

## Adoption of the 2018 International Fire Code and Amendments

The 2018 International Fire Code was adopted by the Village of Glenview through Ordinance #6347 on August 18, 2020

Building codes are adopted to provide a means to enforce building standards of construction and use, and are periodically updated to reflect the latest standards of life-safety and construction technology. These amendments are established on particular physical and aesthetic conditions within the Village as well as to provide consistency between Village, State and County codes.

### **Amendments to the International Fire Code;**

- (1) *Section 101.1 Title.* Amended to read as follows: “These regulations shall be known as the Fire Code of the Village of Glenview, Cook County, Illinois (the “Village”) hereinafter referred to as ‘this code.’”
- (2) *Section 102.7. Referenced codes and standards.* Amended to read as follows: “The codes and standards referenced in this code shall be those that are listed in Chapter 80 of this code and such codes and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between the provisions of this code and the referenced standards, the provisions of this code shall apply. The following codes and standards are not adopted by reference and thus are not considered part of the requirements of this code.  
  
IPC 2018 International Plumbing Code  
IWUIC 2018 International Wildland-Urban Interface Code”
- (3) *Section 105.2.3 Time limit of application.* Deleted in its entirety. Refer to Glenview Municipal Code – Division 5 Section 18-143 and Section 54-2.
- (4) *Section 105.3.1 Expiration.* Deleted in its entirety. Refer to Glenview Municipal Code – Division 5 Section 18-143 and Section 54-2.
- (5) *Section 202 Definitions.* Amended by adding the following definition: “**Consumer Novelties.** Consumer novelties shall mean: (i) snakes, glow worm pellets, smoke devices, trick snappers, trick matches, cigarette loads, auto burglar alarms, toy pistols, toy canes, toy guns, and other devices in which paper or plastic caps containing 0.25 grains or less of explosive compound are used, provided they are constructed so that the hand cannot come in contact with the cap when in place for the explosion, and (ii) toy pistol paper or plastic caps which contain less than 0.25 grains of explosive mixture.”
- (6) *Section 202 Definitions – Fire Alarm Control Unit.* Amended to read as follows: “**Fire Alarm Control Unit.** A system component that receives inputs from automatic and manual fire alarm devices and may be capable of supplying power to detection devices and

transponders or off-premises transmitters. The control unit is capable of providing a transfer of power to the notification appliances and transfer of conditions to relays or devices. The control unit shall be used for the fire alarm only.”

- (7) *Section 505.1 Address identification.* Amended to read as follows: “New and existing buildings shall be provided with *approved* address identification. The address identification shall be legible and placed in a position that is visible from the public right of way. Address identification characters shall contrast with their background. Address numbers shall be Arabic numerals of at least 6 inches (152 mm) in height with one inch (25 mm) stroke. Where required by the *fire code official*, address identification shall be provided in additional *approved* locations to facilitate emergency response. Where access is by means of a private road and the building cannot be viewed from the *public way*, a monument, pole or other sign or means shall be used to identify the structure. Address identification shall be maintained.”
- (8) *Section 506.1 Where required (Key boxes).* Amended to read as follows: “All buildings, structures or tenant spaces equipped with a fire alarm or fire suppression system shall provide a fire department Knox box on entrances to the building, structure or tenant space as determined by the *fire code official*. The box shall contain keys to allow fire department entry in the event of fire alarm activation or an emergency. The fire code official may also require a fire department Knox box if access to the building, structure or area is unduly difficult. All fire department key boxes, location of the Knox boxes, and the number of key boxes required shall be approved by the fire official. The Knox box shall be mounted at a height of five feet six inches (5’ 6”) above the finished grade. The key box shall be of an *approved* type listed in accordance with UL 1037, and shall contain keys to gain access as required by the *fire code official*.”
- (9) *Section 507.5.2 Inspection, testing and maintenance.* (Fire Hydrant Systems) Amended by adding a new subsection, 507.5.2.1 *Maintenance – Required documentation*, which reads as follows: “All required documentation regarding the design and procedures for maintenance, inspection, and testing of fire hydrant systems, including fire protection submittal documents, shall be maintained in a secured location on the premises approved by the code official for the life of the fire protection systems. Ongoing system test reports and documentation required per NFPA must be submitted to and through the Village’s third party contractor fire protection testing portal or per Authority Having Jurisdiction.”
- (10) *Section 510 Emergency Responder Radio Coverage.* Deleted in its entirety and replace with the following: *Section 510 Emergency Responder Radio Coverage*,

*“Section 510.1 Obstruction of existing and planned public safety communications microwave paths.* New or modified buildings or structures comprised of six (6) stories or greater may not interrupt the microwave paths connecting facilities which comprise the Village’s public safety communications infrastructure. Prior to obtaining a permit for such construction or modifications, the property owner shall furnish proof to the Village Manager or his designee in the form of a registered engineer’s certification that the structure will not interfere with the present microwave path or any planned path.”

