

Elected Officials Information Packet for Consideration of the 2018 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 2018 International Fire Code (IFC) with amendments has been adopted by the Summit Fire and EMS Authority and the Red White and Blue Fire Protection District. We are respectfully requesting adoption of the IFC with amendments by local municipalities and Summit County Government. This affords consistency for contractors, developers, fire inspectors, and building officials. The 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 as amended meet the minimum set of standards that are sufficient for Summit County? After numerous meetings with our respective staffs, we feel it meets a minimum set of standards for unique geographical region.

Detailed Discussion on the amendments to the 2018 IFC:

- The fire departments held three public meetings across Summit County to review the amendments to the 2018 IFC. Each of the meetings was published and sent to the Summit County Builders Association with no public attendance at any of the meetings. In addition, each special district held a public hearing prior to adoption. The fire districts have solicited constructive feedback from all of the building officials in the county through various group meetings. Many of the current amendments have been in place since 1988.
- There were two items that may be considered substantive amendments/changes that the fire departments would like to bring to your attention.
 - Appendix O. This appendix was developed to have 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. In essence it keeps us under Level 1 fire restrictions at all times.
 - Appendix P. This appendix was developed to move the wildfire mitigation activities that the fire departments perform through agreements with a town or county related to a new construction permit or the replacement of a deck.
- 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 there is a tangible cost that can be attributed to the amendment, then it will be shown. The one cost we are unable to show is the cost in a life or injury to a citizen or emergency services worker. As you know, a value cannot be placed on a life.

Amendments:

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

2. 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 *Rationale:* The national code development process takes three years. It does not take advantage of the latest standards or technologies that are available to building & fire officials, developers and contractors. *Costs:* No additional costs.

3. 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 105.6 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 105.7.

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

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

4. 105.4.1 **Amend this section to read Submittals.** *Construction documents* and supporting data shall be submitted with each application for a permit and in such form and detail as required by the *fire code official*. The *construction documents* shall be prepared by a registered design professional where required by the ~~statutes of the~~ jurisdiction in which the project is to be constructed.

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

Restrictiveness: Clarification *Rationale:* This amendment allows for local control and for electronic submissions if allowed. *Costs:* No additional costs.

5. 105.6.30 **Amend this section to read Mobile food preparation vehicles.** A permit is required for mobile food preparation vehicles equipped with appliances ~~that produce smoke or grease laden vapors.~~

History: Amendment proposed for the 2018 International Fire Code. *Restrictiveness:* Clarification
Rationale: This amendment allows for local control. *Costs:* No additional costs

6. 105.6.33 Amend this section to read **Open burning.** An open burning 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 proposed for the 2018 International Fire Code. *Restrictiveness:* More Restrictive *Rationale:* This amendment allows for local control of recreational fires to help prevent a catastrophic wildland fire in our community. *Costs:* The cost of the permit, \$50 for the initial permit and \$25 every two years thereafter for the renewal of the permit. We are working on an online program to allow for easier access to the permitting process for homeowners.

7. 105.7 Amend this section to read **Required Construction Permits.** The fire code official is authorized to issue construction permits for work, or the likes of which are regulated by this code, and as set forth in Section 105.7.1 through 105.7.26.

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

Restrictiveness: Clarification *Rationale:* This amendment supports the “Type of permit.” amendment above. *Costs:* No additional costs.

8. 105.7.25 Amend this section to read **Temporary membrane structures and tents.** A construction permit is required to erect an air-supported temporary membrane structure, a temporary stage canopy or a tent having an area in excess of ~~400~~ **200** square feet (~~37~~ **18.58** m²).

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

Restrictiveness: Clarification *Rationale:* This amendment allows for local control. *Costs:* Permit costs are the only costs associated with tents between 200 and 400 square feet.

9. 105.7.26 Add the following section **Wildfire Mitigation.** The holder of a construction permit is required to perform defensible space requirements of Appendix P that do not fall under a voluntary wildfire mitigation program.

History: Amendment proposed for the 2018 International Fire Code. *Restrictiveness:* More Restrictive *Rationale:* 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 between \$25.00 and \$150.00.

10. 108.1.1 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 chief. The fire chief shall arrange for the board of appeals to meet within 10 working days from the receipt of the request. All applicable fees as stated in the fire district or fire authority fee schedule shall be paid at the time the written request is made.

History: Amendment proposed for the 2018 International Fire Code. *Restrictiveness:* Clarification

Rationale: This amendment provides guidelines for the appeals process. *Costs:* No additional costs.

11. 108.3 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 *Rationale:* 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.

12. 109.4 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 *Rationale:* 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.

13. 111.4 Amend this section to read **Failure to comply.** Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable for a fine of ~~not less than [AMOUNT] dollars or more than [AMOUNT] dollars~~ **as determined by the court and shall be subject to a fee as adopted by the fire district or fire authority.**

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

Restrictiveness: Clarification. *Rationale:* Supports amendment #8 above. *Costs:* No additional costs.

14. **GENERAL DEFINITIONS** Amend the following definitions

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

DEFENSIBLE SPACE. The selection, location, grouping, and maintenance of vegetation on the property in such a manner that the opportunity for fire to burn directly to a structure is minimized.

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 exterior walls of a building.**

FIREWISE® LANDSCAPING is defined as trees, shrubs, and other materials which meet the criteria for fire resistant landscaping.

GROUND FUELS. All combustible materials on, in or near the ground such as grass, duff, loose surface litter, tree or shrub roots, rotting wood, leaves, peat, or sawdust that typically support combustion.

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

MOBILE FOOD PREPARATION VEHICLES. Vehicles that contain cooking equipment that produce smoke or grease-laden vapors for the purpose of preparing and serving food to the public. Vehicles intended for private recreation shall not be considered mobile food preparation vehicles.

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. Is a permanently constructed fixture without air gaps in surrounding sides and has 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 wildfires.

PORTABLE OUTDOOR FIREPLACE. A commercially designed and manufactured device that is purchased that has a screen preventing ember emissions from the device.

