

CHAPTER 26-ORDINANCES
FIRE PREVENTION REGULATIONS

<u>ORDINANCE</u>		<u>DATE PASSED</u>
74-024	Establish Fire Prevention Bureau	02.05.74
76-037	Word "Director" changed to "Fire Marshal", addition of Article 5 - Life Safety Code, and new Article 4 - International Fire Code Fire Prevention Code	04.13.76
79-058	Appointment of Fire Marshal	10.02.79
83-021	Changes to Article 1	05.10.83
84-037	Amending by repealing the old Chapter 26 in its entirety and enacting in lieu thereof a new Chapter 26 titled "Fire Regulations	08.28.84
86-049	Amending Section 26-107	08.26.86
87-039	Amending Chapter 26 in its entirety	05.26.87
89-024	Amending Fees	04.11.89
89-127	Amending Fire Prevention Regulations	12.12.89
91-013	Emergency Escape Windows; Security	02.26.91
91-031	Ambulance User Fees	04.23.91
93-049	Amending Fees	04.27.93
93-102	Amending Fire Prevention Regulations	07.27.93
93-125	Amending Definitions, and Creation of Fire Prevention Bureau	10.12.93
94-005	Adopting latest INTERNATIONAL FIRE CODE, 2006 EDITION	01.11.94
94-040	Amending Required Inspections	04.26.94
94-087	With Respect to Fees and Fines	07.26.94
95-189	Amending Requirements to Keep Copies on File Re Building Codes	12.19.95
97-022	Amending Fire Inspections	04.08.97
00-116	Amending Deputy Chief and Fire Marshal	06.27.00
01-072	Amending Fees, Taxes and Fines	04.24.01
01-165	Amending Required Inspections	10.09.01
02-071	Amending Fire Prevention Code	07.09.02
04-052	Amending Fines & Charges	05.03.04
05-065	Amending with Respect to Ambulance Fees	05.31.05

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FIRE PREVENTION REGULATIONS

<u>ORDINANCE</u>		<u>DATE PASSED</u>
07-046	Amending Fees (Chap. 8, 13, 26 & 33)	04.24.07
08-019	Amending Re Fees for Fire Dept. Services	03.11.08
08-105	Amending Article 4 (Fire Prevention Code) re Outdoor Fireplaces/Fire Pits	10.28.08

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CHAPTER 26 -- FIRE REGULATIONS

ARTICLE 1 -- FIRE PREVENTION BUREAU

Section 26-101. DEFINITIONS. (Amended in its entirety by Ordinance No. 00-116, 06.27.00) For the purpose of this Chapter 26, the following terms, phrases, words and their derivations shall have the meanings given herein. When not inconsistent with the context, words used in the present tense include the future, words in the plural number include the singular number, and words in the singular number include the plural number. The word "shall" is always mandatory and not merely directory.

- (A) "Village" is the Village of Bolingbrook.
- (B) "Fire Marshal" is the supervisor of the day-to-day operations of the Fire Prevention Bureau.

Section 26-102. CREATION OF FIRE PREVENTION BUREAU. There is hereby created in the Fire Department a Fire Prevention Bureau. (Ordinance No. 93-125, 10.12.93)

Section 26-103. DUTIES OF FIRE PREVENTION BUREAU. The Fire Prevention Bureau, under the supervision of the Fire Marshal, shall enforce all laws and ordinances covering the following:

- (a) Inspection of potential hazards.
- (b) Abatement of existing hazards.
- (c) Investigation of the cause, origin and circumstances of fires.
- (d) Control and use of explosives and flammables.
- (e) Regulation of the maintenance of fire escapes.
- (f) Regulation of the installation and maintenance of automatic and other private fire alarm systems, and fire extinguishing equipment.
- (g) Control of the means and adequacy of exits in case of fire, from factories, schools, hotels, lodging houses, hospitals, churches, halls, theaters, and all other places in which persons work, meet, live or congregate.
- (h) Educational fire prevention programs.
- (i) Dangerous accumulations of rubbish, waste, paper, boxes, shavings or other highly flammable, combustible or toxic materials.
- (j) Accumulations of dust or waste material in air conditioning or ventilating systems or of grease in kitchen or other exhaust ducts.

The Bureau shall have such other powers and perform such other duties as may be set forth in this Code and as may be conferred or imposed from time to time by the Chief of the Fire Department, in the exercise of authority duly conferred upon him or as otherwise may be conferred or imposed by law.

Section 26-104. RIGHT TO ENTER FOR INSPECTION. The Fire Marshal of the Fire Prevention Bureau or his duly designated agent shall have the right and authority to enter any building, structure, or premises within the corporate limits of the Village for the purpose of making inspections or investigations at all reasonable hours; provided that except in cases of emergency, the right and authority conferred by this Section shall not apply to the entry of a private residence. If the Fire Marshal or his duly designated agent determines that it is necessary to inspect a private residence, a written request shall be served upon the occupant of said premises. Such written request shall contain a statement of the time that inspection will be made and shall also contain a statement of the purpose of such inspection or investigation. If entry is denied, the Fire Marshal or his duly designated agent may take additional measures to secure access to the premises, including, but not limited to, application for an administrative search warrant.

(A) **Scope of Inspection Authorized.** The inspection and examination authorized by this Chapter 26 shall be for the purpose of reporting and correcting the following hazards pertaining to buildings and their occupants:

- (1) Disrepair.
- (2) Age and dilapidated condition.
- (3) Faulty or unapproved construction.
- (4) Inadequate fire escapes or lack of means of egress.
- (5) Inadequate fire alarm protection.
- (6) Inadequate fire extinguishing equipment.
- (7) Materials and buildings especially susceptible to fire or endangerment to life.
- (8) Conditions endangering other property or occupants.
- (9) Any other hazards, dangerous to life or property.

Section 26-105. REQUIRED INSPECTIONS. It shall be the duty of the Fire Marshal of the Fire Prevention Bureau, in addition to the inspections required below, to inspect as often as he shall find necessary, to the enforcement of this Chapter 26, all buildings and premises in the Village. The Fire Marshal shall cause to have published at least semi-annually a Public Notice that a Matrix Schedule is available in the Fire Prevention Bureau which lists the approximate dates when Fire Prevention Inspection shall be conducted. The Matrix Schedule shall be made available to any individual who requests information regarding upcoming Fire Prevention Inspections. Inspections may be scheduled to a date within three (3) working days of the published date if the published schedule is inconvenient with the management of the location to be inspected.

(A) **Commercial and Industrial Buildings and Premises.** The Fire Marshal or his duly designated agent shall inspect all commercial and industrial buildings and premises not less than once a year. (Ordinance 97-022, 04.08.97)

(B) **Place of Public Assembly.** The Fire Marshal or his duly designated agent shall inspect all places of public assembly not less than once a year. (Ordinance 01-165, 10.09.01)

Section 26-106. INTERPRETATIONS. The Fire Marshal of the Fire Prevention Bureau shall have the power to interpret any of the provisions of the Fire Prevention Code and Life Safety

Code upon application in writing by the owner or lessee, or his duly authorized agent. The particulars of such interpretation and the decision of the Fire Marshal of the Fire Prevention Bureau thereon shall be entered upon the records of the department and a signed copy furnished the applicant.

Section 26-107. ORDER TO CORRECT VIOLATION. Where violations of this Chapter 26 or of any other laws or ordinances relating to fire hazards are found by the Fire Marshal or his duly designated agent, the Fire Marshal shall serve a written order co-signed by the Village Manager to correct the violation upon the owner, operator, occupant or other person responsible for the violation. (Ordinance No. 89-127, 12.12.89)

(A) **Method of Service.** The order required herein shall be served in one of the following ways:

- (1) By making personal delivery of the order to the person responsible.
- (2) By leaving the order with some person of suitable age and discretion upon the premises.
- (3) By affixing a copy of the order to the door at the entrance of the premises in violation.
- (4) By mailing a copy of the order to the last known address of the owner of the premises, by registered mail.
- (5) By publishing a copy of the order in a local paper.

(B) **Time for Compliance.** The order required herein shall set forth a time limit for compliance, dependent upon the hazard and danger created by the violation. In cases of extreme danger to persons or property, the Fire Marshal shall have the authority to require compliance immediately upon service of the order.

(C) **Appeal from Order.** A person to whom an order hereunder is directed, or who is aggrieved by an interpretation of the Fire Marshal under **Section 26-106**, shall have the right, within forty-eight (48) hours of the service of such order, to appeal to the Village Board of Trustees who shall review such order within twenty-one (21) days and file its decision thereon. Unless the order is revoked or modified it shall remain in full force and be obeyed by the person to whom directed. No person to whom an order is directed shall fail to comply with such order within ten (10) days after an appeal shall have been determined.