*“Section 510.2 Public Safety Radio Amplification Systems.*

*Section 510.2.1 Applicability.* Except as otherwise provided in this division and specifically exempted below, no person shall erect, construct, change the use of, remodel, or install an addition to a building which yields a resulting building footprint in excess of 150% of the original building unless a Public Safety Radio Amplification System is provided. For the purposes of determining the area of the original and subsequent building footprint(s) of any structure subject to the terms of this section, a plat of survey depicting the original conditions of the given lot prior to construction of any addition or modification governed by the provisions of this section shall be furnished for review by the fire code official to be compared to a proposed site plan depicting the scope of the improvements. An “as-built” plat of survey may be required by the fire code official at the conclusion of construction to confirm compliance with the 150% requirement. The 150% requirement shall apply cumulatively to all improvements proposed to a given building as of the effective date of the original amendment which was December 9, 2014.

*Exceptions.* The following uses and structures shall be exempt from the requirements of this subsection:

- A. Single-family detached residential buildings.
- B. Single-family attached residential buildings comprised of up to two (2) units.
- C. Any building or structure comprised of a combined gross floor area of less than 5,000 square feet.
- D. Any building, structure, or addition which supports a minimum signal level of DAQ 3 (Delivered Audio Quality 3) available in 95% of the area designated on a coverage acceptance test plan designed in accordance with manufacturer specifications and approved by the Village Manager or his designee.

*Section 510.2.2 Specialty Structures.* In addition to the construction types listed in Section 510.2.1, the requirements of this section shall additionally apply to the following specialty structures:

- A. *Electronics Establishments* including any and all buildings which hold, carry, store, and/or operate electronic devices, electronics, electrical and/or communications equipment which creates interference with the Village’s public safety communications infrastructure.

- B. *Storage Vaults and basements* including any floor space above or below grade designated as a storage vault and any floor space below grade in excess of two-thousand (2,000) square feet.
- C. *High-Rise Structures* including any and all high-rise buildings comprised of five (5) stories or greater and/or a building height of 140.0 feet or greater.
- D. *Hospitals* including any and all buildings within any H-1 Hospital and Medical district as defined by sec. 98-134 of the Code in which medical procedures are performed.

*Section 510.2.3 System requirements.*

- A. Any building, structure, or addition subject to the provisions of this section shall be equipped with any of the following systems:
  - 1. A radiating cable system
  - 2. An internal multiple antenna system with FCC Type Accepted Bi-Directional UHF Amplifiers as needed to encompass the Very High Frequency (VHF) band range from 150.0 MHz through 174.0 MHz, the Extremely High Frequency (EHF) band range from 769.0 MHz through 775.0 MHz and 799.0 MHz through 805.0 MHz, and, and the Tremendously High Frequency (THF) band range from 806.0 MHz through 912.0 MHz.
  - 3. An alternate system that has been approved by the Village as being capable of providing amplification to meet the requirements of this section.
- B. The system shall be capable of operating on an independent battery and/or generator system for a period of at least 12 hours without any additional external power input. The battery system shall automatically charge in the presence of external power input.
- C. There shall be no connectivity between the amplification system and the fire/police alarm system.
- D. If a system's bi-directional amplifiers create interference within 35 dB of the NPSAC band, filters tuned to the frequencies specified in Section 510.2.3 A.2 shall be required.
- E. *Signal Booster Requirements. If used signal boosters shall meet the following requirements:*

1. *All signal booster components shall be contained in a National Electrical Manufacturer's Association (NEMA) 4-type waterproof cabinet.*
2. *Battery systems used for the emergency power source shall be contained in a NEMA 4 type waterproof cabinet.*
3. *The signal booster system and battery system shall be electrically supervised and monitored by a supervisory service, or when approved by the fire code official, shall sound an audible signal at a constantly attended location.*
4. *Equipment shall have FCC certification prior to installation.*

*Section 510.2.4 Testing.*

- A. *Qualifications of Testing Personnel.* All tests shall be conducted, documented, and signed by a person in possession of a current FCC general radiotelephone operator license. All test records shall be retained at the inspected premises by the building owner and a copy submitted to the Village of Glenview within thirty (30) days of when the test has been conducted. In the event the test shall fail to comply with the minimum requirements of the village, appropriate modifications and/or repairs shall be made and additional tests conducted until tests meet the minimum requirements of the village.
- B. *Testing Procedure.* Each floor of the building shall be divided into a grid of approximately twenty (20) equal areas. A maximum of two nonadjacent areas will be allowed to fail the test. In the event that three of the areas fail the test, in order to be more statically accurate the floor may be divided into forty (40) equal areas. In such event, a maximum of four nonadjacent areas will be allowed to fail the test. After the 40 area tests, if the system continues to fail the property owner shall repair, replace, alter, or upgrade the system altered to meet the DAQ 3 coverage requirement. Talk testing from site to the Village of Glenview Public Safety Communications Center shall use a two watt portable transceiver with speaker/microphone and flexible antenna. A spot located approximately in the center of the grid area will be selected for the test, then the radio will be keyed to verify two-way communication to and from the outside of the building. Once the spot has been selected, use of another spot with the grid area will not be permitted. Field strength testing instruments are to be recently calibrated (within the past 12 months) and of the frequency selective type incorporating a flexible antenna similar to the ones used on the hand held transceivers.
- C. *Gain values.* The gain values of all amplifiers shall be measured and the results kept on file with the property owner so that the measurements can be verified each year during the annual tests. In the event that the measurement results

become lost, the property owner will be required to rerun the acceptance test to reestablish the gain values.

