VILLAGE OF SCHAUMBURG

AGENDA ITEM SUMMARY

Presentation of 2021 International Fire Code - Informational
9/8/2022
Public Safety Committee

Presenter: Fire Chief
Lead Department: Fire

Executive Summary:

The village periodically updates the adopted building and fire codes to stay current with construction trends and evolving hazards. Having current building and fire codes provides an effective strategy to help protect the community. Additionally, to receive full credit for the department's ISO fire prevention review, the fire department is required to have adopted a fire code edition that has been released within the last five years. The current village fire code is the 2015 edition of the *International Fire Code*. The recommendation is to adopt the 2021 edition of the *International Fire Code* with amendments with an effective date of December 1, 2022.

Significant changes from the 2015 edition to the 2021 edition of the *International Fire Code* include the following:

- New chapter on energy systems, including additional requirements for battery storage systems (i.e. lithium-ion batteries). This chapter was added due to the increase of solar power and battery storage. It identifies proper storage and protection procedures.

- New chapter on processing and extraction facilities (i.e. marijuana and other plant processing). This chapter was necessary to provide guidance to facilities designed to grow and process marijuana and other plants. Code language mirrors the NFPA Life Safety Code

- New chapter on the storage of distilled spirits and wines, this pertains to large warehouses and distilleries which require general precautions against fires and sprinkler protection. Currently no existing buildings in Schaumburg.

The village also maintains local amendments to the *International Fire Code*. The full list of amendments is attached. The following is a summary of the significant changes to the village's amendments:

- The regulations regarding the use of fire pits were simplified and included language clean up. There are no new requirements. A new section was added to include propane fueled fire tables, which allows for a less restrictive distance to structures (5' rather than 15').

- Regulations were added form extraction facilities (marijuana and other vegetative processing) that align with national standards (NPFA) but were not included in the 2021 *International Fire Code*.

- Prior amendments that required fire alarm systems in certain occupancies have been removed to align village's requirements with 2021 *International Fire Code*. Changes are less restrictive than current amendments.

- Prior amendment that required ten-pound (4A:60BC) fire extinguishers in all occupancies has been revised for most occupancies to align village's requirements with 2021 *International Fire Code,* allowing for less hazardous occupancies to use smaller extinguishers.

- Removal of Chapter 108 (Public Safety Radio Amplification Systems) of the Village Code. Section 510 of the *International Fire Code* addresses these systems. This will align the village with national standards and do not add any additional requirements.

- Adoption of new Appendix N that provides regulations for trade shows and exhibitions. This will align our requirements for conventions at the Renaissance Convention Center and other hotels with national standards. Schaumburg's current requirements mirror the appendix and do not alter current requirements.

Updates to the 2021 International Fire Code also included the following but staff recommends **exempting** these requirements from this revision cycle to allow for further analysis to determine impact and need in Schaumburg.

- Sprinkler systems in new open parking garages greater than 48,000 square feet or over 55 feet in height.
- Sprinkler systems in existing restaurant, bars, etc. with an occupant load greater than 300 and where alcohol is consumed onsite.

Recommended Action:

Informational Only

ATTACHMENTS:

Description	Type
Chapter 157 Fire Code 2021	Exhibit
Chapter 157 Fire Code 2021 - Proposed Changes	Exhibit

CHAPTER 157: - FIRE CODE

§ 157.01 - ADOPTION.
The 2021 International Fire Code, including Appendices D, E, F, G, and N has been adopted and codified pursuant to § 153.02 of this Code. Should any differences between a provision of chapter 157 and any other provision of this code be found, the more restrictive provision, as determined by the fire chief, shall prevail.

§ 157.02 - LOCAL AMENDMENTS TO THE 2021 INTERNATIONAL FIRE CODE.
The 2021 International Fire Code is amended and changed as follows:

101.1 Title. These regulations shall be known as the Fire Code of the Village of Schaumburg, hereinafter referred to as "this code."

109.3 Recordkeeping. A record of periodic inspections, tests, servicing and other operations and maintenance shall be maintained on the premises or other approved location for not less than 3 years, or a different period of time where specified in this code or referenced standards. Records shall be made available for inspection by the fire code official, and a copy of the records shall be provided to the fire code official upon request. All inspection and maintenance reports shall be submitted via the IROL system (Inspection Reports Online). Any company or agent performing inspections and/or maintenance to fire protection systems shall be required to register with IROL.

111 MEANS OF APPEAL is hereby repealed in its entirety and replaced with the Appeal Process provisions contained in Section 153.03.1 of the Village Code.

112.4 Violation penalties is hereby repealed in its entirety and replaced with the provisions contained in Section 157.99 Fines and Penalties herein.

Section 202, Definitions, shall be read to include the following:

BONFIRE. A large, open air fire, utilized for a planned ceremonial or recreational event purposes.

FIRE PIT, PERMANENT. A custom designed structure, either above and below grade, or wholly below grade, made of stone, masonry, metal or other similar noncombustible material.

FIRE PIT, PORTABLE. A prefabricated portable self-contained burning device having legs, a bottom container, screen, and a lid.

FIRE PIT TABLE. A fuel-fired table that has a small pit at the center of a tabletop. Fire pit tables usually have a base and top design.

OUTDOOR FIREPLACE. Similar to an indoor fireplace consisting of a noncombustible base, firebox, chimney and screen; to burn wood, propane and similar gases.

PROHIBITED FIRE. The open burning of paper, garbage, refuse, waste, leaves, clippings, wood or other offensive materials.

307.1. General. A person shall not kindle or maintain or authorize to be kindled or maintained any open burning unless conducted and approved in accordance with Section 307..

Exceptions:
1) Fires set by a public official in performance of an official duty or recreational purposes, subject to a permit being issued as specified in Section 307.2.
2) Outdoor fireplaces constructed in accordance with the *International Building Code*.

307.2. Permit required. A permit shall be obtained from the fire code official in accordance with Section 105.5 prior to kindling a fire for recognized cultivation and management of trees (silvicultural), horticultural burns, range or wildlife management practices, prevention or control of disease or pests, or a bonfire. Application for such approval shall only be presented by and permits issued to the owner of the land upon which the fire is to be kindled.

307.2.1. Additional authorization. Where required by state or local law or regulations, open burning shall only be permitted with prior approval from the state or local air and water quality management authority, provided that all conditions specified in the authorization are followed.

307.3 Extinguishment authority. When open burning creates or adds to a hazardous situation, creates a nuisance by the emission of smoke or gases, or a required permit for open burning has not been obtained, the fire code official or village employee is authorized to order the extinguishment of the open burning operation.

307.4 Location. The location for open burning and recreational fires shall not be less than 50 feet (15,240 mm) from any structure or combustible. In addition, conditions which could cause a fire to spread within 50 feet (15,240 mm) of a structure shall be eliminated prior to ignition.

Exception:
Fires in approved containers in accordance with this section.

307.4.1 Permanent fire pits. Each fire pit shall be dug into the ground in a manner that will prevent the burn materials from falling out of the fire pit. The above grade portion of the fire pit shall be constructed of stone, masonry, metal, or other similar noncombustible materials. The bottom of the fire pit shall be below grade and shall be comprised of gravel, stone, or dirt. The total open area of the fire pit shall be no more than thirty-six inches (36”) in diameter and no more than twenty-four inches (24”) in depth. The fire pit shall be surrounded by a noncombustible barrier that is at least six inches (6”) above the coals or ash within the fire pit. A ring of sand, dirt, or other noncombustible material at least thirty-six inches (36”) wide shall be provided around the fire pit to provide separation for combustibles, including plant materials.

Exception: For permanent fire pits that burn only propane, natural gas or other similar approved gases, the total open area and depth of the pit shall be measured for the burning area, not the entire unit.

307.4.1.1 Permits. A permit is required for the installation of a permanent or stationary fire pit.

307.4.2 Portable fire pits. Portable fire pits shall be located on a noncombustible, hard, level surface when in use, such as, but not limited to, concrete, paver bricks, or asphalt. Portable fire pits shall be used in accordance with manufacturer's instructions, including the use of all parts such as the screen,

lid, and grate. The total open area of the portable fire pit shall be no more than thirty-six inches (36”) in diameter and no more than twenty-four inches (24”) in height.

Exception: For permanent fire pits that burn only propane, natural gas or other similar approved gases, the total open area and depth of the pit shall be measured for the burning area, not the entire unit.

307.4.3 Clearance: A minimum clearance of fifteen feet (15') from all structures and combustibles, and fifteen feet (15') from a property line shall be maintained for permanent and portable fire pits. Structures and combustibles include, but are not limited to, homes, buildings, garages, sheds, playhouses, wood decks, trellises and other items that are combustible.

