

Chapter 23.45 LOCAL AMENDMENTS TO THE INTERNATIONAL FIRE CODE 2018 EDITION

The amendments to the 2018 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 (2018 Edition).

(AO No. 2020-85, § 1, 10-27-20)

23.45.105.4.2 Information on construction documents.

Amend Section 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 in accordance with 13 AAC 50.027 or a professional fire protection engineer, mechanical engineer or electrical engineer registered under AS 08.48. Plans shall include the following on each drawing:

1. Original signature and date on professional seal, or digital signature and date on professional seal.
2. State of Alaska Fire System Permit license number with permit level designation or Engineer license number; and date.

(AO No. 2020-85, § 1, 10-27-20)

23.45.105.6 Required operational permits.

Amend Section 105.6 by adding Section 105.6.51:

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

(AO No. 2020-85, § 1, 10-27-20)

23.45.105.7 Required Construction Permits.

Amend Section 105.7 as follows:

Delete Section 105.7.25.

Add Section 105.7.26.

105.7.26 Energy Systems. A construction permit is required to install Energy Systems where required by Section 1203.2.

Add Section 105.7.27.

105.7.27 Access Control Systems. A construction permit is required to install access control systems that delay egress or electrically lock egress doors.

Add Section 105.7.28.

105.7.28 Modification of fire protection, gas detection, energy, access control or life safety systems. A construction permit is required to modify any fire protection, gas detection, energy, access control or life safety system as set forth in this section.

105.7.28.1 Fire protection, gas detection, energy, access control or life safety systems modified or repaired shall be in accordance with the requirements set forth in Section 105.7.28. Maintenance of fire protection, gas detection, energy, access control or life safety systems, including like-for-like change of system devices totaling not more than 20% of the devices or equipment per floor or system whichever is less, do not require a permit unless specifically required by Section 105.7.28.

105.7.28.2 PERMITS.

105.7.28.2.1 General.

Permits shall be issued by the Fire Code Official. The building owner shall maintain a record of all system modifications in accordance with Section 901.6.3.

105.7.28.2.2 Plan review requirements.

Plan review shall be required, unless otherwise approved by the fire code official, whenever a system required by 105.7 is modified.

105.7.28.2.3 Permit requirements.

Whenever a permit is required by Section 105.7, a separate permit application shall be submitted along with all supporting documentation to the fire code official.

105.7.28.2.4 System modifications requiring a permit.

A permit shall be required in accordance with Sections 105.7.28.2.4.1 through 105.7.28.2.4.13.

105.7.28.2.4.1 New or replacement fire protection, energy or life safety system. A permit is required for all new and replacement fire protection, energy or life safety systems, whether the system is required or not.

105.7.28.2.4.2 Fire sprinkler and water-based systems. A permit is required for fire sprinkler and water-based systems under any of the following conditions:

- a. Relocation or addition of sprinkler heads to a system riser.
- b. Replacement of conventional sprinklers and piping with flexible piping and sprinklers.
- c. Changes to piping that require seismic bracing.
- d. 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. 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 having a 0.2 gpm/sf or greater density.
- j. At the discretion of the fire official, sufficient changes to a system or occupancy/use that minimum design density requirements and/or seismic bracing requirements must be verified.
- k. Pipe schedule systems must have a plan review completed if the changes will affect pipe size anywhere other than on a branch line or any of the above requirements.
- l. Change out of dry or pre-action sprinkler valves.

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- m. Changes to a sprinkler system with extended coverage heads.
 - n. Changes to a sprinkler system with residential heads.

105.7.28.2.4.3 Backflow prevention device. A permit including drawings and hydraulic calculations shall be required for installation of a Backflow Prevention Device under the following conditions:

- a. A backflow prevention device installed on a water-based fire system that previously did not have a backflow device.
- b. Replacement of a backflow prevention device.
- c. Changing a backflow prevention device from a double check to a reduce pressure backflow device.
- d. Backflow prevention devices installed on tank supply lines.

105.7.28.2.4.4 Fire alarm system. A permit is required for fire alarm systems under the following conditions:

- a. Fire alarm control panel is replaced or upgraded. Note that a full visual upgrade is required per the IFC Section 907.5.2.3, Exception 1.
- b. Any changes to a networked fire alarm system.
- c. Addition of a booster power supply.
- d. Addition of initiating/monitoring/control devices to a fire alarm system.
- e. Addition of fire alarm notification to any fire alarm system.
- f. Fire alarm panel replacement like-for-like.
- g. Installation of a communication device to transmit alarm, trouble, supervisory or other signals to a supervising station.

105.7.28.2.4.5 Kitchen hood fire systems. A permit is required for kitchen hood fire systems under the following conditions:

- a. Addition of nozzles to a system.
- b. Addition of agent cylinders.
- c. Addition of larger agent cylinder.
- d. Installation of a relocated system.

105.7.28.2.4.6 Special hazard fire systems. A fire systems permit is required for special hazard fire systems under the following conditions:

- a. Addition or modification to the system.
- b. Installation of a relocated system.

105.7.28.2.4.7 Fire standpipe system. A fire systems permit is required for fire standpipe systems under the following conditions:

- a. Addition or modification to the system.

105.7.28.2.4.8 Fire Pump. A fire systems permit is required for fire pumps under the following conditions:

- a. Addition to the system.
- b. Change out of the fire pump.
- c. Change out of the fire pump controller.

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- d. Modifications to piping arrangements.
 - e. Change out or rebuilding of electric motor or diesel engine.
 - f. Changes to electrical service.

105.7.28.2.4.9 Gas Detection System. A permit is required for a gas detection system under the following conditions:

- a. Changes to the approved or required detection levels.
- b. Change out of the system controller.
- c. Expansion of the system.
- d. Modifications to detection coverage arrangement.