(D) **Failure to Comply.** When a person to whom an order is directed shall fail to comply within the specified time he shall be liable for such penalty as may be provided by this Chapter 26. (Ordinance No. 86-49, 8.26.86)

Section 26-108. INVESTIGATION OF FIRES. The Fire Marshal or his duly designated agent shall investigate promptly the cause, origin and circumstances of each and every fire occurring in the Village in which property has been destroyed or damaged, and if it appears to the officer making investigation that such fire is of suspicious origin, he shall then take immediate charge of the physical evidence and pursue a criminal investigation for the person or persons responsible.

Section 26-109. RECORD OF FIRES. The Fire Marshal shall keep a record of all fires and of all the facts concerning the same, including statistics as to the extent of such fires and the damage caused thereby.

Section 26-110. SUBMITTAL OF BUILDING PLANS AND SPECIFICATIONS. The Building Commissioner shall submit to the Fire Prevention Bureau a complete set of plans and specifications for all new building construction, remodeling, alteration and demolition for all types of buildings. The Fire Prevention Bureau shall check plans and specifications for life safety and fire code requirements within ten (10) days received, and shall submit in writing all approvals, disapprovals, corrections or changes to be made to all parties concerned. No building permit shall be issued until the plans have been submitted and reviewed for approval by the Fire Prevention Bureau. Any building plans altered or disapproved by the Fire Prevention Bureau containing recommendations for modification which are disputed by the applicant shall be referred immediately to the Village Board of Trustees, as provided in Section 26-107(C).

Section 26-111. FIRE DRILLS. The Fire Marshal shall require the officials of public, private and parochial schools, and other educational institutions to have one fire drill each month or per State requirement and to keep all doors and exits unlocked during the times the building is occupied.

Section 26-112. REPORT ON ACTIVITY OF FIRE PREVENTION BUREAU. The Chief of the Fire Department shall submit a monthly report on the activities of the Fire Prevention Bureau to the Village Manager on the first day of each month.

ARTICLE 2 -- (RESERVED FOR PERMIT PROCEDURE)

ARTICLE 3 -- VIOLATIONS AND PENALTIES

Section 26-301. PENALTY. Any person, firm or corporation violating any of the provisions of this Article shall be fined not less than Fifty Dollars (\$50.00) nor more than \$500.00 and shall be subject to imprisonment for not less than five (5) days nor more than sixty (60) days for each offense, and each and every day during which a violation continues and exists shall be deemed a separate offense.

Section 26-302. The owner or occupant of any building, structure, or any part thereof, or any architect, builder, contractor, agent, or other person who commits, participates in, assists in, or maintains such violation, may each be found guilty of a separate offense and suffer the penalties herein provided.

Section 26-303. Nothing herein contained shall be construed to prevent the Village of Bolingbrook from taking such other lawful action as is necessary or appropriate to prevent or remedy any violation.

ARTICLE 4 – INTERNATIONAL FIRE PREVENTION CODE, 2006 EDITION

Section 26-401. ADOPTION OF ICC INTERNATIONAL FIRE CODE. There is adopted for the purpose of establishing rules and regulations governing required property from fire or explosion in the Village of Bolingbrook the "International Code Council, Inc. International Fire Code, 2006 Edition" (hereinafter referred to in this Article 4 as the "ICC Fire Code") which code shall be the fire prevention regulations for the Village of Bolingbrook in the State of Illinois. One (1) copy of said International Fire Code is on file in the office of the Village Clerk of the Village of Bolingbrook. Each and all of the regulations, provisions, penalties, conditions and terms of said international Fire Code are hereby referred to, adopted, and made a part hereof, as if fully set out in this Article, with the additions, insertions, deletions, and changes prescribed in Section 26-403 of this Chapter. (Ordinance 02-071, 07.09.02)

Section 26-402. INTERPRETATION.

(A) Wherever the term "municipality" appears in the aforesaid IFC Fire Prevention Code, it shall be deemed to mean the Village of Bolingbrook.

(B) Wherever the term "Board of Appeal" appears in the aforesaid IFC Fire Prevention Code, it shall be deemed to mean the Board of Trustees of the Village of Bolingbrook.

(C) Whenever the term "Fire Official" is used in the Fire Prevention Code, it shall be held to mean the Fire Marshal of the Fire Prevention Bureau of the Village of Bolingbrook.

(D) The definitions contained in the IFC Fire Prevention Code and the IFC Building Code shall apply to amendments and additions to the IFC Fire Prevention Code contained herein.

Section 26-403. EXCEPTIONS. The following sections are amendments or additions to the International Fire Code, 2006 Edition. Such sections shall hereafter be and read as follows:

(NOTE: Section numbers changed by 94-005, 01.11.94)

Section F-306.4.1. DECORATIVE MATERIALS. In all new and existing buildings of use group I (Institutional) and A (Assembly), all drapes, hangings, curtains, drops and all other decorative materials, including Christmas trees, that would tend to increase the fire and panic hazard, shall be made from material which is not flammable material, or shall be treated and maintained in a flame retardant condition by means of flame retardant solution or process approved by the fire official. Exit doors, exit lights, fire alarm sending stations, wet standpipe hose cabinets, and fire extinguisher locations shall not be concealed or obstructed by any decorative material.

Section F-308.2.2. GUARDS. Heating appliances shall be listed by the American Gas Association or other recognized testing agency. The heating element or combustion chamber in any appliance shall be permanently guarded so as to prevent accidental contact by any person or material.

Section F-309.0. FIRE SUPPRESSION SYSTEMS FOR COOKING OPERATIONS.

Section F-309.3. AREAS PROTECTED. The installation shall include full surface protection including the exhaust duct.

Section F-309.4. HEAT DETECTOR. The installation shall include a heat detector for automatic actuation of the system.

Section F-309.5. PIPING. There shall be no horizontal piping or fusible links below the filter area in the hood. Horizontal piping used for fire protection purposes must be placed above the hood or in the plenum area.

Section F-309.6. EXPOSED PIPING. All exposed piping and nozzles in the hood area shall be chrome plated or polished stainless steel.

Section F-309.7. DIMENSIONS.

- (a) The maximum distance between the bottom edge of the hood and the floor shall be 6 feet 6 inches.
- (b) The maximum height of the bottom edge of the hood above the cooking surface shall be 3 feet 6 inches.
- (c) The minimum depth (height) of the hood shall be 24 inches.
- (d) All open sides of the hood shall overhang all cooking units by at least 12 inches.
- (e) All piping and/or electrical conduit shall be spaced one-half inch to one-inch away from all interior or exterior hood surfaces.

Section F-309.8. FUEL IGNITION SHUT DOWN. All fire suppression systems for cooking operations shall be designed and installed to automatically shut down fuel supplies and interrupt the ignition sequence upon activation.

Section F-311.0. ESTABLISHMENT OF FIRE LANES ON PRIVATE PROPERTY DEVOTED TO PUBLIC USE.

Section F-311.1. LOCATION. The fire lanes referred to in the Fire Prevention Code are hereby established as follows: Whenever the Fire Marshal of the Fire Prevention Bureau finds that a fire lane is required to provide access to buildings or structures or fire hydrants for fire fighting vehicles or equipment in order to prevent or eliminate a dangerous or hazardous condition, he shall recommend to the Mayor and Board of Trustees of the Village of Bolingbrook that they designate such fire lane or lanes as may be necessary. In all instances fire lanes shall be extended to within 150 feet of all portions of exterior walls of the first story of any building. Where the approved roadway cannot be provided, an approved fire protection system or systems shall be provided as required and approved by the Fire Official. (Ordinance No. 89-127, 12.12.89)

Section F-311.2. APPROVAL OF FIRE LANE MARKING. The marking of fire lanes on private property, devoted to public use, shall be approved by the Fire Marshal of the Fire Prevention Bureau.

Section F-311.3. POSTING OF FIRE LANES. Fire lanes so designated shall be posted with permanent all weather signs "No Parking Fire Lane" identifying their location.

Section F-311.4. OBSTRUCTION OF FIRE LANES. It shall be unlawful for any person to block or obstruct wholly or partially, any duly designated and posted fire lane.

Section F-311.5. MINIMUM WIDTH OF FIRE LANES. Fire lanes required by this code shall be a minimum of 20' in width, and constructed of a hard surfaced material capable of supporting the imposed load of fire apparatus. (Ordinance No. 89-127, 12.12.89)

Section F-311.6. MINIMUM VERTICAL CLEARANCE. All fire lanes serving buildings or property shall have minimum vertical clearance of 13 feet 6 inches.

Section F-313.0. ELEVATORS.