307.5 Attendance. Open burning, bonfires, and the use fire pits or outdoor fireplaces shall be constantly attended until the fire is extinguished. Not fewer than one portable fire extinguisher complying with Section 906 with a minimum 4-A rating or other approved on-site fire-extinguishing equipment, such as dirt, sand, water barrel, garden hose or water truck, shall be available for immediate utilization.

307.6 Approved fuel. Fuel used in bonfires, outdoor fireplaces, or fire pits shall be limited to unpainted, untreated, clean, seasoned dry wood or manufactured fire logs. Propane, natural gas, or other similar approved gases may also be used.

307.7 Hours and duration. Open burning, bonfires, and the use fire pits or outdoor fireplaces are prohibited between the hours of two o'clock (2:00) A.M. and six o'clock (6:00) A.M. All fires must be extinguished in such a manner that all air to the fire is cut off or the burning material is wet down with water or other fire extinguishing material as listed in Section 307.6., until it is cool to the touch. In addition, the recreational fire shall not burn for more than a total of six (6) hours in any twenty-four (24) hour period of time.

307.8 Inspections. Inspections may be conducted, relative to recreational fires or the equipment used to contain them by the village's fire, police and/or community development department at such times as deemed necessary by the Village, to ensure compliance with this section.

308.1.4 Open-flame cooking devices. Charcoal burners and other open-flame cooking devices shall not be operated on combustible balconies or within ten feet (3048 mm) of combustible construction.

Exceptions:
1. Group R Occupancies.
2. Cooking devices protected by commercial cooking hoods in accordance with Section 607.

605.5.2.1 Location. Portable outdoor gas-fired heating appliances and fire pit tables shall be used and located in accordance with Sections 605.5.2.1.1 through 605.5.2.1.4.

605.5.2.2.1 Listing and approval. Only listed and approved portable outdoor gas-fired heating appliances or fire pit tables utilizing a fuel gas container that is integral to the appliance shall be used. Portable outdoor gas-fired heating appliances shall be listed and labeled in accordance with ANSI Z83.26/CSA 2.37. Fire pit tables shall be listed and labeled in accordance with ANSI Z21.97/CSA 2.41 (2017).

Exception: Fire pit tables that has a fuel gas line installed in accordance with the International Fuel Gas Code that are listed and labeled in accordance with ANSI Z21.97/CSA 2.41 (2017).

605.5.2.2.2 Use and maintenance. Portable outdoor gas-fired heating appliances and fire pit tables shall be used and maintained in accordance with the manufacturer's instructions.

605.5.2.2.4 Guard against contact. The heating element or combustion chamber of portable outdoor gas-fired heating appliances or fire pit tables shall be permanently guarded so as to prevent accidental contact by persons or material.

Exception: Fire pit tables that do not have guards provided by the manufacturer.

605.5.2.3 Gas containers. Fuel gas containers for portable outdoor gas-fired heating appliances and fire pit tables shall comply with Section 605.5.2.3.1 through 605.5.2.3.4.

809 INDOOR HORTICULTURAL GROW STRUCTURES

809.1 Structures. Indoor horticultural grow structures installed and operated inside all occupancies that exceed 5 feet in height and 32 square feet in floor area shall comply with the *International Building Code* and this section.

809.1.1 Materials. Horticultural grow structures shall be constructed of noncombustible materials or of combustible materials that comply with the following:

1. Textiles and films complying with Test Method 2 of NFPA 701
2. Plastic materials having a maximum heat-release rate not greater than 100 kW when tested in accordance with UL 1975, *Fire Tests for Foamed Plastics Used for Decorative Purposes*, or when tested in accordance with NFPA 289, using the 20 kW ignition source
3. Exterior fire-retardant-treated wood complying with NFPA 703
4. Light-transmitting plastics complying with Section 2606 of the *International Building Code*
5. Aluminum composite material (ACM) meeting the requirements of Class A interior finish in accordance with Section 803 of the *International Building Code* when tested as an assembly in the maximum thickness intended for use

901.4.7.1 Access. Automatic sprinkler system risers, fire pumps and controllers shall be provided with ready access. Access shall be provided via an exterior access door directly to the sprinkler system riser or fire pump room or an alternative means approved by the fire code official. The door shall be permitted to be locked provided a key is available within a key box in accordance with Section 506.

903.2.1.1 Group A-1. An automatic sprinkler system shall be provided throughout all buildings containing group A-1 occupancies.

Exception: *Buildings 1,000 square feet or less housing group A-1 occupancies.*

903.2.1.2 Group A-2. An automatic sprinkler system shall be provided throughout all buildings containing group A-2 occupancies.

Exception: *Buildings 1,000 square feet or less housing group A-2 occupancies.*

903.2.1.3 Group A-3. An automatic sprinkler system shall be provided throughout all buildings containing group A-3 occupancies.

Exception*: Buildings 1,000 square feet or less housing group A-3 occupancies.*

903.2.1.4 Group A-4. An automatic sprinkler system shall be provided throughout all buildings containing group A-4 occupancies.

Exception*: Buildings 1,000 square feet or less housing group A-4 occupancies.*

903.2.2 Group B. An automatic sprinkler system shall be provided throughout all buildings containing Group B occupancies.

Exception: *Buildings 1,000 square feet or less housing Group B occupancies other than ambulatory care facilities.*

903.2.2.1 Ambulatory Care Facilities. An automatic sprinkler system shall be installed throughout the entire floor area containing an ambulatory care facility where either of the following conditions exist at any time:

1. Four or more care recipients are incapable of self-preservation, whether rendered incapable by staff or staff has accepted responsibility for care recipients already incapable.
2. One or more care recipients that are incapable of self-preservation are located at other than the level of exit discharge serving such a facility.

In buildings where ambulatory care is provided on levels other than the level of exit discharge, an automatic sprinkler system shall be installed throughout the entire floor where such care is provided and all floors between the level of ambulatory care and the nearest level of exit discharge, the level of exit discharge, and all floors below the level of exit discharge.

903.2.3 Group E. An automatic sprinkler system shall be provided throughout all buildings containing group E occupancies.

Exception: *Buildings 1,000 square feet or less housing group E occupancies.*

903.2.4 Group F. An automatic sprinkler system shall be provided throughout all buildings containing group F occupancies.

Exception: *Buildings 1,000 square feet or less housing group F occupancies.*

903.2.6 Group I is hereby amended by deleting exceptions 2 and 3 in their entirety without replacement.

903.2.7 Group M. An automatic sprinkler system shall be provided throughout all buildings containing group M occupancies.

Exception: *Buildings 1,000 square feet or less housing group M occupancies.*

903.2.9 Group S-1. An automatic sprinkler system shall be provided throughout all buildings containing group S-1 occupancies.

Exception: *Buildings 1,000 square feet or less housing group S-1 occupancies.*

903.2.10 Group S-2. An automatic sprinkler system shall be provided throughout all buildings containing group S-2 occupancies.

Exceptions:
1. *Open parking garages.*
2. *Buildings 1,000 square feet or less housing group S-2 occupancies.*

903.3.1.3.1 Waterflow alarms. Local waterflow alarms shall be provided. The local waterflow alarm shall provide an interior audible warning and an exterior audio/visual notification.
903.4.3 Floor control valves assemblies. Approved supervising indicating control valves, check valves, main drain valves, and flow switches shall be provided at the point of connection to the riser on each floor in all buildings. Control valves, check valves, main drain valves, and flow switches shall also be provided for each individual unit (commercial or business) where the units share a common water supply and have individual entrances.

Exception: *The floor control valve, check valve, main drain valve, and flow switch shall not be required where sprinklers on the top level of a multistory building are supplied by piping on the floor below.*

903.6.1. High-Rise buildings. Buildings having floors used for human occupancy located more than 75 feet above the lowest level of fire department vehicle access shall be equipped with an automatic sprinkler system in accordance with Section 903.3.1.1.

903.6.2. Condominium conversions. Buildings being converted into condominiums shall be equipped with an automatic sprinkler system in accordance with Section 903.3.1.1 or Section 903.3.1.2.

903.6.3 Level 3 alterations. Automatic sprinkler systems shall be provided throughout Group A, B, E, F, H, I, M and S structures that exceed 2,000 square feet where a level 3 alteration occurs as classified in the International Existing Building Code. All work requiring a permit done within any three-year period contributes to the fifty percent (50%) threshold required for a level 3 alteration.

Exceptions:
1. *Open parking garages.*
2. *If the building does not have sufficient municipal water supply available within 200 feet of the property line for design of a fire sprinkler system without the installation of a new fire pump.*

906.3.1.1 Group F and S. In Groups F and S occupancies, the minimum accepted extinguisher rating for use, unless a more restrictive provision is noted elsewhere, shall be 4A:60BC (10 lb typical). Extinguisher spacing shall be based on 3,500 square feet or 75 feet maximum travel unless a more restrictive provision is noted elsewhere.

