

CHAPTER 23.45 LOCAL AMENDMENTS TO THE INTERNATIONAL FIRE CODE 2012 EDITION

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23.45.100 Local amendments to the International Fire Code, 2012 Edition.

The amendments to the 2012 Edition of the International Fire Code are listed hereinafter by section. The last digits of the section number (after the title and chapter digits) refer to the section of the International Fire Code to which the amendment applies, i.e., 23.45.103.3.1.1 refers to section 103.3.1.1 of the International Fire Code (2012 Edition).

The 2012 International Fire Code, including Appendices B through G, I and K, are adopted as amended.

23.45.105.4.2 Information on construction documents.

Amend 105.4.2 by adding a new Section 105.4.2.2 as follows:

105.4.2.2 Fire system plans. Fire system plans shall be designed by a State of Alaska Fire System Permit holder Level IC, IIC or IIIC only, in accordance with 13 AAC 50.027 or a professional mechanical or electrical engineer registered under AS 08.48. Plans shall include the following on each drawing:

1. Original signature or engineering seal

2. State of Alaska Fire System Permit license number with permit level designation or Engineer license number
3. Date

23.45.105.6 Required operational permits.

Amend **105.6** by adding a new Section:

105.6.47 Connection to municipal fire alarm. An operation permit is required to connect a private fire alarm system to the municipal fire alarm circuit.

23.45.202 General Definitions.

Amend 202 by adding definition for driveway:

DRIVEWAY. A vehicular ingress and egress route serving:

1. No more than five dwelling units, or
2. Not more than two unoccupied buildings or structures each with an area less than 1500 square feet.

23.45.307.2.1 Authorization

Add the following sentence to the end of the paragraph:

Failure to obtain a required permit is prosecutable under title AMC 8.20 and Alaska Statute Title 41.15.

23.45.308.1.4 Open-flame cooking devices.

After the word "operated" add "or stored".

After the words "combustible balconies" add "and decks".

23.45.401.3 Emergency responder notification.

Amend by adding new Section 401.3.4 to read as follows:

401.3.4 False alarm charges. The owner of a building containing a fire alarm or fire protection system shall pay a charge in accordance with section AMC 8.40.040 for each and every false alarm to which the fire department responds.

As used in this section, "*false alarm*" means an alarm signal generated by a fire alarm system reporting an alarm for which no fire or emergency actually exists, and includes system malfunctions, faulty operation of detectors, and false alarms not classified above. It does not include incidents where the detector or system

operated as designed, such as but not limited to, a smoke detector sounding from someone smoking under the detector or a manual pull station being pulled.

23.45.408 Use and occupancy-related requirements

Amend 408 by adding a new Section 408.12 as follows:

23.45.408.12 Occupants needing physical assistance.

Facilities housing occupants needing physical assistance shall comply with this section.

408.12.1 Applicability. The provisions of this section apply to Group I-1 institutional and Group R-3 and R-4 residential care/assisted living facilities where the occupants require physical assistance from staff or others to respond to an emergency.

408.12.2 Definitions. Evacuation capability means the ability of occupants, residents, and staff as a group either to evacuate a building or to relocate from the point of occupancy to a point of safety; Point of safety means a location (a) exterior to and away from a building or (b) within a building of any type construction protected throughout by an approved automatic sprinkler system and is either (1) within an exit enclosure meeting the requirements of section 1022 or (2) within another portion of the building separated by smoke partitions meeting the requirements of IBC section 710 with not less than one half hour fire resistance rating, and the portion of the building has access to a means of escape or exit conforming to the requirements of this code and does not require return to the area of the fire.

Prompt evacuation capability means a group has the ability to move reliably to a point of safety in a manner equivalent to the ability of a household in the general population as measured under section 408.12.3.

Slow evacuation capability means a group has the ability to move reliably to a point of safety in a manner not as rapid as members of a household in the general population, as measured under section 408.12.3.

Impractical evacuation capability means a group does not have the ability to reliably move to a point of safety in a timely manner as measured under section 408.12.3.