RECREATIONAL FIRE. An outdoor fire on private land contained to a commercially designed and manufactured fireplace, a permanent outdoor fireplace, or a portable outdoor fireplace that is assembled, located, and operated in accordance with the manufacturer’s or designer’s instructions. ~~burning materials other than rubbish where the fuel being burned is not contained in an incinerator, outdoor fireplace, portable outdoor fireplace, barbecue grill or barbecue pit and has~~ **The fire shall not exceed** a total fuel area of 3 feet (914 mm) or less in diameter and 2 feet (610mm) or less in height. **A non-toxic fuel source such as wood or gas (i.e. propane or natural gas) must be used and the fire is intended for pleasure, religious, ceremonial, cooking, warmth or similar purposes. Recreational fire shall not be used for the purpose of waste removal or trash incineration.**

STRUCTURE IGNITION ZONE. The area around a specific structure and associated accessory structures, including all vegetation that contains potential ignition sources and fuels.

TREE CROWN is the needle or leaf bearing part of a tree. The crown edge is the tree’s drip edge.

WILDLAND-URBAN INTERFACE. An area where wildland fuels abut structures, with a clear line of demarcation between residential, business, and public structures and wildland fuels.

OCCUPANCY CLASSIFICATION.

Institutional Group I-1 – 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.~~

Institutional Group I-2 - 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 Section P2904 of the International Residential Code.~~

Residential Group R-3 – 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: Amendment proposed for the 2018 International Fire Code. *Restrictiveness:* Clarification

Rationale: Simplifies the definition to help ensure fire and life safety. *Costs:* No additional cost.

15. 304.1.2 ~~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 P, local codes, policies, and ordinances.**

History: Amendment proposed for the 2018 International Fire Code. *Restrictiveness:* Clarification

Rationale: 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.

16. 304.3.3 ~~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 *Rationale:* The exception meets the current regulations enforced by the Town of Breckenridge. *Costs:* No additional cost.

17. 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 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 *Rationale:* The exception meets the current regulations enforced by the Town of Breckenridge. *Costs:* No additional cost.

18. 308.1.4 Amend this section to read **Open-flame cooking devices.** Charcoal burners, wood pellet burners, and other open-flame cooking devices shall not be operated on combustible balconies or within 10 feet (3048 mm) of combustible construction.

Exceptions:

1. One- and two-family dwellings.
2. Where buildings, balconies and decks are protected by an automatic sprinkler system.
3. LP-gas cooking devices having LP-gas container with a water capacity not greater than 2-1/2 48 pounds [nominal ± 20 pounds (0.454 9.1 kg) LP-gas capacity].
4. Where a more restrictive code, policy, ordinance, or covenant exists.

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

Restrictiveness: Less restrictive *Rationale:* Your standard size propane cooking appliances have been on balconies across Summit County for a long period of time. Fire departments do not have the personnel to enforce the original fire code wording. The exception #4 allows HOA's to create their own more restrictive rules. *Costs:* No additional cost.

19. 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~~ 6,000 square feet (~~1115~~ 557.42 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 *Rationale:* The exception meets the current building size amendments for these types of life safety systems. *Costs:* No additional cost.

20. 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 signs.**

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

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

21. 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 storage 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 **where the storage does not exceed 30-inches (762 mm) in depth.**

History: Amendment proposed for the 2018 International Fire Code. *Restrictiveness:* Clarification

Rationale: The exception change meets the requirements of NFPA 13 and NFPA 25 requirements.

Costs: No additional cost.

22. 315.3.3 Amend this section to read **Equipment rooms.** Combustible material shall not be stored in boiler rooms, mechanical rooms, ~~or~~ electrical equipment rooms, **and other rooms where a potential ignition source exists, as determined by the fire code official.**

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

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

23. 319.1 Amend this section to read **General.** Mobile food preparation vehicles that are equipped with appliances ~~that produce smoke or grease-laden vapors~~ shall comply with this section.

History: Amendment proposed for the 2018 International Fire Code. *Restrictiveness:* More Restrictive

Rationale: Allows for better local control on mobile food vehicles that is not covered under any other code, ordinance, or statute. Recent explosions of food trucks have been caused by propane or liquid natural gas leaking into the service area. This amendment allows us to regulate vehicles further than those that produce grease laden vapors. *Costs:* No additional cost.

24. 319.4.1 Amend this section to read **Fire protection for cooking equipment.** Cooking equipment **that produces smoke or grease-laden vapors** shall be protected by automatic fire extinguishing systems in accordance with Section 904.12.

History: Amendment proposed for the 2018 International Fire Code. *Restrictiveness:* Clarification

Rationale: Allows for better local control on mobile food vehicles that is not covered under any other code, ordinance, or statute. *Costs:* The cost of the extinguishing system if the vehicle is not already equipped.

25. 319.8 Amend this section to read **LP-gas systems.** Where LP-gas systems provide fuel ~~for cooking appliances~~, such systems shall comply with Chapter 61 and Sections 319.8.1 through 319.8.5.

History: Amendment proposed for the 2018 International Fire Code. *Restrictiveness:* Clarification

Rationale: Allows for better local control on mobile food vehicles that is not covered under any other code, ordinance, or statute. *Costs:* Minimal.

26. 403.12.3 **Amend this section to read Crowd managers.** Where facilities or events involve a gathering of ~~more than 500 people or more~~, crowd managers shall be provided in accordance with Sections 403.12.3.1 through 403.12.3.3.

History: Amendment proposed for the 2018 International Fire Code.. *Restrictiveness:* Clarification
Rationale: Word change to reduce interpretation issues. *Costs:* No additional cost.

27. 403.12.3.1 **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 or portion thereof, shall be provided for the gathering.

Exceptions:

1. Outdoor events 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 proposed for the 2018 International Fire Code.. *Restrictiveness:* Clarification
Rationale: Word change to correct interpretation issues and match other sections of the code. *Costs:* No additional cost.