907.2.8.3 Smoke alarms. Smoke alarms shall be installed in accordance with Section 907.2.11. The smoke alarms shall be connected to an emergency electrical system and shall be annunciated by guestroom at an approved, constantly attended location. Staff monitoring the panel shall be capable of manually activating the fire alarm system.

907.5.2.1.4 Audible alarm notification devices shall be provided on the building exterior where required by the fire code official.

907.5.2.3.4 Visible alarm notification devices shall be provided on the building exterior where required by the fire code official.

907.6.3 Initiating device identification. The fire alarm system shall identify the specific initiating device address, location, device type, floor level where applicable and status including indication of normal, alarm, trouble and supervisory status, as appropriate.

907.6.3.2 Annunciation maps. Fire alarm annunciation maps shall be provided at all fire alarm control panels, annunciator panels, fire command center, and any other location as determined by the fire official. The annunciation maps shall provide the locations of all fire alarm initiating devices on a floor plan.

907.6.6 Monitoring All fire alarm and suppression systems shall be monitored in accordance with this section.

Exception: *Monitoring by a supervising station is not required for:*
1. *Single- and multiple-station smoke alarms required by Section 907.2.11.*
2. *Smoke detectors in Group 1-3 Occupancies.*
3. *Automatic sprinkler systems in one- and two-family dwellings.*

907.6.6.4 Fire alarm and fire suppression systems. All fire alarm and fire suppression systems shall transmit fire, supervisory, and trouble signals to the village's designated remote supervising station via an approved method in accordance with NFPA 72.

907.11 Level 2 or 3 alterations. An approved fire alarm system shall be installed in accordance with Section 907 and NFPA 72 in buildings where either level 2 or level 3 alterations and/or a change of occupancy classification occurs as classified in the International Existing Building Code.

912.4.4 Concrete path and pad. Any fire department connection located behind or within landscaping or vegetation shall have a concrete path from the sidewalk or closest public way to the connection. A concrete pad of not less than 36 inches by 36 inches shall also be provided at the fire department connection.

915.1 General. Carbon monoxide detection shall be installed in new buildings in accordance with Sections 915.1.1 through 915.7. Carbon monoxide detection shall be installed in existing buildings in accordance with Section 1103.9.

915.7 Smoking lounges. Carbon monoxide detectors shall be installed in smoking lounges that utilize charcoal or similar fuels. The detectors shall automatically activate the building's mechanical ventilation system and a local alarm. Mechanical ventilation systems shall comply with the International Mechanical Code. Carbon monoxide detectors shall be installed in accordance with their manufacturer's recommendations and be listed in accordance with UL 2075.

Section 1008.3.2 Buildings. In the event of power supply failure an emergency electrical system shall automatically illuminate all of the following areas:

1. Interior exit access stairways and ramps.
2. Interior and exterior exit stairways and ramps.
3. Exit passageways.
4. Vestibules and areas on the level of discharge used for exit discharge in accordance with Section 1028.2.
5. Exterior landings as required by Section 1010.1.5 for exit doorways that lead directly to the exit discharge.

Section 1008.3.3 Rooms and spaces. In the event of power supply failure, an emergency electrical system shall automatically illuminate all of the following areas:
1. Public and private washrooms with an area greater than 300 square feet.
2. Locker and dressing rooms.
3. Lunch or break rooms with an area greater than 300 square feet.
4. Conference or assembly rooms with an area greater than 300 square feet.
5. Exercise rooms with an area greater than 300 square feet.
6. Examination rooms.
7. Electrical equipment and emergency generator rooms.
8. Fire pump and sprinkler rooms.
9. Fire command centers.

1010.2.16 Elevator lobby exit access door locking system. In existing Group B occupancies, door assemblies separating the elevator lobby form the exit access shall be permitted to be electrically locked where installed and operated in accordance with all of the following:
1. The electrical locking hardware is listed in accordance with ANSI/UL 294, *Standard for Access Control System Units*.
2. The building is protected throughout by a fire alarm system in accordance with Section 907.
3. The building is protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 903.
4. The elevator lobby is protected by an approved, supervised smoke detection system in accordance with Section 907.
5. Initiation of the building fire alarm system by other than manual fire alarm boxes unlocks the electrical locks on the elevator lobby door assembly.
6. Loss of power to the elevator lobby electrical lock system unlocks the electrical locks on the elevator lobby door assemblies.
7. Once unlocked, the elevator lobby door assemblies remain electrically unlocked until the building fire alarm system has been manually reset.
8. Where the elevator lobby door assemblies remain mechanically latched after being electrically unlocked, latch-releasing hardware in accordance with 1010.2 is affixed to the door leaves.
9. A two-way communication system is provided for communication between the elevator lobby and a central control point that is constantly staffed with personnel capable, trained, and authorized to provide emergency assistance.
10. The provisions of 10.10.2.13 for delayed-egress locking systems are not applied to the elevator lobby door assemblies.

1011.12 Stairway to roof. In buildings four or more stories above grade plane, one stairway shall extend to the roof surface, unless the roof has a slope steeper than 4 units vertical in 12 units horizontal (33-percent slope).

Exception: Other than where required by Section 1011.12.1 or 1011.12.3, in buildings without an occupied roof, access to the roof from the top story shall be permitted to be by a ships ladder from within an interior exit stairwell in accordance with Section 1023 of the International Building Code. A safety post shall be provided for extension above the roof level.

1011.12.3 High-rise buildings. In high-rise buildings, one stairway shall provide access to the roof through a penthouse complying with Section 1511.2 of the International Building Code.

1103.5.1 Group A-2 is hereby repealed in its entirety.

1103.9.1 Smoking lounges. Existing smoking lounges shall comply with Section 915.7.

3106.5.1 Separation from tents or structures. Cooking appliances or devices that produce sparks or grease-laden vapors or flying embers (firebrands) shall not be used within 20 feet of a tent or temporary structure.

Exceptions:
1. Designated cooking tents not occupied by the public when approved by the fire code official.
2. Tents or structures where cooking appliances are protected with an automatic fire-extinguishing system in accordance with Section 904.13.
3. Where an approved portable fire extinguisher is provided for the protection of cooking appliances when approved by the fire code official.

3903.3 Location. For other than carbon dioxide and nonhazardous extraction processes, the extraction equipment and extraction processes shall be located in a room of noncombustible construction, and the room shall not be used for any other purpose.

3903.3.1 Means of egress. For extraction rooms using hazardous materials, each room shall be provided with at least one exit access door complying with the following:
1. The door shall swing in the direction of egress travel.
2. The door shall be provided with a self-closing or automatic closing device.
3. The door shall be equipped with panic or fire exit hardware.

3903.3.2 Staffing. For other than approved, unattended processes, the extraction process shall be continuously staffed. Staff monitoring the extraction process shall be trained in the following:
1. The extraction process
2. The transfer of solvents, where applicable
3. Safe operation of all equipment
4. All emergency procedures

3903.6.1 Storage. Liquefied petroleum gas containers not in use shall not be stored within extraction rooms.

3904.2.2.4 Change of extraction medium. Where the medium of extraction or solvent is changed from the material indicated in the technical report, the technical report shall be revised and submitted for review and approval of the fire code official prior to the use of the equipment with the new medium or solvent.

3905.3 Protection. Automatic sprinkler protection shall be provided within hoods and ductwork conveying flammable or combustible gases or vapors in accordance with Sections 2703.10.4 and 2703.10.5, and NFPA 13.

REFERENCED STANDARDS

UL 9540 – 2020: Standard for Energy Storage Systems and Equipment

D107.1 One- or Two-Family Dwelling Residential Developments. Developments of one- or two-family dwellings where the number of dwelling units exceeds 30 shall be provided with two separate and approved fire apparatus access roads and shall meet the requirements of Section D106.3

Exceptions:

1. *Developments having up to 60 dwelling units may have a single approved fire apparatus access roads when all dwelling units are equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3 of this Code.*
2. *The number of dwelling units on a single fire apparatus access road shall not be increased unless fire apparatus access roads will connect with future development as determined by the fire code official*.

D107.2 Projects Having More Than 60 Dwelling Units. Developments of one- or two-family dwellings where the number of dwelling units exceeds 60 shall be provided with two separate and approved fire apparatus access roads regardless of whether they are equipped with an approved automatic sprinkler system. The access roads shall meet the requirements of Section D106.3

CHAPTER 157: - FIRE CODE

Section

§ 157.01 - ADOPTION.

