

Title 17F Construction Standards

Chapter 17F.080 Fire Code

Section 17F.080.010 Adoption of International Fire Code

- A. The Washington State amended version of the 2012~~5~~ International Fire Code (IFC) and related standards, published by the International Code Council, as modified by this title, is the fire code of the City of Spokane except as otherwise provided.
- B. The following amendments are made to the International Fire Code:
1. Section 101.1 is modified to read as follows:
 - a. Title.

These regulations shall be known as the fire code of the City of Spokane, hereinafter referred to as "this code."
 2. Section 109.4 is modified to read as follows:
 - a. 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 provisions of this code shall be subject to the provisions of [chapter 1.05 SMC](#).
 3. Section 111.4 is modified to read as follows:
 - a. 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 subject to penalties identified in [chapter 1.05 SMC](#).
 4. IFC Sections 503.1.1, 503.1.2, 503.1.3, 503.2, 503.3, and 503.4 are adopted as published.
 5. Chapter 56 is amended with [chapter 10.33A SMC](#).
 6. Section 903.2.11.5 is revised to read:
 - a. A wet chemical suppression system shall be installed in a commercial kitchen exhaust hood and duct system to meet the compliance of Section 904.
 7. Section 904.2.1~~2~~ is revised to read:
 - a. Each required commercial kitchen exhaust hood and duct system required by Section 609 to have a Type 1 hood shall be protected with a wet chemical suppression system installed in accordance with this code.
 8. Section 904.1~~4~~
 - Replace the first paragraph and the five types to read:
 - a. 904.1~~4~~ – Commercial Cooking Systems.

The automatic fire extinguishing system for commercial cooking systems shall be a wet-chemical type system. The wet-chemical system shall be tested in accordance with UL 300 and listed and labeled for the intended application. The system shall be installed in accordance with this code, its listing, and the manufacturer's installation instructions. Wet-chemical extinguishing systems shall be installed in accordance with NFPA 17A.
 9. Section 904.1~~4~~ – Exception; Section 904.1~~4~~.1 – Exception; Section 904.1~~4~~.3; Section 904.1~~4~~.4 are not adopted.
 10. Section 905.1 – Add the following to end of the paragraph:

Class II and Class III standpipes are not allowed for new construction in the City of Spokane. All requirements for Class II and Class III shall be Class I and references to one- and one-half inch outlets shall be changed to two and one-half inches. There are no requirements for two and one-half inch hose to be provided (i.e., stages).
 - 11.906.1.1.

Revise exception to read as follows:

 - a. Exception.

Portable fire extinguishers are not required for residential buildings that do not have an interior or exterior common space, such as townhouses.
 12. Section 10~~09~~11.1~~3~~
 - Remove "and for access to unoccupied roofs" from last sentence.
 13. Section 10~~09~~11.1~~6~~
 - Remove the last sentence "In buildings without an occupied roof, access to the roof from the top story shall be permitted to be by an alternating tread device."
 14. Section 1020.2~~3~~.8~~9~~
 - Revise the second sentence to read as follows:

". . . the story of, the number of floors above grade (if it is different from the story number), and the direction . . ."
 15. Section 5704.2.9.6.1.

Remove the last part of the last sentence "(See Section 3 of the Sample Ordinance for Adoption of the International Fire Code on page ~~v~~xxi)."

16. Section 5706.2.4.4.
Remove the last part of the last sentence "(See Section 3 of the Sample Ordinance for Adoption of the International Fire Code on page ~~vxxi~~)."
17. Section 5806.2.
Remove the last part of the last sentence "(See Section 3 of the Sample Ordinance for Adoption of the International Fire Code on page ~~vxxi~~)."
18. Section 6104.2.
Remove the last part of the last sentence "(See Section 3 of the Sample Ordinance for Adoption of the International Fire Code on page ~~vxxi~~)."

Section 17F.080.030 Appendices Adopted

The following appendices of the International Fire Code are adopted as part of the fire code of the City:

- A. Appendix A – Board of Appeals.
- B. Appendix B – Fire flow Requirements for Buildings.
 1. B105.2 – Exception: Revise to read:
 - a. ~~A reduction in fire flow of up to fifty percent, as approved, is allowed when the building is provided with an automatic sprinkler system installed.~~
- C. Appendix C – Fire Hydrant Locations and Distribution.
 1. Table C1052.1 – Revise the column for 'Maximum distance from any point on street or road frontage to a hydrant' to be five hundred feet for each row. ~~For a fully fire sprinklered building, the maximum distance shall be no more than seven hundred fifty feet.~~
 2. Table C1052.1 – Footnote b is not adopted.
 3. Table C102.1 – Revise footnote g to read: " A 50% increase shall be "
- D. Appendix D – Fire Apparatus Access Roads.