28. 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)~~ 5 inches (127 mm) high, **unless otherwise approved**, with a minimum stroke width of .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.

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

Restrictiveness: More restrictive *Rationale:* 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

29. 508.1 **Amend this section to read General.** Where required by other sections of this code, **buildings, structures, or facilities that are more than 4 stories (including basements) in height or are greater than 50,000 square feet (4645 m²) within surrounding exterior walls**, and in all buildings classified as high-rise buildings by the International Building Code, a fire command center for fire department operations shall be provided and shall comply with Sections 508.1.1 through 508.1.6.

History: Amendment proposed for the 2018 International Fire Code. *Restrictiveness:* More restrictive
Rationale: 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.

30. 508.1.5 **Amend this section to read Features.** ~~Where required by other sections of this code and in all buildings classified as high-rise buildings by the *International Building Code*, a fire command center for fire department operations shall be provided and shall comply with Sections 508.1.1 through 508.1.5.~~ **A Fire Command Center shall be required in buildings, structures, or facilities that are more than 4 stories (including basements) in height or are greater than 50,000 square feet (4645 m²) within surrounding exterior walls. The fire command center shall be provided and comply with Sections 508.1.1 through 508.1.6.**

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

Restrictiveness: More restrictive *Rationale:* 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. It allows one person to perform multiple tasks thus freeing up other personnel to assist with the operational aspects of an incident. It serves as a safe shelter for building maintenance personnel to confer with and assist fire commanders in controlling building systems. It allows for an interior command post in a 1-hour protected shell to conduct operations out of the severe environmental conditions seen in Summit County. The rooms also allow for a non-fire incident such as mass causality, hostage or hazardous materials incidents to be used by police, ambulance and security personnel. *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.

31. 603.6.6 **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 forwarded to the fire department upon completion.**

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

Restrictiveness: More restrictive *Rationale:* 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.

32. 603.9 **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. Areas around gas and utility meters shall be kept clear of snow and ice build-up at all times.**

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

Restrictiveness: More restrictive *Rationale:* 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.

33. 606.9 Add a section to read **Communication**. All elevators shall be equipped with two-way communication equipment and the equipment shall be operable at all times.

Exception: One- and two-family dwellings

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

Restrictiveness: Clarification *Rationale:* This amendment request supports the existing national codes for elevators and assists fire crews during elevator rescue operations. *Costs:* Usually part of the initial cost during new construction.

34. 701.2.2 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 proposed for the 2018 International Fire Code. *Restrictiveness:* Clarification

Rationale: This amendment helps ensure that penetrations through fire resistance rated assemblies after initial construction are properly sealed with work that occurs during remodels. *Costs:* Usually part of the initial cost during new construction.

35. 701.3.1 Add section to read **Smoke barriers 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 proposed for the 2018 International Fire Code. *Restrictiveness:* Clarification

Rationale: 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.

36. 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 proposed for the 2018 International Fire Code. *Restrictiveness:* Clarification

Rationale: This amendment helps ensure continuity between the code and national standards. *Costs:* Minimal

37. 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 *Rationale:* 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 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.

38. 901.4.3 **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 *Rationale:* Simplifies the definition. *Costs:* No additional costs.

39. 901.7 **Amend this section to read Systems out of service.** Where a required fire protection system is out of service, the fire department ~~and the fire code official~~ shall be notified immediately and where required by the fire code official ~~department~~, the building shall either be evacuated or an approved fire watch shall be provided for all occupants left unprotected by the shutdown until the fire protection system has been returned to service.

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

Restrictiveness: Less restrictive *Rationale:* Fire crews on scene of an alarm condition have been trained on evacuation procedures and the initiation of a fire watch condition. *Costs:* No additional costs.

40. 901.9 **Amend this section to read Termination of monitoring services.** For fire ~~alarm~~ **protection** systems required to be monitored by ~~this code~~ **the authority having jurisdiction**, notice shall be made to the fire code official whenever ~~alarm system~~ monitoring services are terminated. Notice shall be made in writing, **to the fire code official by** the provider of the monitoring service being terminated.

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

Restrictiveness: Clarification *Rationale:* Summit County fire departments require monitoring of all types of fire protection systems. *Costs:* No additional costs.

NOTE: For amendments #41 to #62 the history, restrictiveness, Rationale, and costs are the same, and will be noted at the end of amendment #62.

41. 903.2.1 **Amend this section to read An** automatic fire sprinkler system shall be provided throughout buildings ~~and portions thereof~~ used as Group A occupancies as provided in this section.

42. 903.2.1.1 **Amend this section to read Group A-1. 903.2.1.1 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~~ **6,000** square feet (~~1115~~ **557** 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.~~

43. 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.~~

44. 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~~ **6,000** square feet (~~1115~~ **557** 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.~~

45. 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~~ **6,000** square feet (~~1115~~ **557** 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.~~

46. 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.~~

47. 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.

48. 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.

49. 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~~ **6,000** square feet (~~1115~~ **557** 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.

50. 903.2.4 Amend this section to read **All Group F-1**. An automatic sprinkler system shall be provided throughout all buildings containing a Group F-1 occupancy where one of the following conditions exists:

1. A Group F-1 fire area exceeds ~~12,000~~ **6,000** square feet (~~1115~~ **557** m²).
2. A Group F-1 fire area is located more than ~~three~~ **two** stories above grade plane.
3. The combined area of all Group F-1 fire areas on all floors, including any mezzanines, exceed ~~24,000~~ **6,000** square feet (~~2230~~ **557** m²).
4. A Group F-1 occupancy used for the manufacture of upholstered furniture or mattresses exceeds 2,500 square feet (232 m²).

51. 903.2.6 Amend this section to read **Group I**. An automatic sprinkler system shall be provided throughout buildings with a Group I fire area.