- (a) All elevators shall be designed to automatically return to the main floor in case of fire.
- (b) One elevator shall be designed for emergency control.
- (c) One elevator shall be designed to allow access to and hold an ambulance crew of two and a cot with the patient in horizontal position.
- (d) All elevators shall be designed in accordance with nationally recognized standards.
- (e) Fire safety and emergency operating facilities for elevators shall be approved by the Bureau of Fire Prevention.
- (f) All emergency notification devices from inside elevator cars or elevator lifts shall be directly connected to the VOB dispatch headquarters by dialing 630-226-0600.

Section F-316.0. RUBBER AND RUBBER TIRE STORAGE.

Tires stored inside of buildings shall not block doors, windows, or exit ways. Piles and racks of rubber or rubber tires which are placed directly against and parallel to walls, shall not extend out from such walls more than five (5) feet. Piles or racks of rubber or rubber tires placed in rows perpendicular to the walls shall not exceed ten (10) feet in width and fifty (50) feet in length. Every row of tires shall be accessible on all sides by aisle ways at least ten (10) feet wide. Tires shall not be stored in such a pattern as to form dead-end aisles. Piles and racks of tires shall maintain stability and shall not become a hazard by falling during a fire or other emergency. Areas inside buildings where more than 2,000 pounds of tires are stored shall be protected by an automatic fire extinguishing system. Piles or racks of rubber or rubber tires stored outside shall comply with the length and width and aisle way requirements for inside storage.

Section F-317.0. FIRE PROCEDURE NOTICE. Owners, managers, and agents of multiple dwelling units with three (3) or more living units shall post and maintain in a conspicuous location within each dwelling unit a notice in writing which explains what procedures to use in the event of fire. The notice shall contain a diagram of exit routes and all fire exits.

Section F-318.0. TENANT SEPARATION. Units of multi-family dwellings shall be separated from each other by walls, partitions and floor-ceiling assemblies having at least a two-hour Factory Mutual approved fire rating. All tenant separation assemblies shall be constructed of concrete or masonry. In all cases dwelling units exceeding eight hundred (800) square feet shall be separated into fire areas by masonry assemblies having a fire rating of not less than two hours. (Ordinance No. 89-127, 12.12.89)

Section F-319.0. FIRE STOPPING. Vertical and horizontal spread of fire shall be controlled by properly located and installed fire stopping which shall include but is not limited to soffits, chimney enclosures, raceways, and cores.

Section F-320.0. EMERGENCY CONDITIONS. When, in the opinion of the Fire Marshal, there exists a hazardous condition which endangers life or threatens property, the Fire Marshal may order persons to vacate the premises and may take whatever action is necessary to alleviate the

hazardous condition. The owner of the premises shall pay any costs of alleviating the hazardous condition.

Section F-403.9. OUTDOOR FIREPLACE. Outdoor burning of aged logs in a free-standing outdoor fireplace ("Outdoor Fireplace") shall be permitted only under the following conditions:

(A) Said Outdoor Fireplace shall employ screens and a lid to completely enclose the fire and burning logs contained therein, or a chimney.

(B) Only aged logs or commercially produced "compressed logs" shall be burned.

(C) The Outdoor Fireplace shall be located not less than 10 feet from the nearest portion of any structure, tree, vehicle or building nor within 10 feet of any property line.

(D) No Outdoor Fireplace shall be permitted to emit offensive or objectionable smoke or odors or when other circumstances make usage of said Outdoor Fireplace hazardous.

(E) The Outdoor Fireplace shall be used strictly in adherence with all manufacturer's guidelines and specifications issued with respect to the make and model of said Outdoor Fireplace.

(F) Once a fire has been started in an Outdoor Fireplace, the lid and side screens shall be secured and shall not be removed until the fire is out or extinguished, and no object shall be permitted to protrude outside the lid and screens while a fire is burning within the Outdoor Fireplace, provided that recreational fires utilized to cook food shall be exempt from said requirement during that period when food is being cooked over the flame.

(G) Any fire in an Outdoor Fireplace shall be attended at all times by a person 18 years of age or older.

(H) For the purposes of this section, an approved Outdoor Fireplace includes those commercially manufactured devices specifically designed, intended and advertised for the purpose of recreational fires, such as chimneys, outdoor fireplaces, and those areas specifically designed by a landscape professional and built within the confines of a deck that are constructed of stone, concrete blocks or other noncombustible materials. Those fireplaces constructed by a landscape professional using stone, concrete or blocks shall be exempt from the use of a lid/screen but shall comply with all other requirements of this section.

(I) An Outdoor Fireplace shall be attended at all times when in use until the fire is out or extinguished.

(J) A water source or other provisions for extinguishing the fire shall be immediately accessible at all times when there is a fire in the Outdoor Fireplace.

Section F-404.0. TORCHES FOR REMOVING PAINT OR SWEATING PIPE JOINTS.

Section F-404.1. GENERAL. Any person using a torch or other flame producing device for removing paint or sweating pipe joints from or in any building or structure shall provide one approved fire extinguisher or water hose equipped with a suitable nozzle, sufficient to reach all portions of the building and connected to a water supply on the premises where said burning operation is performed. Combustible material in the close proximity of open flame shall be protected against ignition by shielding, wetting or other means. In all cases, a fire watch shall be maintained in the vicinity of the operation for one-half hour after the torch or flame producing device has been used.

Section F-501.1. SCOPE. The provisions of this article shall govern the location operation, maintenance, and testing of all new and existing fire protection systems, devices, units and fire safety equipment in all occupancies as herein provided. The most current applicable NFPA standards shall apply.

Section F-501.2. INSTALLATIONS. Before any fire alarm, detection or fire suppression system is installed, enlarged or extended, a permit shall be secured from the building official. Plans and specifications shall be reviewed by the fire official prior to the issuance of the building permit. The installation methods, repair, operation or maintenance of fire protection systems shall be in accordance with this code and the mechanical code listed in Appendix A.

Section F-501.3. ACCEPTANCE TEST. Before final approval and acceptance of fire suppression, alarm, detection or any other fire protection device including emergency generators and fire ventilating systems, in any building or structure, the installation shall be subjected to the tests prescribed herein and conducted in the presence of the fire official. It shall be unlawful to occupy any building, structure or any portion thereof until all required fire protection systems have been tested and approved by the fire official.

Section F-501.3.1. TESTS. All required tests shall be conducted by and at the expense and risk of the owner or his representative. The fire official, the Village and its employees shall not be held responsible for any damages incurred during any such test. Where the presence of the fire official is required for tests under the provisions of this article, he shall be notified in writing not less than 48 hours before said test is made. All flow test connections, valves, switches, panels, or other test device shall be readily accessible to the Fire Marshal without the use of any ladder or other device.

Section F-501.5. SIGNS. All existing fire department connections and fire pump test connections shall be properly marked with a sign indicating their purpose and shall be properly maintained. A metal sign with raised letters at least one (1) inch in height shall be mounted on all fire department connections serving fire sprinklers and/or standpipes and/or fire pump test connections. Such signs shall read "Automatic Sprinklers" and/or "Standpipe" and/or "Test Connection." If fire suppression control valves are located in a separate room, or building, a sign shall be provided on the entrance door. The lettering for such sign shall be of a conspicuous color and shall be at least four (4) inches in height and shall read "Sprinkler Control Valves" and/or "Standpipe Control Valves" or indicate other types of systems.

Section F-501.6. THREADS. All threads provided for fire department connections to sprinkler systems, standpipe systems, yard hydrants, or any other fire hose connections shall be American National Fire Hose Connection Screw Thread.

Section F-501.7. MAINTENANCE. The owner, tenant or lessee of every building or structure shall be responsible for insuring the safety and welfare of the occupants, including proper maintenance of all equipment and devices. Fire protection systems shall not be disconnected or otherwise rendered unserviceable without first notifying the Fire Department. When installations of required fire protection systems are interrupted for repairs or other necessary reasons, the owner, tenant or lessee shall immediately advise the fire department and shall act expeditiously to restore the protection. (Ordinance No. 89-127, 12.12.89)

Section F-501.8. GENERAL REQUIREMENTS. The fire official shall designate the type and number of fire appliances to be installed and maintained in and upon all buildings and premises in the jurisdiction other than private dwellings. This shall be done according to the relative severity of probable fire, including the rapidity with which it may spread. Such appliances shall be of a type suitable for the probable class of fire associated with such building or premises and shall have approval of the fire official. In occupancies of an especially hazardous nature, or where special

hazards exist in addition to the normal hazard of the occupancy, or where access for fire apparatus is unduly difficult, additional safeguards may be required consisting of additional fire appliance units, more than one type of appliance, or special system suitable for the protection of the hazard involved. Such appliances or devices may consist of automatic fire alarm systems, automatic water spray or sprinkler systems, standpipe and hose, fixed or portable fire extinguishers, suitable asbestos blankets, breathing apparatus, manual or automatic covers, or carbon dioxide, foam or other special fire extinguishing systems. Where such systems are installed, they shall be in accordance with the applicable standards of the National Fire Protection Association. An approved water supply capable of supplying required fire flow for fire protection shall be provided to all premises upon which buildings or portions of buildings are hereafter constructed. When any portion of the building protected is in excess of 150 feet from a water supply on a public street, there shall be provided, when required by the fire official, on site mains and fire hydrants capable of supplying the required flow. Water supply may consist of reservoirs, pressure tanks, elevated tanks, water mains, or other fixed systems capable of supplying their required fire flow, provided that the firefighting equipment of the Village can utilize a particular form of water supply for fire flow purposes. The fire official may be guided by the standard published by the Insurance Services Office, "Guide for Determination of Required Fire Flow." The location, number, and type of fire hydrants connected to a water supply capable of delivering the required fire flow shall be provided on the public street or on the site of the premises to be protected as required and approved by the fire official.