Provided, fire department access will be in conformance to Appendix D with the following exceptions:

 1. D103.1.
Access roads with hydrants shall have a minimum width of twenty-eight feet along the twenty feet prior to and twenty feet after the hydrant.
 2. D103.3.
The minimum external turning radius will be fifty feet and minimum internal turning radius will be twenty-eight feet.
 3. Table D103.4.
The cul-de-sac diameter shall be one hundred feet. Width of road for length of five hundred one feet to seven hundred fifty feet will be twenty-eight feet.
 4. Figure D103.1.
The ninety-six feet diameter cul-de-sac is revised to one hundred feet diameter.
 5. D103.5.1.
Revise wording to the following:
 - a. The minimum gate width shall be twenty feet (six thousand ninety-six millimeters) unless reviewed and accepted by the fire official or designated representative.
 6. D103.6.1.
Revise road width from twenty-six feet to twenty-eight feet unless reviewed and accepted by the fire department.
 7. D103.6.2.
Revise road width from twenty-six feet to twenty-eight feet. Revise road width of thirty-two feet to thirty-six feet unless reviewed and accepted by the fire department.
 8. D103.7.1.
Residential Driveways. Driveways used as fire lanes for single family and two-family dwellings can be reduced to an unobstructed width of twelve feet wide as long as there is a code compliant fifty foot radius turn-around or approved hammerhead within one hundred fifty feet of all points around the dwelling.
 9. D103.7.2.
Fire access roads can be designed in accordance with [SMC 17H.010.140](#), Emergency Vehicle Access and Staging Areas, as an approved alternative with the approval of the fire official for residential access roads.
- E. Appendix E – Hazardous Categories.
- F. Appendix F – Hazard Ranking.

- G. Appendix G – Cryogenic Fluids – Weight and Volume Equivalents.
- H. Appendix H – Hazardous Materials Management Plan (HMMO) and Hazardous Materials Inventory Statement (HMIS) Instructions.
- I. Appendix I – Fire Protection Systems – Noncompliant Conditions; and
- J. Appendix J – Building Information Sign.

[Section 17F.080.070](#) Flammable or Combustible Liquids

Section 105.6.167 of the IFC is amended to read: Flammable or combustible liquids or critical materials: See chapter [3457](#) and the City's aquifer protection ordinance ([chapter 17E.010 SMC](#)). An operational permit is required.

[Section 17F.080.090](#) Additional Definitions – Section 202

There are added to IFC Section 202 the following definitions:

- A. "Cellar" is that portion of a building between floor and ceiling which is wholly or partly below grade and so located that the vertical distance from grade to the floor below is equal to or greater than the vertical distance from grade to ceiling, provided the space does not meet the definition of a basement as defined in the International Building Code.
- B. "Central business district" or "CBD" is that portion of downtown Spokane so designated on the comprehensive plan.
- C. "Central reporting system" is an approved system or group of systems, the operation of which is signaled to, recorded in, maintained, and supervised from an approved central station in which there are competent and experienced observers and operators in attendance at all times whose duty it shall be, upon receipt of a signal, to call the fire department and to take such action as shall be required under the rules established for their guidance. Such systems shall be controlled and operated by a person, firm, or corporation whose principal business is the furnishing and maintaining of supervised protective signaling service and who has no interest in the protected properties. Such approved system must be listed with Underwriters Laboratories.
- ~~D. "Guest room" is any room or rooms used or intended for use by a guest for sleeping purposes. Every one hundred square feet of superficial floor area in a dormitory is regarded as one guest room.~~
- E. "Performance certificate" is a statement by the installer certifying that a system has been installed as approved by the fire official and tested in accordance with manufacturer's specifications.
- F. "Registered servicer" is a natural person possessing a current license as provided in [SMC 17F.080.270\(A\)](#) and [SMC 10.29.060\(A\)](#).
- G. "Special areas to be protected" are the following areas of a building, which present a special need for fire detection whether the space is provided with fire sprinklers or not:
 1. Boiler and furnace rooms.
 2. Community kitchens.
 3. Community laundries.
 4. Custodial rooms.
 5. Locker rooms.
 6. Machine rooms.
 7. Parking garages.
 8. Public or community restrooms,
 9. Smoking rooms.
 10. Storage rooms.
 11. Supply rooms.
 12. Tool and shop areas.
 13. Trash rooms.
 14. Vertical shafts and adjacent spaces which convey fire.
 15. Public waiting areas.
 16. Mechanical and equipment rooms.
 17. Electrical rooms; and
 18. Other rooms or spaces as the fire official may designate.

