringent fire sprinkler requirements. With input from the building officials and re-evaluating the ability to deliver effective fire flow, it was mutually agreed to change the amendments to 6,000 sq. ft. during the 2006 fire code adoption. We now feel we need to reduce that threshold to meet our resource capabilities. On structures over 6,000 sq. ft., we do not have enough personnel to deliver the required fire flow and meet federally mandated safety requirements for our firefighters. It does not affect larger structures such as those recently developed around Summit County, nor does it affect a smaller development under 6,000 sq. ft. Prior fire and metro boards, town councils and the BOCC's have viewed this favorably. The result is slightly less infrastructure in staffing and equipment that the average taxpayer would have to support.

As you well know, sprinklers have been a proven life and structural safety device since the late 1800's. Summit County has literally averted dozens of potentially destructive fires, which would have caused significant economic loss or life loss due to effective sprinkler activation. (In most cases 1 or 2 sprinklers have contained or extinguished the fire.) Fire sprinklers are present in a structure 24/7 to ensure containment. One might say they are similar to having a firefighter in every room 24 hours a day. The efficiency and cost/benefit ratio to the average citizen in Summit County is without question. Finally, it goes without saying that sprinklers save civilian and firefighter lives every hour of every day across the U.S. *Costs:* The additional costs in these amendments **only** occur in those structures between 6,000 and 12,000 sq. ft. Residential sprinkler systems **are** permitted in Group R or residential occupancies if desired. Costs vary depending on the complexity of the building design, but average \$3.50 to \$5.00 a sq. ft for residential and \$4.00 to \$6.50 a sq. ft for commercial design. This adds approximately 1-2% to a total building cost. The owner often can realize a fire insurance premium discount of 5-10%, through careful shopping. Thus, there may be a long-term payoff for the astute shopper. Developers/contractors can realize savings in water main sizes, number of required hydrants, less restrictive construction types and some access modifications, which will assist in offsetting or in some cases eliminating the 1-2% sprinkler cost. Sprinklers save fire districts money by reducing staffing needs at fires and the amount of structural equipment required, thus slightly offsetting their operational and capital costs.

905.3.1 Amend this section to read **Height.** Class III I standpipe systems shall be installed throughout buildings where any of the following conditions exist:

1. Four or more stories are above or below grade plane.
2. The floor level of the highest story is located more than 30 feet (9144 mm) above the lowest level of the fire department vehicle access.
3. The floor level of the lowest story is located more than 30 feet (9144 mm) below the highest level of fire department vehicle access.

Exceptions:

1. Class I standpipes are allowed in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.

2. Class I standpipes are allowed in Group B and E occupancies.
3. Class I manual standpipes are allowed in open parking garages where the highest floor is located not more than 150 feet (45 720 mm) above the lowest level of fire department vehicle access.
4. Class I manual dry standpipes are allowed in open parking garages that are subject to freezing temperatures, provided that the hose connections are located as required for Class II standpipes in accordance with Section 905.5.
5. Class I standpipes are allowed in basements equipped throughout with an automatic sprinkler system.
6. Class I standpipes are allowed in buildings where occupant-use hose lines will not be utilized by trained personnel or the fire department.
7. In determining the lowest level of fire department vehicle access, it shall not be required to consider either of the following:
 - 7.1. Recessed loading docks for four vehicles or less.
 - 7.2. Conditions where topography makes access from the fire department vehicle to the building impractical or impossible.

History: Amendment approved during the adoption of the 2012 International Fire Code.

Restrictiveness: More restrictive due to the reduction in height but less restrictive due to a less expensive standpipe system type. *Rational:* Due to snow storage and snow shedding, it is often not safe or practical to haul hose lines up to the third story of a structure via a rope bag (common practice). By reducing the height requirement 10 feet we can access the second floor with the pre-connected hose lays off vehicles, however we cannot access the third floor with pre-connected hose lays. A reduction in cost is seen due to the fact that we require dry standpipes (no freezing potential) and there is no need for interior hose or separate valves. *Costs:* More for a 3-story building, less for buildings greater than 4 stories.