408.12.3 Fire drills. A fire drill conducted by the fire official or other approved licensee shall make the initial determination of evacuation capability. Changes to the evacuation capability shall be based on a record of drills conducted by the facility and recorded for review by the fire official or other licensing official. The drills shall be conducted six (6) times a year on a bimonthly basis, with at least two (2) drills conducted during the night when residents are sleeping. Records shall indicate the time taken to reach a point of safety, date and time of the drill,

location of simulated fire origin, escape paths used, and comments relating to residents who resisted or failed to participate in the drills. The relation of drill time to evacuation capability is as follows:

1. Three (3) minutes or less – prompt;
2. Over three (3) minutes but under 14 minutes – slow; or
3. Fourteen (14) minutes or more – impractical.

408.12.4 Evacuation capability and fire protection requirements. Evacuation capability and fire protection requirements of a facility under this section are as follows:

408.12.4.1 Prompt evacuation capability. Evacuation capability of three minutes or less indicates prompt evacuation capability. Facilities maintaining prompt evacuation capability are considered to be in compliance with this code.

408.12.4.2 Slow evacuation capability. Evacuation capability of more than three but less than 14 minutes indicates slow evacuation capability. Group I-1, R-3 and R-4 facilities maintaining slow evacuation capability must be protected by an automatic sprinkler system with quick response or residential sprinklers installed in accordance with section 903.3. Additionally, Group I-1 and R-4 facilities maintaining slow evacuation capability must be protected by an automatic smoke detection system using addressable smoke detectors in accordance with the provisions of this code.

408.12.4.3 Impractical evacuation capability. Evacuation capability of fourteen minutes or more indicates impractical evacuation capability. Impractical evacuation capability is not allowed and must be corrected.

23.45.502.1 Definitions.

Amend 502.1 by adding **DRIVEWAY** to definitions.

23.45.503 Fire apparatus access roads.

Amend 503.1 by adding the following sentence:

Driveways shall be provided and maintained in accordance with Section 503.7.

Amend 503 by adding a new Section 503.7 as follows:

503.7 Driveways. Driveways shall be provided when any portion of an exterior wall of the first story of a building is located more than 150 feet (45720 mm)

from a fire apparatus access road. Driveways shall comply with Sections 503.7.1 through 503.7.4.

Exception: Where driveways cannot be installed because of topography, railways, waterways, non-negotiable grades or other similar conditions, the fire code official is authorized to require additional fire protection.

503.7.1 Dimensions. Driveways shall provide a minimum unobstructed width of 12 feet (3658 mm) and a minimum unobstructed height of 13 feet 6 inches (4115 mm).

503.7.2 Length. Driveways in excess of 150 feet (45720 mm) in length shall be provided with turnarounds. Driveways in excess of 200 feet (60960 mm) in length and less than 20 feet (6096 mm) in width shall be provided with turnouts in addition to turnarounds.

503.7.3 Turnarounds. The design for driveway turnarounds shall be approved by the fire code official.

503.7.4 Turnouts. Driveway turnouts shall be an all-weather road surface at least 10 feet (3048 mm) wide and 30 feet (9144 mm) long. Driveway turnouts shall be located as required by the fire code official.

23.45.506.1.2 Key boxes for nonstandardized fire service elevator keys

Amend by changing the language of 506.1.2 Item 1 to the following:

The key cylinder for the Elevator key box shall be of a tubular, 7 pin, style 137 construction and shall have a bitting code of 6143521 starting at the tab sequenced clockwise as viewed from the barrel end of the key. The key shall be coded "FEO-K1".

23.45.607.4 Elevator key location.

Amend by adding the following clarifying language to 607.4:

"Building owners/managers shall have 2 years from the date of adoption of this requirement to complete the following for all existing buildings with elevators. The keys to be provided in the elevator key box shall include but are not limited to; the machine room/space or control room/space keys (as is applicable to the elevator(s) in each building), the proper hoist way door unlocking device keys for the particular vintage of elevator or bank of elevators, a fire service key for each phase-I and phase-II switch, a key to the auxiliary power selector switch (if present), stop/run keys (if present), and all other keys located in the elevator car operating panels, such as the fans, lights, floor lockouts and service cabinets. All keys shall be marked for their intended use."