All hydrants shall be accessible to the fire department apparatus by roadways meeting the requirements of Section F-313.0. When fire protection facilities are to be installed by the developer, or public utility, such facilities including all surface roads or access roads shall be installed and made serviceable prior to and during the time of construction.

Section F-501.9. PLANS AND SPECIFICATIONS. Plans shall be submitted to indicate conformance with this code and the mechanical code of this jurisdiction and shall be reviewed by the Fire Prevention Bureau prior to the issuance of the permit. The plans and specifications submitted to the Fire Prevention Bureau shall contain sufficient detail to evaluate the hazard and to evaluate the effectiveness of the system. The details of the hazards shall include materials involved, the location and arrangement, and the exposure to the hazard. The details on the fire protection system shall include the design calculations, considerations, and other information as required by this Code and the mechanical code listed in Appendix A.

Section F-507.0. FOAM EXTINGUISHING SYSTEMS.

Section F-507.1. GENERAL. Foam extinguishing systems shall be of an approved type and installed in accordance with the provisions of this code and NFPA 11, 11A and 16 listed in Appendix A.

Section F-507.2. DESIGN. The detail on the system supplied with the plans and specifications shall include complete computations showing pressure drop in all system piping, friction loss calculations on liquid lines and a detailed layout of the entire hazard to be protected. Hydraulic characteristics of foam proportioners and foam makers as determined by tests shall be supplied by the manufacturer to the department (including the range of operating conditions required for the proposed installation), to permit determination of the adequacy of the hydraulics of the proposed protection.

Section F-507.3. ACTUATION. A foam extinguishing system shall be automatically actuated with supplementary auxiliary manual tripping capability.

Section F-507.4. TESTS. All piping except that piping which handles expanded foam shall be subjected to a two (2) hour hydrostatic pressure test at two hundred (200) psi or fifty (50) pounds in excess of the maximum pressure anticipated, whichever is greater without leakage. The system

is fully protected in conformance with the design specification, and to determine the flow pressures, actual discharge capacity, foam quality, consumption rate of foam-producing materials, manpower requirements and other operating characteristics.

Section F-508.0. CARBON DIOXIDE EXTINGUISHING SYSTEMS.

Section F-508.7. GENERAL. Carbon dioxide extinguishing systems shall be of an approved type and installed in accordance with the provisions of this code and NFPA 12 listed in Appendix A.

Section F-508.8. DESIGN. The detail on the system supplied with the plans and specifications shall include information and calculations on the amount of carbon dioxide; the location and flow rate of each nozzle including equivalent orifice area; the location, size and carbon dioxide storage facility. Information shall be submitted pertaining to the location and function of the detection devices, operating devices, auxiliary equipment, and electrical circuitry, if used. Sufficient information shall be indicated to identify properly the apparatus and devices used. Any special features should be adequately explained.

Section F-508.9. ACTUATION. Carbon dioxide extinguishing systems shall be automatically actuated with supplementary auxiliary manual

Section F-508.10. SAFETY REQUIREMENTS. In any proposed use of carbon dioxide where there is a possibility that men may be trapped in, or enter into atmospheres made hazardous by a carbon dioxide discharge, warning signs, discharge alarms and breathing apparatus shall be provided to insure prompt evacuation of and to prevent entry into such atmospheres and also to provide means for prompt rescue of any trapped personnel.

Section F-508.11. TESTS. A completed system shall be tested for tightness up to the selector valve, and for continuity of piping with free unobstructed flow beyond the selector valve. The labeling of devices with proper designations and instructions shall be checked. Operational tests should be conducted on all devices except cylinder valves in multi-cylinder high pressure systems. Where conditions prevail that make it difficult to determine adequately the system requirements or design, a suitable discharge and analysis test should be made. All tests are to be conducted as indicated in the above standard.

Section F-509.0. HALOGENATED EXTINGUISHING SYSTEMS.

Section F-509.6. GENERAL. Halogenated fire extinguishing systems shall be of an approved type and installed in accordance with the provisions of this code and NFPA 12A and 12B listed in Appendix A.

Section F-509.7. DESIGN. The detail on the system supplied with the plan and specifications shall include information and calculations of the amount of extinguishing agent; container storage pressure; the location and flow rate of each nozzle including equivalent orifice area; the location, size and equivalent lengths of pipe, fittings and hose; and the location and size of the storage facility. Information shall be submitted pertaining to the location and size of the storage facility. Information shall be submitted pertaining to the location, and function of the detection devices, auxiliary equipment, and electrical circuitry, if used. Sufficient information shall be indicated to identify properly the apparatus and devices used. Any special features should be adequately explained.

Section F-509.8. ACTUATION. Halogenated fire extinguishing systems shall be automatically actuated with supplementary auxiliary manual tripping capability.

Section F-509.9. SAFETY REQUIREMENTS. In any proposed use of a halogenated fire extinguishing system where there is a possibility that men may be trapped in or enter into atmospheres made hazardous by a discharge, warning signs, discharge alarms and breathing apparatus shall be provided to insure prompt evacuation of and to prevent entry into such atmospheres and also to provide means for prompt rescue of any trapped personnel.

Section F-509.10. TEST. A completed system shall be tested for tightness up to the selector valve, and for continuity of piping with free unobstructed flow beyond the selector valve. The labeling of devices with proper designations and instructions shall be checked. Operational tests should be conducted on all devices except cylinder valves in multi-cylinder systems. Where conditions prevail that make it difficult to determine adequately the system requirements or design, a suitable discharge test or concentration analysis should be made. All tests are to be conducted as indicated in the above standard.

Section F-510.0. DRY CHEMICAL EXTINGUISHING SYSTEMS.

Section F-510.4. GENERAL. Dry chemical extinguishing systems shall be of an approved type and installed in accordance with the provisions of this code and NFPA 17 listed in Appendix A.

Section F-510.5. DESIGN. The details on the system supplied with the plans and specifications shall include sufficient information and calculations on the amount of dry chemical; the size, length, and arrangement of connected piping, or piping and hose; description and location of nozzles so that the adequacy of the system can be determined.

Information shall be submitted pertaining to the location and function of detection devices, operating devices, auxiliary equipment and electrical circuitry, if used. Sufficient information shall be indicated to identify properly the apparatus and devices used. Any special features should be adequately explained.

Section F-510.6. ACTUATION. A Dry chemical extinguishing system shall be automatically actuated with supplementary auxiliary manual tripping capability.

Section F-510.7. SAFETY REQUIREMENTS. Where there is a possibility that personnel may be exposed to a dry chemical discharge, warning signs, discharge alarms and breathing apparatus shall be provided to ensure prompt evacuation of such locations, and also to provide means for prompt rescue of any trapped personnel.

Section F-510.8. TESTS. A completed system shall be tested by a discharge of expellant gas through the piping and nozzles. Observations for serious gas leakage and for continuity of piping with free unobstructed flow shall be made. Observations shall be made of the flow of expellant gas through all nozzles. The labeling of devices with proper designations and instructions should be checked. After testing, all piping and nozzles are to be blown clean, using compressed air or nitrogen and the system properly charged and placed in the normal "set" condition. All tests are to be conducted as indicated in the above standard.

Section F-512.0. FIRE ALARM SYSTEMS.

Section F-512.4. CONNECTION TO FIRE DEPARTMENT HEADQUARTERS. All occupancies except one and two-family dwellings required to have installed fire alarm detection or extinguishing systems, manual or automatic, are hereby required to connect such systems to the Fire Department alarm monitoring equipment. Connections and termination shall be type accepted by the fire official. (Ordinance No. 89-127, 12.12.89)

Section F-512.7. MANUAL FIRE ALARM SYSTEMS (PULL STATIONS).