105.7.28.2.4.10 Energy System. A permit is required for an energy system under the following conditions:

- a. Rebuilding of engine or generator unit.
- b. Replacement of transfer switch.
- c. Relocation of any wiring or equipment.
- d. Change of fuel supply type or size.
- e. Change to an energy system regulated under Section 1203.

105.7.28.2.4.11 Life Safety System. A permit is required for life safety systems as regulated by Chapter 9 under the following conditions:

- a. Change out of the system controller.
- b. Expansion of the system.
- c. Modification to the system.

105.7.28.2.4.12 Access Control System. A permit is required for any modification to an access control system that has delayed egress or electronically controlled egress doors.

105.7.28.2.4.13 Demolition of Fire Protection System and Life Safety System. A demolition permit is required for demolition or partial removal of any fire protection system and life safety system under the following conditions:

- a. Removal of fire protection system.
- b. Removal of gas detection system.
- c. Removal of energy system regulated under Section 1203.
- d. Removal of life safety system regulated by Chapter 9.

105.7.28.2.5 Retrofit Permits. Retrofit permits are limited to projects involving fire alarm, fire sprinkler and kitchen fire system where design is not required by Fire Code Official. Fire alarm, fire sprinkler and kitchen fire system retrofit permits are permitted to be used on the same project. Plan review is not required, and retrofit permits are limited in scope-of-work as follows:

- a. Relocation of 4 to 14 standard spray fire sprinkler heads.
- b. Addition of 3 to 6 standard spray fire sprinkler heads.
- c. Where 2 to 3 conventional sprinkler heads and piping are replaced with flexible piping and sprinkler heads.
- d. Addition of 3 to 10 initiation/monitoring/control devices to a fire alarm system.

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- e. Addition of 2 to 5 notification devices of 75 candela or less to a fire alarm system.
 - f. Kitchen hood fire system re-piping of the system for new appliance layout.
 - g. Addition of up to 2 kitchen hood fire system nozzles with a maximum total of 3 nozzle flow points are allowed to be added to a system not exceeding maximum allowable flow points of the cylinder.

Fire alarm, fire sprinkler and kitchen fire systems exceeding the above listed parameters require design in accordance with Section 105.7. A commercial alteration permit is required.

105.7.28.2.4.5.1 Retrofit permit close out. Where changes are made to fire systems utilizing a retrofit fire system permit, the following actions shall be required by the company and individual making the changes to close out the permit.

1. Modifications shall have design and install oversight by a person holding a Level C State of Alaska Fire Systems Permit.
Exception: Sprinkler head additions shall be documented by a Level IIB or IIC State of Alaska Fire Systems Permit holder when the repairs are done per the pipe schedule parameters set forth in NFPA 13. Additions must be indicated on the original sprinkler plans 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 an installer's certification letter to the permanent building fire system record located at the site where the installation was completed in accordance with Section 901.6.3 and a copy to the fire code official containing the following.
 - a. A diagram on 8 ½ x 11 paper of the changes made to the fire system.
 - b. Written description of the changes to the fire system. Included but not limited to battery calculations, sound pressure levels, system components compatibility, circuit capacity loads, wiring diagrams showing the connection between new and existing systems, piping diagrams, tank size with flow points used.
 - c. A statement verifying that the changes are in compliance with the appropriate standard/codes and manufacturer's installation manuals.
 - d. State of Alaska Fire System Permit number of person making the changes.
 - e. Printed name and signature of the person performing the system modifications.
 - f. Printed name and signature of a level C State of Alaska Fire System permit holder certifying modification does not exceed system design limitations.
4. Completed installer's certification shall be submitted to the fire code official at 907-343-8438 within 30 days of work completion.
5. Schedule a final inspection within 30 days of work completion. Inspections are permitted to be closed out by the Fire Code Official without a physical inspection following receipt of Installer's Certification paperwork.

105.7.28.2.6 Fire systems not requiring permit.

A permit is not required for installations or modifications with work quantities less than specified in section 105.7.28. The following actions shall be required by the company/individual making the changes:

1. Modifications shall have design and install oversight by a person holding a Level C State of Alaska Fire Systems Permit.

Exception: Sprinkler head additions shall be documented by a Level IIB or IIC State of Alaska Fire Systems Permit holder when the repairs are done per the pipe schedule parameters set forth in NFPA 13. Additions must be indicated on the original sprinkler plans 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 an installer's certification letter to the permanent building fire system record located at the site where the installation was completed in accordance with Section 901.6.3 and a copy to the fire code official containing the following.
 - a. A diagram on 8½ × 11 paper of the changes made to the fire system.
 - b. Written description of the changes to the fire system. Included but not limited to battery calculations, sound pressure levels, system components compatibility, circuit capacity loads, wiring diagrams showing the connection between new and existing systems, piping diagrams, tank size with flow points used.
 - c. A statement verifying that the changes are in compliance with the appropriate standard/codes and manufactures instructions.
 - d. State of Alaska Fire System Permit number of the person who actually made the changes.
 - e. Printed name and signature of the person who performed the system modifications.
 - f. Printed name and Signature of a level C State of Alaska Fire System permit holder certifying modification do not exceed system design limitations.
4. Completed installers certification shall be submitted to the fire code official at 907-343-8438 within 30 days of work completion.

(AO No. 2020-85, § 1, 10-27-20)

23.45.202 General Definitions.

Amend Section 202 by adding the following definitions:

DRIVEWAY. A vehicular ingress and egress route that serves no more than two buildings, not including accessory structures, or more than five dwelling units.

LIMITED ACCESS ROADWAY. A vehicular ingress and egress route located in a right-of-way that serves no more than four single-family dwelling units or lots.

(AO No. 2020-85, § 1, 10-27-20; AO No. 2021-88(S), § 13, 2-15-22)

23.45.308.1.4 Open-flame cooking devices.

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

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

(AO No. 2020-85, § 1, 10-27-20)

23.45.401.3 Emergency responder notification.

Amend by adding 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 systems shall pay a charge in accordance with AMC Section 14.70.190 for false alarms 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.