- D. *Acceptance Testing.* Acceptance testing for an in-building radio amplification system is required.
- E. *Annual Testing.* When an in-building radio system is installed, the property owner shall test all active components of the system including but not limited to amplifier, the power supplies, and back-up batteries, a minimum of once every twelve (12) months. Amplifiers shall be tested to ensure that the gain is the same as it was upon initial installation and acceptance. Back-up batteries and power supplies shall be tested under load for a period of one hour to verify that they will operate during an actual power outage. All other active components shall be checked to determine that they are operating within the manufacturers specifications for the intended purpose.
- F. *Ten-Year Testing.* In addition to the annual test, the property owner shall perform a radio coverage test a minimum of once every ten (10) years to ensure that the radio system continues to meet the requirements of the original acceptance. The procedure set forth above shall apply to such tests.
- G. All required documentation regarding the design and procedures for maintenance, inspection, and testing of fire protection systems, including fire protection submittal documents, shall be maintained in a secured location on the premises approved by the code official for the life of the fire protection systems or per Authority Having Jurisdiction.

*Section 510.2.5 Maintenance responsibilities.*

- A. *Maintenance Contract.* Upon completion of all the tests to the minimum standards of the village, the property owner shall be responsible for the maintenance of the system. Upon request by the Village Manager or his designee, the property owner shall furnish a maintenance contract including the name(s) of the contractor(s), who will supply a 24-hour, 7-day emergency response within two (2) hours after notification by either the village or the property owner.
- B. *System Maintenance.* The property owner shall be responsible for making any repairs, replacements, or upgrades to the systems should the system fail to meet testing specifications.”

*Section 510.3 Permit Required.* A construction permit for the installation of or modification to emergency responder radio coverage systems and related equipment is required as specified in Section 105.7.6. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.”

- (11) *Section 901.4.6 Pump and Riser Room Size.* Amended to read as follows: “A room containing the automatic fire sprinkler system riser valve and/or a fire pump shall be provided in new buildings or additions to buildings with new or existing fire sprinklers. Fire pump and *automatic sprinkler system* riser rooms shall be designed with adequate space for all equipment necessary for the installation, as defined by the manufacturer, with sufficient working room around stationary equipment. Clearance around equipment to elements of permanent construction, including other installed equipment and appliances, shall be sufficient to allow inspection, service, repair or replacement without removing such elements of permanent construction or disabling the function of a required fire-resistance-rated assembly. Fire pump and *automatic sprinkler system* riser rooms shall be provided with doors and unobstructed passageways large enough to allow removal of the largest piece of equipment.”
- (12) *Section 901.4.6.1 Access.* Amended to read as follows: “Rooms or spaces containing an automatic sprinkler system riser valve and/or a fire pump shall be provided with direct access from the exterior of the building or structure. Access shall be provided by a key storage box with door keys as determined by the Authority Having Jurisdiction.”
- (13) *Section 901.6 Inspections, testing and maintenance.* Amended by adding a new subsection, *901.6.3.2 Inspection, testing and maintenance documentation routing.* Which reads as follows: “Ongoing system test reports and documentation required per NFPA must be submitted to and through the Village’s third party contractor fire protection testing portal or per Authority Having Jurisdiction.”
- (14) *Section 903.2 Where required.* Amended to read as follows: “Section 903.2 Where required. Approved automatic sprinkler systems in new buildings and structures and additions to buildings currently equipped with sprinklers shall comply with Section 903.2.1 as amended below. Retrofitting of sprinklers in existing buildings shall comply with section 903.6 as amended.”
- (15) *Sections 903.2.1 through 903.2.11 Where required.* Deleted in their entirety.
- (16) *Section 903.2 Where required.* Amended by adding a new subsection. *903.2.1 New construction and additions to existing sprinklered buildings* which reads as follows: “Approved automatic fire sprinkler systems shall be installed in all new and additions to existing fire sprinklered buildings regardless of materials used in construction and / or use group classification. This requirement also applies to Assembly use occupancies on roofs, and enclosed A-5 Use spaces under grandstands or bleachers. Automatic fire suppression systems shall comply with the 2016 edition of the NFPA Standards.