23.45.901.6.2 Records.

Amend section 901.6.2 by deleting “upon request” and replacing it with “in accordance with appendix K”.

23.45.903.2.3 Group E.

Delete 903.2.3 and replace with the following:

An automatic sprinkler system shall be provided throughout all buildings that contain a Group E occupancy and for every portion of educational buildings below the level of exit discharge. The use of a fire wall does not establish a separate building for purposes of this section.

Exception: Buildings with Group E occupancies having an occupant load of 49 or less.

Daycare uses licensed to care for more than five (5) persons between the hours of 10 p.m. and 6 a.m. shall be equipped with an automatic sprinkler system designed and installed in accordance with subsection 903.3.1 or an approved equivalent system.

23.45.903.2.11 Specific building areas and hazards.

Amend by adding the following sections:

903.2.11.7 Pit sprinklers. Sprinklers shall be installed in the bottom of all new elevator pits below the lowest projection of the elevator car but no higher than 24” (609.6 mm) from the bottom of the pit when the building has a sprinkler system.

903.2.11.8 Sprinkler systems shall not be allowed in elevator machine rooms/ spaces or control room/ spaces and at the tops of hoist ways, except as required by NFPA13 8.15.5.6.

903.2.11.8.1 Sprinklers shall be required in all spaces where combustible elevator belts are present.

23.45.903.3.1.3 NFPA 13D sprinkler systems.

Amend section by adding the following sentence:

All required automatic sprinklers systems installed in accordance with NFPA 13D shall have a minimum 30 minute water supply or a minimum 20 minute water supply with a FDC for Group R-3 and R-4 occupancies.

23.45.903.3.5 Water supplies.

Amend by adding new Section 903.3.5.3 as follows:

903.3.5.3 Fire sprinkler hydraulic water flow design.

Fire sprinkler hydraulic water flow design shall be by one of the following methods.

1. Preferred method. Fire sprinkler hydraulic design water supply shall be from AWWU computer model Max Day demand.
2. Alternate method. Can only be used if AWWU computer model cannot be obtained. Fire sprinkler system being designed with water supply data from a hydrant flow test shall have a 10 percent minimum flow rate safety factor at the water source. Hydrant flow test shall be witnessed by the fire code official or their designee.

23.45.907.1.2 Fire alarm shop drawings.

Amend section by adding the following construction drawing to the list of those required to be submitted:

14. System riser diagrams.

23.45.907.2.1 Group A.

Delete Exception.

23.45.907.2.2 Group B.

Delete Exception.

23.45.907.2.3 Group E.

Amend 907.2.3 (Group E) by adding a second paragraph to read:

"Rooms used for sleeping or napping purposes within a day care use of a Group E occupancy shall be provided with smoke alarms that comply with Section 907.2.11.2"

Replace "30" in exception #1 one with "50".

Delete exception #2 and replace with the following:

2. Emergency voice/alarm communication systems are not required in group E occupancies with an occupant load of 100 or less.

Delete exception #3.

23.45.907.2.4 Group F.

Delete Exception.

23.45.907.2.6.1 Group I-1

Delete Exception #1

23.45.907.2.7 Group M.

Delete Exception #2.

23.45.907.2.8.1 Group R-1: Manual fire alarm system.

Delete Exception #2.

23.45.907.2.9.1 Group R-2: Manual fire alarm system.

Amend section 907.2.9.1 by deleting first sentence and replacing it with:

A manual fire alarm system and an automatic fire detection system with smoke detection in the public and common use areas shall be installed in Group R-2 occupancies where:

907.2.9.1: Amend by deleting Exception # 2.

23.45.907.2.10.1 Manual fire alarm system

Delete Exception # 2

23.45.907.5.2.1.1 Average Sound Pressure

Add the following sentence:

The minimum sound pressure level in every occupiable space shall be 75 dBA in Group R occupancies and 60 dBA in all other occupancies.

23.45.907.5.2.3 Visible alarms.

Amend 907.5.2.3 by adding the following to exception 1.

An upgrade shall be the replacement of a fire alarm panel, or fire system components providing improved functional performance or capabilities. (A software upgrade is exempt from this requirement.)