(AO No. 2020-85, § 1, 10-27-20)

23.45.403.1 General.

Amend 403.1 as follows: change 403.12.3.3 to 403.13.4.3.

(AO No. 2020-85, § 1, 10-27-20)

23.45.403.10.3 Group R-3 custodial care/assisted living facilities and Group R-4 occupancies.

Amend Section 403.10.3 by replacing 403.10.3 with:

403.10.3 Group R-3 custodial care/assisted living facilities and Group R-4 occupancies. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group R-3 custodial care/assisted living facilities and Group R-4 occupancies. Group R-3 custodial care/assisted living facilities and Group R-4 occupancies shall comply with Sections 403.10.3.1 through 403.10.3.6.

(AO No. 2020-85, § 1, 10-27-20)

23.45.403 Emergency Preparedness Requirements.

Amend Section 403 by adding a Section 403.13 as follows:

403.13 Occupants needing physical assistance. Facilities housing occupants needing physical assistance shall comply with this Section.

403.13.1 Applicability. The provisions of this Section apply to Group I-1 Institutional and Group R-3 Custodial Care/Assisted Living Facilities and Group R-4 facilities where the occupants require physical assistance from staff or others to respond to an emergency.

403.13.2 Definitions. The following terms and definitions are to be utilized for occupants needing physical assistance, section 403.13.

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 403.13.3.

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 403.13.3.

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 403.13.3.

403.13.3 Fire drills. A fire drill conducted by the Fire Code Official or other approved agencies that have oversight of the 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 Code Official or other approved agencies that have oversight of the licensee.

Fire drills with all occupants participating 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. Residents who resisted or failed to participate in the drills shall be classed as impractical capability and corrected per 403.13.4.3. 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.

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

403.13.4.1 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.

403.13.4.2 Slow evacuation capability. Evacuation capability of more than three but less than 14 minutes indicates slow evacuation capability. Facilities maintaining slow evacuation capability shall be protected by an automatic fire sprinkler system in accordance with Section 903.

Additionally, Group I-1 and R-4 facilities maintaining slow evacuation capability shall be protected by an automatic smoke detection system using addressable smoke detectors in accordance with the provisions of this code.

403.13.4.3 Impractical evacuation capability. Evacuation capability of fourteen minutes or more indicates impractical evacuation capability. Impractical evacuation capability is not allowed and must be corrected immediately with additional staff or relocation of residents to an appropriate facility that can meet the level of care required.

(AO No. 2020-85, § 1, 10-27-20)

23.45.502.1 Local Amendment Repealed.

(AO No. 2020-85, § 1, 10-27-20; AO No. 2021-88(S), § 14, 2-15-22)

23.45.503 Fire apparatus access roads.

Amend Section 503.1 by adding the following sentence:

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

Amend Section 503 by adding 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 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 and a minimum unobstructed height of 13 feet 6 inches.

503.7.2 Length. Driveways in excess of 150 feet in length shall be provided with a turnaround. Driveways in excess of 200 feet in length and less than 20 feet in width shall be provided with a turnout in addition to a turnaround.

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 wide and 30 feet long. Driveway turnouts shall be located as required by the fire code official.

(AO No. 2020-85, § 1, 10-27-20)

23.45.506.1.2 Key boxes for nonstandardized fire service elevator keys.

Revise the wording in Item 1 to read as follows:

The key cylinder for the Elevator key box shall be of a tubular, 7 pin, style 137 construction and shall have a biting 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".

(AO No. 2020-85, § 1, 10-27-20)

23.45.507.1 Required water supply.

Amend Section 507.1 by adding the following exception:

Exception: In areas of the jurisdiction not served by a water utility the following structures do not require a water supply:

1. Detached one- and two-family dwellings, townhouses and related accessory structures;
2. Structures accessory to detached one- and two-family dwellings and regulated by the International Residential Code having 3,000 square feet or less gross floor area;
3. Structures classified as a Group U occupancy in accordance with the International Building Code having 3,000 square feet or less gross floor area;
4. Structures classified as a Group U occupancy in accordance with the International Building Code in excess of 3,000 square feet of gross floor area and protected throughout by an approved automatic fire sprinkler system;
5. Buildings protected throughout by an approved automatic fire sprinkler system and constructed of Type I-A or I-B construction in accordance with the International Building Code;
6. Buildings protected throughout by an approved automatic fire sprinkler system and constructed of Type II-A construction when Type II-B construction is allowed based on occupancy classification, allowable height and allowable area in accordance with the International Building Code;

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7. Buildings protected throughout by an approved automatic fire sprinkler system and constructed of Type III-A construction when Type III-B construction is allowed based on occupancy classification, allowable height and allowable area in accordance with the International Building Code; and
 8. Buildings protected throughout by an approved automatic fire sprinkler system and constructed of Type V-A construction when Type V-B construction is allowed based on occupancy classification, allowable height and allowable area in accordance with the International Building Code.

(AO No. 2020-85, § 1, 10-27-20)

23.45.606.7 Elevator key location.

Amend by adding the following language to 606.7:

Building owners/managers shall have 2 years from the date of adoption of this requirement or at the time of elevator modernization per ASME A17.3 to complete the following for all existing buildings with elevators. The keys to be provided in the elevator key Knox Box model #1404 and 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 cabinet. All keys shall be marked for their intended use.

(AO No. 2020-85, § 1, 10-27-20)

23.45.901.6.3 Records.

Amend Section 901.6.3 by adding the following to the end of the Section:

Records shall be copied to the fire code official in accordance with Appendix I.