Exceptions:

1. Detached accessory building with an intended use that is incidental to that primary building on the same lot of record as a detached one-family dwelling. Detached accessory buildings shall include, but not be limited to, detached garages, storage sheds, and animal habitats.
2. Detached accessory buildings with an intended use that is incidental to that of the primary building on the same lot of record where the primary building is classified as a Use Group B, F, I, M, S, and U that are less than 250 square feet in size. This exception shall not apply if the horizontal separation between the accessory building is less than 25 feet from any other building or accessory building and/or structure is used for the following hazardous materials:
  - a. Flammable and/or combustible liquids classified as Class 1A, 1B, 1C, and 111A and if the combined quantity exceeds 30 gallons.
  - b. Flammable gas if the quantity exceeds 10 gallons and/or 333 cubic feet of gas.
  - c. Corrosives.
  - d. Toxic agents.
  - e. Oxidizers classified as Class 2, 3, or 4. Class 1 oxidizers shall not exceed 100 gallons and/or 1,000 pounds.
  - f. Unstable/reactives.
  - g. Water reactives if the quantity exceeds 100 gallons and/or 1,000 pounds.
  - h. Pyrophoric materials (All classifications).
  - i. Organic peroxides (All classifications).
  - j. Explosives (All classifications).
3. Picnic shelters, gazebos, pergolas, and detached public restroom facilities with a minimum horizontal separation of 25 feet from all other buildings. This exception shall not apply if the picnic shelter, gazebo, pergola, or detached public restroom is equipped with a permanent heat-producing appliance that utilizes natural gas and/or propane as a fuel supply or if the detached public restroom facility exceeds a total of 400 square feet in size.
4. In telecommunications equipment buildings, a manual dry fire suppression system shall be installed in those spaces or areas equipped exclusively for telecommunications equipment, association electrical power distribution equipment, batteries and standby engines provided that those spaces or areas are equipped throughout with an automatic fire detection system in accordance with Section 907 and are separated from the remainder of the building by not less than one-hour fire barriers constructed in accordance with Section 707 or not less than two-hour horizontal assemblies constructed in accordance with Section 711, or both. “



- (17) *Section 903.2.12 During construction.* Renumbered as Section 903.2.2.
- (18) *Section 903.3.1.3 NFPA13 D sprinkler systems.* Amended by adding a new subsection, *903.3.1.3.1 Additional requirements*, which reads as follows: “NFPA 13D fire sprinkler systems shall have dry head coverage in the garage. CPVC shall not be permitted to be exposed.”
- (19) *Section 903.3.5 Water supplies.* Amended to read as follows: “Water supplies for automatic sprinkler systems shall comply with this section and the standards referenced in Section 903.3.1 of this code. The potable water supply shall be protected against backflow in accordance with the requirements of this section and Title 77, Part 890 of the Illinois Administrative Code (the “Illinois Plumbing Code”). For connections to public water systems, the water supply test used for design of fire protection systems shall be adjusted to account for seasonal and daily pressure fluctuations based on information from the water supply authority and as approved by the fire code official. See Section 903.3.5.3 for low water pressure factor. Hydrant flow data used for the design of any sprinkler system shall be no more than one (1) year old.”
- (20) *Section 903.3.5. Water supplies.* Amended by adding a new subsection, *903.3.5.3 Low water pressure factor*, which reads as follows: “Provide a minimum ten percent (10%), but not less than five (5) psi, safety factor in the fire protection system hydraulic calculation. The system demand shall be a minimum 5 psi below the annual water flow test supply.”
- (21) *Section 903.4.2 Alarms.* Amended by adding a new subsection, *903.4.2.1 Additional alarm location*, which reads as follows: “In addition to a ten (10) inch bell, a weatherproof visual strobe activated by water flow shall be provided on the exterior of the building or structure and located over the fire department connection and above the required bell or in a location approved by the authority having jurisdiction.”
- (22) *Section 903.4.2 Alarms.* Amended by adding a new subsection, *903.4.2.2 Location*, which reads as follows: “Alarm notification shall be provided throughout fire-sprinklered buildings with audible and visual appliances and located per NFPA 72 edition 2016.”
- (23) *Section 903.4.3 Floor control valves.* Amended to read as follows: “Approved supervised indicating control valve assemblies with flow switches shall be provided at the point of connection to the riser on each floor of the building or structure.”

- (24) *Section 903.5 Testing and maintenance.* Amended by adding a new subsection, *903.5.1 Access*, which reads as follows: “Fire sprinkler systems’ inspection test valves shall be accessible at all times and located no more than six (6) feet above the finished floor surface. On multiple riser systems test valves shall be clearly identified in permanent marking as to the riser and area served.”
- (25) *Section 903.5 Testing and maintenance (Automatic Sprinkler Systems).* Amended by adding a new subsection, *903.5.2 Required documentation.* which reads as follows: “Inspection, testing and maintenance shall be performed in accordance with NFPA25. All required documentation regarding the design and procedures for maintenance, inspection, and testing of fire protection systems, including fire protection submittal documents, shall be maintained in a secured location on the premises approved by the code official for the life of the fire protection systems or per Authority Having Jurisdiction.”
- (26) *Section 903.6 Where required in existing buildings and structures.* Amended to read as follows: *Section 903.6 Where required in existing buildings and structures.* which reads as follows:

Where addition, alterations or remodeling exceed 50% of the replacement cost of the structure, an approved automatic fire sprinkler systems shall be installed per the following thresholds. Automatic fire suppression systems shall comply with the 2016 edition of the NFPA Standards or as determined per the International Existing Building Code 2018. For the purpose of this article, replacement costs shall be determined by the latest building valuation data published by the International Code Council.