Exceptions:

1. An automatic sprinkler system installed in accordance with Section 903.3.1.2 shall be permitted in Group I-1, Condition 1 facilities.
2. An automatic sprinkler system is not required where Group I-4 day care facilities are at the level of exit discharge and where every room where care is provided has not fewer than one exterior exit door.
3. In buildings where Group I-4 day care is provided on levels other than the level of exit discharge, an automatic sprinkler system in accordance with Section 903.3.1.1 shall be installed. ~~On the entire floor where care is provided, all floors between the level of care and the level of exit discharge and all floors below the level of exit discharge other than areas classified as an open parking garage.~~

52. 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~~ **6,000** square feet (~~1115~~ **557** m²).
2. A Group M fire area is located more than ~~three~~ **two** stories above grade plane.
3. The combined area of all Group M fire areas on all floors, including any mezzanines, exceeds ~~24,000~~ **6,000** square feet (~~2230~~ **557** m²).
4. A Group M occupancy used for the display and sale of upholstered furniture or mattresses exceeds 5,000 square feet (464 m²).

53. 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~~ **6,000** square feet (~~1115~~ **557** 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~~ **6,000** square feet (~~2230~~ **557** 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 occupancy used for the storage of upholstered furniture or mattresses exceeds 2,500 square feet (232 m²).

54. 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~~ **6,000** square feet (~~929~~ **557** m²).
2. Buildings not more than one story above grade plane, with a fire area containing a repair garage exceeding ~~12,000~~ **6,000** square feet (~~1115~~ **557** 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).

55. 903.2.9.2 **Amend this section to read Bulk storage of tires.** Buildings and structures where the area for the storage of tires exceeds ~~20,000~~ **10,000** cubic feet (~~566~~ **283** m³) shall be equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.

56. 903.2.10 **Amend this section to read Group S-2 enclosed parking garages.** An automatic sprinkler system shall be provided throughout buildings classified as enclosed parking garages in accordance with Section 406.6 of the International Building Code where either of the following conditions exists:

1. Where the fire area of the enclosed parking garage exceeds ~~12,000~~ **6,000** square feet (~~1115~~ **557** m²).
2. Where the enclosed parking garage is located beneath other groups.

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

57. 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 lineal 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 lineal 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.

58. 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.

59. 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.

60. **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. Open parking structures.~~
- ~~2. Occupancies in Group F-2.~~

61. 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 6,000 sq. ft. (577 m²).
2. Where the combined fire areas of Group B and mixed occupancies on all floors including mezzanines and basements is greater than 6,000 sq. ft. (577 m²).

62. 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 6,000 square feet (577 m²).

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

History: Amendments approved during the adoption of the 2012 International Fire Code with items 57, 58, & 59 being proposed for the 2018 International Fire Code. *Restrictiveness:* More restrictive

Rationale: 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 from neighboring fire department for 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.

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 contain 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 over 6,000 sq.

ft.. Costs vary depending on the complexity of the building design. Single family residential designs average \$3.50 to \$6.00 a sq. ft. and multifamily and commercial designs average \$4.00 to \$6.50 a sq. ft. This adds approximately 1-2% to a total building cost. The owner can often 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. These offsets can eliminate the 1-2% sprinkler cost.

63. 903.3.1.3 **Amend this section to read NFPA 13D sprinkler systems.** Automatic sprinkler systems installed in one- and two-family dwellings; Group R-3; Group R-4, Condition 1; and townhouses shall be permitted to be installed throughout in accordance with NFPA 13D **and local codes, ordinances, and policies.**

History: Amendment proposed for the 2018 International Fire Code. *Restrictiveness:* Clarification.

Rationale: This simplifies the installation procedure sprinkler systems based on our climate and specific changes to NFPA 13D. *Costs:* Will reduce the overall cost on fire protection systems.

64. 903.3.8 **Amend this section to read Limited area sprinkler systems.** Limited area sprinkler systems as required in the **International Residential Code** shall be in accordance with the standards listed in Section 903.3.1 except as provided in Sections 903.3.8.1 through 903.3.8.5.

History: Amendment proposed for the 2018 International Fire Code. *Restrictiveness:* Clarification.

Rationale: Aligns this code with sprinkler systems for remodels under the International Residential Code. *Costs:* Will reduce the overall cost retrofitting a fire protection system in a one- and two-family dwellings.

65. 903.4 **Amend this section to read Sprinkler system supervision and alarms.** Valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperatures, critical air pressures and waterflow switches on all sprinkler systems shall be electrically supervised by a listed fire alarm control unit.

Exceptions:

1. Automatic sprinkler systems **valves, pumps, and tanks in** protecting one- and two-family dwellings.
- ~~2. Limited area sprinkler 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 provided.~~
4. Jockey pump control valves that are sealed or locked in the open position.
- ~~5. Control valves to commercial kitchen hoods, paint spray booths or dip tanks that are sealed or locked in the open position.~~
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, preaction and deluge sprinkler systems that are sealed or locked in the open position.

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

Restrictiveness: Clarification *Rationale:* This simplifies the installation procedure for monitoring fire protection systems. *Costs:* Will reduce the overall cost on fire protection systems.

66. 905.3 **Amend this section to read Required installations.** Standpipe systems shall be installed where required by Sections 905.3.1 through 905.3.8. Standpipe systems are allowed to be combined with automatic sprinkler systems.

Exception: Standpipe systems are not required in Group R-3 occupancies.

History: Amendment proposed for the 2018 International Fire Code. **Restrictiveness:** More restrictive due to the removal of the exception. **Rationale:** Due to snow storage and snow shedding it is often not safe or practical to haul hose lines up to a fire floor in multi-family dwelling type buildings. **Costs:** More for Group R-3 buildings.

67. 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~~ **20** feet (~~9144 mm~~ **603.5 m**) above the lowest level of the fire department vehicle access.
3. The floor level of the lowest story is located more than ~~30~~ **20** feet (~~9144 mm~~ **603.5 m**) 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. **Rationale:** 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.

68. 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 **Rationale:** 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.