Section F-512.7.1. PLANS AND SPECIFICATIONS. Where required by this code, the plans and specifications for the manual fire alarm system shall show the location and number of all sending stations and signals with specifications of the type, construction and operation of the system. Installation of all equipment shall conform to the requirements of this code and the applicable standards listed in Appendix A.

Section F-512.7.2. APPROVAL. The manual fire alarm system shall be approved for the particular application and shall be used for the fire protection signaling purposes only. Alarm boxes shall be painted a distinctive red color.

Section F-512.7.3. WHERE REQUIRED. A manual fire alarm system shall be installed and maintained in full operating condition in the locations described in the following Sections F-512.7.3.1 through F-512.7.3.4.

Section F-512.7.3.1. AUTOMATIC ALARM SYSTEM. In all buildings required to be equipped with an automatic fire alarm system (see Section F-513.13).

Exception:

Automatic fire alarm system as required by Section F-513.13.4 for dwelling units in use groups R-2 and R-3.

Section F-512.7.3.2. ASSEMBLY (A) USE. In all new and existing buildings of use group A (Assembly).

Section F-512.7.3.3. BUSINESS (B) USE. In all buildings of use group B (business) when three (3) or more stories in height. (Ordinance No. 89-127, 12.12.89)

Exception:

Buildings equipped with an automatic fire suppression system and less than seven (7) stories in height.

Section F-512.7.3.4. RESIDENTIAL (R-2) USE. In all buildings of use group R-2 (Residential, Multi-family).

Section F-512.7.4. LOCATION. Manual pull stations shall be located in each common corridor of each story including basements or cellars, so that from each common corridor door, not more than two hundred (200) feet will be traversed in order to reach a manual station. Stations shall be located as near as possible and not more than five (5) feet from each exitway. Where corridors are not provided, manual stations shall be located so that any point in the building is not more than two hundred (200) feet from a station. Where a stage is provided, a manual pull station shall be located adjacent to the lighting control panel.

Section F-512.7.5. CODING. Coded stations shall be coded in conformance with the standards as listed in Appendix A.

Section F-512.7.6. POWER SUPPLY. Electric power supply shall be provided from the most reliable source obtainable at the building. The power supply for the fire alarm systems shall be provided at a point ahead of the main disconnect when connected to the building supply.

Section F-512.7.7. REQUIREMENTS. Fire alarm systems shall be of the closed circuit type and shall be electrically or mechanically supervised. In addition, such systems shall comply with the following Sections: F-512.7.7.1 through F-512.7.7.5.

Section F-512.7.7.1. WIRING. All wiring shall conform to the requirements of NFPA 72 as listed in Appendix A.

Section F-512.7.7.2. ALARMS. In all buildings or occupancies with manual alarms, audible alarms, of the approved horn type, shall be provided. In institutional occupancies, audible and visual alarms shall be audible or visual alarms to operate. Visual and audible alarms shall be provided in occupancies housing the hard-of-hearing. Alarm sounding devices shall be horns of approved type, shall provide a distinctive tone and shall not be used for any other purpose than that of an alarm of fire. They shall be of such character and so located as to be effectively heard above all other sounds (or seen), by all the occupants, in every occupied space within the building. (Ordinance No. 89-127, 12.12.89)

Section F-512.7.7.3. PRE-SIGNAL SYSTEM. A pre-signal system may be installed in institutional occupancies. Pre-signal systems shall not be installed in other occupancies, unless approved by the fire official. Where a pre-signal system is installed, twenty-four (24) hour personnel supervision shall be provided at a location approved by the fire department, in order that the alarm signal can be actuated in the event of fire or other emergency.

Section F-512.7.7.4. HEIGHT. The height of the manual pull station boxes shall be not more than four (4) feet, measured vertically from the floor level.

Section F-512.7.7.5. ZONES. In buildings with manual alarms, each floor shall be zoned separately. If the floor area exceeds twenty-thousand (20,000) square feet, additional zoning shall be provided. The length of any zone shall not exceed two hundred (200) feet in any direction. Zoning indicator panels and controls shall be located as approved by the department. Annunciators shall lock in until the system is reset. (Ordinance No. 89-127, 12.12.89)

Section F-512.7.8. ACCEPTANCE TESTS. Upon completion of a manual fire alarm system, the installation shall be subjected to a performance test to demonstrate its efficiency of operation. All connections and wiring, with signal devices disconnected shall develop an insulation resistance of not less than one (1) megohm.

Section F-513.0. AUTOMATIC DETECTION.

Section F-513.11. PLANS AND SPECIFICATIONS. Where required by this code, the plans and specifications for the automatic fire alarm system shall show location and number of all sending station and signals with specifications of the type, construction, and operation of the system including all automatic detection devices. Installations of all equipment shall conform to the requirements of this code and the applicable standards listed in Appendix A.

Section F-513.12. APPROVAL. The automatic fire alarm system shall be approved for the particular application and shall only be used for detection and signaling in the event of fire. The automatic detecting devices shall be approved smoke detectors.

Section F-513.13. WHERE REQUIRED. An automatic fire alarm system shall be installed and maintained in full operating condition in the locations described in the following Sections F-513.13.1 through F-513.13.4, PROVIDED THAT, except for buildings or portions of buildings of use group I (Institutional), buildings or portions thereof equipped with an automatic fire suppression system are not required to be equipped with an automatic fire alarm system but are required to be equipped with a manual fire alarm system conforming to Section F-512.7. (Ordinance No. 89-127, 12.12.89)

Section F-513.13.1. INSTITUTIONAL (I), HIGH HAZARD (H), ASSEMBLY (A) AND (E) EDUCATIONAL USE. In all new and existing buildings of use group I (Institutional), H (High Hazard), A (Assembly) and E (Educational Group).

Section F-513.13.2. RESIDENTIAL (R-1 & R-2) USE. In all buildings of use group R-1 and R-2.

Section F-513.13.3. BUSINESS (B), FACTORY (F), STORAGE (S), OR RESIDENTIAL (R-2) USE. In all buildings of use group B (Business), F (Factory), S (Storage), or R-2 (Residential, Multi-family) when more than two (2) stories or twenty (20) feet in height, or when more than 5,000 square feet in gross floor area.

Section F-513.13.4. RESIDENTIAL (R-2 AND R-3) USE. In each dwelling unit within buildings of use groups R-2 (residential, multi-family) or R-3 (residential, one-family and two-family). Each dwelling unit shall be provided with a minimum of one (1) approved smoke detector per level sensing visible or invisible particles of combustion, installed in a manner and location approved by the authority having jurisdiction. When actuated, the detector shall provide an alarm suitable to warn the occupants within the individual dwelling unit. Each smoke detector shall be powered by one of the following method:

(a) House electric service provided a separate circuit which is used for all fire alarms and is connected to the supply side of the service overcurrent device in accordance with the requirements of the most current edition of the National Electrical Code, NFPA #70.

Section F-513.14. MANUAL PULL STATIONS. A manual fire alarm system conforming to the requirements of Section F-512.7 shall be installed in conjunction with an automatic fire alarm system. (Ordinance No. 89-127, 12.12.89)

Section F-513.15. DISTANCES. Approved fire detecting devices shall be installed not to exceed the lineal or square footage allowances specified, based on the generally accepted test standards under which they were tested and approved.

Section F-513.16. ALTERNATIVE PROTECTION. In special use buildings and structures or parts thereof, an automatic fire alarm system must be installed in lieu of an automatic fire suppression system when approved by the fire official when the installation of an automatic fire suppression system would be detrimental or dangerous to the specific use and occupancy.

Section F-513.17. POWER SUPPLY. Electric power supply shall be provided from the most reliable source obtainable at the building. The power supply for the automatic fire alarm system shall be provided at a point ahead of the main electrical disconnect when connected to the building supply. (Ordinance No. 89-127, 12.12.89)

Section F-513.18. REQUIREMENTS. All automatic fire alarm systems shall be of the closed circuit type and shall be electrically or mechanically supervised. In addition, such systems shall comply with the following Section F-513.18.1 through F-513.18.3.

Section F-513.18.1. WIRING. All wiring shall conform to the requirements of NFPA 72 as listed in Appendix A.