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(Ord. 07-187, passed 12-11-2007; Am. Ord. 10-025, passed 4-13-2010; Am. Ord. 14-040, passed 4-8-2014; Am. Ord. 18-011, passed 1-23-2018)

§ 157.02 - LOCAL AMENDMENTS TO THE ~~2015~~ 2021 INTERNATIONAL FIRE CODE.

The ~~2015~~ 2021 International Fire Code is amended and changed as follows:

101.1 Title. These regulations shall be known as the Fire Code of the Village of Schaumburg, hereinafter referred to as ~~"the fire code" or~~ "this code."

~~**107.3**~~**109.3 Recordkeeping.** A record of periodic inspections, tests, servicing and other operations and maintenance shall be maintained on the premises or other approved location for not less than 3 years, or a different period of time where specified in this code or referenced standards. Records shall be made available for inspection by the fire code official, and a copy of the records shall be provided to the fire code official upon request. All inspection and maintenance reports shall be submitted via the IROL system (Inspection Reports Online). Any company or agent performing inspections and/or maintenance to fire protection systems shall be required to register with IROL.

~~**Section 108 Board of Appeals**~~**111 Means of Appeal** is hereby repealed in its ~~entirety, and~~entirety and replaced with the Appeal~~s~~ Process provisions contained in ~~chapter 153~~Section 153.03.1 of the Village Code. ~~herein~~.

112.4 Violation penalties is hereby repealed in its entirety and replaced with the provisions contained in Section 157.99 Fines and Penalties.

Section 202, Definitions, shall be read to include the following:

~~***BARBECUE GRILL.*** Typically a metal appliance with a grate and cover used for cooking in an outdoor environment fueled by wood, charcoal, propane or similar LP gas.~~

BONFIRE. A large, open air fire, utilized for a planned ceremonial or recreational event purposes~~,~~ ~~generally associated with a pep rally or celebration~~.

~~***CHIMENEA.*** A freestanding front loading fireplace with a bulbous body and usually a vertical smoke vent resembling a small chimney with an opening to view a small fire. Approved chimeneas shall be equipped with a grated door to close off the fireplace opening and a spark arrester atop the stack.~~

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FIRE PIT, PERMANENT ~~***or STATIONARY***~~***.*** A custom designed structure, either above and below grade, or wholly below grade, made of stone, masonry, metal or other similar noncombustible material.

FIRE PIT, ~~***PREFABRICATED***~~***PORTABLE.*** A prefabricated portable self-contained burning device having legs, a bottom container, screen, and a lid.

FIRE PIT TABLE. A fuel-fired table that has a small pit at the center of a tabletop. Fire pit tables usually have a base and top design.

~~***OPEN BURNING.*** The burning of materials wherein products of combustion are emitted directly into the ambient air without passing through a stack or chimney from an enclosed chamber. Open burning does not include the following:~~

~~1. Road flares, smudge pots and similar devices associated with safety or occupational uses typically considered open flames;~~

~~2. Recreational fires or use of barbecue grills, chimenea, fire pits and outdoor and portable outdoor fire places.~~

~~For the purpose of this definition, a chamber shall be regarded as enclosed when, during the time combustion occurs, only apertures, ducts, stacks, flues or chimney necessary to provide combustion air and permit the escape of exhaust gas are open.~~

OUTDOOR FIREPLACE. Similar to an indoor fireplace consisting of a noncombustible base, firebox, chimney and screen; to burn wood, propane and similar gases.

~~***OUTDOOR FIREPLACE, PORTABLE.*** A portable, outdoor, solid-fuel-burning fireplace that may be construed of steel, concrete, clay or other noncombustible material. A portable outdoor fireplace may be open in design, or may be equipped with a small hearth opening and a short chimney or chimney in the top.~~

PROHIBITED FIRE. The open burning of paper, garbage, refuse, waste, leaves, clippings, wood or other offensive materials.

~~***RECREATIONAL FIRE:*** An outdoor fire burning materials other than rubbish where the fuel being burned is not contained in an incinerator, outdoor fireplace, portable outdoor fireplace, barbecue grill, or fire pit for pleasure, religious, ceremonial, cooking, warmth or similar purposes.~~

~~**Section 307, Open Burning, Recreational Fires and Portable Outdoor Fireplaces** , reads:~~

~~**SECTION 307 OPEN BURNING, RECREATIONAL FIRES, OUTDOOR FIREPLACES AND FIRE PITS**~~

307.1. General. A person shall not kindle or maintain or authorize to be kindled or maintained any open burning~~, recreational fire, or use of an outdoor fire place or fire pit~~ unless conducted and approved in accordance with Section 307.~~1 herein~~.

Exceptions:

1) Fires set by a public official in performance of an official duty or recreational purposes, subject to a permit being issued as specified in Section 307.2.

2) Outdoor fireplaces constructed in accordance with the *International Building Code*.

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307.1.1. Prohibited open burning. Open burning shall be prohibited when atmospheric conditions or local circumstances make such fires hazardous.

Exceptions:

1) Prescribed burning for the purpose of reducing the impact of wildland fire when authorized by the fire code official;

2) Fires set by a public official in the performance of an official duty or recreational purposes, subject to a permit being issued as specified in Section 307.2. herein;

3) Fires used for private recreational purposes, as specified herein; and

4) Fires in outdoor fireplaces, portable outdoor fireplaces, chimeneas, portable and permanent/stationary fire pits or barbecue grills designed for cooking food as specified by Subsection 307.4.5. and Section 307.5., herein.

307.2. Permit required. A permit shall be obtained from the fire code official in accordance with Section 105.5 Subsection 105.6.30 of the IFC prior to kindling a fire for recognized cultivation and management of trees (silvicultural), horticultural burns, range or wildlife management practices, prevention or control of disease or pests, or a bonfire. Application for such approval shall only be presented by and permits issued to the owner of the land upon which the fire is to be kindled.

307.2.1. Additional authorization. Where required by state or local law or regulations, open burning shall only be permitted with prior approval from the state or local air and water quality management authority, provided that all conditions specified in the authorization are followed.

307.3 Extinguishment authority. When open burning creates or adds to a hazardous situation, creates a nuisance by the emission of smoke or gases, or a required permit for open burning has not been obtained, the fire code official or village employee is authorized to order the extinguishment of the open burning operation. In the absence of the fire code official, a sworn police officer, sworn firefighter or an authorized representative of the community development department may determine and order the extinguishment of any burning that creates a nuisance by the emission of smoke or noxious gases upon a neighboring property, or contributes to a hazardous condition to health or life safety.

307.4. Location. The location for open burning and recreational fires shall not be less than 50 feet (15,240 mm) from any structure or combustible. In addition, conditions which could cause a fire to spread within 50 feet (15,240 mm) of a structure shall be eliminated prior to ignition.

Exception:

1) Fires in approved containers in accordance with this section. that are not less than 15 feet (4,572 mm) from a structure.

307.4.1. Bonfires. A bonfire shall not be conducted within 50 feet (15,240 mm) of a structure or combustible material. In addition, conditions which could cause a fire to spread within 50 feet (15,240 mm) of a structure shall be eliminated prior to ignition.

307.4.2. Approved fuel. Wood burning recreational fires shall be limited to burning untreated, unpainted, clean, seasoned, dry wood and manufactured fire logs. Propane and other similar gases may also be burned. Burning of processed wood is strictly prohibited.

307.4.2 Permanent fire pits. Each fire pit shall be dug into the ground in a manner that will prevent the burn materials from falling out of the fire pit. The above grade portion of the fire pit shall be constructed of stone, masonry, metal, or other similar noncombustible materials. The bottom of the fire

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pit shall be below grade and shall be comprised of gravel, stone, or dirt. The total open area of the fire pit shall be no more than thirty-six inches (36") in diameter and no more than twenty-four inches (24") in depth. The fire pit shall be surrounded by a noncombustible barrier that is at least six inches (6") above the coals or ash within the fire pit. A ring of sand, dirt, or other noncombustible material at least thirty-six inches (36") wide shall be provided around the fire pit to provide separation for combustibles, including plant materials.

Exception: For permanent fire pits that burn only propane, natural gas or other similar approved gases, the total open area and depth of the pit shall be measured for the burning area, not the entire unit.

307.4.2.1 Permits. A permit is required for the installation of a permanent or stationary fire pit.

307.4.3 Portable fire pits. Portable fire pits shall be located on a noncombustible, hard, level surface when in use, such as, but not limited to, concrete, paver bricks, or asphalt. Portable fire pits shall be used in accordance with manufacturer's instructions, including the use of all parts such as the screen, lid, and grate. The total open area of the portable fire pit shall be no more than thirty-six inches (36") in diameter and no more than twenty-four inches (24") in height.

Exception: For permanent fire pits that burn only propane, natural gas or other similar approved gases, the total open area and depth of the pit shall be measured for the burning area, not the entire unit.