23.45.908.7 Carbon monoxide alarms.

Amend section 908.7 as follows:

908.7.1 Carbon monoxide alarms. The provisions of this section apply to Group I-1, R-2, R-3 and R-4 occupancies, and Group A and E occupancies where individuals sleep on a periodic basis. At least one (1) carbon monoxide alarm shall be installed on each floor level. If a floor level contains bedrooms or sleeping rooms, at least one (1) alarm shall be located in the immediate vicinity of the sleeping area, outside of the bedrooms/sleeping rooms. Carbon monoxide alarms shall be listed as complying with UL 2034 and be installed and maintained in accordance with NFPA 720 and the manufacturer's instructions. The alarm shall be clearly audible in all sleeping rooms with intervening doors closed as required by NFPA 720.

Exceptions:

1. Carbon monoxide detectors are not required in dwelling units and structures with no combustion appliances and that do not have an attached enclosed garage.
2. Carbon monoxide detectors are not required in dwelling units and structures with only direct vent combustion appliances and that do not have an attached enclosed garage.
3. Carbon monoxide detectors are not required in Group A, E, I-1, and R-2 occupancies where all combustion equipment is located within a mechanical room separated from the rest of the building by construction capable of resisting the passage of smoke. If the structure has an attached enclosed parking garage, the garage shall be ventilated by an approved automatic carbon monoxide exhaust system designed in accordance with the mechanical code.

908.7.2 Interconnection. In new construction, all carbon monoxide detectors located within a single dwelling unit shall be interconnected in such a manner that actuation of one alarm shall activate all of the alarms within the individual dwelling unit.

908.7.3 Power source. In new construction, carbon monoxide detectors shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a battery backup. Wiring shall be permanent and without disconnecting switch other than those required for overcurrent protection. In existing construction, carbon monoxide detectors shall be permitted to be battery powered or cord-and-plug type with battery backup.

908.7.4 Carbon monoxide detection systems. Carbon monoxide detection systems, which include carbon monoxide detectors and audible notification appliances, installed and maintained in accordance with this section for carbon monoxide alarms and NFPA 720 shall be permitted. The carbon monoxide detectors shall be listed as complying with UL 2075.

23.45.1008.1.9.7 Delayed egress locks.

Revise item number 3 to read as follows:

3. The door locks shall have the capability of being unlocked by a signal from an approved location.

23.45.1015.2.2 Three or more exits or exit access doorways.

Amend section 1015.2.2 to read as follows:

Where access to three or more exits is required, three exits shall be separated from each other by a minimum distance of one-third the maximum overall diagonal dimension of the area served.

23.45.1103.3 Elevator operation.

Amend section 1103.3 by adding a subsection 1103.3.1.

1103.3.1 Compliance date. Buildings where the elevator(s) have a rise of 75 feet or greater shall have until January 1, 2021 to comply with 1103.3. Buildings where the elevator(s) fall within the scope of 1103.3 and have a rise of less than 75 feet shall have until January 1, 2025 to comply with 1103.3.

23.45.1103.5 Sprinkler systems.

Delete “and 1103.5.2” and add “through 1103.5.4”.

Add two new subsections as follows:

1103.5.3 Group E occupancies. An approved automatic fire extinguishing or sprinkler system shall be installed throughout an existing building containing a Group E occupancy having an occupant load of 50 or more in accordance with Section 903.2.3, as amended, whenever alterations involving the reconfiguration of space, or additions are made to the Group E occupancy.

1103.5.4 Pit sprinklers. In buildings that contain a fire sprinkler system, sprinklers shall be installed in the bottom of all existing elevator pits below the

lowest projection of the elevator car but no higher than 24” from the bottom of the pit.

23.45.1103.7 Fire alarm systems.

Amend section 1103.7 by adding the following to the end of the exception:

“...meeting a minimum sound pressure level of 65 dBA in Group R and I-1 occupancies and 60 dBA in other occupancies.”

23.45.1103.7.5.1 Group R-1 hotel and motel manual fire alarm system.

Amend section 1103.7.5.1 by deleting exception #2

23.45.1103.8.1 Where required

Amend section 1103.8.1 by deleting exceptions number 1 and 2. Renumber exception 3 to exception 1.