905.3.1.1 Add a new section to read **Building Area. In buildings exceeding 10,000 sq. ft. (929 m²) within surrounding exterior walls, an approved Class I standpipe system shall be provided where any portion of the building's interior is more than 140 feet (42.67 m) of travel, vertically and/or horizontally, from the nearest point of fire department vehicle access.**

History: Amendment approved during the adoption of the 2006 International Fire Code.

Restrictiveness: More restrictive *Rational:* Large single floor area buildings make interior attacks difficult for fire crews with pre-connected hose lines. Interior standpipe systems allow for more efficient and safer fire ground operations. *Costs:* \$1.50 - \$2.00 per square foot of building area.

905.4 **Amend this section to read** **Location of Class I standpipe hose connections.** Class I standpipe hose connections shall be provided in all of the following locations:

1. In every required interior exit stairway, a hose connection shall be provided for each story above and below grade plane. Hose connections shall be located at the ~~main floor~~ **intermediate** landing unless otherwise approved by the fire code official.

Exception: A single hose connection shall be permitted to be installed in the open corridor or open breezeway between open stairs that are not greater than 75 feet (22 860 mm) apart.

2. On each side of the wall adjacent to the exit opening of a horizontal exit.

Exception: Where floor areas adjacent to a horizontal exit are reachable from an interior exit stairway hose connection by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30 480 mm) of hose, a hose connection shall not be required at the horizontal exit.

3. In every exit passageway, at the entrance from the exit passageway to other areas of a building.

Exception: Where floor areas adjacent to an exit passageway are reachable from an interior exit stairway hose connection by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30 480 mm) of hose, a hose connection shall not be required at the entrance from the exit passageway to other areas of the building.

4. In covered mall buildings, adjacent to each exterior public entrance to the mall and adjacent to each entrance from an exit passageway or exit corridor to the mall. In open mall buildings, adjacent to each public entrance to the mall at the perimeter line and adjacent to each entrance from an exit passageway or exit corridor to the mall.

5. Where the roof has a slope less than four units vertical in 12 units horizontal (33.3-percent slope), a hose connection shall be located to serve the roof or at the highest landing of an interior exit stairway with access to the roof provided in accordance with Section 1011.12.

6. Where the most remote portion of a nonsprinklered floor or story is more than ~~150~~ **140** feet (~~45 720~~ **42 672** mm) from a hose connection or the most remote portion of a sprinklered floor or story is more than ~~200~~ **140** feet (~~60 960~~ **42 672** mm) from a hose connection, the fire code official is authorized to require that additional hose connections be provided in approved locations.

History: Amendment approved during the adoption of the 2012 International Fire Code.

Restrictiveness: More restrictive due to the reduction in spacing from 150 feet to 140 feet. *Rational:* This allows firefighters to have additional hose length to handle corners in hallways and the entrance to rooms accessed off the hallway. *Costs:* Minimal, most buildings are designed to meet this requirement because of egress stair spacing requirements.

907.6.6 **Amend this section to read** **Monitoring.** Fire alarm systems required by this chapter, ~~or by the~~ International Building Code, ~~or the International Residential Code~~ shall be monitored by an approved supervising station in accordance with NFPA 72.

Exception: Monitoring by a supervising station is not required for:

1. Single- and multiple-station smoke alarms required by Section 907.2.10.
2. Smoke detectors in Group I-3 occupancies.
3. Automatic sprinkler systems in one- and two- family dwellings.

History: Amendment approved in the 2018 International Fire Code. *Restrictiveness:* Clarification

Rational: Summit County fire departments previously required monitoring of all types of fire protection systems through policy. Now it is in the body of the fire code. *Costs:* No additional costs.