~~**307.4.3. Supervision.** Recreational fires shall be constantly attended by a person over the age of eighteen (18), until the fire is extinguished.~~

~~**307.4.4. Extinguishment.** A minimum of one portable fire extinguisher complying with Section 906 of the IFC, with a minimum 4-A rating or other approved on-site fire-extinguishing equipment and material, such as dirt, sand, water, garden hose, or fire extinguisher shall be available when any permanent fire structure, portable outdoor fireplace, chimenea, prefabricated fire pit, permanent/stationary fire pit or bonfire is in use.~~

~~**307.4.5. Portable outdoor fireplaces.** Portable outdoor fireplaces shall be located on a noncombustible, hard, level surface when in use, such as, but not limited to, concrete, paver bricks, or asphalt and be used in accordance with any additional manufacturer's instructions and shall not be operated within 15 feet (3,048 mm) of a structure or combustible material.~~

~~**307.5. Prefabricated fire pits, chimineas and permanent fire pits.**~~

~~**307.5.1. Structures and Combustibles:** Structures and combustibles include, but are not limited to, homes, garages, sheds, playhouses, wood decks and other items that are combustible. Certain distances from all structures and combustibles shall be maintained from all recreational fires as specified in this subsection.~~

~~**307.5.2. Prefabricated fire pits:** Fires may be burned in a fire pit that is a commercially, prefabricated device. All parts, including, but not limited to, screen, lid, and grate shall be used according to the manufacturer's direction.~~

~~**307.5.2.1 Composition:** When in use, prefabricated fire pits and chimineas must be located on a noncombustible, hard, level surface such as, but not limited to, concrete, paver bricks, or asphalt. The total open area of the pit shall be no more than thirty-six inches (36") in diameter and no more than twenty-four inches (24") in height.~~

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~~307.5.2.2.~~307.4.4 ~~**Clearance:**~~ A minimum clearance of fifteen feet (15') from all structures and combustibles, and fifteen feet (15') from a property line shall be maintained for ~~prefabricated fire pits and chimeneas~~ permanent and portable fire pits. Structures and combustibles include, but are not limited to, homes, buildings, garages, sheds, playhouses, wood decks, trellises and other items that are combustible.

~~**307.5.3. Permanent or stationary fire pits.**~~

~~**307.5.3.1. Composition:** Each permanent/stationary fire pit shall be dug into the ground in a manner that will prevent the burn materials from falling out of the fire pit. The above grade portion of the fire pit shall be constructed of stone, masonry, metal, or other similar noncombustible materials. The bottom of the fire pit shall be below grade and shall be comprised of gravel, stone, or dirt. The total open area of the pit shall be no more than thirty-six inches (36") in diameter and no more than twenty-four inches (24") in depth (from the bottom of the fire pit to the top of the above-grade materials. The fire pit shall be surrounded by a noncombustible barrier that is at least six inches (6") above the coals or ash within the fire pit. A ring of sand, dirt, or other noncombustible material at least thirty-six inches (36") wide, shall be provided around the fire pit to provide separation for combustibles. No plant material shall be allowed within said thirty-six-inch (36") ring.~~

~~*Exception:* For permanent/stationary fire pits that burn only propane and natural gas, the total open area and depth of the pit shall be measured for the burning area, not for the entire unit.~~

~~**307.5.3.2. Clearance.** A minimum clearance of fifteen feet (15') from a structure or combustible and fifteen feet (15') from a property line shall be maintained for permanent/stationary fire pits.~~

~~**307.5.3.3. Permits required.** Permanent/stationary fire pits must be permitted and inspected by the Community Development Department, for compliance with applicable building and zoning requirements.~~

~~**307.6. Odors and fumes.** Escape or emission from any open burning, fumes or odors that are detrimental or injurious to the property, health, safety, comfort or welfare of inhabitants of the community, is hereby declared to be a public nuisance, and is punishable by a fine. In addition, immediate fire extinguishment may be ordered pursuant to Section 307.3 herein.~~

~~**307.7. Smoke generation.** All fires must be maintained in such a manner as to minimize the generation of smoke. Smoke that is a result of a smoldering or dying fire shall be prohibited. Generation of such smoke is considered a public nuisance punishable by a fine. In addition, immediate fire extinguishment may be ordered pursuant to Section 307.3 herein.~~

Exception: For permanent fire pits that burn only propane, natural gas or other similar approved gases, the total open area and depth of the pit shall be measured for the burning area, not the entire unit.

307.5 Attendance. Open burning, bonfires, and the use fire pits or outdoor fireplaces shall be constantly attended until the fire is extinguished. Not fewer than one portable fire extinguisher complying with Section 906 with a minimum 4-A rating or other approved on-site fire-extinguishing equipment, such as dirt, sand, water barrel, garden hose or water truck, shall be available for immediate utilization.

307.6 Approved fuel. Fuel used in bonfires, outdoor fireplaces, or fire pits shall be limited to unpainted, untreated, clean, seasoned dry wood or manufactured fire logs. Propane, natural gas, or other similar approved gases may also be used.

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307.~~8.~~7 Hours and duration. ~~All fires~~ Open burning, bonfires, and the use fire pits or outdoor fireplaces are prohibited between the hours of two o'clock (2:00) A.M. and six o'clock (6:00) A.M. All fires must be extinguished in such a manner that all air to the fire is cut off or the burning material is wet down with water or other fire extinguishing material as listed in Section ~~307.4.4~~307.6. ~~herein~~, until it is cool to the touch. In addition, the recreational fire shall not burn for more than a total of six (6) hours in any twenty-four (24) hour period of time.

307.~~9.~~8 Inspections. Inspections may be conducted, relative to recreational fires or the equipment used to contain them by the village's fire, police and/or community development department at such times as deemed necessary by the Village, to ~~insure~~ ensure compliance with this section.

~~**Section 308.1.4 Open Flame Cooking Device** is hereby repealed in its entirety with no replacement.~~

308.1.4 Open-flame cooking devices. Charcoal burners and other open-flame cooking devices shall not be operated on combustible balconies or within ten feet (3048 mm) of combustible construction.

Exceptions:

1. Group R Occupancies.
2. Cooking devices protected by commercial cooking hoods in accordance with Section 607.

605.5.2.1 Location. Portable outdoor gas-fired heating appliances and fire pit tables shall be used and located in accordance with Sections 605.5.2.1.1 through 605.5.2.1.4.

605.5.2.2.1 Listing and approval. Only listed and approved portable outdoor gas-fired heating appliances or fire pit tables utilizing a fuel gas container that is integral to the appliance shall be used. Portable outdoor gas-fired heating appliances shall be listed and labeled in accordance with ANSI Z83.26/CSA 2.37. Fire pit tables shall be listed and labeled in accordance with ANSI Z21.97/CSA 2.41 (2017).

Exception: Fire pit tables that has a fuel gas line installed in accordance with the International Fuel Gas Code that are listed and labeled in accordance with ANSI Z21.97/CSA 2.41 (2017).

605.5.2.2.2 Use and maintenance. Portable outdoor gas-fired heating appliances and fire pit tables shall be used and maintained in accordance with the manufacturer's instructions.

605.5.2.2.4 Guard against contact. The heating element or combustion chamber of portable outdoor gas-fired heating appliances or fire pit tables shall be permanently guarded so as to prevent accidental contact by persons or material.

Exception: Fire pit tables that do not have guards provided by the manufacturer.

605.5.2.3 Gas containers. Fuel gas containers for portable outdoor gas-fired heating appliances and fire pit tables shall comply with Section 605.5.2.3.1 through 605.5.2.3.4.

~~**Section 510 Emergency Responder Radio Coverage** is hereby repealed in its entirety, and replaced with the provisions the Public Safety Radio Amplification Systems provisions contained in chapter 108 herein.~~

~~**Section 605.11 Solar Voltaic Power System** is hereby amended by adding the following new section:~~

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~~**605.11.3 Rapid Shutdown.** Solar photovoltaic power systems shall be provided with a rapid shutdown function in accordance with NFPA 70. The location(s) of the rapid shutdown controls shall be approved by the fire code official.~~

~~**Section 901.6.2 Records** is hereby amended by adding the following new paragraph:~~

~~The owners of a fire alarm system shall maintain a valid fire alarm system maintenance agreement. A current copy of the maintenance agreement, the fire alarm test/inspection report, and the monitoring agreement shall be kept on the premises and be available for inspection.~~

809 INDOOR HORTICULTURAL GROW STRUCTURES

809.1 Structures. Indoor horticultural grow structures installed and operated inside all occupancies that exceed 5 feet in height and 32 square feet in floor area shall comply with the *International Building Code* and this section.