69. 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 mm) from a hose connection or the most remote portion of a sprinklered floor or story is more than 200 feet (60 960 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 height but less restrictive due to a less expensive standpipe system type. *Rationale:* 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.

70. 907.6.6 **Amend this section to read** **Monitoring.** Fire ~~alarm~~ **protection** 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 proposed for the 2018 International Fire Code. *Restrictiveness:* Clarification
Rationale: 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.

71. 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 proposed for the 2018 International Fire Code. *Restrictiveness:* Clarification
Rationale: 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.

72. 1010.1.9.4 **Amend this section to read Locks and latches.** Locks and latches shall be permitted to prevent operation of doors where any of the following exist:

1. Places of detention or restraint.
2. In buildings in occupancy Group A having an occupant load of 300 or less, Groups B, F, M and S, and in places of religious worship, the main door or doors are permitted to be equipped with key-operated locking devices from the egress side provided:
 - 2.1. The locking device is readily distinguishable as locked.
 - 2.2. A readily visible, durable sign is posted on the egress side on or adjacent to the door stating: **THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED DURING BUSINESS HOURS.** The sign shall be in letters 1 inch (25 mm) high on a contrasting background.
 - 2.3. The use of the key-operated locking device is revocable by the fire code official for due cause.
3. Where egress doors are used in pairs, approved automatic flush bolts shall be permitted to be used, provided that the door leaf having the automatic flush bolts does not have a doorknob or surface-mounted hardware.
4. Doors from individual dwelling or sleeping units of Group R occupancies having an occupant load of 10 or less are permitted to be equipped with a night latch, dead bolt or security chain, provided such devices are openable from the inside without the use of a key or tool.
5. Fire doors after the minimum elevated temperature has disabled the unlatching mechanism in accordance with listed fire door test procedures.
6. Doors serving roofs not intended to be occupied shall be permitted to be locked, preventing entry to the building from the roof.

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

Restrictiveness: Clarification *Rationale:* Business owners have asked for the change. To keep the doors unlocked “when building is occupied” is a security risk for employees before and after normal business hours. *Costs:* No additional cost.

73. 1103.5 **Amend this section to read Sprinkler systems.** An automatic sprinkler system shall be provided in existing buildings in accordance with Sections 1103.5.1 ~~and 1103.5.2~~ **through 1103.5.5.**

History: Amendment proposed for the 2018 International Fire Code. *Restrictiveness:* Clarification
Rationale: Administrative correction for a new code number now in the body of the fire code. *Costs:* No additional costs.

NOTE: For amendments #74 to #77 the history, restrictiveness, Rationale, and costs are the same, and will be noted at the end of amendment #77.

74. 1103.5.5 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 6,000 square feet (577 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.

75. 1103.5.5.1 Add a new section to read **Existing buildings with a fire area not exceeding 6,000 sq. 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 6,000 square feet (464 m²).

76. 1103.5.5.2 Add a new section to read **Existing buildings with a fire area exceeding 6,000 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.

77. 1103.5.5.3 Add a new section to read **Alterations to existing buildings with a fire area exceeding 6,000 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.

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

Restrictiveness: More restrictive *Rationale:* 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.

78. 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 proposed for 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. *Rationale:* 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.

79. 1103.9 Amend this section to read **Carbon monoxide alarms.** Carbon monoxide alarms shall be installed in existing dwelling units and sleeping units where those units include any of the conditions identified in Sections 915.1.2 through 915.1.6. The carbon monoxide alarms shall be installed in the locations specified in Section 915.2 and the installation shall be in accordance with Section 915.4.

History: Amendment proposed for the 2018 International Fire Code. *Restrictiveness:* More restrictive
Rationale: Ensures that this code and the State Statute related to carbon monoxide detection are in line with one another. *Costs:* Minimal

80. 2403.2.7 **Amend this section to read** **Welding warning signs.** Welding, cutting and similar spark-producing operations shall not be conducted in or adjacent to flammable vapor areas or dipping or coating operations unless precautions have been taken to provide safety. Conspicuous signs with the following warning shall be posted in the vicinity of flammable vapor areas, dipping operations and paint storage rooms:

NO WELDING
THE USE OF WELDING OR CUTTING
SIMILAR SPARK-PRODUCING
EQUIPMENT IN OR NEAR THIS AREA
IS DANGEROUS BECAUSE OF FIRE
AND EXPLOSION HAZARDS. WELDING
AND CUTTING SHALL BE DONE ONLY
UNDER THE SUPERVISION OF THE
PERSON IN CHARGE.

History: Amendment proposed for the 2018 International Fire Code. *Restrictiveness:* Clarification
Rationale: Industry standard has been to reduce the chance of fire from sparks associated with cutting, grinding, and the like. This amendment clarifies the concern and simplifies the required sign posting.
Costs: Minimal.

81. 3103.2 **Amend this section to read** **Approval required.** Tents and membrane structures having an area in excess of ~~400~~ **200** square feet (~~37~~ **19** m²) shall not be erected, operated or maintained for any purpose without first obtaining a permit and approval from the fire code official.

Exception:

1. Tents used exclusively for recreational camping purposes.
2. ~~Tents open on all sides which comply with all of the following:~~
 - 2.1. ~~Individual tents having a maximum size of 700 square feet (65 m²).~~
 - 2.2. ~~The aggregate area of multiple tents placed side by side without a fire break clearance of 12 feet (3658 mm), not exceeding 700 square feet (65 m²) total.~~
 - 2.3. ~~A minimum clearance of 12 feet (3658 mm) to all structures and other tents.~~

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

Restrictiveness: This reduction in square footage reverts back to the requirements of the 2006 International Fire Code. This is more restrictive. *Rationale:* Small pop-up tents/canopies at special events are very susceptible to changing weather conditions. By regulating the safe use of these tents/canopies we ensure the safety of all the participants at special events. *Costs:* Maintaining the same code requirements will not increase the permit costs.