(AO No. 2020-85, § 1, 10-27-20)

23.45.901.6 Inspection, testing and maintenance.

Amend 901.6 by adding Section 901.6.4 as follows:

901.6.4 Sound level check. The fire alarm sound pressure levels shall be checked annually in Group R and I-1 occupancies in the following locations:

1. Common areas.
2. Sleeping areas, a minimum of 15% of the units per floor with a minimum of 2 units per floor.

(AO No. 2020-85, § 1, 10-27-20)

23.45.901.11 Registration of monitoring company.

Amend section 901 by adding Section 901.11 as follows:

901.11 Registration of monitoring company. All companies that provide Central Station Service, Proprietary Supervision Station or Remote Supervising Station alarm monitoring, as required by IFC, IBC and NFPA 72, shall annually register with the Anchorage Fire Department Fire Prevention Division. A company failing to register shall be subject to fines AMC Title 10.75.010C3.

(AO No. 2020-85, § 1, 10-27-20)

23.45.901.12 Registration of fire and life safety company.

Amend Section 901 by adding Section 901.12 as follows:

901.12 Registration of fire and life safety company. A company that performs inspection(s), install, repairs or maintains a fire protection system or life safety system shall register with the Anchorage Fire Department Fire Prevention Division on an annual basis. A company failing to register shall be subject to fines AMC Title 10.75.010C3.

(AO No. 2020-85, § 1, 10-27-20)

23.45.903.2.3 Group E.

Revise 903.2.3 to read as follows:

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 having an occupant load of 49 or less.

Daycare uses licensed to care for more than five 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.

(AO No. 2020-85, § 1, 10-27-20)

23.45.903.2.8 Group R.

Amend Section 903.2.8 by adding the following section:

23.45.903.2.8.5 Group R-2.

An automatic sprinkler system installed in accordance with Section 903.3.1.3 shall be permitted in Group R-2 occupancies with 4 or fewer dwelling units.

(AO No. 2023-130(S), § 5, 1-16-24)

23.45.903.2.11 Specific building areas and hazards.

Amend Section 903.2.11 by changing "903.2.11.6" to "903.2.11.7".

Amend Section 903.2.11 by adding the following section:

903.2.11.7 Sprinkler systems shall not be allowed in elevator machine rooms/spaces or control room/spaces and at the tops of hoistways, except as required by NFPA 13.

(AO No. 2020-85, § 1, 10-27-20)

23.45.903.3 Installation requirements.

Amend 903.3 by changing "903.3.8" to "903.3.9".

(AO No. 2020-85, § 1, 10-27-20)

23.45.903.3.1.3 NFPA 13D sprinkler systems.

Amend section 903.3.1.3 by adding the following sections:

903.3.1.3.1 Group R-3 care facilities and Group R-4, Condition 1 occupancies. An automatic sprinkler system serving a Group R-3 care facility or Group R-4, Condition 1 occupancy shall have a minimum 30 minute water supply or a minimum 20 minute water supply with fire department connection (FDC). Fire sprinkler protection shall be provided in attached garages.

23.45.903.3.1.3.2 Group R-2 with 4 or fewer dwelling units. Automatic sprinkler systems installed in Group R-2 occupancies with 4 or fewer dwelling units shall be permitted to be installed throughout in accordance with NFPA 13D. A fire department connection shall be installed in accordance with Section 912. Automatic sprinkler protection shall be provided in attached garages. Systems shall be monitored in accordance with Section 903.4.

(AO No. 2020-85, § 1, 10-27-20; AO No. 2023-130(S), § 6, 1-16-24)

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 and pressure safety factor at the water source. Hydrant flow test shall be witnessed by the fire code official or their designee.

(AO No. 2020-85, § 1, 10-27-20)

23.45.903.3.9 Seismic Design.

Add a new Section 903.3.9 as follows:

903.3.9 Seismic Design. Fire sprinkler systems shall have a minimum seismic design coefficient C_p of 0.72 or greater as by NFPA 13.

(AO No. 2020-85, § 1, 10-27-20)

23.45.903.4 Sprinkler system supervision and alarm.

Amend exception number 1 by adding the following to the end of the sentence: "not used as an assisted living or custodial care facility."

(AO No. 2020-85, § 1, 10-27-20)

23.45.907.2 Where required - new buildings and structures.

Amend Section 907.2 by replacing "907.2.23" with "907.2.24".

Add new Section 23.45.907.2.24 Group R-4.

(AO No. 2020-85, § 1, 10-27-20)

23.45.907.2.1 Group A.

Delete Exception.

(AO No. 2020-85, § 1, 10-27-20)

23.45.907.2.2 Group B.

Delete Exception.

(AO No. 2020-85, § 1, 10-27-20)

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 within a Group E day care shall be provided with smoke alarms that comply with Section 907.2.10.2.

Delete Exceptions 3 and 4.

(AO No. 2020-85, § 1, 10-27-20)

23.45.907.2.4 Group F.

Delete Exception.

(AO No. 2020-85, § 1, 10-27-20)

23.45.907.2.7 Group M.

Delete Exception 2.

(AO No. 2020-85, § 1, 10-27-20)

23.45.907.2.8.1 Group R-1: Manual fire alarm system.

Delete Exception 2.

(AO No. 2020-85, § 1, 10-27-20)

23.45.907.2.9.1 Group R-2: Manual fire alarm system.

Amend section 907.2.9.1 by deleting the 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 any of the following conditions apply:

Delete Exception 2.

(AO No. 2020-85, § 1, 10-27-20)

23.45.907.2 Fire Alarm and Detection Systems - Where Required - New Buildings and Structures.

Add the following section:

907.2.24 Group R-4: Manual and Automatic Fire Alarm System. Fire alarm systems and smoke alarms shall be installed in Group R-4 assisted living or custodial care occupancies as required in Sections 907.2.24.1 through 907.2.24.3.

907.2.24.1 Manual fire alarm system. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group R-4 assisted living or custodial care facilities.