Section F-513.18.2. ALARMS. Audible alarms, of approved horn type, shall be provided in any building where such system is required. In institutional occupancies, audible and visual alarms shall be provided. The operation of any detection device shall cause all audible or visual alarms to

operate. Visual and audible alarms shall be provided in occupancies housing the hard-of-hearing. Alarm sounding devices shall be horns of approved type, shall provide a distinctive tone and shall not be used for any other purpose than that of a fire alarm. They shall be located so as to be effectively heard above all other sounds, by all the occupants, in ever occupied space within the building. Upon activation of the audible or visual alarm device fire alarms, all occupants of the building shall immediately evacuate the premises thereof in a brisk, quiet and orderly manner through the nearest available exit and shall not reenter said building until the senior fire department member present determines that a fire emergency no longer exists. (Ordinance No. 89-127, 12.12.89)

Section F-513.18.3. ZONES. Each floor shall be zoned separately. If the floor area exceeds twenty thousand (20,000) square feet, additional zoning shall be provided. The length of any zone shall not exceed two hundred (200) feet in any direction. Zoning indicator panels and controls shall be located as approved by the department. Annunciators shall lock in until the system is reset. (Ordinance No. 89-127, 12.12.89)

Section F-517.0. FIRE DEPARTMENT CONNECTIONS.

Section F-517.5. REQUIRED. All water sprinkler and standpipe systems shall be provided with at least one (1) two-way department connection. Each inlet of the fire department connection shall be at least two and one-half (2 1/2) inches in diameter. The pipe from the standpipe system to the fire department connection shall not be smaller than four (4) inches. The pipe from the water sprinkler system to the fire department connection shall not be smaller than four (4) inches. Single fire department connections may be installed when approved by the department with the exception that a fire department connection shall not be required for limited area sprinkler systems (see Section F-522).

Section F-517.6. CONNECTIONS. Fire department connections shall be arranged in such a manner that the use of any one (1) water sprinkler connection will serve all the sprinklers, and the use of any one (1) standpipe connection will serve all the standpipes within the building.

Section F-517.7. LOCATION. Fire department connections shall be located and be visible on a street front or in a location approved by the department. Such connections shall be located so that immediate access can be made by the fire department. Obstructions such as fences, bushes, trees, walls or any other similar object shall not be permitted for new or existing installations.

Section F-517.8. HEIGHT. Fire department connections shall not be less than one (1) foot six (6) inches and not more than three (3) feet six (6) inches in elevation, measured from the ground level to the center line of the inlets.

Section F-517.9. PROJECTION. Where the fire department connection would project beyond the property line or into the public way, a flush-type fire department connection shall be provided.

Section F-519.0. WATER SPRINKLER SYSTEMS. (Ordinance No. 93-102, 07.27.93)

Section F-519.1. GENERAL. Water sprinkler systems shall be an approved type and installed in accordance with the provisions of this code and the standards listed in Appendix A.

Section F-519.2. DESIGN. The details on the system supplied with the plans and specifications shall include information and the calculations on the sprinkler spacing and arrangement with water supply and discharge requirements, size, and equivalent lengths of pipe and fittings and water supply source. Sufficient information shall be included to identify the apparatus and devices used.

Section F-519.3. ACTUATION. Water sprinkler extinguishing systems shall be automatically actuated unless otherwise specifically provided in this code.

Section F-519.4. TESTS. A completed system shall be tested hydrostatically for two (2) hours without visible leakage at not less than two hundred (200) pounds per square inch (psi), or at fifty (50) psi in excess of the maximum static pressure when the maximum static pressure is in excess of one hundred and fifty (150) psi.

Section F-519.5. FITTINGS. Fire Department inlet connections shall be fitted with check valves, ball drip valves, and male threaded caps and chains.

Section F-519.6. WHERE REQUIRED. Water sprinkler systems shall be installed and maintained in full operating condition, as specified in these codes, in the following locations except one-and two-family dwellings.

Section F-519.6.1. ASSEMBLY (A-1) AND (E) EDUCATIONAL USE. In all buildings or portions thereof A-1 (Assembly-Theaters) and E (Educational) use groups.

Section F-519.6.2. ASSEMBLY (A-2) USE. In all buildings or structures or portions thereof use groups A-2 (Assembly-Nightclubs).

Section F-519.6.3. ASSEMBLY (A-3 - A-4) USE. In all buildings or structures or portions thereof of use group A-3 or A-4 (Assembly) when more than five thousand (5,000) square feet in area.

Section F-519.6.4. STAGES IN (A) USE. Stages of any size in assembly occupancies (A) in the following locations:

- (a) Over the stage.
- (b) Stage gridirons when sidewall sprinklers with one hundred thirty-five (135) degrees F. Rated heads with heat baffle plates are installed around the entire perimeter of the stage at points not more than thirty (30) inches below the gridiron, not more than six (6) inches below the baffle plate.
- (c) Under all fly galleries.
- (d) Over the proscenium opening at the stage side.
- (e) Under the stage.
- (f) In all basements, cellars, work rooms, dressing rooms, store rooms, and property rooms.
- (g) In toilet lounge and smoking rooms.

Section F-519.6.5. BUSINESS (B) USE. In all buildings or structures of use group (B) (Business) when more than four (4) stories or fifty-five (55) feet in height.

Section F-519.6.6. HIGH HAZARD (H) USE. In all buildings or portions thereof of use group (H) (High Hazard).

Section F-519.6.7. INSTITUTIONAL (I) USE. In all buildings or structures or portions thereof use group I (Institutional).

Section F-519.6.8. MERCANTILE (M), STORAGE (S) OR FACTORY AND INDUSTRIAL (F) USES. In all buildings and structures of use groups M, S-1, and F (Mercantile, Storage or Factory and Industrial):

- (a) When more than five thousand (5,000) square feet in area: or
- (b) When more than sixteen thousand (16,000) square feet in total area on all floors: or
- (c) When more than two (2) stories in height.

Section F-519.6.9. RESIDENTIAL (R-1 AND R-2) USES. In all buildings or structures or use groups R-1 (Residential, Hotels), and R-2 (Residential, Multi-Family) all common areas shall be sprinklered. When an R-2 structure exceeds 5,000 square feet in gross area, the entire structure shall be protected with an automatic sprinkler system.

Section F-519.6.10. PUBLIC GARAGES. In all public garages and all vehicle repair facilities.

Section F-519.6.11. COMMERCIAL VEHICLE GARAGES. In all commercial vehicle garages.

Section F-519.6.12. UNLIMITED AREA BUILDINGS. In unlimited area buildings as defined by the B.O.C.A. National Building Code, as adopted by the Bolingbrook Municipal Code.

Section F-519.6.13. AIRCRAFT HANGERS. In aircraft hangers.

Section F-519.6.14. HIGH-RISE BUILDINGS. In all multi-story buildings or structures where the roof level exceeds thirty-five (35) feet in height above average grade, or in all multi-story buildings or structures where the roof level exceeds thirty-five (35) feet in height above average grade when fire apparatus is unable to gain access to at least a twenty (20) foot wide area located approximately between ten (10) feet and thirty (30) feet from the building line measured perpendicular thereto, on at least three (3) sides of the building. Also in all buildings two or more stories in height above grade which is used primarily as a living quarters for persons confined, detained, held for correctional purposes, substantially handicapped, semi-ambulatory, non-ambulatory, under medical care so that assistance by others is required, or for persons of similarly restricted facilities.

Section F-519.6.15. WATER PUMPING STATIONS. In all water pumping stations.

Section F-519.6.16. STORAGE AND WORKSHOP AREAS. In all portions of all use groups occupied for storage, workshop, or similar purposes.

Section F-519.6.17. CELLAR OR BASEMENT. In every story, cellar or basement of all buildings except single family residential.

Section F-519.6.18. PAINTING ROOMS. In spray painting rooms or shops where painting, brushing, dipping, or mixing is regularly conducted using flammable or combustible materials.

Section F-519.6.19. TRASH ROOMS AND CHUTES. In rooms or areas used for incineration, trash, laundry collection, or similar uses. At alternate floor levels and at the top of all chutes used in conjunction with these rooms or areas.

Section F-519.6.20. FURNACE ROOMS. In furnace rooms, boiler rooms and rooms for similar uses.

Section F-519.6.21. UNENCLOSED VERTICAL OPENINGS. In unenclosed vertical openings between floors.

Section F-520.0. WATER SPRAY FIXED SYSTEMS.

Section F-520.1. GENERAL. Water spray extinguishing systems shall be of an approved type and installed in accordance with the provisions of this code and NFPA listed in Appendix A.

Section F-520.2. DESIGN. The detail on the system supplied with the plans and specifications shall include information and the calculations on the sprinkler spacing and arrangement with water supply and discharge requirements, size and equivalent, lengths of pipe and fittings and water supply source. Sufficient information shall be included to identify the apparatus and devices used.

Section F-520.3. ACTUATION. Water spray extinguishing systems shall be the automatically actuated type with supplementary auxiliary manual tripping capability.

Section F-520.4. TESTS. All new system piping shall be hydrostatically tested in accordance with the provisions of the standard referenced above.

Section F-520.5. SPRINKLER ALARMS. Approved audible and visual alarm devices shall be connected to every water sprinkler system and such alarm device shall be located in an approved location.

Section F-521.0. STANDPIPE SYSTEMS.