23.45.1104.16.5.1 Examination

Amend section by deleting 1104.16.5.1 Examination.

23.45.2006.3 Construction of aircraft-fueling vehicles and accessories.

Revise 2006.3 by adding an exception to read:

Exception: A vehicle or trailer tank with a capacity of 500 gallons or less may be used for non-commercial refueling of private non-commercial aircraft provided:

1. The tank is placarded with no smoking signs, the type of fuel contained in the tank, and the tank capacity;
2. The tank and all appurtenances used in the fueling operation are listed and approved for the specific purpose;
3. Electrical bonding is provided as required under Section 2006.3.7.
4. Two (2) listed portable fire extinguishers complying with section 906, each having a minimum rating of 20-B:C are provided. A portable fire extinguisher shall be readily accessible from either side.

23.45.3103.5 Use period.

Add a new exception to read as follows:

Exception: Seasonal Use Structures permitted under AMC 23.10.104.2

23.45.3104.15 Heating and cooking equipment.

Amend 3104.15 by adding at the end of the sentence:

“unless as otherwise approved by the fire code official.”

23.45 Chapter 80 Referenced standards.

Amend IFC chapter 80 by adding:

NFPA 291 – 12 Recommended Practice for Fire Flow Testing and Marking of Hydrants, Ref. 507.5.2

23.45.D102.1 Access and loading.

Amend section by deleting 75,000 pounds and replacing it with 80,000 pounds.

23.45.APPENDIX K

Amend Part VII - Appendices by adding APPENDIX K as follows:

APPENDIX K Fire protection system permits and status reporting

SECTION K101 General

K101.1 Scope.

Fire protection system permits and service reports shall be in accordance with this appendix and all other applicable requirements of the International Fire Code.

SECTION K102 Definitions

K102.1 Definitions.

For the purpose of this appendix, certain terms are defined as follows:

FIRE SYSTEM MAINTENANCE. Maintenance to fire systems may include like for like change of system devices. Fire system maintenance shall not require a permit.

SECTION K103 Fire protection system permits

K103.1 General.

Permits for fire protection systems shall be issued by the Fire Code Official. The building owner shall maintain a record of all fire system modifications in accordance with section 901.2.2.

K103.2 Plan review requirements.

Fire system plan review may be required by the fire code official whenever a fire system is changed, modified, or when the proposed modifications are determined to be special circumstances which require further plan review.

K103.3 Permit requirements.

Whenever a permit is required for a fire protection system a permit application shall be submitted along with all supporting documentations to the fire code official.

K103.4 Fire systems requiring a permit.

A permit shall be required when any of the following exits:

1. **New fire systems.** A permit for a fire system is required on all new fire systems whether the system is required or not.
2. **Fire sprinkler and water based systems.** A fire systems permit is required for fire sprinkler and water based systems under the following conditions:
 - a. Whenever there is a relocation of 15 or more or an addition of 6 or more sprinkler heads to a system riser.
 - b. Whenever 4 or more conventional sprinklers and piping are replaced with flexible piping and sprinklers.
 - c. Whenever there are changes to piping that require seismic bracing.
 - d. Whenever there are changes to the most demanding design density flow area.
 - e. Increase to the building area and/or an increase to the system design density.
 - f. High pile/rack storage sprinkler system modifications.
 - g. All additions to an in-rack sprinkler system or a new in rack sprinkler system.
 - h. Any change to an ESFR sprinkler system.
 - i. Any change to a sprinkler system that has a 0.2 gpm/sf or greater density.
 - j. At the discretion of the fire official considering that there may be sufficient changes to the system and that the minimum design density requirements and/or seismic bracing requirements must be verified.
 - k. Pipe schedule systems must be plan reviewed if the changes will affect pipe size anywhere other than on a branch line or any of the above requirements.

Note: Sprinkler head addition limitation to a system is cumulative. This means that if 6 sprinklers require a permit or plan review and 5 sprinklers are added one month and 1 sprinkler a month later, it does not negate the need to obtain a permit or plan review. As soon as 6 sprinklers, (cumulative) are modified or added, then a plan review and construction permit shall be required.