Exceptions:

1. A manual fire alarm system is not required in buildings not more than two stories in height where all individual sleeping units and contiguous attic and crawl spaces to those units are separated from each other and public or common areas by at least 1-hour fire partitions and each individual sleeping unit has an exit directly to a public way, egress court or yard.
2. Manual fire alarm boxes in resident or patient sleeping areas shall not be required at exits where located at all nurses' control stations or other constantly attended staff locations, provided such stations are visible and continuously accessible and that travel distances required in Section 907.4.2.1 are not exceeded.

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

Exceptions:

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

907.2.24.3 Smoke alarms. Single- and multiple-station smoke alarms shall be installed in accordance with Section 907.2.10.

(AO No. 2020-85, § 1, 10-27-20)

23.45.907.5.2.1 Audible alarms.

Amend Section 907.5.2.1 by adding the following section:

907.5.2.1.3 Minimum sound pressure. The minimum sound pressure level in every occupiable space shall be 75 dBA in Group I-1 and R occupancies and 60 dBA in all other occupancies.

(AO No. 2020-85, § 1, 10-27-20)

23.45.907.5.2.3 Visible alarms.

Amend section 907.5.2.3 by adding the following to Exception No. 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.)

(AO No. 2020-85, § 1, 10-27-20)

23.45.907.6.1 Wiring.

Amend Section 907.6.1 by adding the following:

Exposed wiring, transformers and equipment installed below 7 feet above finished floor shall be protected from physical damage by an enclosure, raceway or metallic cable.

(AO No. 2020-85, § 1, 10-27-20)

23.45.907.6.2 Power supply.

Amend 907.6.2 by adding the following:

Exposed wiring, transformers and equipment installed below 7 feet above finished floor shall be protected from physical damage by an enclosure, raceway or metallic cable.

(AO No. 2020-85, § 1, 10-27-20)

23.45.907.6.6 Monitoring.

Amend exception number 3 by adding the following to the end of the sentence: "not used as an assisted living or custodial care facility".

(AO No. 2020-85, § 1, 10-27-20)

23.45.915 Carbon Monoxide Detection.

Amend Section 915.1 as follows:

915.1 General. Carbon monoxide detection shall be installed in new buildings in accordance with Sections 915.1.1 through 915.6 and NFPA 72. Carbon monoxide detection shall be installed in existing buildings in accordance with IFC Section 1103.9 and NFPA 72.

(AO No. 2020-85, § 1, 10-27-20)

23.45.915.5.1 General.

Amend Section 915.5.1 by replacing NFPA 720 with NFPA 72.

(AO No. 2020-85, § 1, 10-27-20)

23.45.915.5.2 Locations.

Amend Section 915.5.2 by replacing NFPA 720 with NFPA 72.

(AO No. 2020-85, § 1, 10-27-20)

23.45.915.6 Maintenance.

Amend Section 915.6 by replacing NFPA 720 with NFPA 72.

(AO No. 2020-85, § 1, 10-27-20)

23.45.1007.1.2 Three or more exits or exit access doorways.

Amend Section 1007.1.2 to read as follows:

1007.1.2 Three or more exits or exit access doorways. Where access to three or more exits is required, not less than two exit or exit access doorways shall be arranged in accordance with the provisions of Section 1007.1.1. Three exits or exit access doorways shall be separated from each other by a minimum distance of one-third the maximum overall diagonal dimension of the area served. Additional required exit or exit access doorways shall be arranged a reasonable distance apart so that if one becomes blocked, the others will be available.

(AO No. 2020-85, § 1, 10-27-20)

23.45.1010.1.9.12 Stairway doors.

Amend Section 1010.1.9.12 by adding the following:

Where a building is protected by an automatic sprinkler system in accordance with Section 903 or a fire alarm system in accordance with Section 907, including automatic smoke detection located at the top and every other landing in stairways, doors are permitted to be locked opposite the egress side, provided they are openable from the egress side and shall be unlocked simultaneously without unlatching upon sprinkler waterflow or activation of occupant notification devices.

(AO No. 2020-85, § 1, 10-27-20)

23.45.1010.1.9 Door operations.

Amend by adding Section 1010.1.9.13 as follows:

1010.1.9.13 Electrically locked egress doors from elevator lobbies. For elevator lobbies not having direct access to an egress stair, the lobby doors may be electrically locked to secure all or part of a floor. In addition to the requirements of Section 1010.1.9.9 or 1010.1.9.10, a manual unlocking device listed in accordance with UL 294 shall be provided within 12 inches of the door frame and is clearly labeled "Pull handle (or push button) to release door".

(AO No. 2020-85, § 1, 10-27-20)

23.45.1103.1 Required construction.

Amend Section 1103.1.

Replace 1103.10 with 1103.12.

(AO No. 2020-85, § 1, 10-27-20)

23.45.1103.3.1 Elevators, escalators and moving walks.

Amend Section 1103.3.1 by adding a Section 1103.3.1.1 as follows:

1103.3.1.1 Compliance date. Buildings have until January 1, 2025 to comply with 1103.3.1.

(AO No. 2020-85, § 1, 10-27-20)

23.45.1103.3.2 Elevator emergency operation.

Amend Section 1103.3.2 by adding a Section 1103.3.2.1 as follows:

1103.3.2.1 Compliance date. Buildings where the elevator(s) have a rise of 75 feet or greater shall have until January 1, 2021 to comply with 1103.3.2. Buildings where the elevator(s) have a rise of less than 75 feet shall have until January 1, 2025 to comply with 1103.3.2.

(AO No. 2020-85, § 1, 10-27-20)

23.45.1103.5.3 Group I-2, Condition 2.

Replace "as established by the adopting ordinance" with "by January 1, 2022."