Section F-521.1. LOCATIONS AND GENERAL TESTING REQUIREMENTS. All buildings and structures shall be equipped with two and one-half (2-1/2) inch or larger standpipes, and shall be made to comply with requirements of this section. (Ordinance No. 89-127, 12.12.89)

Section F-521.2. WHERE REQUIRED. Standpipes shall be installed and maintained in full operating condition, as specified in this article and the standards listed in Appendix A, in the locations described in Sections F-521.2.1 through F-521.2.3.

Section F-521.2.1. ASSEMBLY. In buildings of Assembly use groups with an occupancy load of more than three hundred (300), regardless of the number of stories therein.

Section F-521.2.2. THREE STORIES. In buildings three (3) stories in height when: (Ordinance No. 89-127, 12.12.89)

- (a) of use B (Business), F (Factory and Industrial), M (Mercantile) or S-1 (Moderate hazard storage more than three thousand (3,000) square feet in area per floor); or
- (b) of use groups A (Assembly), I (Institutional), or R-1 (Residential, Hotels); or
- (c) of any use group more than ten thousand (10,000) square feet in area per floor.

Section F-521.2.3. FOUR STORIES. In buildings four (4) stories or more in height regardless of the area per floor. (Ordinance No. 89-127, 12.12.89)

Section F-522.0. LIMITED AREA SPRINKLER SYSTEMS.

Section F-522.1. GENERAL. A limited area sprinkler system shall be of an approved type and installed in accordance with the provisions of this code and the standards listed in Appendix A.

Section F-522.2. INSTALLATION. Where the provisions of this code require a limited number of sprinklers, a limited area sprinkler system may be installed to comply with these requirements.

Section F-522.3. DESIGN. The detail on the system supplied with the plans and specifications shall include information and the calculations on the sprinkler spacing and arrangement with water supply and discharge requirements, size and equivalent lengths of pipe and fittings and water supply source. Sufficient information shall be included to identify the apparatus and devices used.

Section F-522.4. ACTUATION. A limited area sprinkler extinguishing system shall be automatically activated.

Section F-522.5. SPRINKLER ALARMS. Alarms and alarm attachments shall not be required.

Section F-522.6. WATER SUPPLY. Limited area sprinklers may be supplied from the domestic water system provided the domestic water system is designed to adequately support the design flow of the largest number of sprinklers in any one enclosed room or are shall not exceed twenty (20) sprinklers which must totally protect the room or area.

Section F-522.7. FIRE DEPARTMENT CONNECTIONS. A fire department connection is not required for limited area sprinkler systems supplied from the domestic water system.

Section F-522.8. STANDPIPE CONNECTION. The water supply for the limited area sprinkler system shall be from the building standpipe system when available.

Section F-522.9. CROSS CONNECTION. A limited area sprinkler system may be supplied individually from the domestic water system or from the standpipe system. There shall not be a cross-connection between the domestic and standpipe system.

Section F-523.0. SUPERVISION.

Section F-523.1. FIRE SUPPRESSION SYSTEMS. Valves controlling required fire suppression systems shall be supervised open by the following methods:

- (a) Approved central station system, proprietary system or remote station system of the jurisdiction;
- (b) Local alarm service which will cause the sounding of an audible signal at a constantly attended location;
- (c) Locking valves open; or

(d) Sealing of valves and approved weekly recorded inspection when valves are located within fenced enclosures under the control of the owner.

Exceptions:

- (A) Underground gate valves with roadway boxes.
- (B) Halogenated extinguishing systems.
- (C) Dry chemical extinguishing systems.

(Ordinance No. 89-127, 12.12.89)

Section F-523.2. FIRE PROTECTION SYSTEMS. All required fire protection systems shall be connected to an approved central station system, proprietary system, or remote station system of the jurisdiction, when approved by the fire department.

Exception:

- (a) Automatic fire alarm devices protecting individual dwelling units as required by Section F-513.13.4.

Section F-524.0. LICENSE OF FIRMS ENGAGED IN THE INSTALLATION OR SERVICE OF FIRE PROTECTION SYSTEMS.

Section F-524.1. INSTALLATION AND SERVICE OF EQUIPMENT. Sprinkler systems, standpipe systems, fire alarm systems, and other fire protective or extinguishing systems or appliances which have been installed in compliance with any permit or order, or because of any law or ordinance shall be installed and/or serviced only by a firm or his authorized agent licensed by the Fire Prevention Bureau to perform such installation or service within the limits of the Village of Bolingbrook.

Section F-603.3. EMERGENCY ESCAPE WINDOWS; SECURITY.

Section F-603.3.1. SECURITY. Bars, grilles, gates, shutters, grates or similar security devices shall not be installed over windows or doors in any new or existing building (Ordinance No. 91-013, 02.26.91)

Section F-707.0. HIGH RISE BUILDINGS.

Section F-707.4. HIGH RISE REQUIREMENTS. In all buildings of all use groups when five (5) or more stories.

Section F-707.5. HEATING, VENTING AND AIR CONDITIONING. Upon activation of any fire detection or fire suppression device, the HVAC systems shall automatically:

- (a) Place the fire area where the activated device is located into a negative pressure condition.
- (b) Place all stairways into a positive pressure condition.
- (c) Place all elevator shafts into a positive pressure condition.

- (d) Make-up air shall be supplied from three (3) or more locations on the exterior of the structure located as remote from each other as possible. The make-up air intake ports shall be capable of being opened or closed under emergency conditions.

Section F-707.6. ELEVATORS.

- a) Elevators within high-rise buildings shall be so designed that all control devices are not activated by heat or any other product of combustion. In addition, all control devices' construction and design shall be approved by the Fire Marshal.
- (b) One elevator shall be designated for Fire Department emergency use. Within the emergency elevator shaft no penetrations are allowed.

Section F-707.7. COMMUNICATIONS. All high-rise structures shall have the capability under emergency conditions to supply mass communications to each or all fire areas and floors of the structure. In addition, each landing on each floor of all stairwells shall be provided with an emergency telephone system, tied into the emergency control room.

Section F-707.8. EMERGENCY FIRE DEPARTMENT STORAGE AREAS. All high-rise buildings shall be provided with one room for every five floors to house additional firefighting equipment which will be supplied and maintained by the owner. The type and numbers of the required firefighting equipment will be specified by the Fire Marshal. The emergency rooms will be a minimum of 150 square feet and constructed of masonry with not less than a two-hour fire rating. When a story or floor exceeds 15,000 square feet, additional rooms and equipment may be required. The Fire Department will have sole access to the storage room.

Section F-707.9. EMERGENCY CONTROL CENTER. All high-rise buildings shall have an emergency control room where all of the requirements of this code can be controlled during emergency conditions without normal systems intervention. The control center shall be located on the first floor and have direct access to the exterior of the structure as well as access to the interior of the structure. The room shall be constructed of masonry with a fire rating of not less than four (4) hours.

ARTICLE 23. HAZARDOUS MATERIALS AND CHEMICALS

Section F-2321.1. VEHICLE ROUTES. The designated routes for vehicles transporting hazardous chemicals and other dangerous materials are hereby established as follows:

- (a) Vehicles transporting interstate shipments shall use Interstate Route 55 provided, however, that such vehicles may use Illinois Route 53 when such interstate shipments terminate in the Village or where Illinois Route 53 is the most direct route to such vehicle's point of destination.
- (b) The route for intrastate shipments shall be Interstate Route 55 and Illinois Route 53 only.
- (c) Prior notification of, and the written approval of the Fire Marshal of the Fire Prevention Bureau shall be mandatory for any deviations from these listed routes. No stopping or parking of vehicles of interstate or intrastate shipment shall be allowed within the limits of the Village of Bolingbrook, except for the purpose of inspection by the Fire Prevention Bureau to insure compliance with this Code or for inspection by the State of Illinois, Department of Law Enforcement and for making deliveries.

Section F-2905.0. TRANSPORTATION.

Section F-2905.4. ESTABLISHMENT OF MOTOR VEHICLE ROUTES FOR VEHICLES TRANSPORTING CRYOGENIC LIQUIDS. The designated routes for vehicles transporting cryogenic liquids are hereby established as follows:

- a) Vehicles transporting interstate shipments shall use Interstate Route 55 provided, however, that such vehicles may use Illinois Route 53 when such interstate shipments terminate in the Village or where Illinois Route 53 is the most direct route to such vehicle's point of destination.
- (b) The route for intrastate shipments shall be Interstate 55 and Illinois Route 53 only.
- (c) Prior notification of, and the written approval of the Fire Marshal of the Fire Prevention Bureau shall be mandatory for any deviations from these listed routes. No stopping or parking of vehicles of interstate or intrastate shipment shall be allowed within the limits of the Village of Bolingbrook, except for the purpose of inspection by the Fire Prevention Bureau to insure compliance with this Code or for inspection by the State of Illinois, Department of Law Enforcement and for making deliveries.