809.1.1 Materials. Horticultural grow structures shall be constructed of noncombustible materials or of combustible materials that comply with the following:

1. Textiles and films complying with Test Method 2 of NFPA 701
2. Plastic materials having a maximum heat-release rate not greater than 100 kW when tested in accordance with UL 1975, *Fire Tests for Foamed Plastics Used for Decorative Purposes*, or when tested in accordance with NFPA 289, using the 20 kW ignition source
3. Exterior fire-retardant-treated wood complying with NFPA 703
4. Light-transmitting plastics complying with Section 2606 of the *International Building Code*
5. Aluminum composite material (ACM) meeting the requirements of Class A interior finish in accordance with Section 803 of the *International Building Code* when tested as an assembly in the maximum thickness intended for use

901.4.7.1 Access. Automatic sprinkler system risers, fire pumps and controllers shall be provided with ready access. Access shall be provided via an exterior access door directly to the sprinkler system riser or fire pump room or an alternative means approved by the fire code official. The door shall be permitted to be locked provided a key is available within a key box in accordance with Section 506.

~~**Section** **903.2.1.1 Group A-1** is hereby repealed in its entirety and replaced with the following new section:~~

~~Group A-1.~~ An automatic sprinkler system shall be provided throughout all buildings containing group A-1 occupancies.

Exception: Buildings 1,000 square feet or less housing group A-1 occupancies.

~~**Section** **903.2.1.2 Group A-2** is hereby repealed in its entirety and replaced with the following new section:~~

~~Group A-2.~~ An automatic sprinkler system shall be provided throughout all buildings containing group A-2 occupancies.

Exception: Buildings 1,000 square feet or less housing group A-2 occupancies.

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~~**Section** **903.2.1.3 Group A-3** is hereby repealed in its entirety and replaced with the following new section:~~

~~Group A-3.~~ An automatic sprinkler system shall be provided throughout all buildings containing group A-3 occupancies.

Exception: Buildings 1,000 square feet or less housing group A-3 occupancies.

~~**Section** **903.2.1.4 Group A-4** is hereby repealed in its entirety and replaced with the following new section:~~

~~Group A-4.~~ An automatic sprinkler system shall be provided throughout all buildings containing group A-4 occupancies.

Exception: Buildings 1,000 square feet or less housing group A-4 occupancies.

~~**Section 903.2.2 Ambulatory Care Facilities** is hereby repealed in its entirety and replaced with the following new section:~~

~~**Section** **903.2.2 Group B.** An automatic sprinkler system shall be provided throughout all buildings containing Group B occupancies.

Exception: Buildings 1,000 square feet or less housing Group B occupancies other than ambulatory care facilities.

~~**Section** **903.2.2.1 Ambulatory Care Facilities.** An automatic sprinkler system shall be installed throughout the entire floor area containing an ambulatory care facility where either of the following conditions exist at any time:

1. Four or more care recipients are incapable of self-preservation, whether rendered incapable by staff or staff has accepted responsibility for care recipients already incapable.
2. One or more care recipients that are incapable of self-preservation are located at other than the level of exit discharge serving such a facility.

In buildings where ambulatory care is provided on levels other than the level of exit discharge, an automatic sprinkler system shall be installed throughout the entire floor where such care is provided ~~as well as all floors below, and all floors between the level of ambulatory care and the nearest level of exit discharge, including the level of exit discharge.~~ and all floors between the level of ambulatory care and the nearest level of exit discharge, the level of exit discharge, and all floors below the level of exit discharge.

~~**Section** **903.2.3 Group E** is hereby repealed in its entirety and replaced with the following new section:~~

~~Group E.~~ An automatic sprinkler system shall be provided throughout all buildings containing group E occupancies.

Exception: Buildings 1,000 square feet or less housing group E occupancies.

~~**Section** **903.2.4 Group F** is hereby repealed in its entirety and replaced with the following new section:~~

~~Group F.~~ An automatic sprinkler system shall be provided throughout all buildings containing group F occupancies.

Exception: Buildings 1,000 square feet or less housing group F occupancies.

~~Section~~ **903.2.6 Group I** is hereby amended by deleting exceptions 2 and 3 in their entirety without replacement.

~~Section~~ **903.2.7 Group M** ~~is hereby repealed in its entirety and replaced with the following new section:~~

~~Group M.~~ An automatic sprinkler system shall be provided throughout all buildings containing group M occupancies.

Exception: Buildings 1,000 square feet or less housing group M occupancies.

~~Section~~ **903.2.9 Group S-1** ~~is hereby repealed in its entirety and replaced with the following new section:~~

~~Group S-1.~~ An automatic sprinkler system shall be provided throughout all buildings containing group S-1 occupancies.

Exception: Buildings 1,000 square feet or less housing group S-1 occupancies.

~~Section~~ **903.2.10 Group S-2** ~~is hereby repealed in its entirety and replaced with the following new section:~~

~~Group S-2.~~ An automatic sprinkler system shall be provided throughout all buildings containing group S-2 occupancies.

Exceptions:

1. *Open parking garages.*
2. *Buildings 1,000 square feet or less housing group S-2 occupancies.*

~~**Section 903.3.1.3 NFPA 13D Sprinkler Systems** is hereby amended by adding the following new section:~~

~~Section~~ **903.3.1.3.1 Waterflow alarms.** Local waterflow alarms shall be provided. The local waterflow alarm shall provide an interior audible warning and an exterior audio/visual notification.

~~**Section 903.3.8** is hereby repealed in its entirety without replacement.~~

~~**Section 903.3. Installation Requirements** is hereby amended by adding the following new section:~~

~~**903.3.9 Access Door.** Provide an outside access door to the sprinkler riser valve room and fire pump room, or alternative access as approved by the fire code official.~~

~~**Section 903.4.3 Floor Control Valves** is hereby repealed in its entirety and replaced with the following new section:~~

903.4.3 Floor control valves assemblies. Approved supervising indicating control valves, check valves, main drain valves, and flow switches shall be provided at the point of connection to the riser on each floor in all buildings. Control valves, check valves, main drain valves, and flow switches shall

also be provided for each individual unit (commercial or business) where the units share a common water supply and have individual entrances.

Exception: The floor control valve, check valve, main drain valve, and flow switch shall not be required where sprinklers on the top level of a multistory building are supplied by piping on the floor below.

~~**Section 903.6 Where Required in Building and Structures** is hereby amended by adding the following new sections~~:

903.6.1. High-Rise buildings. Buildings having floors used for human occupancy located more than 75 feet above the lowest level of fire department vehicle access shall be equipped with an automatic sprinkler system in accordance with Section 903.3.1.1. ~~required to install an automatic sprinkler system throughout the building in accordance with NFPA 13.~~

903.6.2. Condominium conversions. ~~**Any building**~~ **Buildings** being converted into condominiums shall be equipped with an automatic sprinkler system in accordance with Section 903.3.1.1 or Section 903.3.1.2. ~~protected throughout by an automatic sprinkler system in compliance with the International Building Code and International Fire Code, as amended. Conversion buildings up to and including four stories in height may comply with the sprinkler system design and installation requirements of NFPA 13R, in lieu of NFPA 13 upon written approval of the fire chief. Said approval shall be based upon the fire chief's opinion that the existing construction features of the building being converted do not create a significant hazard to firefighters or building occupants.~~

~~**Section 903 Automatic Sprinkler Systems** is hereby amended by adding the following new section:~~

~~**903.7**~~**903.6.3 Level 3** ~~**Alterations**~~**alterations.** Automatic sprinkler systems shall be provided throughout Group A, B, E, F, H, I, M and S structures that exceed 2,000 square feet where a level 3 alteration occurs as classified in the International Existing Building Code. All work requiring a permit done within any three-year period contributes to the fifty percent (50%) threshold required for a level 3 alteration.

Exceptions:

1. *Open parking garages.*
2. *If the building does not have sufficient municipal water supply available within 200 feet of the property line for design of a fire sprinkler system without the installation of a new fire pump.*

~~**Section 904.12 Commercial Cooking Systems** is hereby amended by adding the following new sections:~~

~~**Section 904.12.7 (Special provisions for water-based fire-extinguishing systems for commercial cooking systems).** Water-based commercial cooking systems shall be supplied from the building automatic sprinkler system through a connection located between the system check valve and alarm valve.~~

~~*Exception: Buildings without an automatic sprinkler system.*~~

~~**Section 904.12.7.1 (Control Valve).** A separate, readily accessible, indicating-type control valve shall be provided on all water-based fire-extinguishing systems for commercial cooking systems. The control vale shall be monitored by the building fire alarm system.~~

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~~*Exception: The control valve shall activate a local alarm for buildings without an automatic fire alarm system.*~~

~~**Section 906.1. Where Required.** Portable fire extinguishers shall be installed in all new and existing occupancies.~~

~~**Section** **906.3**~~.1.1 Group F and S ~~**Size and Distribution** is hereby amended by deleting the first sentence in its entirety and replacing it with the following new first sentence:~~

In Groups F and S occupancies, ~~The~~the minimum accepted extinguisher rating for use, unless a more restrictive provision is noted elsewhere, shall be 4A:60BC (10 lb typical). Extinguisher spacing shall be based on 3,500 square feet or 75 feet maximum travel unless a more restrictive provision is noted elsewhere.