(AO No. 2020-85, § 1, 10-27-20)

23.45.1103.5 Sprinkler systems.

Replace "and 1103.5.4" with "through 1103.5.6".

Add two new sections as follows:

1103.5.5 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.

1103.5.6 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.

(AO No. 2020-85, § 1, 10-27-20)

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 Group E, I-2, and I-3 occupancies."

(AO No. 2020-85, § 1, 10-27-20)

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

Delete Exception #2.

(AO No. 2020-85, § 1, 10-27-20)

23.45.1103.8.1 Where required.

Amend Section 1103.8.1 by deleting Exception Nos. 1 and 2.

(AO No. 2020-85, § 1, 10-27-20)

23.45.1103.11 Monitoring.

Amend section 1103 by adding Section 1103.11 as follows:

1103.11 Monitoring. Monitoring shall be provided for all existing occupancies with fire sprinkler or fire alarm systems. Fire sprinkler system monitoring shall comply with Sections 903.4 and 903.4.1. Fire alarm monitoring shall comply with Section 907.6.6.

1103.11.1 Compliance Date. Group I and R occupancies shall be in compliance by January 1, 2023. All other occupancies shall be in compliance by January 1, 2025.

(AO No. 2020-85, § 1, 10-27-20)

23.45.1103.12 Group I-1, R-3 and R-4 occupancies.

Amend section 1103 by adding subsection 1103.12 as follows:

1103.12 Group I-1, R-3 and R-4 occupancies. An automatic fire sprinkler system shall be installed throughout all existing Group I-1 facilities, and Group R-3 and R-4 custodial care/assisted living facilities in accordance with Section 903 of this Code. Occupancies shall be in compliance by January 1, 2024.

(AO No. 2020-85, § 1, 10-27-20)

23.45.1204.2.1 Solar photovoltaic systems for Group R-3 buildings.

Add the following exception:

3. Roof access, pathways and setback requirements do not apply to photovoltaic systems installed on a single roof plane of a building having multiple roof planes where such roof plane is not located below or provide access to an emergency escape and rescue opening.

(AO No. 2020-85, § 1, 10-27-20)

23.45.1206.2.11.1 Fire-extinguishing systems.

Change reference "Chapter 5 of NFPA 13" to Chapter 20 of NFPA 13.

(AO No. 2020-85, § 1, 10-27-20)

23.45.1206.3.5.1 Fire-extinguishing systems.

Change reference "Chapter 5 of NFPA 13" to Chapter 20 of NFPA 13.

(AO No. 2020-85, § 1, 10-27-20)

23.45.2006.3 Construction of aircraft-fueling vehicles and accessories.

Revise 2006.3 by adding Exceptions 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.

(AO No. 2020-85, § 1, 10-27-20)

23.45.3103.5 Use period.

Add an exception to read as follows:

Exception: Seasonal Use Structures permitted under AMC 23.10.104.3.

(AO No. 2020-85, § 1, 10-27-20)

23.45.3107.12 Heating and cooking equipment.

Amend 3107.12 by adding at the end of the sentence:

"unless as otherwise approved by the fire code official."

23.45 Chapter 80 Referenced standards.

Amend the Reference Standards as follows:

Change NFPA 13-16 to NFPA 13-19: Standard for the Installation of Sprinkler Systems.

Change NFPA 13D-16 to NFPA 13D-19: Standard for the Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Homes.

Change NFPA 13R-16 to NFPA 13R-19: Standard for the Installation of Sprinkler Systems in Low-rise Residential Occupancies.

Change NFPA 20-16 to NFPA 20-19: Standard for the Installation of Stationary Pumps for Fire Protection.

Change NFPA 25-17 to NFPA 25-20: Standard for the Inspection, Testing and Maintenance of Water-based Fire Protection Systems.

Change NFPA 72-16 to NFPA 72-19: National Fire alarm and Signaling Code.

Change NFPA 2001-15 to NFPA 2001-18 Stand on clean Agent Fire Extinguishing Systems.

Add NFPA 291-19 Recommender Practice for Fire Flow Testing...Ref. 507.5.2.

(AO No. 2020-85, § 1, 10-27-20)

23.45 Appendices.

Adopt appendices B, C, D, F and I.

(AO No. 2020-85, § 1, 10-27-20)

23.45.B105.1 One- and two-family dwellings, Group R-3 and R-4 buildings and townhouses.

Amend Section B105.1 by adding the following exception:

Exception: Buildings protected throughout with an approved automatic fire sprinkler system.

(AO No. 2020-85, § 1, 10-27-20)

23.45.B105.2 Buildings other than One- and two-family dwellings, Group R-3 and R-4 buildings and townhouses.

Amend Section B105.2 by adding the following exception:

Exception: Group U occupancies and accessory structures having 3,000 square feet or less gross floor area.

(AO No. 2020-85, § 1, 10-27-20)

23.45.D102.1 Access and loading.

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

(AO No. 2020-85, § 1, 10-27-20)

23.45.D103.2 Grade.

Replace both instances of "10 percent" with "12 percent."

(AO No. 2021-88(S), § 15, 2-15-22)

23.45.D103.4 Dead ends.

Amend Section D103.4 by adding the following exception:

Exception: For one- and two-family dwellings, only dead-end fire apparatus access roads in excess of 250 ft. shall be provided with turnaround provisions in accordance to Table D103.4.

(AO No. 2021-88(S), § 16, 2-15-22)

23.45. Appendix I Fire Protection Systems - Noncompliant Conditions.

Delete I102 Referenced Standards and replace with the following:

23.45.I102 FIRE, GAS DETECTION, ENERGY SYSTEMS AND LIFE SAFETY SYSTEMS STATUS REPORTING.

I102.1 Scope.

Fire, gas detection, energy and life safety system service reports shall be in accordance with this appendix and all other applicable requirements of the International Fire Code, NFPA Standards, Manufactures instructions and other governing codes.