ARTICLE 30. EXPLOSIVES, AMMUNITION AND BLASTING AGENTS

Section F-3004.0. STORAGE OF EXPLOSIVES.

Section F-3004.1.1. GENERAL. The storage of explosives or blasting agents is prohibited in all commercial and industrial districts within the Village, except for temporary storage for use in connection with approved blasting operations; provided, however, this prohibition shall not apply to wholesale and retail stocks of small arms ammunition, explosive bolts, explosive rivets or cartridges for explosive actuated power tools in quantities involving less than 500 pounds of explosive material. Magazines shall be in the custody of a competent person at all times who shall be at least twenty-one (21) years of age, and who shall be held responsible for compliance with all safety precautions.

Section F-3005.0. TRANSPORTATION OF EXPLOSIVES.

Section F-3005.10.1. VEHICLE ROUTING.

- (a) Vehicles transporting interstate shipments shall use Interstate Route 55 provided, however, that such vehicles may use Illinois Route 53 when such interstate shipments terminate in the Village or where Illinois Route 53 is the most direct route to such vehicle's point of destination.
- (b) The route for intrastate shipment shall be Interstate Route 55 and Illinois Route 53 only.
- (c) Prior notification of, and the written approval of the Fire Marshal of the Fire Prevention Bureau shall be mandatory for any deviations from these listed routes. No stopping or parking of vehicles of interstate or intrastate shipment shall be allowed within the limits of the Village of Bolingbrook, except for the purpose of inspection by the Fire Prevention Bureau to insure compliance with this Code or for inspection by the State of Illinois, Department of Law Enforcement and for making deliveries.

F-3208.0. FLAMMABLE AND COMBUSTIBLE LIQUIDS.

Section F-3208.9.1. LEAK DETECTORS. Underground flammable or combustible liquid storage tanks shall have leak detectors installed.

Section F-3208.9.2. 10" SUMPS. Underground flammable or combustible liquid storage tanks shall have 10" sumps installed down grade from the tanks. The materials, methods of installation, and the location of the sump shall be included on the tank installation plans and submitted to the Fire Department for review.

Section F-3208.10.3. TESTING. Bi-annual test of underground tank storage systems shall be required by the Fire Official in accordance with the authority granted under Section F-106.6 of the B.O.C.A. Basic/National Fire Prevention Code, 1993 edition, to determine that leakage has not occurred.

APPENDIX A. FIRE PROTECTION SYSTEMS.

N.F.P.A. 13	Sprinkler Systems, Installation of, 1987 edition
N.F.P.A. 14	Standpipes and Hose Systems, Installation of, 1986 edition
N.F.P.A. 32	Dry Cleaning Plants, 1985 edition
N.F.P.A. 33	Spray Application Using Flammable and Combustible Materials, 1985 edition
N.F.P.A. 72	Alarm Systems (A, 1985 edition) (B, 1986 edition) (C, 1986 edition) (D, 1986 edition) (E, 1984 edition) (F, 1985 edition)
N.F.P.A. 82	Incinerators, 1983 edition
N.F.P.A. 88A	Parking Structures, 1985 edition
N.F.P.A. 88B	Repair Garages, 1985 edition
N.F.P.A. 90A	Air Conditioning and Ventilating Systems, 1985 edition
N.F.P.A. 90B	Warm Air Heating and Air Conditioning Systems, 1984 edition
N.F.P.A. 204M	Smoke and Heat Venting, 1985 edition
N.F.P.A. 409	Aircraft Hangers, 1985 edition
N.F.P.A. 701	Flame-Resistant Textiles and Films, 1977 edition
N.F.P.A. 1963	Fire Hose Connections, 1985 edition

Doors, Tin-Clad Fire ULI 10 (A) 1985

Hardware, Sliding, for standard horizontally mounted tin-clad fire doors ULI 14 (B) 1984

If the N.F.P.A. standard is not listed above, the most current applicable N.F.P.A. standard shall apply. All future revisions to the above N.F.P.A. standards shall apply.

Section 26-404. MODIFICATIONS.

The Fire Marshal of the Fire Prevention Bureau shall have power to modify any of the provisions of the Fire Prevention Code upon application in writing by the owner or lessee, or his duly authorized agent, when there are practical difficulties in the way of carrying out the strict letter of the code, provided that any such modification shall comply with the spirit of the code shall provide equivalent fire protection safety, and shall secure the public safety. The particulars of such modification when granted or allowed and the decision of the Fire Marshal of the Fire Prevention Bureau thereon shall be entered upon the records of the department and a signed copy shall be furnished the applicant.

Section 26-405. FILING OF COPIES. Three copies of the IFC Fire Prevention Code and all annual supplements to such code, shall be kept on file at all times with the Village Clerk and Fire Marshal.

Section 26-406. CONFLICTS. Except where otherwise expressly provided, where the regulations of the IFC Fire Prevention Code are in conflict with other ordinances of the Village, the more restrictive ordinances of the Village shall govern.

ARTICLE 5 -- LIFE SAFETY CODE

Section 26-501. ADOPTION OF CODE. There is hereby adopted for the purpose of providing minimum standards to safeguard the health and welfare of all persons through properly designed buildings with adequate safeguards against the perils of fire, the International Fire Code and the International Building Code, being particularly the 2006 Edition thereof.

Section 26-502. INTERPRETATION. Wherever the term "administrative authority" or "authority having jurisdiction" is used in the Code for Life Safety, it shall mean the Fire Marshal of the Fire Prevention Bureau of the Village of Bolingbrook or such person or persons duly authorized by him to carry out the provisions of the code.

Section 26-503. FILING OF COPIES. Three copies of the said Life Safety Code shall be kept on file at all times in the offices of the Village Clerk and the Fire Prevention Bureau.

Section 26-504. REPORTS. The Fire Marshal of the Fire Prevention Bureau shall prepare and submit all reports requested by the Fire Chief on any work covered by the Life Safety Code and shall incorporate in said report a summary of his recommendations as to desirable amendments to the Code.

ARTICLE 6 -- FEES AND CHARGES

Section 26-601. FEES FOR SERVICES. The following fees shall be paid to the Village within thirty (30) days of the date of an invoice therefore, for specialized services rendered by the Bolingbrook Fire Department:

(A) Fees for specialized services rendered pursuant to Chapter 26 of the Code:
(Ordinance 04-052, 05.03.04)

(1)	New construction--non residential	\$2,500.00 per building, plus .0007 times estimated construction costs
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(fee for life safety, fire protection reviews; building construction fire protection inspection and reinspection; fire protection and building construction meetings; outside contractual reviews and one revision in fire protection systems), includes one reinspection. If additional inspections are necessary, the fee for such re-inspections shall be \$50.00 per hour, per person. If additional revisions in fire protection systems are necessary, the fee for such revisions shall be \$100.00 per hour. All such fees shall be prepaid.

(2)	New construction--residential	\$100.00 per dwelling unit, per plan
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	Review fee--residential sprinklers	\$150.00 per unit
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(3) Non-residential remodeling,
additions or change of use:

	Change of occupant	\$100.00
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	Minor change of use, alteration or remodeling of premises	\$500.00
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(A minor change, alteration or remodeling exists when there are no structural, fire protection, life safety or floor plan alterations).

	Existing single room offices under 400 square feet (Ordinance 08-019, 03.11.08)	no fee
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	Major change of use, alteration or remodeling of premises	\$2,000.00 per building, plus .0007 times estimated replacement construction costs
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(A major change, alteration or remodeling exists when there is an alteration or addition of any fire protection or life safety requirement or floor plan alteration.)

(4)	Fire pump testing (annual)	\$200.00	
(5)	Emergency generator testing (annual)	\$150.00	
(B)	Fees for specialized services requested by Village residents or otherwise required by the Municipal Code:		
(1)	Request for special fire services	\$250/hour/apparatus \$100/hour/man	
(2)	Required special fire services	\$250/hour/apparatus \$100/hour/man	
(C)	Fees for specialized services in unincorporated areas:		
(1)	Contract fire/ambulance services	\$250/home/year \$400 non-residence/year	
(2)	Non-contract fire/ambulance services	\$250/hour/apparatus \$100/hour/man	
(D)	Ambulance fees for services rendered: (Ordinance 07-046, 04.24.07)		
		<u>Resident</u>	<u>Non-resident</u>
	Advanced Life Support Level 1	\$500.00	\$650.00
	Advanced Life Support Level 2	600.00	850.00
	Basic Life Support	400.00	650.00
	Mileage Fee (per mile)	6.25	10.00
	Refusal Fee	100.00	100.00