Use group R-2 structures (condominiums/ apartments):

An automatic fire suppression system shall be provided throughout all multiple family buildings containing three or more dwelling units in accordance with NFPA 13R 2016 Edition: Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes.

Use group R-3 structures (town homes):

An automatic fire suppression system shall be provided throughout all multiple family buildings containing three or more dwelling units in accordance with NFPA 13D 2016 Edition: Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes.

Use group A-1, A-2, A-3 and A-4 (assembly occupancies):

An automatic fire suppression system shall be provided throughout all assembly buildings greater than 2,500 square feet in area. The design and installation of the suppression system shall be in accordance with NFPA 13 2016 Edition: Standard for the Installation of Sprinkler Systems.

Use Group B, E, F-1, F-2, H-1, H-2, H-3, H-4, I-1, I-2, I-3, M, S-1, S-2 and U (business, educational, factory, hospital, institutional, mercantile, storage and utility):

An automatic fire suppression system shall be installed throughout all buildings referenced herein where the size is greater than 5,000 square feet in area. The design and installation of the suppression system shall be in accordance with NFPA 13 2016 Edition: Standard for the Installation of Sprinkler Systems.

- (27) *Section 903 Automatic Sprinkler Systems.* Amended by adding a new subsection, *903.7. Fire pump test header*, which reads as follows: “Automatic sprinkler systems that are equipped with an approved fire pump shall be provided with an OS&Y (or approved equal) control valve on the fire pump test header(s). Fire pump installations shall include an exterior test header.”
- (28) *Section 903 Automatic Sprinkler Systems.* Amend by adding a new subsection, *903.8 Private fire hydrants*, which reads as follows: “For developed lots, subdivisions or parcels except R-3 occupancies, fire hydrants shall be located no more than three hundred (300) feet apart. Fire hydrants shall be provided on all sides of a developed lot, subdivision or parcel except R-3 occupancies as approved by the authority having jurisdiction. One (1) fire hydrant shall be located not more than 100 feet from the fire department connection on the fire protection water supply to the building or structure.”
- (29) *Section 903 Automatic Sprinkler Systems.* Amended by adding a new subsection, *903.9 Warehouse storage*, which reads as follows: “A two and one-half (2 ½) inch fire hose valve with a one and one-half (1 ½) inch reducer to a one and one-half (1 ½) inch connection shall be provided at each means of egress to warehouse storage areas greater than 20,000 square feet in which storage exceeds twelve (12) feet in height. The two and one-half (2 ½) inch fire hose valve(s) shall be installed on a separate riser piping system and shall be provided with a four (4) inch water supply and a two and one-half (2 ½) inch brand water supplies. Each two and one-half (2 ½) inch fire hose valve shall be installed so no distance from the nearest two and one-half (2 ½) inch fire hose valve is greater than 120 feet.”
- (30) *Section 904.4 Inspection and testing. (Alternative Automatic Fire Extinguishing Systems)* Amended by adding a new subsection, *904.4.4 Maintenance Testing and inspections – Required documentation*, which reads as follows: “All required documentation regarding the design and procedures for maintenance, inspection, and testing of fire protection systems, including fire protection submittal documents, shall be maintained in a secured location on the premises approved by the code official for the life of the fire protection systems. Ongoing system test reports and documentation required per NFPA must be submitted to and through the Village’s third party contractor fire protection testing portal or per Authority Having Jurisdiction.”

- (31) *Section 905 Standpipe Systems.* Amended by renumbering existing sections 905.3.1 through 905.3.8 to 905.3.2 through 905.3.9
- (32) *Section 905 Standpipe Systems.* Amended by adding a new subsection, *905.3.1 Three story buildings or buildings over 150 ft. in any footprint dimension*, which reads as follows: “Any building that has two (2) stories or more above lowest level of fire department access, and/ or has any horizontal dimension exceeding 150 feet between exterior walls, shall be equipped with an automatic standpipe system designed and installed in accordance with NFPA standard 14 for Class 1 automatic standpipe and hose systems as defined therein. A fire pump is required. Manual and Dry standpipe systems are prohibited unless written approval is received from the Fire Code Official or his /her designee as arranged prior to construction permit issuance of the fire sprinkler system. The maximum distance from any remote location on any floor to a hose valve connection shall be 150 ft. ”
- (33) *Section 907.1 General. (Fire Alarm and Detection Systems).* Amended Section 907.1 General, to read as follows: “This section covers the application, installation, performance and maintenance of the fire alarm systems and their components in new and existing buildings and structures.”
- (34) *Section 907.2 Where required – new buildings and structures.* Deleted in its entirety and replaced with the following, *907.2 Where required– New and existing structures and buildings:* “An approved manual, automatic or combination manual and automatic fire alarm monitored system in accordance with the provision of this code and NFPA 72 shall be provided in new and existing buildings and structures in all use groups.