3. **Backflow prevention device.** A fire system permit with full drawings and hydraulic calculations shall be required for installation of a Backflow Prevention Device under the following conditions:
 - a. New backflow prevention device installed on a water-based fire system that previously did not have a backflow installed.
 - b. New backflow prevention device installed on a water-based fire system that is in addition to the backflow prevention devices that were previously approved for installation.
 - c. Changing a backflow prevention device from a double check to a reduce pressure backflow device.
 - d. New sprinkler system installations.

4. **Fire alarm system.** A fire system permit is required for fire alarm systems under the following conditions:
 - a. Fire alarm control panel is replaced or upgraded-Full visual upgrade is required per the IFC.
 - i. **Provide:** battery calculations, verification that sound pressure level measured in dBA are adequate, system components are compatible.
 - b. Any changes to a networked fire alarm system.
 - c. Addition of a booster power supply.
 - d. Additional of 11 or more initiating devices on any fire alarm system. All changes must be documented on the plans with corrected voltage drops, battery calculations, etc.
 - i. **Provide:** battery calculations, verification that sound pressure level measured in dBA are adequate, system components are compatible, that circuit capacities are not exceeded with new devices, wiring diagram showing the connection between new and existing systems.
 - e. Addition of 6 or more fire alarm indicating devices on any fire alarm system. All changes must be documented on the plans with corrected voltage drops, battery calculations, etc.
 - i. **Provide:** battery calculations, verification that sound pressure level measured in dBA are adequate, system components are compatible, line voltage calculations for lines with new devices, wiring diagram showing the connection between new and existing systems.
 - f. If a permit is not required, provide a system certification form and a basic as-built plan showing the location of the new devices and which circuit was augmented.

Note: The device addition limitation to a system is cumulative. This means that if 7 devices require a permit or plan review and 6 devices are added one month and 6 devices are added a month later, it does not negate the need to obtain a permit or plan review. As soon as 7 devices (cumulative) are reached than a plan review and construction permit shall be required.

5. **Kitchen hood fire systems.** A fire systems permit is required for kitchen hood fire systems under the following conditions:
 - a. If there is addition of 4 or more nozzle flow points to a system not exceeding maximum allowable flow points for the cylinder
 - b. If there is additional agent cylinders to be added
 - c. If there is a larger agent cylinder added
 - d. If the system is relocated

Note: The device addition limitation to a system is cumulative. This means that if 3 flow points are added one month and 1 flow point is added a month later, it does not negate the need to obtain a permit or plan review. As soon as 4 flow points (cumulative) are reached than a plan review and construction permit shall be required.

6. **Special hazard fire systems.** A fire systems permit is required for special hazard fire systems under the following conditions:
 - a. If there is any addition or deletion to the system.
 - b. If the system is relocated.
7. **Fire standpipe system.** A fire systems permit is required for fire standpipe systems under the following conditions:
 - a. If there is any addition or modification to the system.
8. **Fire Pump.** A fire systems permit is required for fire pumps under the following conditions:
 - a. If there is any addition to the system
 - b. Change out of the fire pump
 - c. Change out of the fire pump controller
 - d. Modifications to piping arrangements
 - e. Change out or rebuilding of electric motor/diesel engine
 - f. Changes to electrical service

K103.4.1 Fire systems requiring no plan review.

In cases where changes are made to fire systems and a plan review is not required, the following actions shall be required by the company/individual making the changes:

1. Design must be performed by a person holding a Level C State of Alaska Fire Systems Permit.

Exception: Sprinkler addition can be documented by a Level B State of Alaska Fire Systems Permit hold if the repairs are done per the pipe schedule parameters set in NFPA 13. Additions must be indicated in requirement (2d) that it was done per pipe schedule and does not exceed the limitations of a pipe schedule system.