I102.2 Definitions.

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

Status 1 - Impairment/Out of order. A condition where a fire, gas detection, energy or life safety system or portion thereof is out of order, and the condition can result in the fire, gas detection, energy or life safety system not functioning in an event.

Status 2 - Critical Deficiency. A deficiency that, if not corrected, can have a material effect on the ability of the fire, gas detection, energy, or life safety system, to function as intended in an event.

Status 3 - Noncritical Deficiency. A deficiency that does not have a material effect on the ability of the fire, gas detection, energy or life safety system to function in an event, but correction is needed to meet the requirement of fire, gas detection, energy or life safety standard, manufactures instructions or other governing codes for the proper inspection, testing and maintenance of the system or unit.

Status 4 - No Deficiencies. The fire, gas detection, energy or life safety system is operational with no impairment, critical or noncritical deficiencies.

I102.3 Reporting of Fire, Gas Detection, Energy and Life System Inspections.

A report shall be generated for all Fire, Gas Detection, Energy and Life Safety Systems. Inspections and Corrective Action repair/corrections provided within the Building Safety Service Area. The providing entity/company shall send a legible copy of the report, including observation reports, suggestions, notes, etc., to the Division of Fire Prevention, Anchorage Fire Department or appointed fire department representative. Said report shall contain the following information per I102.3.1 through I102.3.4.

I102.3.1 Requirement for 1st page of inspection report.

- a. Service company.
 - i. Name.
 - ii. Address.
 - iii. Phone Number.
- b. Service location.

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- i. Property management company or owners name.
 - a. Point of contact name.
 - b. Phone number.
 - c. Address.
 - d. Email address.
 - ii. Inspected property.
 - a. Building name.
 - b. Address.
 - c. Point of contact name.
 - d. Phone number.
 - e. Email address.
 - c. Date of Inspection.
 - d. Inspection Type:
 - i. Fire Alarm.
 - ii. Fire Sprinkler.
 - iii. Fire Pump.
 - iv. Generator, emergency or legally required standby.
 - v. Gas Detection.
 - vi. Life Safety System.
 - vii. Kitchen Fire System.
 - viii. Other inspections not addressed.
 - e. Inspection Frequency:
 - i. Annual.
 - ii. Semi-annually.
 - iii. Quarterly.
 - iv. Monthly.
 - v. Other frequencies not addressed.
 - f. Building occupancy type as shown in 2018 IBC Section 202.
 - g. Inspector Information.
 - i. First and last name.
 - ii. Email address.
 - iii. Cell phone number.
 - iv. State of Alaska Fire System Permit number issued under 13 AAC 50.035.
 - v. Certification number for other systems.

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- h. System Status Number.
 - i. Determined System Status Number shall be located on the 1st page in the upper right corner.
 - ii. System Status Number 1, 2, 3 or 4 shall be determined in accordance with Section I102.4.
 - i. Deficiencies.
 - i. Typed or legibly handwritten (no cursive/long hand handwriting).
 - ii. Deficiency write-ups must include the code citation in violation and a description of the problem.
 - iii. All deficiencies shall be listed together on the report.
 - j. Only white or yellow copies will be accepted for submitted reports.

I102.3.2 Requirement for additional pages of the inspection report.

- a. Building name (located on top of the report page).
- b. Date of service (located on top of the report page).

I102.3.3 Requirement of Corrective Actions reports.

- a. Service Company.
 - i. Name.
 - ii. Address.
 - iii. Phone number.
- b. Service location.
 - i. Building name.
 - ii. Address.
 - iii. Point of contact name for the property management company or owner.
 - iv. Phone number.
 - v. Email address for the property management company or owner.
- c. Date of Repairs.
- d. Repairs or corrections.
 - i. List items repaired or corrected.
 - ii. List any items not repaired or corrected.
- e. System Status after repairs are made.
 - i. Determined System Status Number shall be located on the 1st page in the upper right corner.
 - ii. System Status Number 1, 2, 3 or 4 shall be determined in accordance with Section I102.4.
- f. Copy of the original inspection report.
- g. Corrective service reports shall be submitted to Anchorage Fire Department Fire Prevention within 3 days after corrective service has been completed.

Email: fireprevention@muni.org or Assigned Fire Inspector.

I102.3.4 Requirement for sound level check inspection report.

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- a. Service company.
 - i. Name.
 - ii. Address.
 - iii. Phone Number.
 - b. Service location.
 - i. Property management company or owners name.
 - a. Point of contact name.
 - b. Phone number.
 - c. Address.
 - d. Email address.
 - ii. Inspected property.
 - a. Building name.
 - b. Address.
 - c. Point of contact name.
 - d. Phone number.
 - e. Email address.
 - c. Date of Inspection.
 - d. Inspection Type:
 - Decibel - Sound Level check.
 - e. Inspection Frequency:
 - i. Annual.
 - ii. Other frequencies not addressed.
 - f. Test areas.
 - i. Common area locations.
 - ii. Sleeping area locations - Minimum of 15% of the units. per floor with a minimum of 2 units per floor.
 - g. Sound meter information.
 - i. Sound meter make and model meeting the requirements of ANSI S1.4 Type 1.
 - ii. Serial number.
 - iii. Annual calibration date.

I102.3.2 Failure to Report.

Any company, individual or entity failing to file reports in the required times as required in Appendix I102 shall be subject to AMC Title 10.75.010C4.

I102.4 System Status:

I102.4.1 Status 1 - Impairment/Out of Order. Systems out of service or having identified major deficiencies shall be reported as Status 1. The 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 249-7788.

I102.4.1.1 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.

I102.4.1.2 Qualifying deficiencies. Systems with deficiencies listed in I102.4.1.2.1 through I102.4.1.2.8 shall be reported as Status 1.