Exceptions:

1. One- and two-family dwelling units, but, not Group Homes (R-4 Use Group).
2. In existing residential multi-family use groups, initiating and notification devices required by NFPA 72 may be omitted from within the dwelling unit provided that such devices located within the adjacent common areas “outside the dwelling unit” shall provide an audible level acceptable to the fire code official.”

*907.2.1 Fire alarm and detection systems – requirement.* All fire alarm control panels shall be of the addressable type only. Conventional zone panels are not permitted. All fire alarm junction boxes, covers, and conduits shall be red in color. Fire alarm junction box covers shall be identified as "FIRE ALARM" in a contrasting color. Fire alarm wire shall be attached to structural members by the use of bridle rings or loops. Fire Alarm Control Units and full function remote annunciators shall be accessed with a key and no other method, including codes.

*907.2.2 Fire alarm and detection systems – Group I occupancies.* A manual fire alarm system shall be installed in Group I occupancies. An electrically supervised, automatic smoke detection system shall be provided in accordance with Sections 907.2.2.1, 907.2.2.2, and 907.2.2.3 of this code. The alarm system shall be designed based on the actual operational use proposed for the occupants and not based on any presumed/assigned use by the designer for building construction height/ area requirements per Mixed Use chapters of the code.

Exception: Manual fire alarm boxes in resident or patient sleeping areas of Group I-1 and I-2 occupancies shall not be required at exits if located at all nurse's control stations or other constantly attended staff locations, provided such stations are visible and provided with ready access and that travel distances required in Section 903.7.4.2.1 of this code are not exceeded.

*907.2.2.1. Group I-1.* Corridors, habitable spaces other than sleeping units and kitchens and waiting areas that are open to corridors shall be equipped with an automatic smoke detection system.

Exceptions:

1. Smoke detection in habitable spaces is not required where the facility is equipped throughout with an automatic sprinkler system.
2. Smoke detection is not required for exterior balconies.

*907.2.2.2. Group I-2.* Corridors in nursing homes (both intermediate care and skilled nursing facilities), detoxification facilities and spaces permitted to be open to the corridors by Section 407.2 of this code shall be equipped with an automatic fire detection system. Hospital shall be equipped with smoke detection where permitted to be open to the corridor per Section 407.2 of this code.

Exceptions:

1. Corridor smoke detection is not required in smoke compartments that contain patient sleeping units where patient sleeping units are provided with smoke detectors that comply with UL268. Such detectors shall be provided a visual display on the corridor side of each patient sleeping unit and an audible and visual alarm at the nursing station attending each unit.
2. Corridor smoke detection is not required in smoke compartments that contain patient sleeping units where patient sleeping unit doors are equipped with automatic door-closing devices with integral smoke detectors on the unit sides installed in accordance with their listing, provided that the integral detectors perform the required alerting function.

*907.2.2.3. Group I-3.* Group I-3 occupancies shall be equipped with a manual and automatic fire alarm system installed for alerting staff.

*907.2.2.3.1 System initiation.* Actuation of an automatic fire-extinguishing system, an automatic sprinkler system, a manual fire alarm box or a fire detector shall initiate an

approved fire alarm signal which automatically notifies staff. Pre-signal systems shall not be used.

*907.2.2.3.2 Manual fire alarm boxes.* Manual fire alarm boxes are not required to be located in accordance with Section 907.3 of this code where the fire alarm boxes are provided at staff-attended locations having direct supervision over areas where manual fire alarm boxes have been omitted.

Manual fire alarm boxes shall be permitted to be locked in areas occupied by detainees, provided that staff members are present within the subject area and have keys readily available to operate the manual fire alarm boxes.

*907.2.2.3.3 Smoke detectors.* An approved automatic smoke detection system shall be installed throughout resident housing areas, including sleeping units and contiguous day rooms, group activity spaces and other common spaces normally accessible to residents.

Exceptions:

1. Other approved smoke detection arrangements providing equivalent protection including, but not limited to placing detectors in exhaust ducts from cells or behind protective guards listed for the purpose, are allowed when necessary to prevent damage or tampering.
2. Sleeping units in Use Condition 2 and 3 as described in Section 308.
3. Smoke detectors are not required in sleeping units with four or fewer occupants in smoke compartments that are equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1.

*907.2.3 Automatic fire detection system required.* An approved, complete automatic fire detection system shall be installed in all use groups, not provided with an automatic sprinkler system, and in accordance with NFPA 72. Devices, combination of devices, appliances, and equipment shall comply with Section 907.1.2 of this code. The automatic fire detectors shall be smoke detectors, except that an approved alternative type of detector shall be installed in spaces such as boiler rooms where, during normal operation, products of combustion are present in sufficient quantity to activate a smoke detector. Smoke detector spacing shall meet the NFPA 72 requirements of heat detector spacing for ceiling heights over ten feet. Automatic fire alarm systems shall comply with the 2016 edition of the NFPA 72 Standard.

*907.2.4 Control panel locations.* All fire alarm control panels of full function annunciator panels shall be installed within ten (10) feet of the main entrance, or in a location approved by the fire code official.”