~~**Table 906.3(1)** is hereby repealed in its entirety without replacement.~~

~~**Section 907.1.3 Equipment** is hereby amended by adding the following new sentence:~~

~~All fire alarm systems shall be of the addressable type and shall be installed per NFPA 72.~~

~~**Section 907.2 Where required - new buildings and structures** is hereby amended by adding a sentence immediately after the section title as follows:~~

~~Those occupancies and buildings where either level 2 or level 3 alterations and/or a change of occupancy classification occurs as classified in the 2015 International Existing Building Code.~~

~~**Section 907.2.1 Group A.**~~

~~A manual fire alarm system and an automatic fire detection system shall be installed throughout all buildings containing A-1, A-2, A-3, A-4, and A-5 occupancies.~~

~~*Exceptions:*~~

~~*1. A-1, A-2, A-3, and A-4 occupancies having an occupant load of less than 50.*~~

~~*2. A-5 occupancies having an occupant load less than 300.*~~

~~*3. Where an automatic sprinkler system is provided throughout the building and connected to the building fire alarm system, an automatic fire detection system is not required unless otherwise specified.*~~

~~**Section 907.2.2 Group B.**~~

~~A manual fire alarm system and an automatic fire detection system shall be installed throughout all buildings containing group B occupancies.~~

~~*Exceptions:*~~

~~*1. Occupancies having an occupant load of less than 50 and having direct exiting to the building exterior.*~~

~~*2. Where an automatic sprinkler system is provided throughout the building and connected to the building fire alarm system, an automatic fire detection system is not required unless otherwise specified.*~~

~~**Section 907.2.2.1** is hereby repealed in its entirety without replacement.~~

Section 907.2.2 Group B is amended by adding the following new section:

Section 907.2.2.2 Manual Fire Alarm System. A manual fire alarm system shall be installed throughout all building containing ambulatory care facilities.

Section 907.2.3 Group E.

A manual fire alarm system and an automatic fire detection system shall be installed throughout all buildings containing group E occupancies. Activation of the fire alarm in Group E occupancies shall initiate a signal using an emergency voice/alarm communication system in accordance with Section 907.5.2.2 herein.

Exception: Where an automatic sprinkler system is provided throughout the building and connected to the building fire alarm system, an automatic fire detection system is not required unless otherwise specified.

Section 907.2.4 Group F and S.

A manual fire alarm system and an automatic fire detection system shall be installed throughout all buildings of containing group F and S occupancies.

Exceptions:

1. *Occupancies having an occupant load of less than 50 and having direct exiting to the building exterior.*
2. *Where an automatic sprinkler system is provided throughout the building and connected to the building fire alarm system, an automatic fire detection system is not required unless otherwise specified.*
3. *An automatic fire detection system is not required in open parking garages.*

Section 907.2.5 Group H.

A manual fire alarm system shall be installed in all group H occupancies. An automatic smoke detection system shall be installed for highly toxic gases, organic peroxides and oxidizers in accordance with **Chapters 60 Highly Toxic and Toxic Materials, Chapter 62 Organic Peroxides, and Chapter 63 Oxidizers, Oxidizing Gases and Oxidizing Cryogenic Fluids** , herein.

Section 907.2.6 Group I.

A manual fire alarm and an automatic detection system shall be installed throughout all buildings containing group I occupancies.

Section 907.2.7 Group M.

A manual fire alarm system and an automatic fire detection system shall be installed throughout all buildings containing group M occupancies.

Exceptions:

1. *Occupancies having an occupant load less than 50 and having direct exiting to the building exterior.*

2. *Where an automatic sprinkler system is provided throughout the building and connected to the building fire alarm system, an automatic fire detection system is not required unless otherwise specified*.

Section 907.2.8.1 Manual Fire Alarm Systems is hereby amended by deleting exceptions 1 and 2 in their entirety without replacement.

Section 907.2.8.3 Smoke Alarmsalarms. Smoke alarms shall be installed as required byin accordance with section Section 907.2.11. The smoke alarms shall be connected to an emergency electrical system and shall be annunciated by guestroom at an approved, constantly attended location. Staff monitoring the panel shall be capable of manually activating the fire alarm system, from which the fire alarm system is capable of being manually activated.

Section 907.2.9 Group R-2.

Manual fire alarm and an automatic detection system shall be installed throughout all buildings containing group R-2 occupancies.

Exceptions:

1. *Buildings not more than two (2) stories in height where all dwelling units and contiguous attic and crawl spaces are separated from each other by at least a one (1) hour fire partition and each dwelling unit has an exit directly to a public way, exit court, or yard.*
2. *Where an automatic sprinkler system is provided throughout the building and connected to the building fire alarm system, an automatic fire detection system is not required unless otherwise specified.*

Section 907.3.3 Elevator Emergency Operation is hereby amended by adding the following new paragraph:

In buildings having elevators and a fire alarm system, all elevators shall, upon sounding of the building's general alarm signals, have the elevator automatically return to the first or designated alternate floor. Control of the elevator shall be under the direction of the fire department during the emergency. Normal operating procedures shall remain inactive until restored by authorized personnel.

Section 907.5.2 Alarm Notification Appliances is hereby amended by adding the following new sections:

907.5.2.1.3 4 Audible alarm notification devices shall be provided on the building exterior where required by the fire code official.

907.5.2.3.4 Visible alarm notification devices shall be provided on the building exterior where required by the fire code official.

907.6.3 Initiating device identification. The fire alarm system shall identify the specific initiating device address, location, device type, floor level where applicable and status including indication of normal, alarm, trouble and supervisory status, as appropriate.

Section 907.6.4 Zones is hereby amended by adding the following new section:

907.6.4.3907.6.3.2 Zone Annunciation maps. Fire alarm zone annunciation maps shall be provided at all fire alarm control panels, annunciator panels, fire command center, and any other

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location as determined by the fire official. The ~~zone~~ annunciation maps shall provide the locations of all fire alarm initiating devices on a floor plan.

~~**Sections 907.6.5, 907.6.5.1 and 907.6.5.2** are hereby repealed in their entirety without replacement.~~

~~**Section**~~ **907.6.6 Monitoring** All fire alarm and suppression systems shall be monitored in accordance with this section.

Exception: Monitoring by a supervising station is not required for:

1. *Single- and multiple-station smoke alarms required by Section 907.2.11.*
2. *Smoke detectors in Group 1-3 Occupancies.*
3. *Automatic sprinkler systems in one- and two-family dwellings.*

~~**907.6.6.1 Wireless Monitoring.** All fire alarm systems shall be monitored by a listed central station or remote supervising station. Any fire alarm systems applied for or installed after this local code amendment was enacted shall transmit trouble, supervisory, and fire signals to a listed central station or remote supervising station via a wireless transceiver in accordance with NFPA 72. Existing hard-wired installations shall meet the requirements for wireless systems when any of the following occurs:~~

~~1. An alarm has been in a trouble condition or out of service for a time period of more than 30 days as a result of a problem with the dedicated telephone fire alarm circuit.~~

~~2. An alarm has experienced three or more line trouble conditions lasting 48 hours or more in any twelve-month period.~~

~~3. When an existing contract with a monitoring agency (central station) ends and a new alarm contract is entered.~~

907.6.6.~~2~~ 4 ~~New~~ Fire ~~Alarm~~ alarm and ~~Fire~~ fire ~~Suppression~~ suppression ~~Systems~~systems. All ~~new~~ fire alarm and fire suppression systems shall transmit fire, supervisory, and trouble signals to the village's designated remote supervising station via a wireless transmitter in accordance with NFPA 72.

~~**907.6.6.3 Amortization of Existing Fire Alarm and Fire Suppression Systems.** All existing fire alarm and fire suppression systems shall transmit fire, supervisory, and trouble signals to the village's designated remote supervising station via a wireless transmitter in accordance with NFPA 72 when any of the following occurs:~~

~~1. When an existing contract with a monitoring agency (central station) ends.~~

~~2. When the existing fire alarm equipment is modified or replaced.~~

~~3. Prior to August 31, 2019.~~

~~*Exception: Extensions may be granted for contracts with a monitoring agency (central station) existing at the effective date of the ordinance that extend beyond August 31, 2019 and upon a determination by the Fire Chief that the public safety is not affected, but no longer than August 31, 2021.*~~

~~**Section 912.4 Access** is hereby amended by adding the following new section:~~

907.11 Level 2 or 3 alterations. An approved fire alarm system shall be installed in accordance with Section 907 and NFPA 72 in buildings where either level 2 or level 3 alterations and/or a change of occupancy classification occurs as classified in the International Existing Building Code.