82. 3103.6 **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. **See fire code official for additional local requirements.**

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

Restrictiveness: More restrictive *Rationale:* 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.

83. 3105.2 **Amend this section to read Approval.** Temporary special event structures in excess of 400-200 square feet (37-18.58 m²) shall not be erected, operated or maintained for any purpose without first obtaining approval and a permit from the fire code official and the building official.

History: Amendment proposed for the 2018 International Fire Code. *Restrictiveness:* More restrictive *Rationale:* This change fits with the code modification shown just above. *Costs:* Maintaining the same code requirements will not increase the permit costs.

84. 5001.1 **Amend this section to read Scope.** Prevention, control and mitigation of dangerous conditions related to storage, dispensing, use and handling of hazardous materials shall be in accordance with this chapter. This chapter shall apply to all hazardous materials, including those materials regulated elsewhere in this code, except that where specific requirements are provided in other chapters, those specific requirements shall apply in accordance with the applicable chapter. Where a material has multiple hazards, all hazards shall be addressed.

Exceptions:

1. In retail or wholesale sales occupancies, the quantities of medicines, foodstuff or consumer products and cosmetics containing not more than 50 percent by volume of water-miscible liquids and with the remainder of the solutions not being flammable shall not be limited, provided that such materials are packaged in individual containers not exceeding 1.3 gallons (5 L).
2. Quantities of alcoholic beverages in retail or wholesale sales occupancies shall not be limited providing the liquids are packaged in individual containers not exceeding 1.3 gallons (5 L).
3. Application and release of pesticide and agricultural products and materials intended for use in weed abatement, erosion control, soil amendment or similar applications where applied in accordance with the manufacturers' instructions and label directions.
4. The off-site transportation of hazardous materials where in accordance with Department of Transportation (DOTn) regulations.
5. Building materials not otherwise regulated by this code.
6. Refrigeration systems (see Section 605).
7. Stationary storage battery systems regulated by Section 1206.2.
8. The display, storage, sale or use of fireworks and explosives in accordance with Chapter 56.
9. Corrosives utilized in personal and household products in the manufacturers' original consumer packaging in Group M occupancies.
10. The storage of ~~distilled spirits and~~ wines in wooden barrels and casks.
11. The use of wall-mounted dispensers containing alcohol-based hand rubs classified as Class I or II liquids where in accordance with Section 5705.5.

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

Restrictiveness: More restrictive *Rationale:* Distilled spirits are a Class IB and IC flammable liquid. This clarifies the confusion about the applicability of the Hazardous Materials and Flammable Liquids Chapters in the fire code. This is the result of the growing popularity of "boutique" or "craft" distillers and the limited resources available to local fire departments. *Costs:* Cost varies depending on the size of the distillery facilities. The amendment also clarifies code language between the fire code and the building code.

85. 5104.2.2 **Amend this section to read Aerosol cooking spray products.** Storage of aerosol cooking spray products in A, B, E, F, M, and R occupancies shall not be more than 1,000 pounds (454 kg) net weight.

History: Amendment proposed for the 2018 International Fire Code. *Restrictiveness:* More restrictive. *Rationale:* Recent testing and focus on aerosol cans has found that they can contribute greatly to the spread of fires. This amendment adds the storage limitation to mercantile occupancies to help ensure consistency with firefighter safety. *Costs:* Minimal.

86. 5701.2 **Amend this section to read Nonapplicability.** This chapter shall not apply to liquids as otherwise provided in other laws or regulations or chapters of this code, including:
1. Specific provisions for flammable liquids in motor fuel-dispensing facilities, repair garages, airports and marinas in Chapter 23.
 2. Medicines, foodstuffs, cosmetics and commercial or institutional products containing not more than 50 percent by volume of water-miscible liquids and with the remainder of the solution not being flammable, provided that such materials are packaged in individual containers not exceeding 1.3 gallons (5 L).
 3. Quantities of alcoholic beverages in retail or wholesale sales or storage occupancies, provided that the liquids are packaged in individual containers not exceeding 1.3 gallons (5 L).
 4. Storage and use of fuel oil in tanks and containers connected to oil-burning equipment. Such storage and use shall be in accordance with Section 603. For abandonment of fuel oil tanks, this chapter applies.
 5. Refrigerant liquids and oils in refrigeration systems (see Section 605).
 6. Storage and display of aerosol products complying with Chapter 51.
 7. Storage and use of liquids that do not have a fire point when tested in accordance with ASTM D92.
 8. Liquids with a flash point greater than 95°F (35°C) in a water-miscible solution or dispersion with a water and inert (noncombustible) solids content of more than 80 percent by weight, which do not sustain combustion.
 9. Liquids without flash points that can be flammable under some conditions, such as certain halogenated hydrocarbons and mixtures containing halogenated hydrocarbons.
 10. The storage of ~~distilled spirits and~~ wines in wooden barrels and casks.
 11. Commercial cooking oil storage tank systems located within a building and designed and installed in accordance with Section 608 and NFPA 30.

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

Restrictiveness: More restrictive *Rationale:* Distilled spirits are a Class IB and IC flammable liquid. This clarifies the confusion about the applicability of the Hazardous Materials and Flammable Liquids Chapters in the fire code. This is the result of the growing popularity of “boutique” or “craft” distillers and the limited resources available to local fire departments. *Costs:* Cost varies depending on the size of the distillery facilities. The amendment also clarifies code language between the fire code and the building code.

87. Chapter 80 **amend this section to read Referenced Standards** add **NFPA 1—2015 Fire Code Chapter 38.**

History: Amendment proposed for the 2018 International Fire Code. *Restrictiveness:* Clarification *Rationale:* 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.