915.1 **Amend this section to read** **General.** Carbon monoxide detection shall be installed in new buildings in accordance with Sections 915.1.1 through 915.6 **and in accordance with State Statute.**

Carbon monoxide detection shall be installed in existing buildings in accordance with Section 1103.9 and in accordance with State Statute.

History: Amendment approved in the 2018 International Fire Code. *Restrictiveness:* Clarification

Rational: Colorado State Statute is more restrictive related to parking garages than this code *Costs:* No additional costs already a requirement by the State of Colorado.

NOTE: For amendments 1103.5.6 to 1103.5.6.4 the history, restrictiveness, rational, and costs are the same, and will be noted at the end of amendment 1103.5.6.4.

1103.5.6 Add a new section to read **Additions and alterations to existing buildings.** Existing buildings constructed prior to adoption of this code, with a fire area exceeding 4,500 square feet (~~4115~~ 418.06 m²), undergoing additions, alterations or remodel work shall be evaluated under the International Fire Code, for the need for additional fire protection. Portions of buildings separated by approved fire walls as outlined in Chapter 7, Section 707 of the International Building Code may be considered as separate buildings.

1103.5.6.1 Add a new section to read **Existing buildings with a fire area not exceeding 4,500sq. ft. (577 m²).** An automatic sprinkler system shall be provided throughout a building undergoing an addition and/or alteration work whose new aggregate fire area of the building exceeds 4,500 square feet (~~4115~~ 418.06 m²).

1103.5.6.2 Add a new section to read **Existing buildings with a fire area exceeding 4,500 sq. ft. (577 m²).** An automatic sprinkler system shall be provided throughout a building undergoing addition work that increases the fire area of the existing building.

1103.5.6.3 Add a new section to read **Alterations to existing buildings with a fire area exceeding 4,500 sq. ft. (577 m²).** An automatic sprinkler system shall be provided throughout a building when the area undergoing alterations equals or exceeds 50% of the aggregate fire area of the building.

Exception: Alterations limited to the removal and replacement or the covering of existing materials, elements, equipment, or fixtures using the same materials, elements, equipment or fixtures that serve the same purpose.

1103.5.6.4 Add a new section to read **Additions.** Buildings built under the International Residential Code any addition which increases the total square footage of the residence to greater than 5,000 square feet (473.81 m²) is to be provided with sprinkler systems at the addition only. Where the size of the addition itself is greater than 4,500 square feet (~~4115~~ 418.06 m²), the addition as well as the existing residence shall be provided with sprinklers. Where the addition increases the total square footage of the residence to greater than 5,000 square feet and the alterations to the existing structure results in the removal of interior wall and ceiling finishes exposing the structure, sprinkler systems shall be retro-fitted into the existing residence as well as the addition.

History: Amendment approved during the adoption of the 2012 International Fire Code.

Restrictiveness: More restrictive *Rational:* The building and fire codes are vague on procedure for dealing with alterations and additions to existing buildings. These amendments would more clearly define a fire code official's role and allow for consistent application of the fire code. *Costs:* Costs vary

depending on the complexity of the building design, but average \$3.50 to \$5.00 a square feet for residential and \$4.00 to \$6.50 a square feet for commercial design. The owner often can realize a fire insurance premium discount of 5-10% through careful shopping.

1103.6.1 Amend this section to read **Existing multi-story buildings.** Existing buildings with occupied floors located more than ~~50~~ 40 feet (~~15240~~ 12192 mm) above the lowest level of fire department access or more than ~~50~~ 40 feet (~~15240~~ 12192 mm) below the highest level of fire department access shall be equipped with standpipes.

History: Amendment approved during the adoption of the 2018 International Fire Code.

Restrictiveness: More restrictive due to the reduction in height but less restrictive due to a less expensive standpipe system type. *Rational:* Older buildings tend to have less fire protection measures. This measure will ease the burden of fighting a structure fire in the unprotected building. A reduction in cost is seen due to the fact that we require dry standpipes (no freezing potential) and there is no need for interior hose or separate valves. *Costs:* Based on building size and complexity, cost may vary from \$600 to \$900 per floor for a single riser.