[Section 17F.080.110](#) Fire Alarm System Requirements

- A. The following Chart 907 depicts the minimum fire alarm system requirements for the City of Spokane. These requirements supplement the International Fire Code.
- B. Where heights are noted, they are from the lowest level of fire department apparatus access to the floor elevation of the highest occupied level.
- C. Existing fire alarm systems will be allowed to be used and repaired without upgrade as long as they are properly maintained. Buildings that are altered or additions exceeding fifty percent of the building area will require the fire alarm system to be upgraded to the current requirements.
- D. Smoke detectors will be the primary means of detection. Where environmental conditions warrant (rooms with moisture potential, outdoors, etc.) heat detectors are allowed. Smoke detectors in restrooms and janitor closets are discouraged.

CHART 907	
OCCUPANCY	REQUIREMENTS FOR FIRE ALARM
All Except R3 and U	Atriums connecting more than two floors. Lowest level of structure greater than sixty feet below grade. Covered mall buildings. Retroactive – IFC 1103.7. Fire sprinkler monitoring for systems with twenty or more sprinklers. Smoke detection required in common areas and interior corridors used for required exits in occupancies required to have automatic fire alarm. Heat detectors are not required in spaces provided with quick response sprinklers in occupancies required to have automatic fire alarm. Special areas to be protected are required to have fire alarm in occupancies required to have automatic fire alarm – See SMC 17F.080.090 . Central monitoring is required. A minimum of one notification device, one manual pull station, and one smoke detector is required.
High Rise (greater than fifty-five to floor)	Tenant spaces exceeding one thousand square feet. Voice notification is required.
Daycares	Less than or equal to thirty <u>thirty-five</u> children – Single station smoke detection is required. Greater than thirty <u>thirty-five</u> children – Automatic. Manual pull stations required at all exits of state licensed facilities.
A1, A2, A3, A4, A5	Automatic if greater than or equal to three hundred people. Voice notification is required if occupancy is greater than or equal to one thousand people. No manual pull stations required if fully sprinklered.
B	Automatic if greater than or equal to five hundred people. Automatic if greater than or equal to one hundred people above or below exit level. No manual pull stations required if fully sprinklered. Area contains Group B Ambulatory health care.
E	Thirty <u>Fifty</u> one or more occupants. Voice notification is required if more than thirty <u>ninety-nine</u> occupants. Exception for manual pulls (907.2.3).
F1, F2	Automatic if greater than five hundred persons above or below exit level. No manual pull stations required if fully sprinklered. Automatic is required when occupancy is two or more stories in height.
H1, H2, H3, H4	Not required unless other requirements apply.
H5	Manual. Automatic for highly toxic gases, organic peroxides and oxidizers.
I1, I2, I3, I4	Automatic. Manual pulls may be at staff-attended location. Sleeping areas required to have single or multiple station smoke detection. Manual pull stations required at all exits of State Licensed I4.
M	Automatic if greater than or equal to five hundred people. Automatic if greater than or equal to one hundred people above or below exit level. Automatic if greater than twelve thousand square feet (SMC). No manual pull stations required if fully sprinklered.
R1, R2	Automatic – Five or more units/guest rooms. Not required for less than three levels with each unit having independent (not shared) direct exit to exterior. One manual pull station per exit stair required if not fully sprinklered. ADA Type A units will be provided with accessible communications features.

	ADA Type B units will be pre-wired for building notification.
R3	Single station smoke detection in sleeping areas and in hallways outside of sleeping areas.
S1, S2	None required unless other requirements apply.