I102.4.1.2.1 Fire sprinkler or water-based system. Impairment deficiencies refer to 2020 NFPA 25 Table A.3.3.8 for list and below requirements.

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. Painted sprinkler heads reference the 2020 edition of NFPA 25, Table A3.3.8, Chapter 5 Sprinkler Systems Inspections.
10. Antifreeze systems where freeze protection is rated above 20° Fahrenheit.
11. Substantial deficiency not addressed but deemed by the servicing agent or fire code official, as impairment or out of service.

I102.4.1.2.2 Fire pump. Impairment deficiencies refer to 2020 NFPA 25 Table A.3.3.8 for list and below requirements.

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 cavitation of the pump.
4. Substantial deficiency not addressed but deemed by the servicing agent or fire code official, as impairment or out of service.

I102.4.1.2.3 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 Notification Appliance Circuit (NAC) loop.
4. Detection not working entire detection loop.
5. Loss of programming.
6. More than three audio & visual devices not working in building.

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7. Detection devices not working - more than three devices in building.
 8. Substantial deficiency not addressed but deemed by the servicing agent or fire code official, as impairment or out of service.

I102.4.1.2.4 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.
6. Substantial deficiency not addressed but deemed by the servicing agent or fire code official, as impairment or out of service.

I102.4.1.2.5 Required clean agent or special hazard fire 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.
4. Substantial deficiency not addressed but deemed by the servicing agent or fire code official, as impairment or out of service.

I102.4.1.2.6 Gas detection system:

1. Nonworking control panel.
2. Malfunctioning control panel.
3. Detection not working.
4. Failure to report alarm.
5. Detection not provided due to modifications in the room with required protection.
6. Substantial deficiency not addressed but deemed, by the servicing agent or fire code official, as impairment or out of service.

I102.4.1.2.7 Energy Systems/Emergency or legally required standby generator:

1. Nonworking generator.
2. Malfunctioning generator.
3. Failure to carry building load.
4. Failure of transfer switch.

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5. Substantial deficiency not addressed but deemed by the servicing agent or fire code official, as impairment or out of service.

I102.4.1.2.8 Life safety system regulated by chapter 9:

1. Nonworking system.
2. Malfunctioning system.
3. Failure of detection or protection devices.
4. Substantial deficiency not addressed but deemed, by the servicing agent or fire code official, as impairment or out of service.

I102.4.2 Status 2 - Critical Deficiency. Systems with a critical deficiency shall be reported as Status 2. The service company shall contact the Division of Fire Prevention at 267-4901 or by fax at 249-7788 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 Marshal's Office in a manner approved by the fire code official.

I102.4.2.1 Corrective action. Systems reported as Status 2 shall be repaired within 14 days.

I102.4.2.2 Qualifying deficiencies. Systems with deficiencies listed in I102.4.2.2.1 through I102.4.2.2.9 shall be reported as Status 2.

I102.4.2.2.1 Fire sprinkler or water-based system. Critical deficiencies refer to 2020 NFPA 25 Table A.3.3.8 for list and below requirements.

1. Painted sprinkler heads reference the 2020 edition of NFPA 25, Table A3.3.8, Chapter 5 Sprinkler Systems Inspections.
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.
8. Hydrostatic testing past due.
9. Substantial deficiency not addressed but deemed, by the servicing agent or fire code official, as critical.

I102.4.2.2.2 Fire pump. Critical deficiencies refer to 2020 NFPA 25 Table A.3.3.8 for list and below requirements.

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. Substantial deficiency not addressed but deemed, by the servicing agent or fire code official, as critical.

I102.4.2.2.3 Fire alarm system (detection and alarm).

1. Batteries overdue for replacement.

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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. Substantial deficiency not addressed but deemed, by the servicing agent or fire code official, as critical.

I102.4.2.2.4 Kitchen hood fire system.

1. Hood and ducts with heavy grease buildup.
2. Substantial deficiency not addressed but deemed, by the servicing agent or fire code official, as critical.

I102.4.2.2.5 Required clean agent or special hazard fire system.

1. Room not properly sealed.
2. Room size has changed.
3. Expired squibs.
4. HVAC shutdowns not properly working.
5. Any other major problem that will affect the performance. Substantial deficiency not addressed but deemed, by the servicing agent or fire code official, as critical.

I102.4.2.2.6 Non-required clean agent or special hazard fire system.

1. Room not properly sealed.
2. Room size has changed.
3. Expired squibs.
4. HVAC shutdowns 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.
11. Substantial deficiency not addressed but deemed, by the servicing agent or fire code official, as critical.

I102.4.2.2.7 Gas detection system:

1. Damaged detector.
2. Expired detectors.
3. Out of calibration range.
4. No current calibration.
5. Substantial deficiency not addressed but deemed, by the servicing agent or fire code official, as critical.

I102.4.2.2.8 Energy Systems/Emergency or legally required standby generator:

1. Failure to pass load bank test.

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2. Failure to start in required time.
 3. Malfunctioning automatic transfer switch.
 4. Substantial deficiency not addressed but deemed, by the servicing agent or fire code official, as critical.

I102.4.2.2.9 Life safety system regulated by chapter 9:

1. Nonworking system.
2. Malfunctioning system.
3. Failure of detection or protection devices.
4. Substantial deficiency not addressed but deemed, by the servicing agent or fire code official, as critical.

I102.4.3 Status 3 - Noncritical Deficiency. 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 within 30 days from the date of inspection. These deficiencies will not affect the performance of the system.

I102.4.3.1 Corrective action. Systems reported as Status 3 shall be repaired within 30 days.

I102.4.3.2 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.

I102.4.3.2.1 Water Based system. Noncritical deficiencies refer to 2020 NFPA 25 Table A.3.3.8 for list.

I102.4.4 Status 4 - No Deficiencies. 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 within 30 days from the date of inspection.

(AO No. 2020-85, § 1, 10-27-20)