3103.5 Amend this section to read **Construction documents.** A detailed site and floor plan for tents or membrane structures ~~with an occupant load of 50 or more~~ shall be provided with each application for approval. The tent or membrane structure floor plan shall indicate details of the *means of egress* facilities, seating capacity, arrangement of the seating and location and type of heating and electrical equipment.

History: Amendment approved during the adoption of the 2012 International Fire Code.

Restrictiveness: More restrictive *Rational:* This change fits with the code modification shown just above. The smaller tents/canopies would not reach the occupant load of 50 or more. *Costs:* Maintaining the same code requirements will not increase the permit costs.

Chapter 80 amend this section to read **Referenced Standards** reference the most current addition of the Standard.

History: Amendment approved during the adoption of the 2018 International Fire Code.

Restrictiveness: Clarification *Rational:* This chapter of NFPA 1 covers the extraction process in more detail than the IFC and is used as a reference to ensure consistency between codes. *Costs:* Minimal.

The following appendices will be part of the adoption as amended.

Appendix B: Fire Flow for Buildings – This nationally developed appendix establishes a standard formula for determining the fire flow requirements for buildings.

Appendix C: Fire Hydrant Location & Distribution - This appendix lays out the basic spacing requirements for fire hydrants.

Appendix D: Fire Apparatus Access Roads – This appendix lays out criteria for Fire Lane signs and access NOT covered by town or county road and bridge standards.

D103.6 Amend this section to read **Signs.** Where required by the fire code official, fire apparatus access roads shall be marked with permanent NO PARKING—FIRE LANE signs complying with Figure D103.6. Signs shall have a minimum dimension of 12 inches (305 mm) wide by 18 inches (457

mm) high and have red letters on a white reflective background. Signs shall be posted on one or both sides of the fire apparatus road as required by Section D103.6.1 or D103.6.2 **and at intervals as required by the Fire Code Official.**

History: Amendment approved during the adoption of the 2018 International Fire Code.

Restrictiveness: Clarification *Rational:* The codes do not have any interval for sign requirements, and this leaves it up to the code official to determine the required spacing were Town and County codes or standards do not cover signage. *Costs:* Minimal.

Appendix E: Hazard Categories - This appendix provides information, explanation and examples to illustrate and clarify hazardous materials.

Appendix F: Hazard Ranking – This appendix applies hazard rankings to hazardous materials to make them the same as those issued by the Department of Transportation.

Appendix G: Cryogenic Fluids – Weight & Volume Chart – This appendix is used to convert from liquid to gas for cryogenic fluids.

Appendix H: Hazardous Materials Management Plan (HMMP) and Hazardous Materials Inventory Statement (HMIS) Instructions – This appendix provides guidance on developing a hazardous materials plan.

Appendix I: Fire Protection Systems – Noncompliant Conditions – This appendix provides guidance on older and out of service fire protection equipment.

Appendix J: Building Information Sign – This appendix standardizes exterior signage on building information for the fire department.

J101.1 **Amend this section to read** New buildings shall have a building information sign(s) that shall comply with Sections J101.1.1 through J101.7. Existing buildings ~~shall~~ **may** be brought into conformance with Sections J101.1 through J101.9 when one of the following occurs:

1. The fire department conducts an annual inspection intended to verify compliance with this section, or any required inspection.
2. A change in use or occupancy has occurred.

History: Amendment approved during the adoption of the 2018 International Fire Code.

Restrictiveness: Less Restrictive *Rational:* Currently we are not utilizing building information signs. This amendment changes the requirement from required to may be required. *Costs:* No cost.

Appendix K: Construction Requirements for Existing Ambulatory Care Facilities – This appendix helps the fire code official assess minimum fire and life safety requirements for buildings containing ambulatory care facilities.

Appendix L: Requirements for Firefighter Air Replenishment Systems. – This appendix provides guidance for the design, installation, and maintenance of a permanently installed firefighter breathing air system in buildings designated by the jurisdiction.