912.4.4 Concrete ~~Path~~ path and ~~Pad~~pad. Any fire department connection located behind or within landscaping or vegetation shall have a concrete path from the sidewalk or closest public way to the connection. A concrete pad of not less than 36 inches by 36 inches shall also be provided at the fire department connection.

915.1 General. Carbon monoxide detection shall be installed in new buildings in accordance with Sections 915.1.1 through 915.7. Carbon monoxide detection shall be installed in existing buildings in accordance with Section 1103.9.

915.7 Smoking lounges. Carbon monoxide detectors shall be installed in smoking lounges that utilize charcoal or similar fuels. The detectors shall automatically activate the building's mechanical ventilation system and a local alarm. Mechanical ventilation systems shall comply with the International Mechanical Code. Carbon monoxide detectors shall be installed in accordance with their manufacturer's recommendations and be listed in accordance with UL 2075.

~~**Section 1008.3.2 Buildings** is hereby amended by deleting the introductory sentence of this section in its entirety and replacing it with the following sentence:~~

~~In the event of power supply failure an emergency electrical system shall automatically illuminate all of the following areas:~~

Section 1008.3.2 Buildings. In the event of power supply failure an emergency electrical system shall automatically illuminate all of the following areas:

1. Interior exit access stairways and ramps.

2. Interior and exterior exit stairways and ramps.

3. Exit passageways.

4. Vestibules and areas on the level of discharge used for exit discharge in accordance with Section 1028.2.

5. Exterior landings as required by Section 1010.1.5 for exit doorways that lead directly to the exit discharge.

Section 1008.3.3~~.~~ Rooms and ~~Spaces~~spaces. In the event of power supply failure, an emergency electrical system shall automatically illuminate all of the following areas:

1. Public and private washrooms with an area greater than 300 square feet.
2. Locker and dressing rooms.
3. Lunch or break rooms with an area greater than 300 square ~~.~~feet.
4. Conference or assembly rooms with an area greater than 300 square ~~.~~feet.
5. Exercise rooms with an area greater than 300 square ~~.~~feet.

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6. Examination rooms.
7. Electrical equipment and emergency generator rooms.
8. Fire pump and sprinkler rooms.
9. Fire command centers.

1010.2.16 Elevator lobby exit access door locking system. In existing Group B occupancies, door assemblies separating the elevator lobby form the exit access shall be permitted to be electrically locked where installed and operated in accordance with all of the following:

1. The electrical locking hardware is listed in accordance with ANSI/UL 294, *Standard for Access Control System Units*.
2. The building is protected throughout by a fire alarm system in accordance with Section 907.
3. The building is protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 903.
4. The elevator lobby is protected by an approved, supervised smoke detection system in accordance with Section 907.
5. Initiation of the building fire alarm system by other than manual fire alarm boxes unlocks the electrical locks on the elevator lobby door assembly.
6. Loss of power to the elevator lobby electrical lock system unlocks the electrical locks on the elevator lobby door assemblies.
7. Once unlocked, the elevator lobby door assemblies remain electrically unlocked until the building fire alarm system has been manually reset.
8. Where the elevator lobby door assemblies remain mechanically latched after being electrically unlocked, latch-releasing hardware in accordance with 1010.2 is affixed to the door leaves.
9. A two-way communication system is provided for communication between the elevator lobby and a central control point that is constantly staffed with personnel capable, trained, and authorized to provide emergency assistance.
10. The provisions of 10.10.2.13 for delayed-egress locking systems are not applied to the elevator lobby door assemblies.

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~~**Section**~~ **1011.12 Stairway to ~~Roof~~roof.** In buildings four or more stories above grade plane, one stairway shall extend to the roof surface, unless the roof has a slope steeper than ~~four~~ 4 units vertical in 12 units horizontal (33-percent slope).

Exception: Other than where required by Section 1011.12.1 or 1011.12.3, in buildings without an occupied roof, access to the roof from the top story shall be permitted to be by a ships ladder from within an interior exit stairwell in accordance with Section 1023 of the International Building Code. A safety post shall be provided for extension above the roof level.

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~~**Section 1011.12. Stairway to Roof** is hereby amended by adding the following new section:~~

1011.12.3 High-rise buildings. In high-rise buildings, one stairway shall provide access to the roof through a penthouse complying with Section ~~1510.2~~1511.2 of the International Building Code.

~~**Section 1023.3.1 Extension** is hereby repealed in its entirety without replacement.~~

~~**Section 1103.9 Carbon Monoxide Alarms.** Existing Group I-1, I-2, I-4, and R occupancies shall be equipped with carbon monoxide alarms in accordance with Section 915.2. Carbon monoxide alarms shall be listed in accordance with UL 2034.~~

1103.5.1 Group A-2 is hereby repealed in its entirety.

1103.9.1 Smoking lounges. Existing smoking lounges shall comply with Section 915.7.

~~**Appendix D Fire Apparatus Access Roads**~~**.**

3106.5.1 Separation from tents or structures. Cooking appliances or devices that produce sparks or grease-laden vapors or flying embers (firebrands) shall not be used within 20 feet of a tent or temporary structure.

Exceptions:

1. Designated cooking tents not occupied by the public when approved by the fire code official.
2. Tents or structures where cooking appliances are protected with an automatic fire-extinguishing system in accordance with Section 904.13.
3. Where an approved portable fire extinguisher is provided for the protection of cooking appliances when approved by the fire code official.

3903.3 Location. For other than carbon dioxide and nonhazardous extraction processes, the extraction equipment and extraction processes shall be located in a room of noncombustible construction, and the room shall not be used for any other purpose.

3903.3.1 Means of egress. For extraction rooms using hazardous materials, each room shall be provided with at least one exit access door complying with the following:

1. The door shall swing in the direction of egress travel.
2. The door shall be provided with a self-closing or automatic closing device.
3. The door shall be equipped with panic or fire exit hardware.

3903.3.2 Staffing. For other than approved, unattended processes, the extraction process shall be continuously staffed. Staff monitoring the extraction process shall be trained in the following:

1. The extraction process
2. The transfer of solvents, where applicable
3. Safe operation of all equipment
4. All emergency procedures

3903.6.1 Storage. Liquefied petroleum gas containers not in use shall not be stored within extraction rooms.

3904.2.2.4 Change of extraction medium. Where the medium of extraction or solvent is changed from the material indicated in the technical report, the technical report shall be revised and submitted for review and approval of the fire code official prior to the use of the equipment with the new medium or solvent.

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3905.3 Protection. Automatic sprinkler protection shall be provided within hoods and ductwork conveying flammable or combustible gases or vapors in accordance with Sections 2703.10.4 and 2703.10.5, and NFPA 13.

REFERENCED STANDARDS

UL 9540 – 2020: Standard for Energy Storage Systems and Equipment

D107.1 One- or Two-Family Dwelling Residential Developments. Developments of one- or two-family dwellings where the number of dwelling units exceeds 30 shall be provided with two separate and approved fire apparatus access ~~roads, and~~roads and shall meet the requirements of Section ~~D104.3.~~D106.3

Exceptions:

1. *Developments having up to 60 dwelling units may have a single approved fire apparatus access roads when all dwelling units are equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3 of this Code.*
2. *The number of dwelling units on a single fire apparatus access road shall not be increased unless fire apparatus access roads will connect with future development as determined by the fire code ~~official.~~ official.*

D107.2 Projects Having More Than 60 Dwelling Units. Developments of one- or two-family dwellings where the number of dwelling units exceeds 60 shall be provided with two separate and approved fire apparatus access roads regardless of whether they are equipped with an approved automatic sprinkler system. The access roads shall meet the requirements of Section D106.3

(Ord. 07-187, passed 12-11-2007; Am. Ord. 10-025, passed 4-13-2010; Am. Ord. 12-016, passed 2-14-2012; Am. Ord. 14-040, passed 4-8-2014; Am. Ord. 16-007, passed 1-26-2016; Am. Ord. 16-078, passed 8-23-2016; Am. Ord. 16-097, passed 10-11-2016; Am. Ord. 18-011, passed 1-23-2018; Am. Ord. 19-006, passed 1-22-2019; Am. Ord. 19-024, passed 3-26-2019)

§ 157.99 - FINES AND PENALTIES.

Any person who violates any provision of this chapter or other fire regulations of the village may be fined as specified in § 10.99 (General Penalty) of this Code.

(Ord. 18-011, passed 1-23-2018)

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