2. A person holding a Level B or C State of Alaska Fire Systems permit shall make the changes.
3. The person making the changes shall submit a letter to the permanent building fire system file in accordance with section 901.6.2.1 and 907.8, after the changes are made explaining what was changed, a simple diagram on 8 ½ x 11 paper of the changes, a statement verifying that the changes are in compliance with the appropriate standard/code, the permit number of the person who actually made the changes, and the signature of the person who performed the repairs.
4. The person who designed the changes shall provide a letter to the Fire Marshal's Office no later than thirty (30) days after the changes are made explaining the following: What was changed; a statement verifying that the changes are in compliance with the appropriate standard/code; the permit number of the person who actually made the changes; and the permit number and signature of the person who performed the design.

SECTION K104 Fire Protection System Reporting

K104.1 Reporting.

All fire service companies providing services in the Building Safety Service Area shall provide a legible copy of the fire system service report to the Division of Fire Prevention, Anchorage Fire Department. System service reports shall contain the following information:

1. Company name, address, and phone number.
2. Inspector's first and last name and State of Alaska Fire System Permit number issued under 13 AAC 50.035.
3. Contact phone number: office and cell if available.
4. System Status (1-4)
5. Deficiencies shall be typed or legibly hand written and shall be printed text (no cursive/long hand handwriting).
6. All reports shall have building name, occupancy inspected, and address clearly identified on the first page, and all subsequent pages shall have the building name and date of inspection on the top of the page.
7. All reports shall have the building contact person's name and phone number on the front page.
8. Only white or yellow copies will be accepted for reports submitted.
9. Deficiency write-ups must include the code citation that is in violation and a description of the problem.

K104.2 Fire system status.

Fire protection system service reports shall contain the status of the system serviced in accordance with K104.2.1 through K104.2.4.

K104.2.1 Status 1. Systems out of service or having identified major deficiencies shall be reported as Status 1. The fire service company shall immediately contact the Division of Fire Prevention at 267-4901, if the system cannot be returned to service. After-hours or on weekends, contact AFD dispatch at 267-4950. Written notification shall be faxed to the Fire Marshal's Office within 24 hours at 267-4958.

K104.2.1.1 Corrective action. Systems reported as Status 1 shall be repaired immediately. Building and facilities with systems reported as Status 1 shall comply with IFC 901.7 through 901.7.6, and AFD Fire watch policy 08-010.

K104.2.1.2 Qualifying deficiencies. Systems with deficiencies listed in K104.2.1.2.1 through K104.2.1.2.5 shall be reported as Status 1.

K104.2.1.2.1 Fire sprinkler or water based system:

1. Non-working flow/pressure switches.
2. Damage to fire department connections.
3. No water to system.
4. Frozen or otherwise damaged system.
5. Local sprinkler alarm not functioning.
6. Large quantities of corrosion scale or debris found when flowing of test connections, remote drains or water motor gong alarm lines. Clogged or plugged sprinkler heads, test ports or alarm lines.
7. Physically damaged piping, sprinkler heads or valves (such as from forklift strike).
8. Main drain test where residual pressure drops below 20 psi during flow of main drain.
9. Where any of the following occur:
 - All sprinkler heads are painted in any room exceeding 1000 square feet.
 - When 25% of sprinkler heads are painted within any building.
 - When 20 or more sprinkler heads are painted in any building.
10. Antifreeze systems where freeze protection is rated above 20° Fahrenheit.

K104.2.1.2.2 Fire pump:

1. Non-working fire pump.
2. Fire pump controls not working or malfunctioning.

3. Degradation of water supply below rating of pump, or any degradation causing cavitations of pump.

K104.2.1.2.3 Fire alarm system (detection and alarm):

1. Non-working fire alarm panel.
2. Malfunctioning fire alarm panel.
3. Audio and visual devices not working entire NAC loop.
4. Detection not working entire detection loop.
5. Loss of programming.
6. Audio & visual devices not working - more than three devices in building.
7. Detection devices not working - more than three devices in building.

K104.2.1.2.4 Kitchen hood fire system:

1. System cylinder is not charged or is leaking.
2. Appliance not properly covered due to rearrangement of appliances.
3. Plugged discharge nozzles.
4. Automatic detection not functional.
5. Fuel or electric power supply not shutting off.