Appendix M: High-Rise Buildings—Retroactive Automatic Sprinkler Requirements – This appendix provides guidance on sprinkler retro-fit requirements giving building owners 12 years to comply once notice is given.

Appendix N: Indoor Trade Shows and Exhibitions – This appendix addresses the hazards that are associated with larger, more complex trade shows and exhibitions

N103.3 Amend this section to read N103.3 Crowd managers. Where events involve a gathering of more than ~~1,000~~ **500** people, trained crowd managers shall be provided in accordance with Section 403.11.3.

History: Amendment approved during the adoption of the 2018 International Fire Code.

Restrictiveness: More Restrictive. Rational: This amendment ensures continuity with amendments made in the body of the code to provide additional public safety in large gathering areas. *Costs:* The cost of additional security or training for event staff.

Appendix O: Valet Trash and Recycle Collection in Group R-2 Occupancies. This appendix provides for valet trash and recycling collection service in Group R-2 occupancies.

Add new appendix to read **Appendix P: Fire Regulations** – This appendix helps land management agencies reduce fire risk and prevent wildfires within Summit County where there is above average exposure to the Wildland Urban Interface (WUI).

SECTION P101 GENERAL

P101.1 Scope. This appendix is intended to identify the restrictions on recreational fires, open burning, fire management, smoking, and using chainsaws under conditions not covered by any Federal, State, or Local fire restrictions.

SECTION P201 DEFINITIONS

P201.1 Definitions. The following terms are defined in Chapter 2:

Controlled Burning

Open Burning

Permanent Fire Ring

Portable Outdoor Fireplace

Recreational Fire

SECTION P301 RECREATIONAL FIRE

P301.1 Recreational Fire. Outdoor recreational fires on private property shall be allowed under the following conditions:

1. A valid permit has been issued.
2. The fire is contained to:
 - 2.1 Permanent outdoor fireplace or fire ring with a screen to reduce the spread of embers.
 - 2.2 Portable outdoor fireplace that is assembled, located, and operated in accordance with the manufacturer's instructions with a screen to reduce the spread of embers.

- 2.3 A commercially designed chiminea with a screen to reduce the spread of embers.
3. The area directly underneath the fireplace or chiminea is barren.
4. The fireplace or chiminea is located at least 15 feet (4.572 m) from any flammable material and/or structure.
5. Within the approved fireplace or fire ring, the fire shall be no larger than 3 feet (0.914 m) in diameter with a flame height of no more than 2 feet (0.610 m).
6. The property is not part of a multi-family dwelling.
7. The property is not used for short-term rentals.

Exception:

1. Fires built within designated dispersed camping sites or picnic areas contained within a permanent metal fire ring as long as the fire is no larger than 3 feet (0.914 m) in diameter with a flame height of no more than 2 feet (0.610 m).
2. Fires contained within a fireplace, stove, wood burning stove, or pellet stove designed for and located within a fully enclosed permanent structure.

P301.2 Fire Prevention Measures. Individuals operating a fire in compliance with the O301.1 shall provide the following safety equipment to prevent the spread of the fire:

1. The fire shall be constantly attended by a responsible adult.
2. The fire shall be extinguished and cool to the touch prior to leaving the site unattended.
3. There shall be available for immediate utilization one of the following:
 - 3.1 A portable fire extinguisher with a minimum 4-A rating.
 - 3.2 A 5 gallon container filled with water.
 - 3.3 A charged garden hose available for immediate utilization.

SECTION P401 CONTROLLED BURNING

P401.1 Open Burning. Burning for the purposes of meeting specific land management objectives, such as to reduce flammable fuels, restore ecosystem health, recycle nutrients, or prepare an area for new trees or vegetation shall be allowed under the following conditions:

1. A valid permit has been issued.
2. The fire shall be constantly attended by a responsible adult.
3. The fire shall be extinguished and cool to the touch prior to leaving the site unattended.
4. There shall be available for immediate utilization one of the following:
 - 4.1 A portable fire extinguisher with a minimum 4-A rating.
 - 4.2 A 5 gallon container filled with water.
 - 4.3 A charged garden hose available for immediate utilization.