- (35) *Section 907.3 Fire safety functions.* Amended to read as follows: “Automatic fire detectors utilized for the purpose of performing fire safety function shall be connected to the building’s fire alarm control panel where a fire alarm system is required by Section 907.2 of this code. Detectors shall, upon actuation, perform the intended function and activate the alarm notification appliances or a visible and audible supervisory signal at a

constantly attended location. The detectors shall be located in accordance with Chapter 5 of NFPA72. Multi-tenant Group M buildings will be activated by individual tenant space by the automatic sprinkler system flow switch for that space or an automatic fire detection system.”

- (36) *Section 907.3.1 Duct smoke detectors.* Amended by adding a subsection, *907.3.1.1 Labeling, which reads as follows:* “Duct detectors shall indicate at the fire alarm control panel as a fire alarm. All duct detectors shall be labeled with the HVAC unit it is associated with and clearly marked on the finished side of the ceiling under the detector or in a location acceptable to the fire code official. Keyed Remote Test Switches shall be located on the wall or column closest to the detector mounted five (5) feet above the floor.”
- (37) *Section 907.8.5 Inspection, testing and maintenance.* (Fire Alarm and Detection Systems) Amended by adding a new subsection, *907.8.5.1 Inspections, Testing and Maintenance – Required documentation, which reads as follows:* “All required documentation regarding the design and procedures for maintenance, inspection, and testing of fire protection systems, including fire protection submittal documents, shall be maintained in a secured location on the premises approved by the code official for the life of the fire protection systems. Ongoing system test reports and documentation required per NFPA must be submitted to and through the Village’s third party contractor fire protection testing portal or per Authority Having Jurisdiction.”
- (38) *Section 907.9 Where required in existing buildings and structures.* (Fire Alarm and Detection Systems). Delete this section in its entirety. See Amendment No. 31 Section No. 907.2 for requirements for existing buildings and structures.
- (39) *Section 909.20 Maintenance.* (Smoke Control System) Amended by adding a new subsection, *909.20.7 Maintenance – Required documentation, which reads as follows:* “All required documentation regarding the design and procedures for maintenance, inspection, and testing of fire protection systems, including fire protection submittal documents, shall be maintained in a secured location on the premises approved by the code official for the life of the fire protection systems. Ongoing system test reports and documentation required per NFPA must be submitted to and through the Village’s third party contractor fire protection testing portal or per Authority Having Jurisdiction.”
- (40) *Section 912 Fire Department Connections.* Amended by adding a new subsection, *912.1.1 Local fire department connections, which reads as follows:* “All fire department connections shall be a NST four- (4) inch, non-swivel Storz connection with a fixed 30-degree downturn and shall be located on the building wall, 24 inches to 42 inches above the finished grade.”

(41) *Section 913.5 Testing and Maintenance.* (Fire Pump) Amended this section to read as follows: “Fire Pumps shall be tested and maintained in accordance with the requirements of NFPA 25. Records of inspections testing and maintenance shall be maintained. All required documentation regarding the design and procedures for maintenance, inspection, and testing of fire protection systems, including fire protection submittal documents, shall be maintained in a secured location on the premises approved by the code official for the life of the fire protection systems. Ongoing system test reports and documentation required per NFPA must be submitted to and through the Village’s third party contractor fire protection testing portal or per Authority Having Jurisdiction.”

(42) *Section 1008.2 Illumination required.* Amended to read “The *means of egress* serving a room or a space shall be illuminated at all times that the room or space is occupied. Emergency lighting shall be provided in all locations required by the fire code official, in all occupancies.

Exceptions:

1. Occupancies in Group U.
2. *Aisle accessways* in Group A.
3. *Dwelling Units* and *sleeping units* in Group R-1, R-2 and R-3.
4. *Sleeping units* of Group I occupancies.”

(43) *Section 1008.3.3 Rooms and spaces (Emergency power for illumination).* Amended by adding a new Line Number 6, which reads as follows: “6. All rooms containing the building sprinkler riser(s), and fire alarm control panel(s).”

(44) *Section 1009.6 Areas of refuge.* Amended by adding a new subsection, *1009.6.6 Identification*, which reads as follows: “Each door providing access to an area of refuge from an adjacent floor area shall be identified by a sign complying with ICC A117.1, stating: AREA OF REFUGE, and include the International Symbol of Accessibility. Where exit sign illumination is required by Section 1013.3 of this code, the area of refuge sign shall be internally illuminated. Additionally, tactile signage complying with ICC A117.1 shall be located at each door to an area of refuge.”

(45) *Section 1103.2 Emergency responder radio coverage in existing buildings.* Amend by deleting item no. 1 and re-numbering number 2 to number 1.

(46) *Section 2404.4 Fire protection.* Amended to read as follows: “Spray booths and spray rooms shall be protected by an approved automatic fire-extinguishing system complying with Chapter 9 of this code. Protection shall also extend to exhaust plenums, exhaust ducts and both sides of dry filters when such filters are used. All existing spray booths and



rooms in existence as of the date of this ordinance shall be retrofitted to comply with this automatic fire-extinguishing system requirement within a period of time specified by the fire code official.”