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

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

Table B105.1(1) [Amend this section to read](#)

TABLE B105.1(1)
REQUIRED FIRE FLOW FOR ONE- AND TWO-FAMILY DWELLINGS, GROUP R-3 AND R-4 BUILDINGS
AND TOWNHOUSES

FIRE-FLOW CALCULATION AREA (square feet)	AUTOMATIC SPRINKLER SYSTEM (Design Standard)	MINIMUM FIRE FLOW (gallons per minute)	FLOW DURATION (hours)
0–3,600	No automatic sprinkler system	1,000	1
3601 and greater	No automatic sprinkler system	Value in Table B105.1(2)	Duration in Table B105.1(2) at the required fire-flow rate
0–3,600	Section 903.3.1.3 of the International Fire Code or Section P2904 of the International Residential Code	500	½
3,601 and greater	Section 903.3.1.3 of the International Fire Code or Section P2904 of the International Residential Code	½ value in Table B104.1(2)	1

History: New amendment. *Restrictiveness:* Clarification. *Rationale:* The building officials amend out P2904 systems from their codes. This change ensures continuity between codes. *Costs:* Minimal.

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

91. **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 proposed for the 2018 International Fire Code. *Restrictiveness:* Clarification *Rationale:* 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.

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

93. **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.

94. **Appendix G: Cryogenic Fluids – Weight & Volume Chart** – This appendix is used to convert from liquid to gas for cryogenic fluids.
95. **Appendix H: Hazardous Materials Management Plan (HMMP) and Hazardous Materials Inventory Statement (HMIS) Instructions** – This appendix provides guidance on developing a hazardous materials plan.
96. **Appendix I: Fire Protection Systems – Noncompliant Conditions** – This appendix provides guidance on older and out of service fire protection equipment.
97. **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 proposed for the 2018 International Fire Code. *Restrictiveness:* Less Restrictive
Rationale: Currently we are not utilizing building information signs. This amendment changes the requirement from required to may be required. *Costs:* No cost.

98. **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.
99. **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.
100. **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 ~~4,000~~ **500** people, trained crowd managers shall be provided in accordance with Section 403.12.3.

History: Amendment proposed for the 2018 International Fire Code. *Restrictiveness:* More Restrictive
Rationale: This amendment ensure 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.

101. **Add new appendix to read Appendix O: 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 O101 GENERAL

O101.1 Scope. This appendix is intended to identify the restrictions to recreational fires, open burning, fire management, smoking, and using internal combustion engines under conditions not covered by any Federal, State, or Local fire restrictions.

SECTION O201 DEFINITIONS

O201.1 Definitions. The following terms are defined in Chapter 2:

Controlled Burning

Open Burning

Permanent Fire Ring

Portable Outdoor Fireplace

Recreational Fire

SECTION O301 RECREATIONAL FIRE

O301.1 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 of flammable material.
4. The fireplace or chiminea is located at least 15 feet (4.572 m) from any flammable material and/or structure.
5. The fire is contained within an approved fireplace or fire ring and the fire has a total fuel area of 3 feet (914 mm) or less in diameter and 2 feet (1.2192 m) or less in height and utilizes a non-toxic fuel source such as wood or charcoal.

Exception:

1. Fires built within designated dispersed camping sites or picnic areas contained within a permanent metal fire ring as long as the fire has a total fuel area of 3 feet (0.9144 m) or less in diameter and 2 feet (1.2192 m) or less in height and utilizes a wood or charcoal.
2. Fires contained within a fireplace, stove, wood burning stove, or pellet stove designed for and located within a fully enclosed permanent structure.

O301.2 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 2A-10B:C rating.
 - 3.2 A 5 gallon container filled with water.

- 3.3 A charged garden hose available for immediate utilization.

SECTION O401 CONTROLLED BURNING

O401.1 Controlled 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. Within the approved burn site, the fire has a total fuel area of 8 feet (2.4384 m) or less in diameter and 4 feet (1.2192 m) or less in height.
5. There shall be available for immediate utilization one of the following:
 - 5.1 A portable fire extinguisher with a minimum 2A-10B:C rating.
 - 5.2 A 5 gallon container filled with water.
 - 5.3 A charged garden hose available for immediate utilization.
6. The approved burn area is located at least 50 feet (15.24 m) from any flammable material and/or structure.

O401.2 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.

O401.3 Restrictions. The Fire Code Official has the right to restrict controlled burning to certain times of the year outside the scope of Federal, State, or Local fire restrictions.

SECTION O501 SMOKING

O501.1 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 O601 USE OF INTERNAL COMBUSTION ENGINES

O601.1 General. The operation of a chainsaw, trimmer, mower, or similar internal combustion engine driven equipment shall be permitted under the following conditions:

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

SECTION O701 FIREWORKS AND EXPLOSIVES

O701.1 Fireworks. The use and sale of recreational fireworks shall be prohibited.
Exception: Fireworks permitted under Town or County codes and/or ordinances.

O701.2 Explosives. The use and sale of recreational explosives including explosive targets or tracer ammunition shall be prohibited.
Exception: Explosives permitted under Town or County codes and/or ordinances.

SECTION O801 OPEN FLAME DEVICES

O801.1 Open flame torch devices. The use of any open flame torch device shall be permitted under the following conditions:

1. A valid permit has been issued.
2. The operator shall have a 2A-10B:C rated dry chemical fire extinguisher available for immediate use.
3. The use of the device shall be at least 15 feet (4.572m) away from natural vegetation and/or flammable materials.

History: Amendment proposed for the 2018 International Fire Code. *Restrictiveness:* More Restrictive *Rationale:* 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:* Permit fee for recreational permits. The initial permit fee is set at \$50.00 and a renewal is \$25.00. At this time, we are looking at the permit being valid for 2 years with an online application process.

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

SECTION P101 GENERAL

P101.1 Scope. This appendix provides a methodology for reducing wildland fire ignition hazards around structures that will be located in a wildland-urban interface area and provides minimum requirements to reduce the potential of structure ignition from wildland fires while ensuring continuity between required and voluntary mitigation activities.