[Section 17F.080.120](#) Elevator Shafts, Equipment Rooms, Machine Spaces, and Lobbies

- A. Elevator shafts and elevator equipment rooms are not required to be provided with automatic sprinklers only if:
 1. they are of non-combustible construction; and
 2. they meet the fire resistance ratings required by the International Building Code.
- B. Elevator shafts, lobbies, machine space, and elevator equipment rooms shall be provided with smoke detection that will:
 1. notify the building's fire alarm system; and
 2. activate the recall operation of the elevator(s). Existing elevators having a travel distance of ~~less~~more than twenty-five feet and with recall capabilities in buildings with a fire alarm system will be connected to the building fire alarm system to activate the recall function. At a minimum, Phase 1 recall is required to be provided with primary and alternate recall floors.

[Section 17F.080.150](#) Installation Requirements

A person is required to install every fire alarm system in accordance with recognized standards mentioned in chapter ~~47~~80 of the International Fire Code.

[Section 17F.080.270](#) Fire Equipment Servicer Registration

A person proposing to engage in the occupation of installation, repair and maintenance of fire department regulated equipment or systems is required to pay the fee prescribed in [SMC 8.02.0226](#) and obtain from the fire official the appropriate registrations as follows:

- A. Portable extinguisher.
- B. Range hood/extinguishing system.
- C. Sprinkler system.
- D. Standpipe system.
- E. Underground tank decommission.
- F. Underground tank install (install, upgrade or repair); and
- G. Underground tank test.
- H. Private Fire Hydrants

[Section 17F.080.321](#) ~~Fire Hydrant Proximity to Residential Infill Properties~~

~~The distance from a fire hydrant to a single-family (including duplexes and townhouses) residential infill property is allowed to be five hundred feet in locations in which the property is within an established area that has been developed to include paved streets and utilities for at least fifteen years. The distance to the fire hydrant shall be along an acceptable path of travel for fire apparatus.~~

[Section 17F.080.370](#) Private Hydrants – Inspection – Installation

All private hydrants are subject to inspection and approval by the *City water and hydroelectric services department* at the time of installation. A fee for inspection or other City services is charged as set forth in [SMC 8.02.034](#).

[Section 17F.080.380](#) Private Hydrants – Regulations

The fire official, with the assistance of *the director of water and hydroelectric services*, is authorized to establish regulations and design standards for private hydrants. These officials have the authority to interpret and apply the regulations and standards and to make rulings and orders consistent with the purpose of this chapter.

Section 17F.080.390 Private Hydrants – Semi-annual Inspection

Property owners with private hydrants are responsible to obtain semi-annual, satisfactory inspection of their private hydrant(s) from a qualified inspector. Inspection procedures and forms for inspection by the City or others are set by the fire official with the assistance of the *director of water and hydroelectric services*. The fire official may order additional inspections as deemed necessary.

Section 17F.080.400 Inspection Reports of Private Hydrants

Inspection reports of private hydrants are the responsibility of the owner and must be submitted to the fire department within five working days ~~by the servicing inspector~~.

~~Section 17F.080.430 Private Hydrants – Access~~

~~Roads and access to the fire hydrant must be provided in accordance with the IFC sections 503 and 507.~~

Section 17F.080.480 Combined Standpipes

Where combined standpipes are used for both wet or dry sprinklers and Class I or III hose outlets, the outlet pressure at the top of the riser shall be not less than one hundred PSI.

Exception:

Buildings up to and including five floors above grade (not to exceed 55 feet) will be pressurized by the fire apparatus upon arrival to the site and are not required to provide one hundred PSI at the top outlet of the riser.

Section 17F.080.490 Licensed Marijuana Cannabis Processor Extraction Requirements

- A. It shall be unlawful for any person to process or manufacture ~~marijuana~~ cannabis concentrate in the City of Spokane in a manner authorized by WAC 314-55-104 who is not a processor licensed by the Washington State Liquor Control Board. Such processors shall be required to use in their processing/manufacturing process a closed loop system that utilizes equipment specifically listed for such use by a nationally recognized testing and certification company, and which has been approved and inspected by Fire Department officials to ensure compliance with all fire safety regulations and codes within the State of Washington and City of Spokane
- B. Licensed processors shall acquire an annual operating permit from the City of Spokane Fire Department for the use and maintenance of cannabis extraction systems that do not use just water hazardous or dangerous products as the medium of extraction.