- (47) *Section 5601.1.3 Fireworks.* Amended to read as follows: “The possession, manufacture, storage, sale, handling and use of fireworks are prohibited.

Exceptions:

1. Storage and handling and use of fireworks at display sites in accordance with Sections 5604 and 5608.5 and NFPA 1123 or NFPA 1126 listed in Chapter 35 of the 2012 ICC International Building Code.
2. The retail sale of approved consumer novelties as defined in Section 202 of this code shall be permitted but only to persons 18 years of age or older. Retail sales shall be permitted only in buildings equipped with approved automatic sprinkler systems. The display of consumer novelties in a building shall be separated from all exit doors by a minimum distance of 20 feet or as approved in advance in writing by the fire code official. The sale of consumer novelties shall not be permitted at any building or on any property where flammable or combustible liquids or gases are sold or dispensed.”

- (48) *Section 5601.1.3 Fireworks.* Amended by adding a new subsection, *5601.1.3.1. Penalties for possession*, which reads as follows: “Any person, firm, corporation, or entity that violates any provision of Section 5601.1.3 of this code shall be subject to penalties as described in Section 1-16 of the Glenview Municipal Code.”

- (49) *Section 5601.2.2 Sales and retail display.* Amend this subsection by adding the following sentence to the end of the paragraph: “It shall be unlawful to display, sell, store, or advertise for sale any Class 1.3G or 1.4G fireworks within the Village of Glenview.”

- (50) *Section 5608.2.1 Outdoor fireworks displays.* Amended to read as follows: “In addition to the requirements of Section 403 of this code, permit applications for outdoor fireworks displays using Division 1.3G fireworks shall include a diagram of the location at which the display will be conducted, including the site from which fireworks will be discharged; the location of buildings, highways, overhead obstructions and utilities; and the lines behind which the audience will be restrained. All outdoor fireworks displays shall be electronically fired using approved electronic firing units and approved mortar racks. All outdoor fireworks displays shall comply with the provisions of the Fireworks Regulation Act of Illinois, 425 ILCS 30/1, *et seq.*, and the Pyrotechnic Distributor and Operator Licensing Act, 225 ILCS 227/1, *et seq.*”

(51) *Chapter 80 – Referenced Standards.* The text under the heading “NFPA” is amended to read as follows: “Pursuant to the Village’s home rule authority, the following national Fire Protection Association (NFPA) Codes and Standards are adopted by reference and supersede those codes and standards listed in Chapter 80 of this code.

1. NFPA 10 2018 Edition: Standards for the Installation of Portable Fire Extinguishers
2. NFPA 13 2016 Edition: Standard for the Installation of Sprinkler Systems
3. NFPA 13D 2016 Edition: Standard for the Installation of Sprinkler Systems in One and Two Family Dwellings and Manufactured Homes
4. NFPA 13R 2016 Edition: Standard for the Installation of Sprinkler Systems in Residential Occupancies Up To and Including Four Stories in Height
5. NFPA 14 2016 Edition: Standard for the Installation of Standpipes, Private Hydrants, and Hose Systems
6. NFPA 17A 2017 Edition: Standard for the Installation of Wet Chemical Fire Extinguishing Systems
7. NFPA 20 2016 Edition: Standard for the Installation of Stationary Fire Pumps
8. NFPA 30 2018 Edition: Flammable and Combustible Liquids Code
9. NFPA 30B 2015 Edition: Standard for the Manufacture and Storage of Aerosol Products
10. NFPA 33 2016 Edition: Standard for Dipping and Coating Processes Using Flammable Liquids
11. NFPA 58 2017 Edition: Liquefied Petroleum Gas Code
12. NFPA 72 2016 Edition: National Fire Alarm Code
13. NFPA 96 2017 Edition: Standard for the Installation of Hood and Duct Systems
14. NFPA 1123 2018 Edition: Code for Outdoor Fireworks Displays
15. NFPA 1124 2017 Edition: Code for the Manufacture, Transportation, Storage, and Retail Sales of Fireworks and Pyrotechnic Articles
16. NFPA 1126 2016 Edition: Standard for Proximate Audience Pyrotechnics”

(52) *Appendices.* The following appendices are adopted in their entirety - If there is a discrepancy between the code and the appendix, the code will govern:

- Appendix B: Fire-Flow Requirements for Buildings
- Appendix C: Fire Hydrant Locations and Distribution
- Appendix D: Fire Apparatus Access Roads
- Appendix E: Hazard Categories
- Appendix F: Hazard Ranking
- Appendix G: Cryogenic Fluids – Weight and Volume Equivalents
- Appendix H: Hazardous Materials Management Plan (HMMP) and Hazardous Material Inventory Statement (HMIS) Instructions
- Appendix I: Fire Protection Systems – Non-Compliant Conditions
- Appendix J: Building Information Sign
- Appendix K: Construction Requirements for Existing Ambulatory Care Facilities
- Appendix M: High-Rise Buildings – Retroactive Sprinkler Requirement
- Appendix N: Indoor Trade Shows and Exhibitions