SECTION P201 DEFINITIONS

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

Defensible Space

Firewise® Landscaping

Ground Fuels

Mitigation

Structure Ignition Zone

Tree Crown

Wildland-Urban Interface

**SECTION P301
FUEL MODIFICATION AREA**

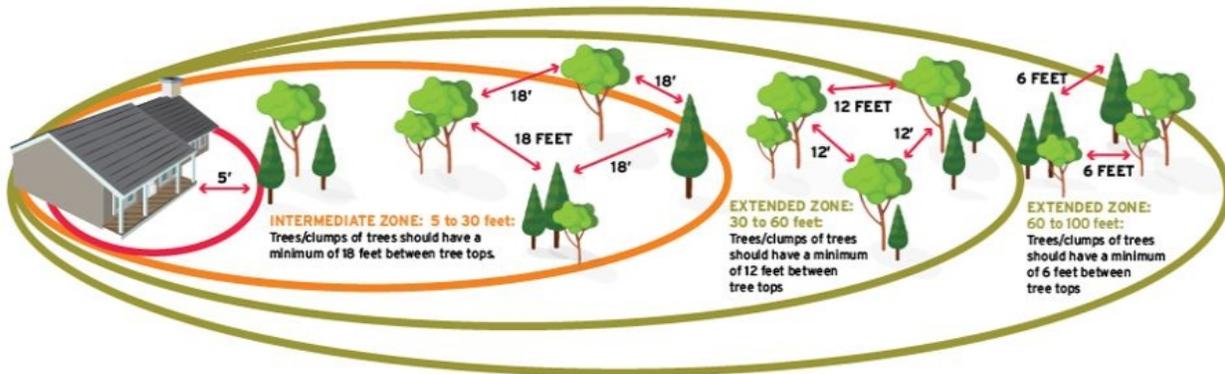
P301.1 **General.** The property shall be divided into three zones. These zones are (Figure P301):

1. The Immediate Zone -- 0 to 5 feet from the furthest attached exterior point of the home
2. The Intermediate zone -- 5 to 30 feet from the furthest attached exterior point of the home.
3. The Extended Zone, 30 to 60 feet and 60 to 100 feet from the furthest attached exterior point of the home.

Exception:

1. Nothing in this appendix shall require the removal of healthy trees, shrubs, and other landscaping materials required by a Town or the County as part of an approved landscaping plan.
2. Property passed a property line.

FIGURE P301



**SECTION P401
THE IMMEDIATE ZONE**

P401.1 **General.** This is the most important zone of the defensible space, according to the Firewise® program, to take immediate action on as it is the most vulnerable to embers. The following specific standards apply to the creation of defensible space within the Immediate Zone:

1. All dead and diseased trees, shrubs, and other landscaping materials shall be removed.
2. All vegetation and combustible and flammable materials shall be moved away from exterior walls, under the eaves, and/or decks. This includes:
 - 2.1 Mulch
 - 2.2 Ground fuels
 - 2.3 Flammable plants
 - 2.4 Leaves and needles
 - 2.5 Firewood piles

**SECTION P501
THE INTERMEDIATE ZONE**

P501.1 **General.** This is the landscaping/hardscaping zone of the defensible space through the use of careful landscaping or creating breaks that can help influence and decrease fire behavior. The following specific standards apply to the creation of defensible space within the Intermediate Zone:

1. All dead and diseased trees, shrubs, and other landscaping materials shall be removed.
2. Removal of ladder fuels (vegetation under trees) shall occur so a surface fire cannot reach the crowns of the trees.
 - 2.1 Limb up trees to a height of 10 feet. For shorter trees, trim to a height of 1/3 of the overall tree height.
3. Trees shall be spaced to have a minimum of eighteen feet between the crowns with the distance increasing with the percentage of slope.
4. Firewise ® trees and shrubs in this zone should be limited to small clusters of a few each to break up the continuity of the vegetation across the landscape.
5. Irrigated trees, shrubs, and other landscaping material shall be preserved if they are limbed to remove dead branches and well-spaced to reduce the risk of a fire spreading to other vegetation or structures.

**SECTION P601
THE EXTENDED ZONE UP TO 60 FEET**

P601.1 General. This zone focuses on interrupting a fire’s path and keeping the flames smaller and on the ground by:

1. All dead and diseased trees, shrubs, and other landscaping materials shall be removed.
2. The accumulation of ground litter and debris shall be disposed of or dispersed.
3. Small conifers growing between mature trees shall be removed.
4. Vegetation adjacent to storage or other outbuildings shall be removed.
5. Trees shall be spaced to have a minimum of twelve feet between the crowns with the distance increasing with the percentage of slope.

**SECTION P701
THE EXTENDED ZONE OVER 60 FEET**

P701.1 General. This zone focuses on interrupting a fire’s path and keeping the flames smaller and on the ground by:

1. All dead and diseased trees, shrubs, and other landscaping materials shall be removed.
2. The accumulation of ground litter and debris shall be disposed of or dispersed.
3. Small conifers growing between mature trees shall be removed.
4. Vegetation adjacent to storage or other outbuildings shall be removed.
5. Trees shall be spaced to have a minimum of six feet between the crowns with the distance increasing with the percentage of slope.

History: Amendment proposed for the 2018 International Fire Code. *Restrictiveness:* More Restrictive
Rationale: This amendment ensures continuity between the Towns and County as well as required and voluntary inspection programs. Following NFPA 1144 and Firewise® we believe mitigation under this program will help with the loss of structures during a catastrophic wildfire event. *Costs:* Permit fee for mitigation. No cost under the voluntary mitigation programs that the fire departments administer.

Summary

The initial step in adopting the 2018 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 2018 International Fire Code, the amendments presented herein (1 thru 102), and Appendices B, C, D, E, F, G, H, I, J, K, M, N, O, and P. If you have any questions please do not hesitate to contact either of us.

- Summit Fire and EMS Authority: Kim McDonald, 970-262-5100 or kmcdonald@summitfire.org
- Red, White & Blue Fire Protection District: Jay Nelson, 970-453-2474 or jnelson@rwbfire.org