K104.2.1.2.5 Required clean agent or special hazard system:

1. System cylinder is not charged or is leaking.
2. Releasing panel not functional.
3. Where any of the following occur:
 - New holes and/or openings in walls and ceilings.
 - Wall or ceiling removed in system area.
 - Faulty door closers where required.
 - In any room or system area, physical changes to the building which could change clean agent concentration level, which adversely impact systems ability to perform as designed.

K104.2.2 Status 2.

Systems with a critical deficiency shall be reported as Status 2. The fire service company shall contact the Division of Fire Prevention at 267-4900 or by fax at 267-4958 within 14 days from the date of inspection if the deficiency cannot be repaired and system returned to service. **Reports shall be sent to the Fire Marshals Office in a manner approved by the fire code official** ~~Written notification shall be faxed to the Fire Marshal's Office within 21 days. at 267-4958.~~

K104.2.2.1 Corrective action. Systems reported as Status 2 shall be repaired within 14 days.

K104.2.2.2 Qualifying deficiencies. Systems with deficiencies listed in K102.2.2.2.1 through K102.2.2.2.6 shall be reported as Status 2.

K104.2.2.2.1 Fire sprinkler or water based system:

1. Five or more painted sprinkler heads in a concentrated area or more than 10 in a facility.
2. Change of use in buildings which causes a change in the occupancy classification to a higher hazard occupancy.
3. Low water pressure - negative changes of 10% or more of static or residual pressures during main drain test from previous year test or from original flow information where available.
4. Any other major problem that will affect the performance - (bad trim valves, pressure switches, etc.).
5. No monitoring on required systems.
6. Five-year obstruction investigation not performed or not verifiable.
7. Water control valves that will not hold back water / allow water to leak by.

K104.2.2.2.2 Fire pump:

1. Low fuel
2. Pump packing leaking beyond specifications.
3. Fire pump room below 40 degrees.
4. Fire pump not meeting its rated discharge pressure or GPM flow over a 10% difference.
5. Any other major problem that will affect the performance.

K104.2.2.2.3 Fire alarm system (detection and alarm):

1. Batteries overdue for replacement.
2. No monitoring on required system.
3. Audio and visual devices not working – up to three devices; over three devices Status 1.
4. Detection not working – up to three devices; over three devices Status 1.
5. Any other major problem that will affect the performance.

K104.2.2.2.4 Kitchen hood fire system:

1. Hood and ducts with heavy grease buildup.
2. Any other major problems that will affect the performance.

K104.2.2.2.5 Required clean agent or special hazard system:

1. Room not properly sealed
2. Room size has changed
3. Expired Squibs
4. HVAC shut downs not properly working
5. Any other major problem that will affect the performance

K104.2.2.2.6 Non-required clean agent or special hazard system:

1. Room not properly sealed
2. Room size has changed
3. Expired Squibs
4. HVAC shut downs not properly working
5. Any other major problem that will affect the performance
6. System cylinder is not charged or is leaking.
7. Releasing panel not functional.
8. Wall or ceiling removed in system area.
9. Faulty door closers where required.
10. In any room or system area, physical changes to the building which could change clean agent concentration level, which adversely impact system's ability to perform as designed.

K104.2.3 Status 3.

Systems with a minor deficiency shall be reported as Status 3. Status 3 reports shall be provided to the Division of Fire Prevention **in a manner approved by the fire code official at 267-4901 or by fax at 267-4958** within 30 days from the date of inspection. These deficiencies will not affect the performance of the system.

K104.2.3.1 Corrective action. Systems reported as Status 3 shall be repaired within 30 days.

K104.2.3.2 Qualifying deficiencies. Systems with minor deficiencies such as missing signs, data plates, leaking ball drip, improperly identified zones in panel programming, and similar items which will not affect the ability of the system to perform in any way shall be reported as Status 3. Includes any items not included in Status 1 or Status 2, and defined by NFPA as deficiencies.

K104.2.4 Status 4.

System with no deficiencies shall be reported as Status 4. Status 4 reports shall be provided to the Division of Fire Prevention **in a manner approved by the fire code official at 267-4901 or by fax at 267-4958** within 30 days from the date of inspection.