P401.2 Restrictions. The Fire Code Official has the right to restrict open burning to certain times of the year outside the scope of Federal, State, or Local fire restrictions.

SECTION P501 MANAGED FIRES

P501.1 Fire Management. Fires caused or administered by any Federal, State, or Local officer or member of an organized rescue or firefighting force shall be permitted if the following conditions are met:

1. Notice is given to the fire department or Fire Code Official.
2. The fire is performed as part of an official duty.

SECTION P601 SMOKING

P601.1 Outdoor Smoking. Outdoor smoking shall be permitted under the following conditions:

1. The individual smoking shall be at least 3 feet (0.914 m) away from natural vegetation and/or flammable materials.
2. All burning objects shall be properly extinguished and disposed of in a sealed container.

SECTION P701 USE OF CHAINSAWS

P701.1 Chainsaws. The operation of a chainsaw shall be permitted under the following conditions:

1. The operator has a 2A-10B:C rated dry chemical fire extinguisher available for immediate use.
2. The chainsaw is equipped with an approved spark arresting device.

SECTION P801 FIREWORKS AND EXPLOSIVES

P801.1 Fireworks. The use and sale of recreational fireworks shall be prohibited.

Exception: Fireworks permitted under Town or County codes and/or ordinances.

P801.2 Explosives. The use and sale of recreational explosives shall be prohibited.

Exception: Explosives permitted under Town or County codes and/or ordinances.

SECTION P901 OPEN FLAME DEVICES

P901.1 Open flame torch devices. The use of any open flame torch device shall be permitted under the following conditions:

1. The operator has a 2A-10B:C rated dry chemical fire extinguisher available for immediate use.
2. The use of the device shall be at least 10 feet (3.048 m) away from natural vegetation and/or flammable materials.

History: Amendment approved during the adoption of the 2018 International Fire Code.

Restrictiveness: More Restrictive *Rational:* This amendment ensures continuity between the Towns and County. The Fire Code is the means for bridging permitting requirements and regulations across all jurisdictions. *Costs:* Minimal, it is a free permit program.

Add new appendix to read **Appendix Q: Wildfire Mitigation** – This appendix provides requirements for wildfire mitigation where not otherwise regulated by local ordinances.

SECTION Q101 GENERAL

Q101.1 Scope. In compliance with Senate Bill 23-166 and any other State of Colorado bills related to the Colorado Wildfire Resiliency Code, this appendix adopts the most current edition of the State of Colorado Wildfire Resiliency Code.

History: Amendment is proposed for the 2024 International Fire Code. *Restrictiveness:* Clarification

Rational: This amendment ensures continuity between the Towns and County and compliance with State Statute on adopting the Wildfire Resiliency Code. Placing this in the Fire Code ensures consistent application of the requirements of the most current edition without having to constantly update adoptions. *Costs:* Permit fee for mitigation. No cost under the voluntary mitigation programs that the fire departments administer.

Summary

The initial step in adopting the 2024 IFC establishes a good platform. We feel that fire agencies and elected officials have to offer our firefighters and our visitors to the county and towns a slight step above minimum standards as seen in the International Fire Code. Our career firefighters do their job because of their **passion** to help. We respectfully request the adoption of the 2024 International Fire Code, the amendments presented herein, and Appendices B, C, D, E, F, G, H, I, J, K, M, N, O, P, and Q. If you have any questions prior to the hearing, please do not hesitate to contact the fire code official in your area:

- Summit Fire and EMS : Scott Benson, 970-262-5100 ext. 523 or sbenson@summitfire.org
- Red, White & Blue Fire Protection District: Jay Nelson, 970-453-2474 ext. 622 or jnelson@rwbfire.org

Thank you for your time.